Kaze Jetstream

by

Dennis Malcolm

A thesis submitted to the faculty of New York University, in partial

fulfillment of the requirements for the degree of

Master of Science in Advanced Digital Applications

Thesis Studio, Spring 2015 MGFX1-GC 4000,

Thesis Studio, Fall 2015

Faculty: Angela Ambrosini / Zeth Willie

Academic Advisor: Joyce Yin

Thesis Statement:

For my thesis I have decided to create an animated short fighting sequence from a story that I have written called Kaze Jetstream. My goal is to use characters from my story to showcase my 3D modeling, animation, background design, texturing & lighting skills. This animation takes place in Japan in a rich & vibrant environment. It starts off with an animation & ends showing character modeling.

Synopsis

The main story is about the protagonist named Sakura Kaze. She is a bright, intelligent young Japanese university student who is also a Good Samaritan. She often goes out of the way to lend a hand to her fellow citizens in times of need. She usually does volunteer work and is an avid practitioner of Jeet Kune Do martial arts. On the other hand, the Antagonist Cairo is a young man trained in the traditional African-Brazilian martial arts. He is also a young, bright intelligent man who has taken the opposite path in life then Sakura. Cairo starts to organize a group of mercenaries, thugs & martial artists from throughout Asia. He tries to recruit by enticing potential members with promises of wealth & power to join his organization. He is into organized crime & starting territorial wars with local gangs & Yakuza. Cairo is a man with little respect for life. He grew up in the war torn country of the Ivory de Coast in West Africa. He eventually tries to recruit the young, beautiful & talented Sakura into his organization but she refuses. Eventually he starts to threaten Sakura's friends to sway her decision. Cairo actually starts to into harbor a torch for Sakura in the duration of the story so he continues to pursue her because he feels that she is a challenge. He wants to corrupt something pure. And so the story goes.....Kaze Jetstream.

This animation will incorporate jump cut sequences, interesting camera angles, fly-throughs & various dynamic systems in Maya. For the modeling portion of this project, it will features the story's supporting cast characters, Yazimoto, son of a prominent Yakuza financial officer, various thugs sent by Cairo, an homeless old man who Sakura helps & a stray dog. That portion will be basic shaded figures showcasing the modeling details in the characters.

The target audience for this project will be viewed by students in the animation & graphics field as well as CG professionals.

Impetus

The dictionary has defined the word impetus as a driving force, a stimulation or encouragement resulting in increased activity. So I suppose for me, the Impetus for my animation project 'Kaze Jetstream' would be that I am a very passionate and driven as an artist/animator. Inspired by great artistic accomplishments of man, I am driven, because I feel that my work as an artist will have a place in this world. In this thesis project, I will try to create a cutting edge animated short film, based on a story that I have written and characters that I have created.

I wanted to create an animated project that will bring my character creations off the page and breathe life into them, creating a new exciting world. I am driven, because I feel that my work as an artist will have a place in the field of entertainment and film animation. I feel that there are a lot of exciting things happening in the field of animation and I want to learn more about the new tools of filmmaking and animation by creating and doing. Such examples of great pieces of inspiring shorts, are "Beautiful Technology" by Parsons Alumnus Andre Vandenburg or "Bounty Hunter" by Eugene Chu, have actually come out of the university thesis students here in New York City. Even though it's obvious that they worked together in teams to develop these amazing pieces, the producers/creators still managed to use this simple team dynamic to their advantage by having each student work in their specialized areas, to produce these extraordinary pieces much like a major motion picture studio would but without the large studio budgets.

Domains

Animation is defined as a simulation of movements created by displaying a series of pictures, or frames. Essentially what animation is at its core is an optical illusion created by the persistence of vision. Animation is usually presented through either a video program or as a motion picture. At the earlier stages of mankind, depictions of animals were drawn onto Paleolithic caves with multiple legs to simulate the action of motion. Nearly two millennia ago, in China, a zoetrope type device was invented to imitate animated movement. Also noted that during the 19th century, the Praxinoscope, an animation device was created in France by Charles-Emile Reynuad as the successor to the zoetrope in 1877. The Praxinoscope was used in early image projection on to a screen. The Phenakistoscope on the other hand, is a precursor of the zoetrope. It is a device that creates an illusion of motion on a revolving disk invented by Joseph Plateau in 1832.
This revolving disc has a series of pictures around the center. The user would look through the moving slits reflection in a mirror. The slit was used so to keep the images from blurring together. Phenakistoscope comes from the Greek word “phenakizein” which means to deceive, much like how the device deceives the eye.
A man known as George Melies was considered to be the creator of special effects in films. It is noted that he stumbled upon his idea one day when he decided to stop the rolling camera to change something in a scene that he was working on & then after continued to roll the film. His technique was later given the name stop motion film.

One of the pioneers of hand drawn animation was a French artist named Emile Cohl. Cohl created a film named Fantasmagorie in 1908. Fantasmagorie was comprised of a stick figure moving around and interacting with a series of shifting items. It was made by drawing each frame onto paper & then afterward shooting each frame on a camera. This is what is known as today as tradition hand drawn animation.
Today this type of animation is almost completely obsolete today due to the wide scale use of computers & digital software tools available today to modern artists.

My second domain is about the Yakuza who are the crime mafia of Japan. They usually have rigid rules of they follow & a very well planned internal structure. The Yakuza are an international organized crime syndicate with tens of thousands of members to help run their operation.

Despite uncertainty about the single origin of yakuza organizations, most modern yakuza derive from two classifications, which emerged in the mid-Edo era from about early sixteen hundred to about mid 1800. One of their first areas of focus were mainly on gambling operations and selling stolen merchandise.
During that early time period, the stolen goods merchants in the beginning started self organizing & operated mostly during large Japanese festivals. Some of the street peddlers took on the role of defense protection for the other merchants during these festivals. Others took on the clerical roles for the new group. At some point the mainstream Japanese regime, started to officially recognizing this group of merchants and decided that heads of this new organization should have the privilege of carrying short swords for protection much like how the samurai were allowed to samurai swords during that time period. This was a great accomplishment for this new group called the Tekiyia. Also happening during this time period was another group; this one participated in & ran illegal gambling operations in the old capital of Japan, Edo. They were the low class gang of thugs that ran gambling rings, loan shark companies for their customers & much like the Tekiyia, they also had their own people working as protection agents.

This group’s original name was the Bakuto or gamblers in English translation. They later became know as the “Yakuza”, a name which was originally from a Japanese form of poker meaning a losing hand. The stereotypes that people have of the Yakuza came from this group of gamblers which were not in high regard with the citizens of Japan.

The Yakuza of modern day still use elements of the tekiya & bakuto origins for group initiation ceremonies. When the Yakuza was created, the pecking order was similar to that of an adopted parent & child in terms of allegiance & reverence. In the official initiation ceremonies, similar to that of traditional weddings, alcohol is drunk from a single cup & passed to the new & existing members of their organization, solidifying this newly bonded relationship. They often accept those who feel that they’ve been abandoned by their parents & start out on the low rung of the organization as thugs. Much like a family, the orders usually flow from the head of the household down to the children. The Yakuza relinquish their pre-existing relationships with their family to solidify their allegiance to the Yakuza’s head of operations.

They have a very intricate internal makeup for their group. There is one boss who presides over all operations, & working directly underneath him are his advisors Senior chief of operations. Below this level there is the

regional manager that coordinates the local gangs in his vicinity. Underneath the regional manager are the local gang heads & then the clerical workers & thugs. The Yakuza are stereotypically pictured with full upper body yakuza tattoos also called Irezumi in Japanese terms. The process is costly and excruciating and may take many years to accomplish. Often when they are gambling in card games they take off their shirts & wrap them around heir waist to reveal their tattoos to one another.

Today there are about a hundred thousand members of the Yakuza in Japan. Even though there are different Yakuza groups, the Yamaguchi-gumi with about fifty to sixty thousand members, the Sumiyoshi-kai with about twenty thousand members and the Inagawa-kaï, with about fifteen thousand participating members.

Visual References & Inspiration

AKIRA

BERNINI

FRANK MILLER'S SIN CITY

ANIME

Sketches

Character Designs

Sakura

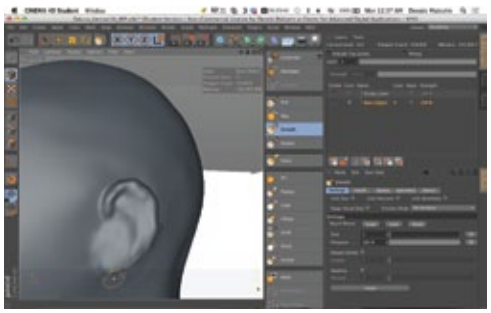
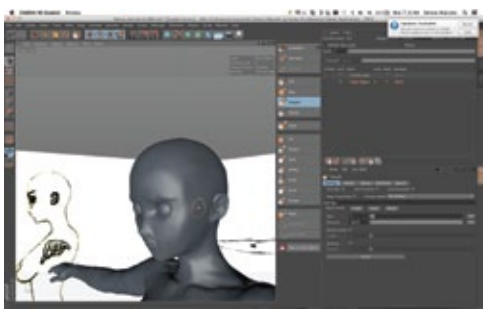
Sakura Character Development Sheet
Illustrated by Dennis Malcolm

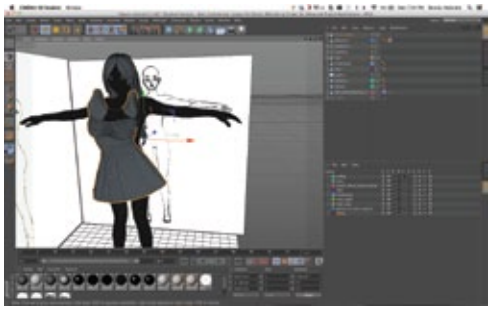
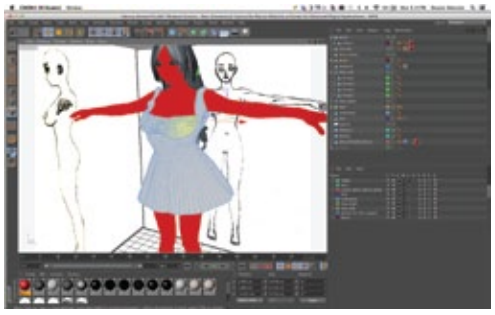
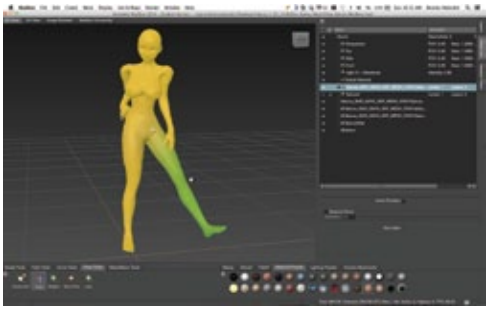
Sakura Bio
Characters:
Sakura Kaze: Protagonist
Fighting Style: Jeet kune do/ Tai Chi
Birthday: ???? Age: ????
Birthplace: Kyoto Blood Type: B
Height: 5’5” Weight: 115lbs.
Hobby: Charity work philanthropy, Listening to Music, avid martial arts practitioner
Favorite Food: Miso soup Tofu
Best Sport: Volleyball Most important: Family & Friends Dislikes:

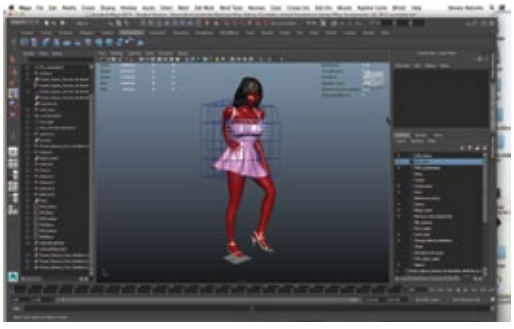
3D Modeling character creation

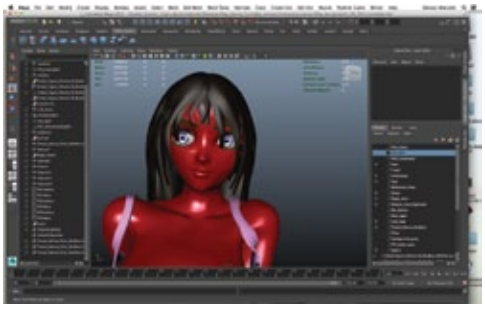
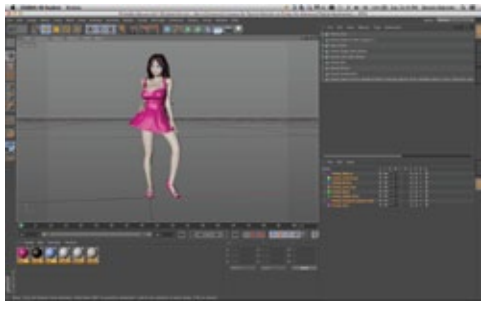
Default Mudbox Basic Human geometry start:

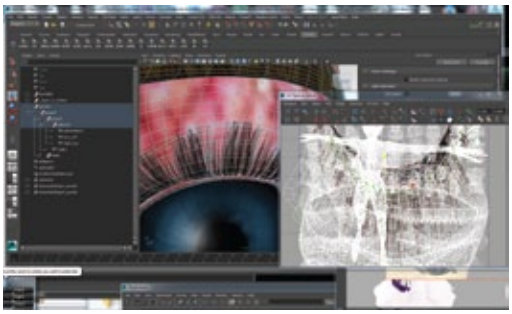
3D Modeling Thug

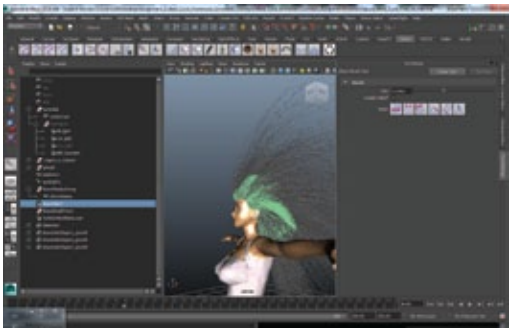



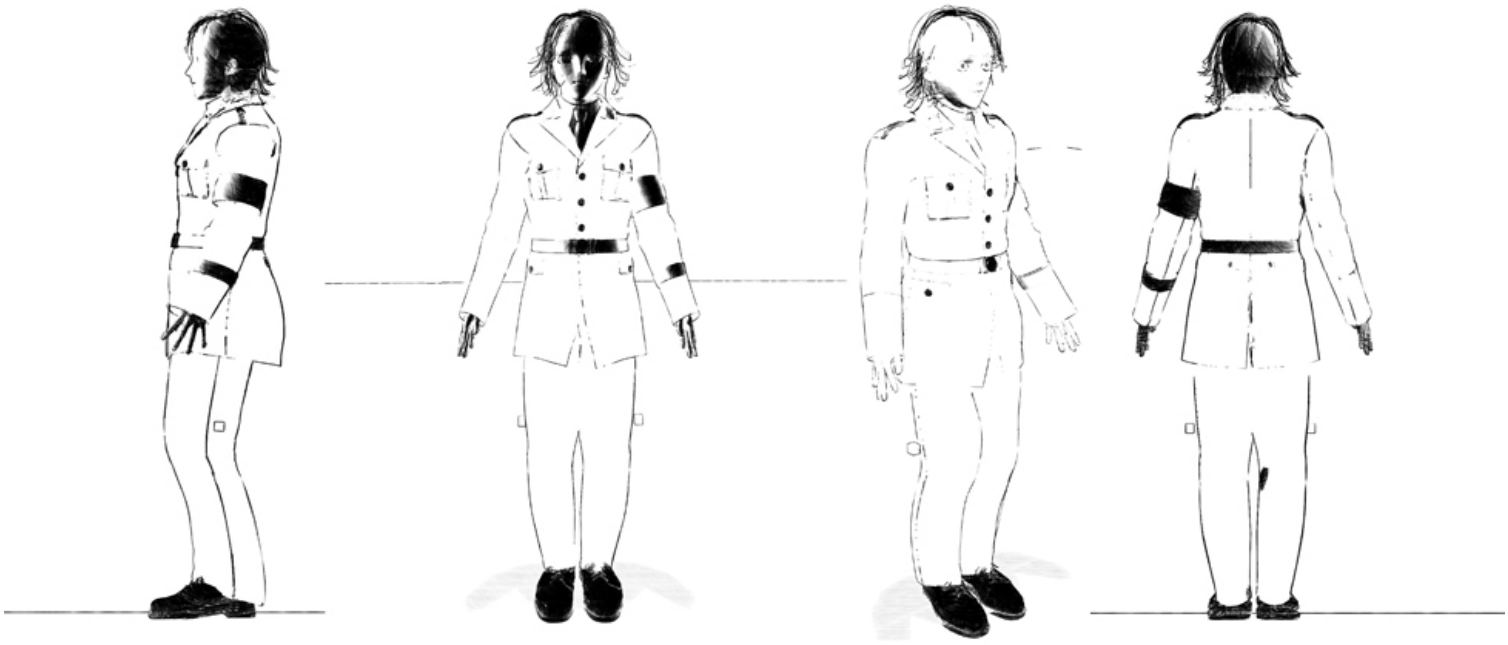






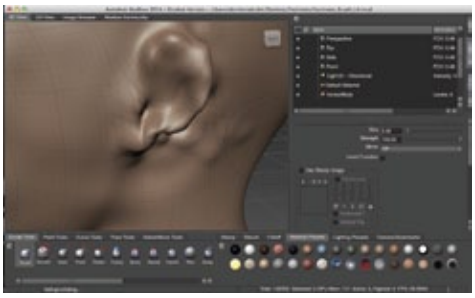
3D PRINTING

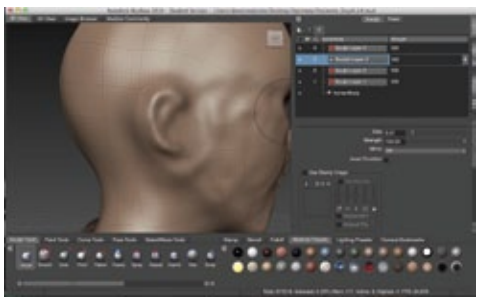


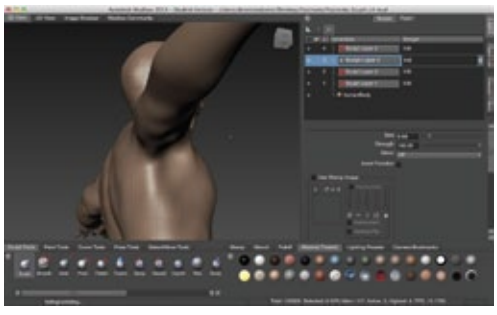
Yazimoto Character Development Sheet
Illustrated by Dennis Malcolm

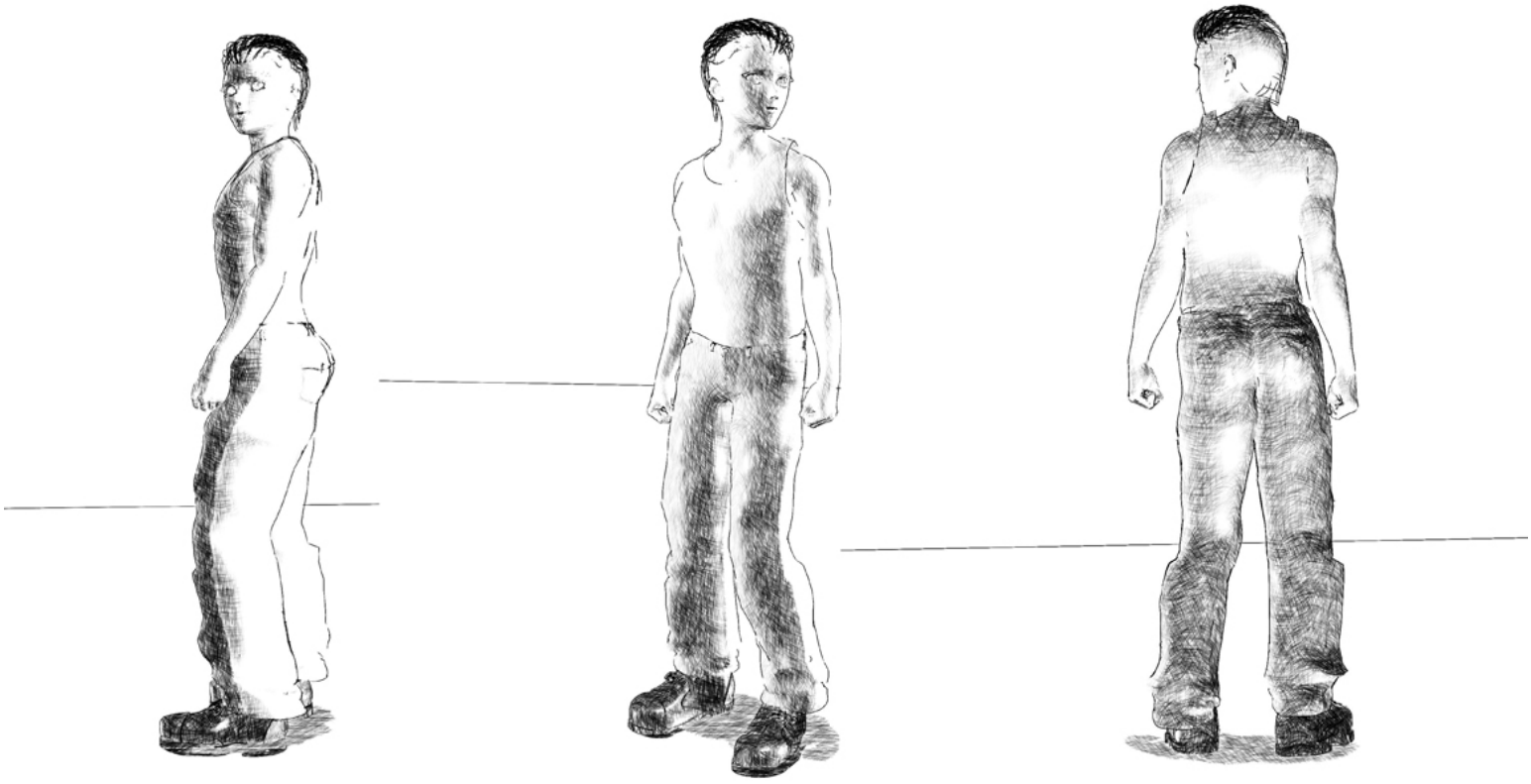
Yazimoto Bio: (Son of a prominent Yakuza's financial operations chief in Japan)
Fighting Style: unknown Birthday: ???? Age: ???? Birthplace: Tokyo
Blood Type: O Height: 5'11" Weight: 150lbs. Hobby: Lead Singer/Guitarist in a Japanese Pop Band Favorite Food: Chicken
Best Sport: Squash
Most important: Rock Band/school work Dislikes: family neglect

3D Modeling Yazimoto





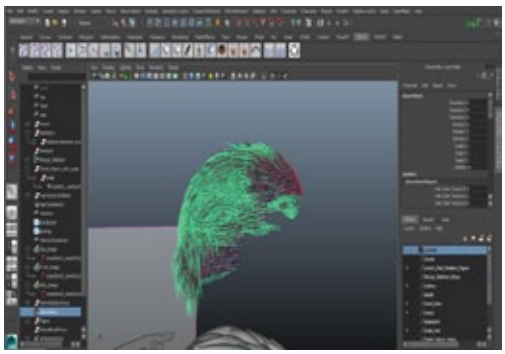


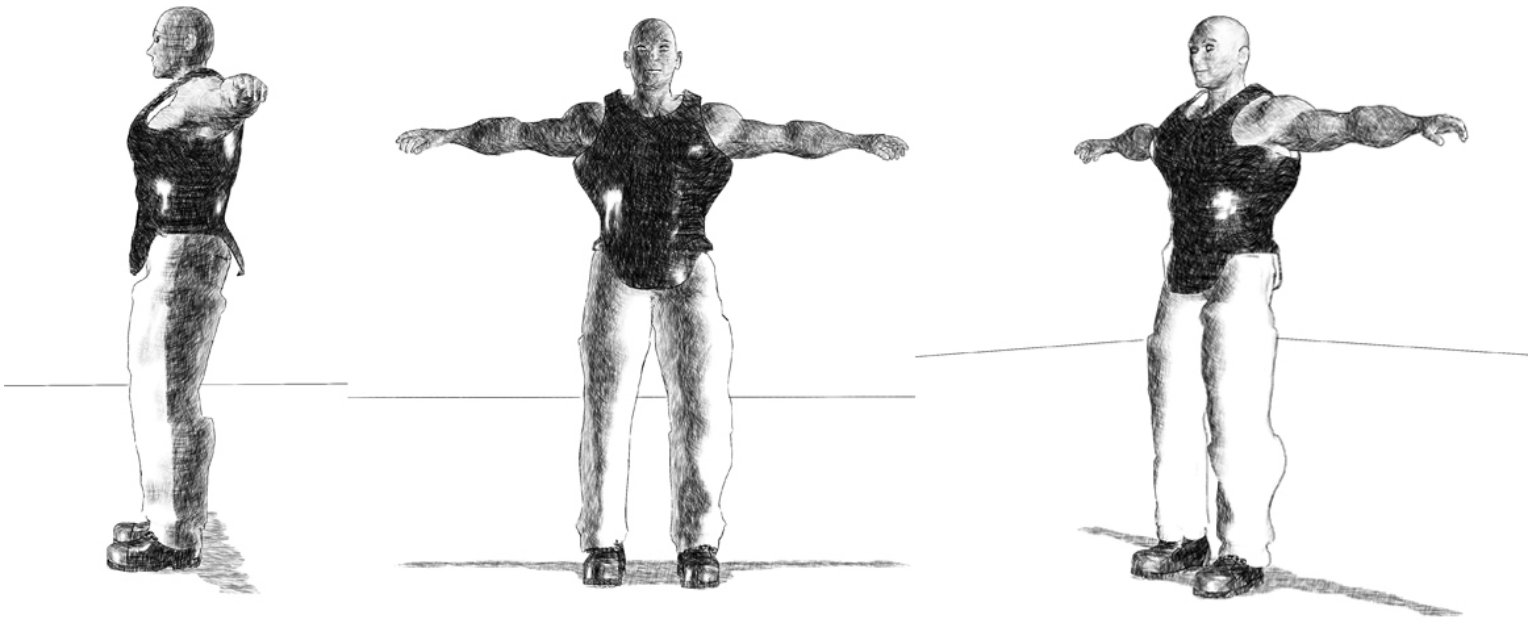


Thug1 Character Development Sheet
Illustrated by Dennis Malcolm

Henchmen/Thug 1 Bio
Fighting Style: street fighter usually with weapons, guns, knifes whatever
Birthday: ???? Age: ???? Birthplace: Osaka
Blood Type: O Height: 5’11” Weight: 170lbs.
Hobby: Poker
Favorite Food: anything spicy
Best Sport: pachinko arcade parlors
Most important: collecting debts Dislikes: deadbeats
Gambling Bookie
Has a military crewcut

3D Modeling Thug1



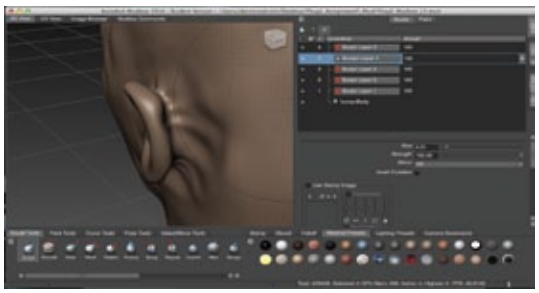


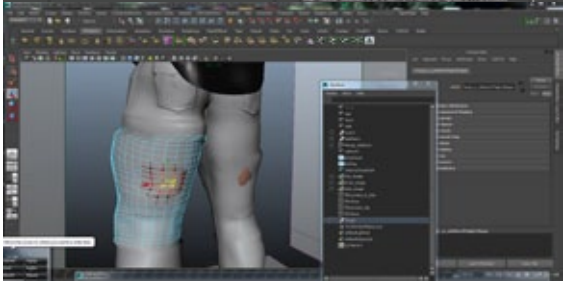
Thug2 Character Development Sheet
Illustrated by Dennis Malcolm

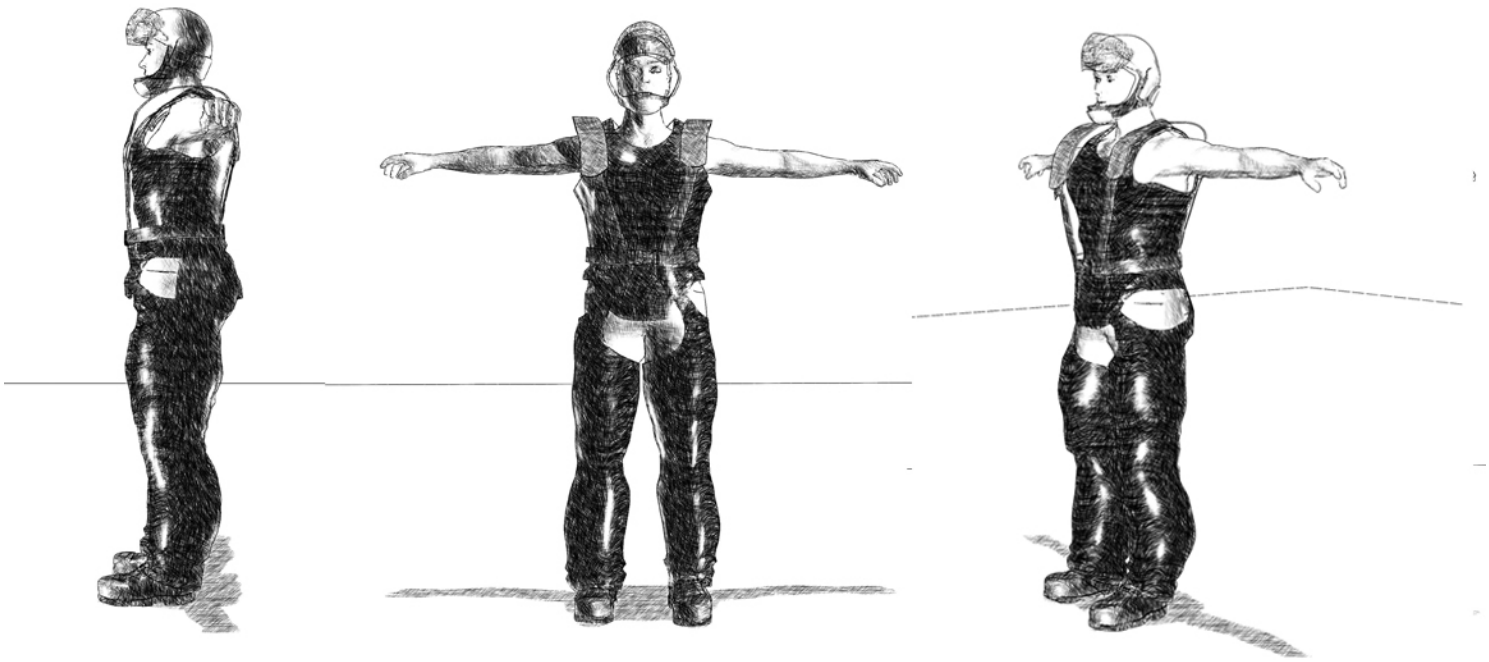
Henchmen/Thug 2 Bio

Fighting Style: boxing Birthday: ???? Age: ???? Birthplace: Tokyo
Blood Type: B- Height: 6'1" Weight: 240lbs.
Hobby: motorcycle racing & car drag racing
Favorite Food: healthfoods
Best Sport: Weightlifting
Most important: customizing his motorcycle Dislikes: weakness
He is Cairo's second favorite henchman. Also hot tempered & ruthless.
Loves gambling & is known as the enforcer in Cairo's organization.
Is bald headed

3D Modeling Thug2 character creation



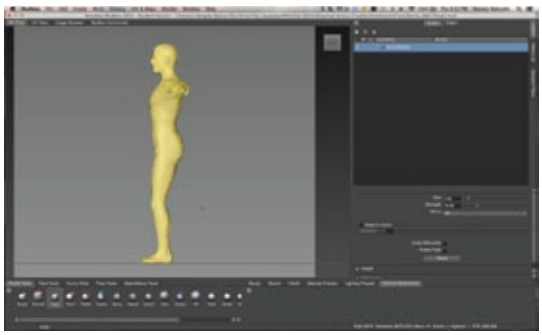


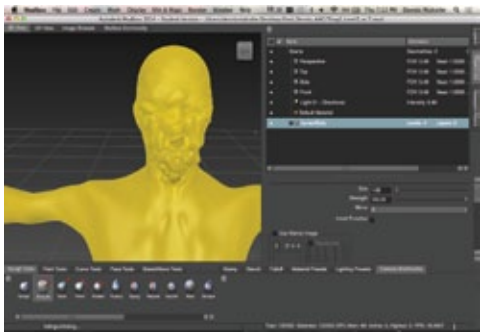


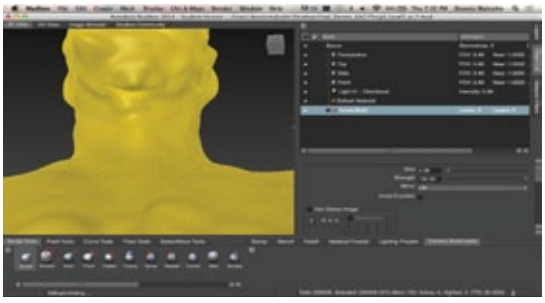
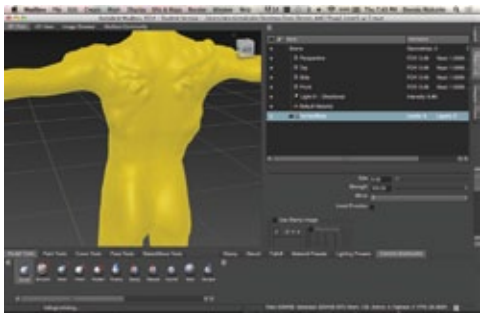
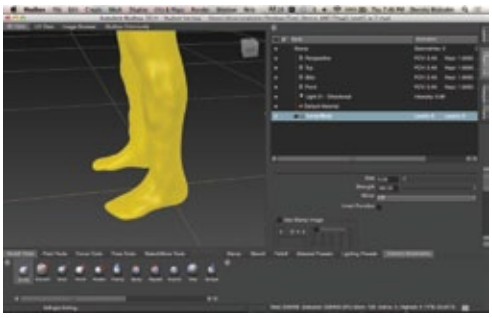
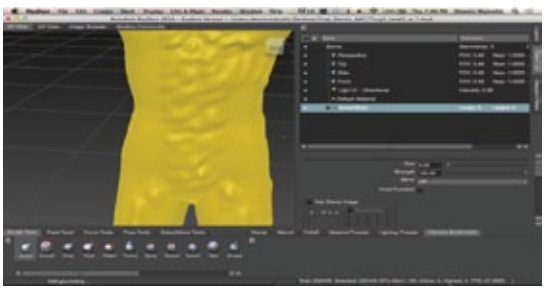
Thug3 Character Development Sheet
Illustrated by Dennis Malcolm

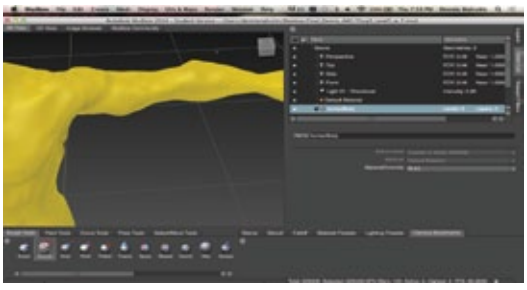
Henchmen/Thug 3 Bio
Fighting Style: Karate Birthday: ???? Age: ???? Birthplace: Tokyo
Blood Type: A Height: 6’ 2 Weight: 215 lbs.
Hobby: Gambling, drinking racketeering motorcycle racing
Favorite Food: Seafood
Best Sport: boxing
Most important: Carrying out Cairo’s orders
Dislikes: failed missions
He is Cairo’s favorite henchman. He hot tempered & ruthless.
Follows orders to a T. He is Cairo’s go to guy for missions
He is a violent alcoholic who grow up in the shady areas of Roppongi Japan
Where his sense of morals & ethics were dithered away growing up in tough gang neighborhoods. He is of mixed ethnicity part African part Japanese.
Has always been considered an outsider by the native Japanese
which led to his growing hatred of everything & everyone around him.
Cairo is like a father figure to him. Usually wears a motor cycle helmet

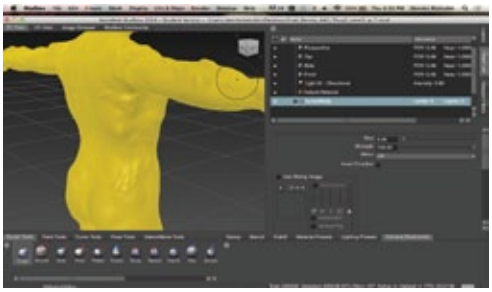
3D Modeling Thug 3



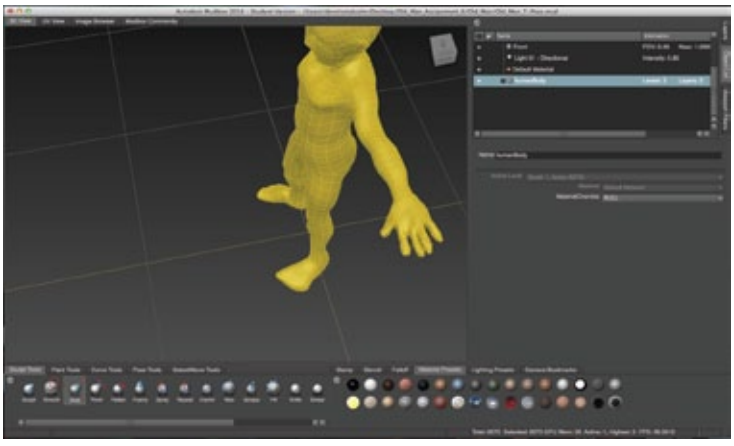


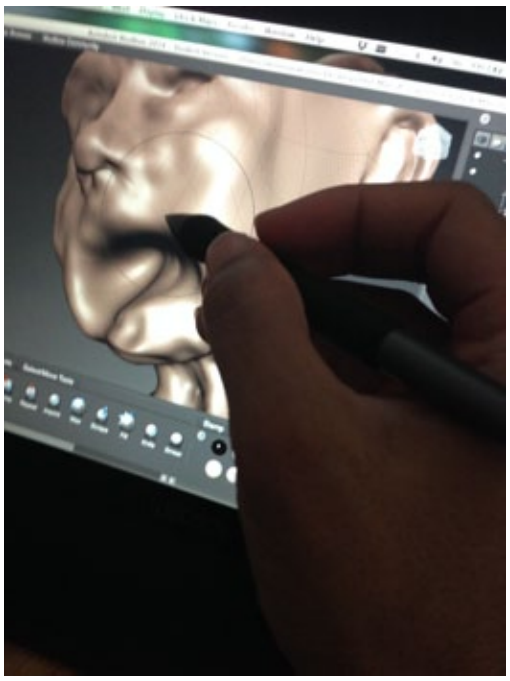





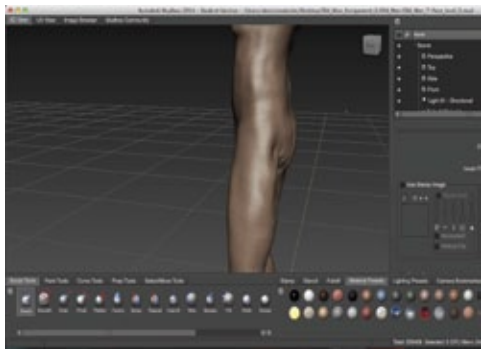


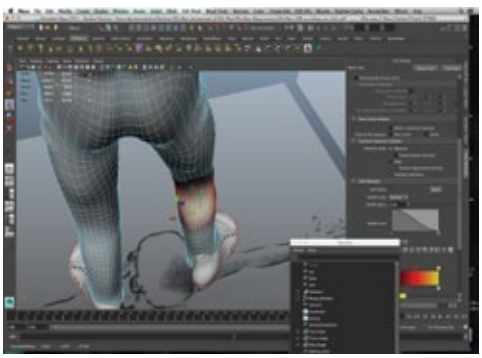
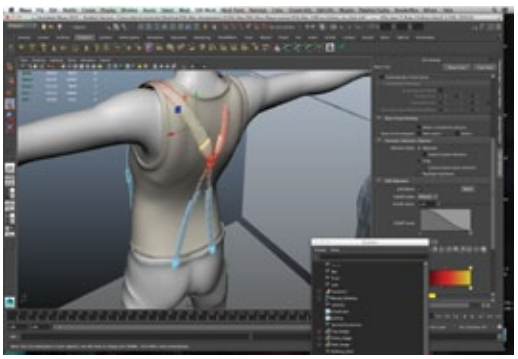


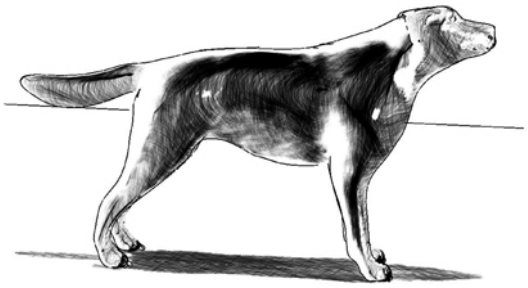
Homeless Man Character Development Sheet
Illustrated by Dennis Malcolm

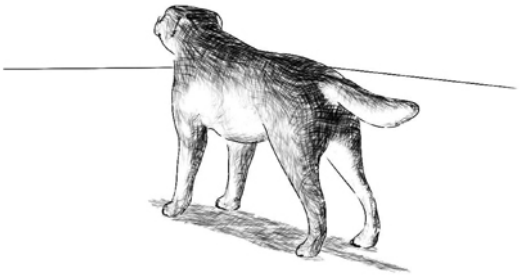




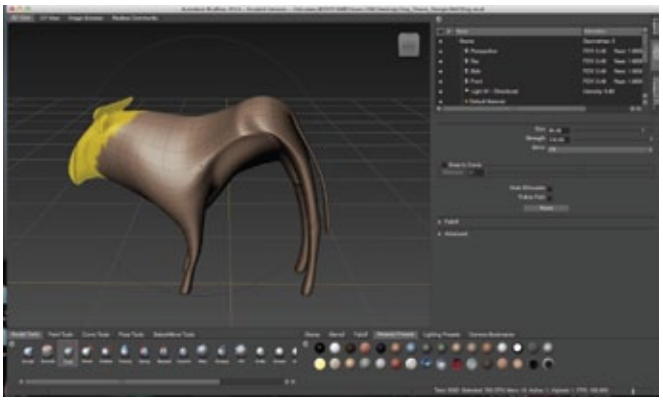


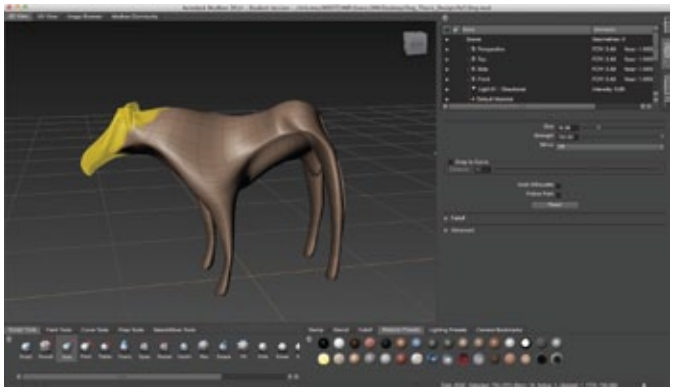



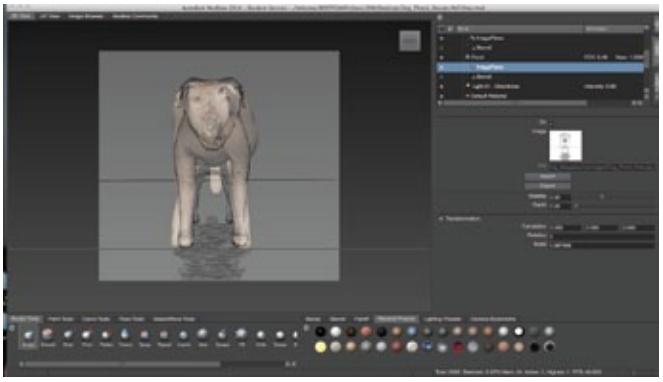


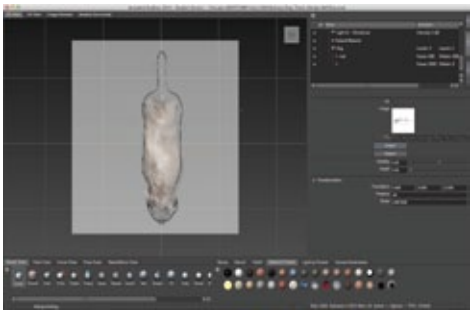


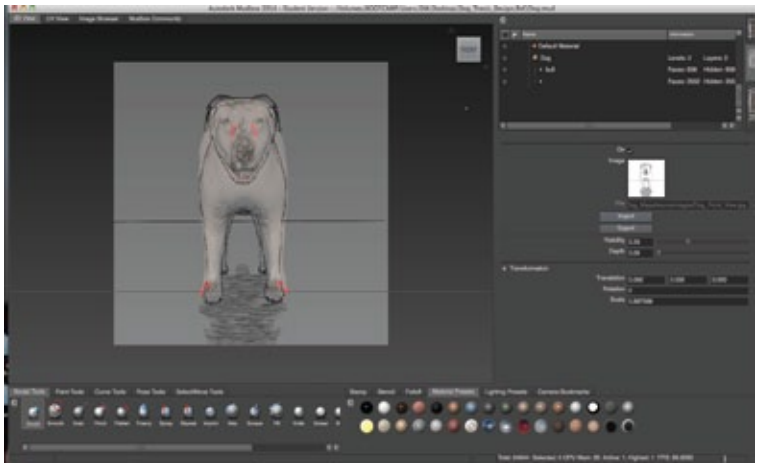
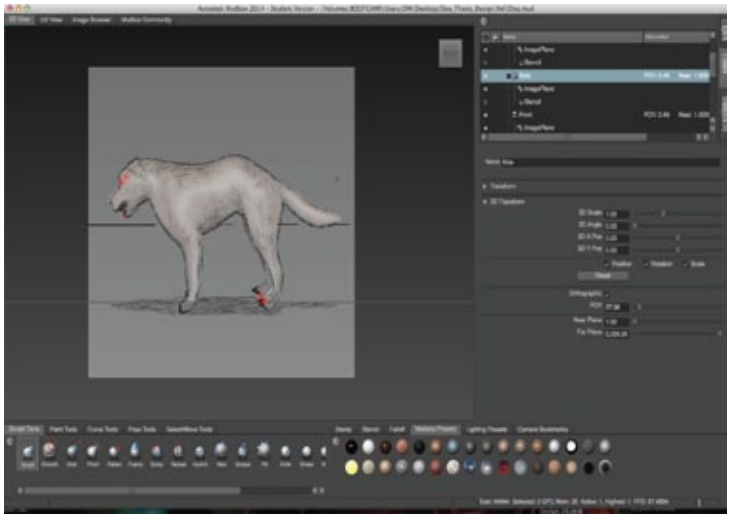
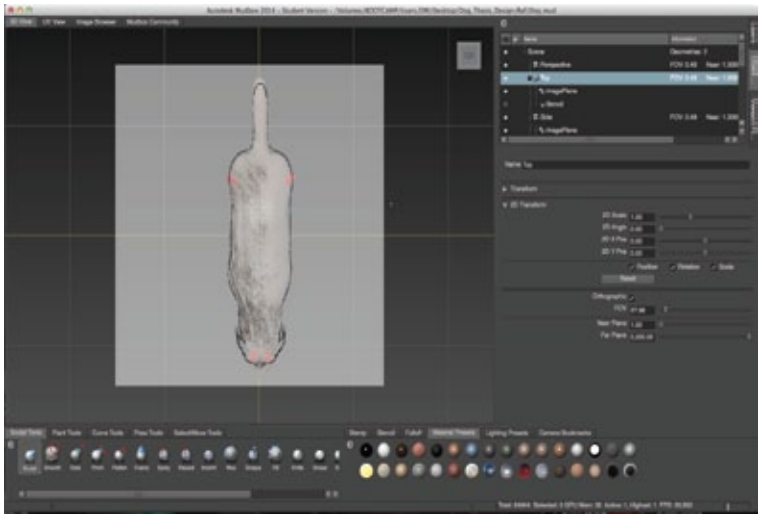
Dog Character Development Sheet
Illustrated by Dennis Malcolm



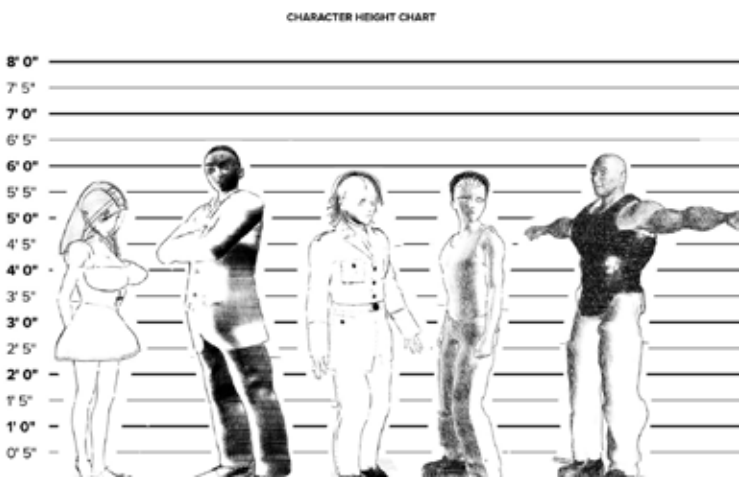


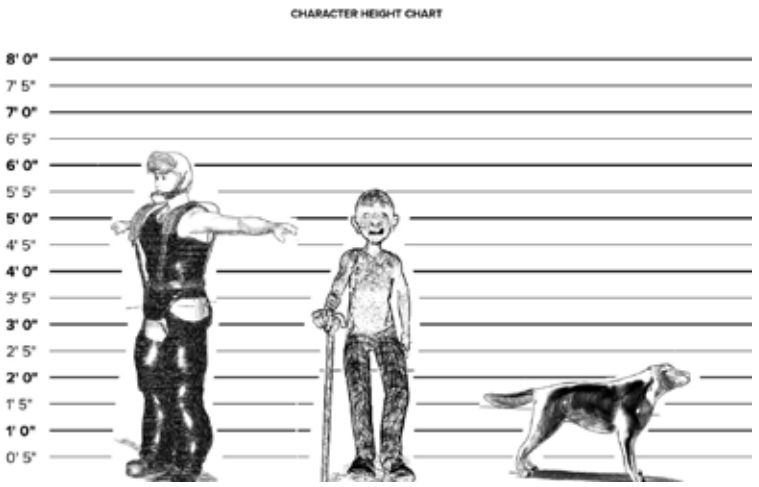




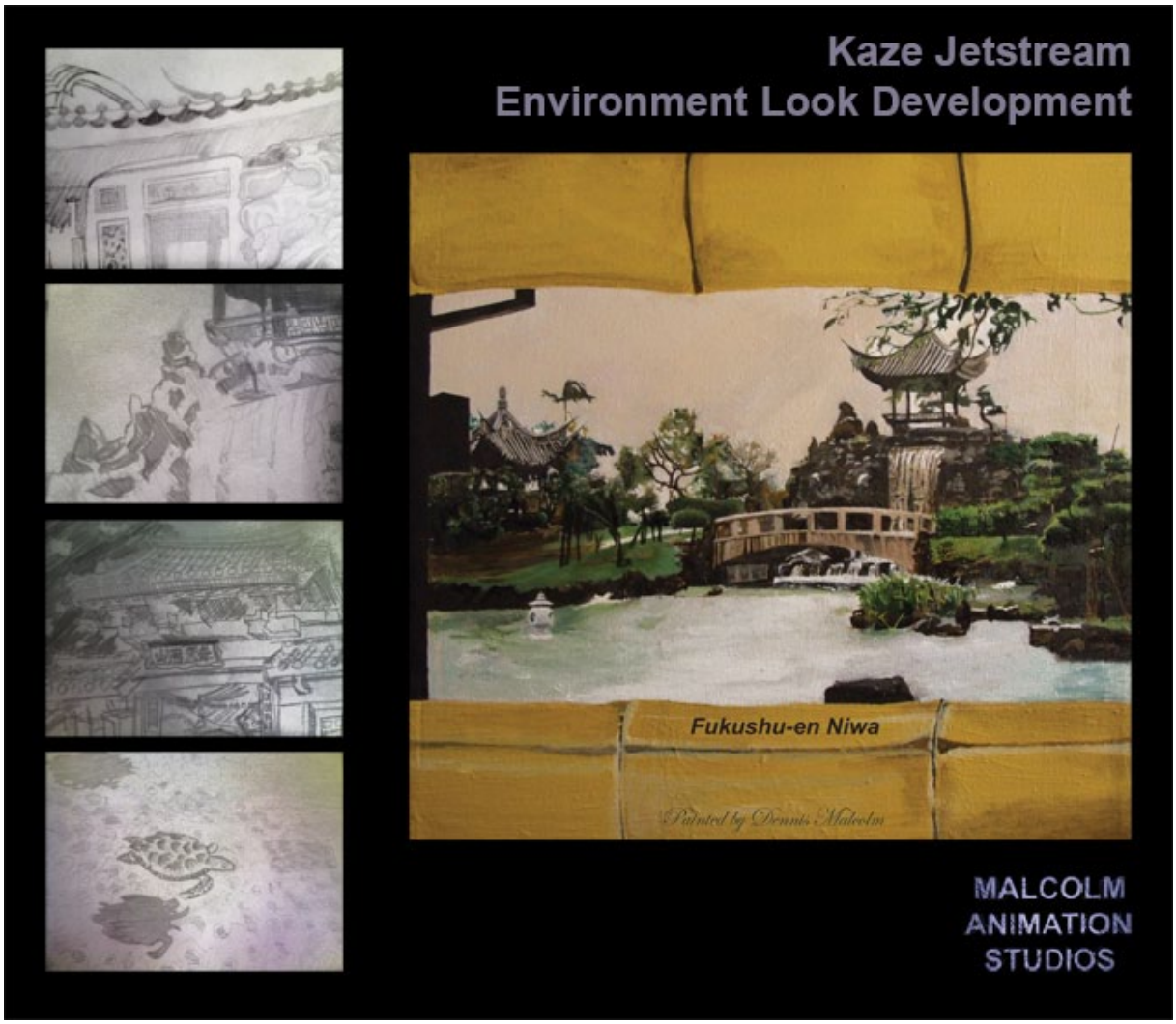




Style Frames





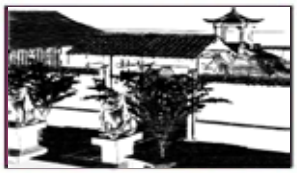
Environmental designs



MALCOLM ANIMATION STUDIOS

Kaze Jetstream

ANIMATED SHORT STORYBOARD

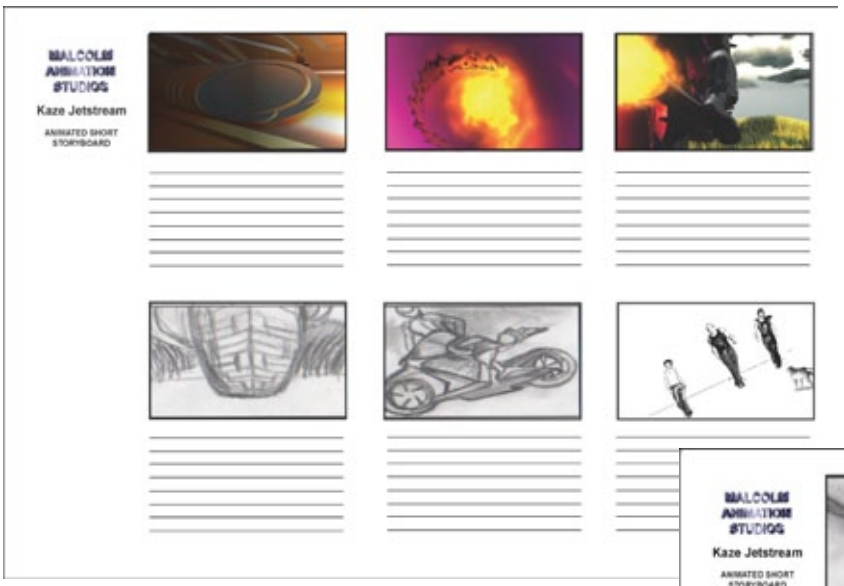


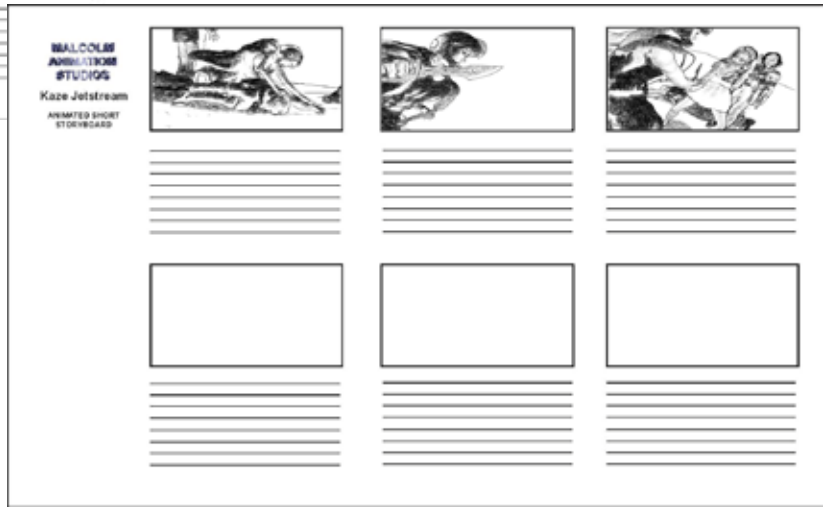
MALCOLM ANIMATION STUDIOS

Kaze Jetstream

ANIMATED SHORT STORYBOARD

Bonus Storyboard illustrations





Production Calendar

Dennis Thesis Production Schedule - Kaze Jetstream,

Feb 2015 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5 Style Frames & 3pm - Calendar_Thesis_Production @ NYU Room 1036	6	7
8 Calendar_Thesis_Production @ NYU Room 1036	9	10	11	12 work on Style &	13	14
15 Calendar_Thesis_Production @ NYU Room 1036	16	17	18 Style & Height	19 Thug1 Modeling	20	21
22 Calendar_Thesis_Production @ NYU Room 1036	23	24	25	26 Thug1 Modeling	27	28

Dennis Thesis Production Schedule - Kaze Jetstream,

Mar 2015 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Calendar_Thesis_Production @ NYU Room 1036	2	3	4 Modeling &	5 Modeling & Thug 2 Start	6	7
8 Calendar_Thesis_Production @ NYU Room 1036	9	10	11	12 Thug 2 Modeling	13	14
15 Calendar_Thesis_Production @ NYU Room 1036	16	17	18 Thug 2 Finish	19 Yazimoto Start	20	21
22 Calendar_Thesis_Production @ NYU Room 1036	23	24	25	26 Yazimoto	27	28
29 Calendar_Thesis_Production @ NYU Room 1036	30	31	1	2	3	4

Dennis Thesis Production Schedule - Kaze Jetstream,

Apr 2015 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
Calendar_Thesis_Production @ NYU Room 1036						
5	6	7	8	9	10	11
Calendar_Thesis_Production @ NYU Room 1036				Old Man, Dog &		
12	13	14	15	16	17	18
Calendar_Thesis_Production @ NYU Room 1036				In progress Old		
19	20	21	22	23	24	25
Calendar_Thesis_Production @ NYU Room 1036			Finish Old Man,	Posing & Rigging		
26	27	28	29	30	1	2
Calendar_Thesis_Production @ NYU Room 1036			Posing & Rigging	Lighting &		

Dennis Thesis Production Schedule - Kaze Jetstream,

May 2015 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	1	2
Calendar_Thesis_Production @ NYU Room 1036			Posing & Rigging	Lighting &		
3	4	5	6	7	8	9
Calendar_Thesis_Production @ NYU Room 1036				Rendering &		
10	11	12	13	14	15	16
Calendar_Thesis_Production @ NYU Room 1036			Finish Animation	Thesis_Due_Date		
17	18	19	20	21	22	23
Calendar_Thesis_Production @ NYU Room 1036				Thesis_Defense		
24	25	26	27	28	29	30
Calendar_Thesis_Production @ NYU Room 1036				Showcase_Thesis_		

Technical Challenges

Some of the problems & frustrations that I dealt with first & foremost were pain stakingly long nCloth simulations in Maya. Each simulation taking two days at minimum to produce a playblast just to see how a nCloth setting I tweaked looked. These simulations took months of work just to get my character's cloth to look properly. For some reason it would do weird things like looking like a garbage bag floating in zero gravity space. Very frustrating to deal with. To date, I've made up to about 50 playblast nCloth simulations, I saved some & overwrote others.

(insert play blast screen shots here)

Another difficulty I faced was creating a liquid simulation of the waterfall for my animated piece. It nearly destroyed my computer's CPU because the calculations were so demanding on my operating system. I couldn't use a Microsoft windows OS because it would crash the computer whenever the simulated calculations started. I had to work on a modern Mac OSX system because it dealt with delegating the computer's resources much better. Even in that situation, my computer was always running in the red. After about a week or two of running water simulations I had to export the geometry out as a 20 Gigabyte alembic file. That in itself creating nightmarish problems for transferring the 20GB alembic file to a Render Farm server that kept on having data interruptions because the file was just too big to transfer. I had to try using 2 different FTP software just to see which would have the least amount of data interruptions. After working closely with the Choas groups VRAY technicians, I believe that I also discovered a bug in VRAY that stopped me from rendering on the render farm. So it turns out that VRAY batch render does not start on complex scenes no matter how much RAM you have available when you jump frames. Anything with heavy animation really. When you render in increments, It will render frame one, but not frame 100, 200, 300, 400 etc. for some reason. When I sent my project in to render, it would hang on the render farms, as well as on my computer when you jump to too large of a frame. I can only render sequentially starting from frame 1, 2, 3, 4 etc. The software does not allow the user to skip frames at least not without a cache incorporated, which I found out after my thesis was nearly done & much trail & error.

For some reason, the rendering engine I used (VRAY) did not pick up on the native geometry of the water when I first created it, so I had to convert it. Which brings me to my next point, when I first decided on a rendering engine for this project I had no idea that VRAY doesn't work with many of the 3rd party plugins that I experimented with & wanted to use for my thesis. I didn't know it at the time I tried working with FumeFX for example that it does not show up in VRAY final renders. So I tried & failed to incorporate FumeFX into my project. After weeks of research of trying, I had to give up on using this plugin. I came to the conclusion it's not possible or I don't have enough programming expertise to make FumeFX work with VRAY. I had to learn how to use Maya's native particle system to simulate fire in a way that would cause VRAY to pick up a fiery effect in the renders. As it turns out VRAY does not work with another Maya plugin called "Shave & a Haircut". I was disappointed because I had previous experience in working with this plugin. I originally planned to use it but I could never get it to work with VRAY unless I converted each hair into blocky geometry. The polygon hair geometry as I found out does not work with gravity dynamics & it also looks pretty terrible in VRAY renders. I had to learn & master Maya's native hair system through weeks & weeks of trial & error as well as painstakingly long playblast simulations again. VRAY only seems to work with it's own native fur systems & not Maya's native grass system, which does not show up at all in my renders. I had to learn through trial & error how to implement the new system into my animated environment.

One of the other issues I faced is that I could not find plugins that would work with the many different versions of Maya that I worked on. I was switching back & forth on different versions to see what worked with what. I spent weeks trying to get the plugins only to find out later that they didn't work with VRAY. One of my biggest issues facing this project was that Maya just kept on crashing, so I was constantly losing files whenever I made the smallest of changes to either the scene or the animation. I had to constantly save iterations of the files with literally every step or change that I made. The file sizes of became very large & difficult to manage due to the amount of geometry, scale & detail of the textures, which made my scenes very fragile & easy to corrupt. To date, the backups & iterations of my thesis is around 160 gigabytes.

I found that in doing the animation & getting it perfect on just 1 character (Sakura) was very tedious. I had ideas to incorporate other characters into my animation originally but quickly abandoned the idea as time had been a major factor in this project. For those additional characters I will probably just revisit the idea at a later time. I had so many ideas of what I wanted to do but executing them in reality was difficult. So I decided for half of my to be about creating & modeling 3D characters & the other half to be about character animation to show my proficiency in both areas.

The environment I created had tons of detail & geometry in it, so texturing & modeling the environment was painstaking. Occasionally when I was working on this project I watch some online tutorials while rendering to see what I could learn or add. Unfortunately I discovered that using a full screen Adobe Flash Player crashed my OSX Mavericks system & it always forced my computer to restart. Another issue I faced is that VRAY rendering & my computer's screen saver don't work well together. As it turns out, my computer's screensaver would freeze my computer & shut it down once swap memory used hit 30 or 40GB of hard disk space. Dealing with hardware shut downs will definitely slow your production rate down to a crawl. And finally, one of the last things I did was a OSX security update from apple in between rendering jobs. So I installed the update, I restarted my computer & thereon after my computer started freezing every 5 minutes. I had to wipe my hard drive & do a clean reinstall of my whole operating system. It took a day out of my production time.

What I learned

My dreams of what my thesis should be, were big & the pressure was always hanging over my head throughout this project. Also, not sleeping properly just to get in extra work is never a good idea. I'll probably work with Cinema 4D on my next animated project because I want to spend more time doing the creative things I enjoy & less time troubleshooting Maya.

Self Critique

One of my biggest challenges I faced was the fact that I just learned how to do 3D animation in my last 2-3 weeks in school in my animation concepts class, which is why it took extra long for me to get used to & master it. If I had to do it again I would have taken that class in my first semester in school & not in my last, which overlapped, with my thesis production class. It's difficult to do a thesis when you have lofty expectations of your project & yourself. Also I had some trouble with time management & trouble shooting many of the Maya software bugs. Did not realize I would spend 65% of my production time troubleshooting Maya technical glitches & software crashes.

Accomplished

At the end of the day, I have to say that I am happy with the way it turned out. I put in a lot of hard work on this project & tried to touch on a lot of technical subjects in CG.

Research

For my library research I visited the Gimbel Art and Design Library at 2 W13th Street & checked out some interested books related to my project.

(For 6 sources that are in-depth or opinionated or worthy of a paper all by themselves books or long articles that I would read in bed, are interesting and provocative to me. Critical design, philosophy, editorials –)

1. The Complete Digital Animation Course by Andy Wyatt
2. The Future of Machinima as a Professional Animation Resource and its Growth as Real-Time Animation in Virtual Worlds. By Dellario, Frank R
(The author argues that although machinima is a relatively specialized field, it offers a newer and faster production pipeline for the commercial animation industry as a whole. Pioneered by individuals who have turned their passion for gaming into a powerful professional animation medium, machinima has a great potential. After comparing the development of machinima to the evolution of the internet, the author concludes that the emergence of virtual worlds such as Second Life was instrumental in the growth of this particular type of real-time computer animation. (Author abstract)
3. Model animation: art and technique by Ashworth & Joan Greaves, Martin
4. Cultural Research Paper Olympia 2036 by Ian Bonilla
5. The Natural Flow of Perspective: Reformulating Perspective Projection for Computer Animation by E. H. Blake
The author proposes a synthesis of theories of perception, image analysis and computer graphics as a foundation for the further development of realistic computer animation based on the point of view of the observer of the simulated world rather than on analysis of the physics of the simulation. Various aspects of perspective are explored, and the author shows how projection on a flat plane can fail to account for our intuitive expectation of how appearances change with distance. He also derives a way of describing truly moving pictures, i.e. those that are not created through a sequence of still frames.
6. Gallery artworks; Computer animations; Net-works; Exhibiting artists; The jury by Leonardo
Presents some of the works shown in the Digital Salon exhibition of computer art at the School of Visual Arts in New York (1995). The exhibiting artists include Laurie Anderson, Steve Bradley, Jon Burris, Douglas Davis, Ken Feingold, Ed Gavin, Wendy Grossman, Ian Haig, Troy Innocent, James Johnson, Jim Loecke, Lesley Mowat, Lynn Pocock, Sonya Rapoport, Bill Seaman, Bryon Thompson, Anna Wagner, Chris Wedge, David Weisman and Judith Yourman.

List 4 sources that may or may not be of interest:
1. Programming.Interactivity.Jul.2009 by OReilly.
2. The Genius of Design by Penny Sparke this is a book I recommended to my Professor to be included into next years curriculum. It talks about some contemporary design concepts, wartime the postwar boom and the potential of new materials and processes; ending with an up to date engagement with design in the 21st century
3. Rendering with Mental ray & 3Ds Max by Joep van der Steen
4. Snow Crash by Neal Stephenson 1992

BOOK REFERENCES
1. Maya Secrets Of The Pros published by Sybex
2. (Digital Art) – Character Modeling by Ballistic D'Artiste
3. Mastering Maya 2009 by John Kundert-Gibbs
4. Computer Animation and Digital Videos by Leonardo, Vol. 34, No. 5,
5. Computers: animation and rendering by Teicholz, Eric
6. Goldene Nica für Compute ranimation [Golden Nica for computer animation] by Staveley, Joan
In 1989 Joan Staveley's Broken Heart was awarded first prize in the Priz Ars Electronica at Linz, Austria, in the section for computer animation. Illustrations of this work are accompanied by the comments of one of the judges, Herbert W. Franke, explaining the reasons for the jury's choice, and by Staveley's own explanation of the cultural and religious elements in her portrayal of the terrain of the spirit when it experiences, reacts to and recalls unmotivated trauma, drawing on William Blake and post-War German poetry for inspiration for a visual poem.

Sources that inform my work in a deep way, but may seem tangential to my project.
1. SVA Theater Gallery show Spring 2015
2. FIT CG Animation Senior Gallery show Spring 2015
3. Vancouver ACM SIGGRAPH SPARK ANIMATION 2015 (Game development with a focus on the independent developer or “indie”)
4. ACM MetroCAF SIGGRAPH presentation 2015 Sept 25th NYIT's Auditorium

Marketing
For this project, my target market will be teens & young adults. For business my SWOT analysis is as follows: Strengths: As an artist, I know my material & have a good understanding of the technical side for production. Weakness: Dealing with the market of people not interested in product. Opportunities: In animation you’re able to reach a large audience. Even if not sold mainstream, the work can stand on it’s own as a portfolio piece for future opportunities. Threats: Limited time. How to deal with this problem?

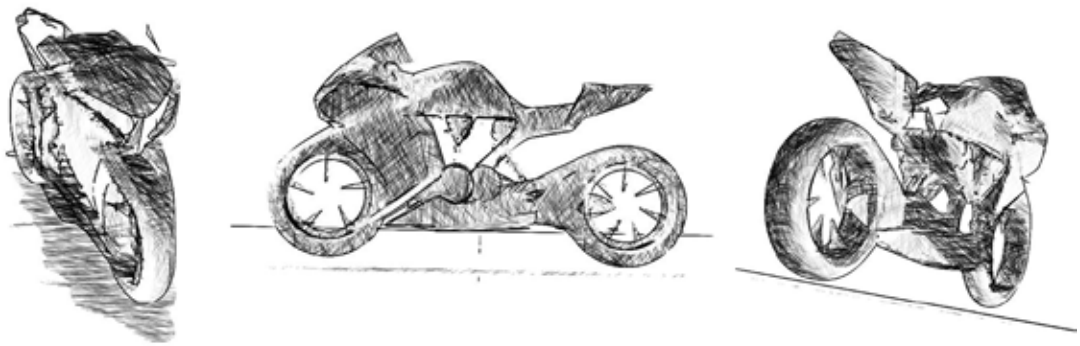
Works cited or Project Precedents:

Beautiful Technology
by Andre Vandenburg (Parsons Alumnus)

Untitled by David Dam (FIT Alumnus)
http://www.fitcg.com/video/david_dam05.mov

Rabbit Kadabra by Dave Chen
http://youtu.be/M8nsaGh5jOI

Bounty Hunter by by Eugene Chu(SVA Alumnus)



Future Cycle Development Sheet
Illustrated by Dennis Malcolm