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Self Fish

By

Douglas E. Rogers

Master of Fine Arts: Imaging Arts and Sciences
Rochester Institute of Technology
School of Film and Animation
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ABSTRACT

It is the duty of every animator to utilize humor, irony and artistic expression to reflect the human experience. Humans are emotional beings consistently projecting their humanity on their environments, often imparting emotions and thought processes to non-emotional entities, even inanimate objects, in an attempt to understand and empathize with the world around us. This is why we talk to our pets, give sentimental value to property, and why we can look at a sequence of images and expect to draw a story from them. This is why animation works, why we see animation as more than just a series of still images, and how characters come to life. Our tendency to connect to the images we see, to relate them to each other and develop a story from them, is enhanced by the persistence of vision phenomena, and allows for the suspension of disbelief.

I believe that the human experience, broken down into its simplest forms, at the lowest common denominator, is either romantic or tragic or both.

Self Fish deals with subject matter that, for me, has become a significant emotional obstacle. I became aware of this emotional barrier following a deployment to Iraq and yet another failed relationship. My purpose here is not wallow in my misfortune, nor to expose the world to the trials and tribulations of my life, but rather to provide some context for the experiences and thought processes that brought about the inspiration for this MFA Thesis Film.

While serving overseas, I had come close to death on several occasions. My experiences with violence and death threw into sharp relief that which I had so long taken for granted; happiness, love, is the reason we are alive. To spend even a moment in misery is a moment wasted.
Without the pursuit of happiness, breath is simply the sand of an hourglass pouring away to our
time of passing. Once I began to truly comprehend that my time on this earth is finite, it forced
me to look closer at how I spend the time I have.

Love is the goal of humanity. Everyone has or will experience love in its many forms over the
course of a lifetime. Many, out of ignorance, habit, or sheer desperation, will fall in love with the
wrong person. Most of us have or will have that one failed relationship, the one we reflect on as
the relationship that taught us the most about who we are, what makes us happy, and what we
seek or try to avoid in a mate. Through failure we learn what we can improve about ourselves.
We learn that there are no perfect people and to try to make them that way is a losing battle, a
never-ending, fruitless effort. None the less, we will always try.

One lesson I have taken away from all of my misery, trauma, and failures in both love and loss, a
lesson that I have adopted as the premise of my thesis film, is this: The success of our pursuit of
happiness is dependent upon our honesty in defining ourselves. That is, if you are not happy, you
cannot make yourself so simply by ignoring your own needs and catering to the needs of others.
At the risk of sounding cliché, you cannot love someone and truly be loved in return until you love
yourself and treat yourself accordingly. When we are happy, we are being honest, even if only
with ourselves. Unhappiness is wanting. If our needs are not being met, we seek to fulfill them,
regardless of the consequences and often at the expense of our relationships and those we care
about.

In Self Fish, the hero has all that he needs, all except someone to share his life with. He is in
search of a companion that he can love and who will love him in return. He is wary, as anyone
would be, of welcoming someone into his world. Eventually He finds what he thinks will be a
loyal, low-maintenance companion: the fish.
We all know that in real life, fish are not a pet that one would typically consider affectionate. You can’t touch or pet a fish, and fish do not show loyalty or attachment. They can’t coexist in our environment without a substantial investment in special equipment. And, although fish owners insist on naming and assigning personality traits to their beloved aquatic friends, fish have but one facial expression, and are not capable of even simulating emotion. We are nothing to fish but a potential predators or potential prey.

The fish character in my film is a metaphor for just this sort of emotional detachment. My fish character does emote; it shows significant
discomfort, but does not reciprocate the love the hero has for the fish. It only admires its own reflection. Try as he might to please the fish, the hero cannot convince the fish to love him in return. His love turns to frustration, then to desperation, to resentment, and eventually to hatred. In the end he is helplessly trapped in an unreciprocated relationship where all amenities favor the fish.

I have played the role of the main character depicted in my film many times in my life, but, more often than not, I have played the role of the fish. To those for whom I have been a fish, I sincerely apologize for my self-fishness. Please consider this story as an acknowledgement of guilt and an attempt to convey my regret for having treated you so cruelly. It seems one needs to be a fish before he can become a man. One needs to be a man before he can realize he has been a fish.

AESTHETIC

ARCHITECTURE & TEXTURES

The jagged and lop-sided look and feel of the environments, objects, and structures in my film were largely inspired by the architecture I admired during an extended tour of Europe back in 2002-03, the second major distraction from the timely completion of my degree.

At this point I think it would be prudent to convey my overwhelming thanks to my good friend and travel benefactor, Ryan Clontz. I had not known Ryan very well or for very long yet, having shared the experience of a marriage gone sour, I guess we had enough in common that he felt I was the perfect candidate to be his traveling sidekick. Well, I certainly had nothing to lose.
I had taken the quarter off from RIT in an attempt to save some money, however, employment proved more difficult than I had expected. Lesson learned? Don’t be a fool, stay in school. I spent the summer and much of the fall bouncing from one friend’s couch to the other. With no job and no place to live, the prospect of a free trip to Europe seemed like another excellent opportunity to avoid facing the mistakes I believed I was making.

At the time, leaving for Europe with a relative stranger, deep in debt, without a dime to my name or any concrete travel plans, might have seemed like the worst mistake of my life, but looking back, it was the best thing that could have happened to me.

Ryan had some money left over from a large insurance settlement. He had spent most of it and in congruence with his care free, carpe diem demeanor, he offered the rest to pay my way to Amsterdam if I would accompany him. I ordered a passport, closed out my bank account, maxed out my credit cards and a week later we landed in Iceland, then Amsterdam, Germany, and eventually came to rest in the beautiful and ancient city of Prague, Czech Republic.

It was the crooked, seemingly unstable architecture of Amsterdam and the crumbling, floodwater eroded textures of Prague that inspired the look of my film. In fact, many of the textures used on the buildings, streets and other models I created were derived straight from photos I brought back from this life-changing journey. The construction of the city street was inspired by the very busy, distorted block where our hostel was located, in the center of the coffee house district of Amsterdam. The buildings leaned in on each other due to the floating foundations they were built upon. They seemed as if they could topple over at any moment. This effect was magnified by the heightened sense of paranoia that comes naturally to the typical visitor of this region. The skewed camera angles greatly reflect the chaotic atmosphere and the constant sense of disorientation I experienced during my stay there. Eventually the stress of the busy tourist attractions and relentless onslaught of beggars, thieves, pickpockets,
and junkies forced us to evacuate *La La Land* earlier than expected. It was out of pure chance that we ended up in the city of Prague, a paradise refuge for disgruntled ex pats, rich college students whose parents wanted them out of the house, and vacationers that neglected to stop vacationing. It just so happens that my entire trip was unplanned, spur of the moment, and completely perfect.

**CHARACTERS: PERSONALITY, ACTING, AND STRUCTURE**

I cannot blame anyone but myself for the personality of my characters. The fish and the man are both the light and dark side of me. They represent how I have been treated and how I have treated others. Having learned from both my mistakes and my successes, I am able to look back at my behavior and make fun of it. I stood in front of a camera and recalled how I felt at times when I was rejected, when I was frustrated, and when I was madly in love. I stood in front of a mirror and referenced the body language of my own defeat and the postures of eternal optimism. It is my opinion that anything, any emotion, thought, or idea can be communicated through body language and expression. Body language does not need to be translated and is largely universal. It is for this reason I have chosen to avoid dialogue. It is simply not necessary and as it happens, distracting.

**The Protagonist:**

The hero of my film is a man that, for the most part, is at peace with himself. He is much like the biblical character, Adam, before partaking from the tree of knowledge. He is lonely but does not necessarily understand that he is lonely until it is suggested to him by his most prized possession, his T.V. He knows something is missing in his life. He knows that he is just shy of bliss.
He believes that companionship is the missing element in his life. He wants something to love and care for. He wants to be loved in return. He is essentially kind, devoted and habitual. He is a hopeless romantic, who is willing to love unconditionally, but is naive in that he believes that to love is to be loved. Love for him becomes a task that he must complete. As it becomes apparent that the object of his affection does not feel the same toward him, he views it as a symptom of his own inadequacy. It does not occur to him that the fish he loves cannot love at all. In his mind, the fish cannot love him because he has failed to please the fish.

**The Antagonist:**

The fish is a metaphor for resentment. It reflects an emotional reaction of being trapped in a bad relationship, forced into a situation that is impossible or difficult to avoid. It represents our tendency to bottle our feelings in an attempt to avoid confrontation, and our reluctance to engage in rational conversation in order to communicate our needs. The fish is stubborn, unhappy, and unwilling to compromise. It is angry that it’s life routine has changed and consequently labels the hero as the source of it’s discontent.

**Character Design:**

In regards to the look of my characters, I can blame the results on others, at least in part. For the origins of the protagonist, we have to go to war, and then we have to go to prison. For this to read in context, we need to step back for a moment and get the big picture. This small bit of history will help give you more insight into my character’s (my) darker side, the fish side.

**History and Context**

A major distraction from completing my MFA on schedule came in the form of exploding planes, falling towers and an overwhelming desire for revenge. This was followed by a hasty military re-enlistment. I’m of
course speaking of the terrorist attack on the World Trade Center and the war in Iraq. I was at R.I.T in the faculty lounge watching TV when it happened. I was so furious and fearful, as we all were. Strangely I found myself feeling sympathy for some of my fellow students who were of Afghan, Arab, or Indian ethnicity, or for that matter, anyone who may fit the visual profile of the media’s stereotypical terrorist. I remember being extra sensitive and aware of the tension and apprehension I perceived them to be feeling. This no doubt caused whatever tension there was to escalate to the point of discomfort. I know I was uncomfortable, and I had no legitimate reason to be. Every night I sat glued to the TV taking in all I could of news concerning our soldiers. As an inactive National Guard member, collecting G.I. Bill benefits, I felt overwhelming guilt for not being in harm’s way. Eventually, the guilt, became too much to bear and I re-enlisted in the US Army. Three months later I was jumping out of the back of an Army C-130 aircraft and landing boots first in Baghdad. I deployed with C Company, 3rd of the 172nd Mountain Infantry, a light assault unit specializing in combat above the tree line. Funny, I never saw a single mountain in Iraq.

I spent over a year with some of the most colorful characters I could have ever hoped to meet. I couldn’t have imagined a better pool of mixed personalities. I still draw from them often when creating new characters and animations.

For a time, we resided at the infamous Abu Gahrib prison facility. I assure you; to live there is torture whether you are a prisoner or a guard. It is easy to understand how someone could lose their mind in a place like that, yet our crew seemed to retain our spirits despite the suffering we experienced day to day. Humor is how we survived.
Charlie Company’s fourth platoon had become transients, replacements for a platoon of Military Police headed stateside. We had arrived at Abu Gharib several months after the prisoner torture scandal. For several weeks, we operated out of the same facility where a small group of perverted half-wits whom had, almost overnight, tarnished the reputation of every American soldier and turned us into a bunch of sadistic, marauding, savages in the eyes of almost everyone on the planet. CNN posted the images (censored for prime time) of naked Iraqis, blindfolded, humiliated, and stacked into pyramids like some twisted cheer leading routine. The propaganda that the incidents created no doubt generates financial support for the opposition to this day. It gave our enemies an edge that they never had before. Suddenly they were the good guys. It emboldened them. It gave them more reasons to fight. Attacks on American soldiers and consequently, attacks on Iraqi civilians, became more frequent and more brutal. And while the trials of several low-ranking service members were broadcast worldwide, we sat rotting in some of the very same prison cells where the incidents occurred and patrolled the neighborhoods in which many of the detainees were born and raised. For a time, I turned from die-hard patriot, to being ashamed of my association with the U.S. military. I was so angry with the imbeciles who perpetrated the torture, everyone was. Every day we found mutilated bodies on the road. Every week there was another kidnapping. Meanwhile Al-Jazeera is broadcasting live beheadings to the entire Arab community.

At the time, volunteering for combat, heading off to war with perfect strangers, spending more than a year living in flea and rodent infested fox holes, simmering in 150 degree heat, getting shot at, blown up, 24 hours a day, 7 days a week, including holidays, might have
seemed like the worst mistake of my life, but looking back, it was the best thing that could have happened to me.

I remember sitting sideways on a folding army cot, six inches from the next cot, in a room full of cots. Each cot was home to at least one homesick soldier. These soldiers were burnt out from forty-eight hour patrols around the city of Fallujah. Sick and exhausted, crammed together like war-torn sardines. There was no ventilation to speak of and you could feel the filth and mold of that place growing in your lungs. It was a medic’s nightmare. An entire platoon was living, working, eating and sleeping in a giant Petri dish. It was a perpetual mass casualty environment and it was my job to keep it from affecting our mission. Needless to say I didn’t have a lot of free time or space.

**Amid the violence, exhaustion, and festering bacteria, I found inspiration.**

I used what little resources were available to continue animating. Sitting on my cot with my laptop overheating, I began to model characters for a story I had not yet created. A friend would frequently sit next to me and watch me work, entertained by the presence of
non-military, high-end technology in such a hostile and desolate place. The male face I was modeling began, quite unintentionally, to resemble my friend who sat and watched so intently and with such amazement. After much tweaking, the final result is far from being Sgt. Mario Reymundo’s virtual twin, but I often see my character strike a pose or facial expression that instantly takes me back to that Army cot and the inquisitive look of my fellow inmate / combat companion. Concentrating on animation helped boost my morale, maintain my skill set, and gave me hope to one day finish what I had started.

Another inspiration that came out of my experience at war has to do with the moral of my story and its rather less than subtle reflection of my observations concerning the U.S. occupation of Iraq. You can’t force your way of life on another and expect them to be happy about it. Our official intentions in Iraq were to liberate the local population from an environment that
western culture, myself included, sees as intollerable and cruel. Unfortunately we ended up forcing the Iraqis to trade one hostile environment, Sadam Husein’s Iraq, for something even more volatile, a country without leadership. They still don’t have their freedom, and their standard of living has gotten much worse. The Iraqis never asked for our help and I don’t blame them for hating us. I didn’t go to war for Iraq, nor did I do it for the United States. I could care less about Iraq and its problems. I feel its their responsibility to solve their problems, not ours. As for my country, I will defend it against all enemies foreign and domestic, but I never saw Iraq as threat in the first place. I didn’t think my country needed defending from it. No I didn’t go to war for patriotism, I went so that some other soldier could come home. Whatever our reasons for being there, I think it has become painfully clear that it is time to leave. Our brand of assistance is not wanted. We are a country of men taking fish out of water.

I have put forth a lot of effort describing my experience at war, probably much more than was necessary to speak of aesthetics. However, I believe it was necessary given that this particular fork in the road was another life-changing event that helped me to grow as an artist and a man. It has given me strength, an impeccable work ethic, and self-discipline that has led me to the successful completion this MFA Thesis.
TECHNICAL CONSIDERATIONS

SOFTWARE

For the production of this film I utilized a wide range of software packages. Most notable are *Maya 2009 Unlimited* and the *Adobe CS4 Master Collection*.

*Maya 2009 Unlimited  64 bit* was used in the creation of 3D environments, characters, lighting, rendering and special effects. It is in my opinion, without a doubt, the best application available to the public for the creation of broadcast quality 3D animation and special effects.

*The Setup Machine for Maya 64 bit* was used to create the various rigs for my characters. The folks at *Anzovin* created this terrific plug-in that makes short work of character rigging. It is an amazing tool and if you’re not interested in becoming a technical director, or if like me, you are constantly on a tight deadline and don’t want to spend the pain staking hours trying to create a viable rig, the Setup Machine is for you. Check it out at http://www.anzovin.com/products/tsm2maya.html

*Adobe CS4 Master Collection:*

The Master Collection was an essential component to my digital arsenal. Of particular importance was Adobe’s *Dynamic Linking* technology. This allowed for seamless integration of all my projects throughout the Adobe product line. Assets created in *After Effects* and *Soundbooth* were linked directly into sequences in *Premiere* and continued on through to the DVD authoring file assembled in *Encore*. Updates to an asset at any point are immediately reflected throughout the workflow pipeline. This means the artist has to render only once out of a single program, rather than constantly re-rendering updates and video clips out of each program. This increased
efficiency and productivity and reduced production time dramatically. The following is a list of software and a brief listing of the role each played in my production.

Adobe Photoshop:
- Texturing,
- Image Editing
- Design

I chose Photoshop for all my texturing, image editing, and design needs. It is the most widely used, industry-standard digital image editing software on the market today. There are plenty of bitmap editors out there, and some, like MetaCreation's Painter, are very useful, offering tools and features that are not available in Photoshop. However, in terms of productivity, Photoshop's versatility, usability and range of customization, combined with its integration with the rest of the Adobe line, makes it the single greatest image editing application available. Nothing comes close to the sophistication, and limitless creativity that can be achieved with Adobe Photoshop.

Adobe After Effects:
- Image Sequencing
- Color Correction and Masking
- Titling
- Special Effects
- DVD Menu Assembly and Animation

I used After Effects to assemble image sequences rendered out of Maya. These sequences were then processed for digital compositing, color correction, and any masking that was
required. I also used this program to create special effects and lighting that I was unable to generate in Maya due to the amount of computing power required. Other tasks include animated title sequences and a DVD Menu. This program is versatile and easy to use if you’ve had any experience with Adobe products. It basically works like Photoshop in motion. There are mass amounts of instruction and video tutorials for this program available on the web. A novice can attain some amazing, professional quality motion graphics in a short amount of time and with very little effort. The Dynamic Linking feature which allowed me to make changes on the fly that were instantly updated throughout the production pipeline.

Adobe Premiere:

- Audio and video track sequencing
- Video capture

Premiere is a video editing package for non-linear slicing and dicing of video footage. Premiere has many useful tools for increasing productivity including the auto sequencing tool, which allows the user to automatically import, sequence, and apply transitions to video clips and other assets. This cuts down on quite a bit of production time typically allocated to a pretty mundane task. However, I found Premiere to be very unstable and prone to frequent crashes. I found myself having to open Premier several times before my animatic and video sequences would stay open, and even then, scrubbing through the time line could cause a major catastrophe at any time. Fortunately, Adobe had enough foresight to create an auto-save feature, which prevented any significant loss of data. Regardless, the loss of production time and stress of having to work with such a volatile program was enough to turn me into a Final Cut Pro user. Premiere is an adequate choice for video editing software, but maybe not the best. I work with Premiere on a daily basis as Creative Director at SOE Software. I have never had the same problems there as I do at home so it is possible that my technical problems were specific to the copy I was working on.
I will test this against my next installation. I didn’t have the time or desire during the production of my film to research the problem.

**Soundbooth:**
- Audio Recording
- Editing and cleanup

Adobe has acquired a wonderful tool for audio recording, editing and cleanup. Formally a *Macromedia* product known as *Sound Edit 16*, Adobe Soundbooth uses a technology called *Frequency Space Editing*. This technology makes it easy to clean up noise pollution and remove incidental sounds from your audio tracks. Since noise happens on specific frequencies, it is possible to remove those specific frequencies with little affect on surrounding frequencies such as voices. Incidental sounds are represented visually as color spectrums using the *Spectral Frequency Display* in Soundbooth. Simply put, sounds like cell phones and air conditioners can be spotted and removed using a standard marquee selection tool familiar to anyone who uses Adobe products.

**InDesign:**
- Thesis report layout and design

**Encore:**
- DVD Authoring

Infused with Adobe’s Dynamic Linking technology, Encore is a DVD authoring solution that allows for simple, intuitive creation of high-end, professional-grade DVD projects. A DVD menu, complete with animated titles, chapter thumbnails, background graphics, and rollover buttons can be designed in
Photoshop or Illustrator, animated in After Effects or Flash, and linked together into a comprehensive user interface within Encore.

**Snagit:**
- Screen capture

Snagit is freeware that allows you to easily take snapshots of whatever is displayed on your monitor. This software made creating imagery for this thesis report very easy and allowed me to better illustrate production processes and technical challenges.

**Windows XP:**
- Operating system

All hail Microsoft!

**LogmeIn:**
- Remote Access VPN

This free software was used to launch and monitor the progress of renders from a remote location. LogmeIn was extremely helpful and I highly recommend it to anyone with a busy work schedule. Working a full-time job as Creative Director for SOE Software and teaching part-time at The Art Institute of Tampa left me with little time during the week to work on my thesis. This software made it possible for me to check my renders 24/7 from any location. Additionally, LogmeIn has an iPhone application for tech savvy wireless junkies.

**HARDWARE**

The production of this film necessitated the use of high-end computer hardware devices. I assembled a computer for the sole purpose of completing this
thesis project. The following describes the hardware and a brief description of its use.

**Dual Pentium Quad Core Processors:**
3D requires substantial computing power, particularly when special rendering considerations are involved. Lighting effects and dynamic simulations such as particles, paint effects, and fluids demand a high performance processor.

**ATI Saphire 3870 Crossfire GL 1GB Graphics Card:**
Having the right graphics card with plenty of onboard memory increases the stability of your graphics programs and reduces render times substantially.

**Western Digital Raptor 10k RPM 160 GB hard drive:**
The speed of this drive greatly increased the stability and data access speed of my operating system and the various software packages used to create my film. This drive held my operating system and program.

**Western Digital 7200 RPM 500GB hard drive:**
This large capacity hard drive afforded me the space to store my work. In the end, I had 60 GB of free space left. I would recommend a TB or more of internal storage. Audio and Video files can fill your drive up quickly.

**Lacie 2TB eSATA external hard drive RAID 01 (for Back up):**
If you are not backed up 3 times you are not backed up. In the professional arena, there are no excuses, and no one cares that your hard drive gave out on you. The deadline is the deadline. Data loss can also completely undermine your motivation and productivity. We’ve all had programs crash on us. Maya is particularly unstable. We have all felt the nausea associated with corruption of a file you’ve been working on for weeks that has become
completely unsalvageable. A RAID system automatically makes a back up copy of your data and stores it on a separate drive. If one drive goes down, the other can still be accessed. Save early, save often, and don’t keep all your eggs in one basket.

Sony Handicam:
Used for video capture and rotoscoping. This device provided a convenient method for capturing and analyzing movement and body language. If you can’t see yourself acting, you can’t properly time and animate the movement. A decent durable video camera is the next best thing to a mirror.

Wacom Graphire Tablet:
If you’re a fine artist by nature, who prefers to draw with a pencil rather than labor through a sketch using a mouse, you need to get yourself a Wacom tablet. It’s not the exact same feel as graphite on paper, but it’s close.

PRODUCTION METHODS AND TECHNICAL DIFFICULTIES

Facial Modeling and Blend
Shape Creation
A method adopted from Mastering Maya 7. This method consists of binding the base geometry of a character’s head to joints constrained to a duplicate of the base
geometry (skull). The constrained joints are restricted to move along the surface of the skull, pulling the CVs of the base geometry. The results are blend shape targets that more accurately mimic the physiology of true facial muscles. The Paint Skin Weights tool is then used to smooth the geometry and correct imperfections. This method is good for more realistic characters but will also be helpful in creating some of the less exaggerated expressions of cartoony characters.

Global and Local Facial Rigs

If you like to keep your options open in regard to facial animation. A wonderful method for creating blend shapes and rigging a face for animation is described in the book *Stop Staring: Facial Modeling and Animation Done Right*, by Jason Osipa. In this method, much of the facial rigging is done using the blend shape editor. In summary, the method calls for creating a series of blend shapes for facial expressions and lip sync that are connected to a “local rig”. Other blend shape targets are created for things like squash and stretch which are connected to their own local rigs. These local rigs are then connected to a single global rig which is in turn connected to the mesh that is bound to your character’s skeleton. My description may sound a bit cryptic, but the procedure is far too detailed to cover completely in this brief overview. In fact, the method, as described by the author in *Stop Staring*, is actually easy to understand and the rig is quite simple to assemble and control. The advantage and purpose behind all these local and global connections is this: Since blend shapes are reflected in real time, it is possible to create new facial expressions and other shapes on the fly. If you get to a point in your animation that
requires a shape that you neglected to construct, this is easily remedied. New shapes can be added to your local rigs and they will not affect the functionality of other local rigs. I cannot give the book *Stop Staring* a higher recommendation and I have since adopted the book as the official text book for my 3D Animation II: Physical Expressions class. Had I read this book prior to the production of my film, my work flow would have been much more efficient, my animation would have been much more robust, my rig much less limited, and my mental state would have been much more stable.

**Texturing - The Apartment:**

One technical difficulty I have failed to resolve and have chosen to ignore due to time constraints is the instability of my interior set, the hero’s apartment. For reasons I have not yet been able to comprehend, any attempt to display hardware texturing in any file that contains the apartment layout, resulted in the immediate and unconditional surrender of the last four hours of work I had accomplished since my last save. In short, Maya crashed instantly and without remorse. My work around for this issue was to avoid displaying the hardware texturing while working on a file, but this did not always work out for the best. Often out of habit I would hit the number six key and sure enough Maya responded with its usual alert notice. Autodesk calls this notice a fatal error. It is aptly named for it makes you feel like killing yourself every time you see it. Another appropriate name for this alert message would be the “I’m sorry you are a total jackass because you were too involved in your work to remember to save and now you have to repeat the efforts of the last eleven hours only to have this happen yet again, and again, and again,
save your work jackass, and again.” alert.

Save early, save often.

**Particle Dynamics, Soft Bodies, Fluids and Other Stuff that My Computer Can’t Handle:**

Creating an environment that simulates water convincingly is no small task, even if photorealism is not your goal. In no way have I claimed to have accomplished this task, far from it, but as always, I did what I could with the tools and time I had. That’s all we can ever do.

That said, Maya has some wonderful tools for creating special effects, but they require a lot of computing power to calculate and render. The fluids system, although not designed for the simulation of liquids, is an excellent tool for creating gases. The particle dynamics system is great for creating dust and debris that reacts to Newton Fields such as gravity or turbulence. Soft and Ridged bodies allow the user to apply those same fields to geometry. Investing a little time into researching these processor bogging features of Maya can open up a whole new world of effects creation for an aspiring effects artist or anyone interested in technical direction. However, if time is not on your side, I suggest some alternative methods of creating effects simulations. Much can be accomplished with simple lighting techniques or with post production tools like After Effects. I chose to use a combination of methods. I found that creating the simulations in Maya allowed me to familiarize myself with these tools. To avoid long render times, computer crashes and endless migraines, I decided not to run the simulations within my animated scenes but rather to render out the simulations against alpha channels and composite them into the shot in After Effects. This method allowed me to create effective dynamic effects in a relatively short amount
of time. If your computer was not sponsored by Microsoft or assembled by the IT department at NASA, you may want to explore this option for creating special effects.

REFERENCES


Kian Bee Ng. 1999. Digital Effects Animation Using Maya. Rockland, Massachusetts: Charles River Media


RECOMMENDED TEXT


APPENDIX A: TREATMENT

SELF FISH

Synopsis:
A man’s desperate attempt at developing a low-maintenance relationship leads to complication, frustration, and violence. His pursuit of happiness leaves him trapped with a companion that will not reciprocate.

Treatment:
A man sits alone in his apartment playing a video game. The room is filled with the sound of gunfire. On the TV is a “first person shooter”. The image is of a pair of hands holding a double-barrel shot gun. The shotgun is aiming at various enemies, creatures, etc. The game character is eventually killed by the enemies and the game is over.

The man turns off his console, sits back in his chair, and grabs the TV remote control. He sighs heavily as he flips through the channels, paying almost no attention to what is on each channel. His attention drifts as he looks around his very plain, almost empty living space. The man sighs again. He has stopped flipping through the channels and has lost any focus he had on his TV. His attention is redirected to focus solely on the ominous, poorly-lit, empty spaces of his apartment. The sound of a TV commercial interrupts the man’s pathetic remorse over his lonely existence. His attention returns to the TV.

“Pets are good for your health! They have been clinically shown to help relieve stress and can help you to live a longer happier life!”

A great smile stretches across the man’s face. His attention returns to the empty spaces of his apartment. The previously dimly lit areas are brighter and a playful little puppy is
rolling around on the floor. The man looks down at his bare feet. The puppy drops his slippers there in front of him. The man looks down at the cute puppy and smiles. The puppy smiles back. The puppy’s facial expression then turns sinister. The puppy sits down on the carpet and begins to drag its ass all the way across the living room floor, leaving behind an enormous and potentially permanent stain. The man scowls intensely, shakes his head and rids himself of the imaginary puppy.

The man sits in his chair thinking. A cat is now sitting in his lap purring. The cat lovingly rolls over onto its back, meows, and rubs its body against him in typical cute cat fashion. The man is once again smiling enjoying the idea of his imaginary companion. His smile fades away as he catches a whiff of an extremely potent and unpleasant odor. He looks to his left just in time to see a litter box drop from thin air onto the floor. The man jumps back in his seat at the shock of the impact and its accompanying smell. The man looks down at the cat. The cat is smiling back at him menacingly. The cat extends razor sharp claws. The man looks around his room to see that all the furniture is torn to shreds. The man looks back that the cat. The cat plunges its claws into the man’s leg. The cat disappears and the man sits in his chair looking very angry.

A bird is sitting in a cage. The bird begins to talk in a very loud nasal voice.

“Ark! Polly wanna cracker! Polly wanna cracker! Polly wanna cra...”

Before the bird can utter another syllable, the man grabs it by the neck and chokes the life out of the bird until it disappears in a cloud of smoke and feathers.

The man grabs his jacket and storms out of his apartment. He is walking down the city streets to relieve the stress of his encounter with his imaginary friends. He walks briskly past a pet shop and almost passes it by. The man does a double take and returns to the window of the pet shop where he stares in awe at a small fish in a rather large aquarium. The fish is staring
back at him with a huge adorable grin. The man’s pupils morph into large hearts. A fishbowl pours redness into the hearts like water filling a tank. Lastly, the fish plops into the hearts and swims around in circles. The man then looks at the price tag of on the fish’s tank and his smile fades. He pauses for a moment. Images of the ruined carpet, the torn furniture, and the smelly cat box appear above him. A fish tank drops from thin air crushing the previous “thoughts / images”. The man rushes into the pet store to purchase the fish.

The man opens the door to his apartment and enters carrying a brown shopping bag in his right arm and a clear plastic bag containing water and the fish in his left hand. He places the fish on his dining room table. He reaches into the shopping bag and pulls out a small, glass fishbowl. He places the bowl on the table and pours the water and the fish into the bowl. He lowers himself to peer into the bowl and gives the fish a big smile. The fish stares out from the bowl at the large magnified grin of the man. The man is smiling but his smile soon fades as he realizes the fish is not smiling back. The man looks at the brown shopping bag. From the shopping bag, he pulls out a can of fish food. He shakes some food into the bowl and watches as it sinks to the bottom of the bowl. The bits of food sink past the fish. The fish is not interested in the food particles. The fish is still not smiling. The man is struck with a look of disappointment.

The man is happier now as he goes about his nightly routines, including the fish into all of them. He make his dinner, eating it at the table where his fish floats in it’s bowl. He moves into the living room, bringing the fishbowl with him. He places the bowl next to him on the coffee table. He watches TV for a while. The man then retires to his bedroom and places the fish on his night stand. Before turning out the light he looks over at the fish and smiles. The fish does not smile back.

Morning light shines through the window of the man’s bedroom. He rolls over to view the fish and smiles. The fish does not smile back. The man frowns and gets out of bed slowly.
He carries the fish into the kitchen where he proceeds to make breakfast. The man sits down in front of the fish bowl and smiles at the fish. The fish does not smile back. The man looks at the eggs on his plate. He drops a piece of egg into the bowl expecting, for some reason, that maybe the fish wanted real food instead of its own. The fish watches the egg sink to the bottom of the bowl and is disinterested. The man purses his lips, slams his fork down on the table and looks away from the fish. He then grins widely, stands up and walks out the door of his apartment.

The man walks into the pet shop and browses through the store picking up various decorations, castles, sea weeds, filters, fish foods, etc.

The man walks through the front door of his apartment and places a brown shopping bag on the table. He begins to remove the various items from the bag. He places the small decorations into the fish bowl. He lowers himself to peer into the bowl. He grins widely. The fish does not smile back. The man squints his eyes, purses his lips and violently crumples up the brown shopping bag and throws it carelessly at the fish bowl. The fish is slightly startled by the crumpled bag hitting the side of the fishbowl. The fish looks up at the man and squints back at him. The man notices the fish's reaction and immediately calms down. He moves closer to the fishbowl and looks back at the fish apologetically. The fish looks away.

The man moves around to the other side of the fishbowl to see the fish. The fish turns away again. The man follows his usual routine of making dinner, watching TV, and taking a shower. As he has done previously, he brings the fish with him as he completes each task. He brings the fish with him to his bedroom, placing the fish on the nightstand next to his bed. Before turning out the light, he looks into the fishbowl and smiles at the fish. The fish does not smile back. The man sneers and rolls over to face the other direction, away from the fish. The man is still sneering with his eyes shut tightly. Over the man's shoulder the fish is staring at him. The fish smiles menacingly. The man opens his eyes, raises one eyebrow, and quickly turns to look at the fish.

The fish is not smiling and looks away quickly to avoid eye contact with the man. The
man turns back away from the fish, pauses for a moment, shakes his head, then closes his eyes and fades off to sleep.

Two eggs fry in a pan. A spatula flips the eggs once and then places them onto a plate. The man sets the plate down on the dining room table. The man sits down and begins to eat as he stares at the fish in the bowl in front of him. The man stops chewing. He stands up and walks out the door briskly.

The man passes money over the cashier counter at the pet shop. The man walks out of the pet shop with his arms filled with miscellaneous equipment and supplies.

The man walks through his front door and drops the equipment on the floor of his living room. The man pulls out a large piece of paper containing some sort of blue prints. The man tosses the blue prints aside and is assembling a large, translucent tubes. He is piecing together large electronic and mechanical devices. The man removes furniture, tears down walls, and rips large holes in the ceiling. The man is hoisting a large rounded translucent tank into the ceiling. The man attaches a hose to his sink and runs the other end into the large tank. The tank is filling with water. The fish sits in a small fishbowl that is suspended from the ceiling. A tube connects the bowl to the ceiling, along the corners of the ceiling, out into the living room, out into every room in the house. A bowl is suspended near the TV, in the bathroom, and over the nightstand next to the man’s bed. The fish moves through the tubes, inspecting every square inch of it’s new environment. The fish makes its rounds and returns to the bowl in the kitchen. The fish is looking around at all of the equipment, high-tech filters, water bubblers, oxygen circulators, and temperature monitors. The fish turns around and sees the man staring at him. The man has a huge grin on his face. The fish does not smile. The fish looks up and away. The man’s smile turns to a frown. The man’s eyes narrow, his eyebrows move low over the bridge of his nose. The man grinds his teeth together and slams his fists on the table.
The man stands up and moves through an almost empty apartment. The furniture pieces that once decorated the space are now gone. The only thing left is a small old TV where there used to be a large, flat LCD screen. The man opens a closet door, reaches in and removes a double barrel shot gun. The man is in the kitchen. He stands at the kitchen table lifts the barrel of the gun up to the suspended fishbowl. The man smiles menacingly at the fish before pulling the trigger. The fish narrowly escapes the blast of the shotgun. The fish swims frantically up through the tubes that connect the fish tank to each room. The fishbowl explodes into oblivion. Water is pouring down through the broken tube. The man walks from room to room shooting at the fish, each time narrowly missing him, each time blowing large holes in the tank, the tubes, the ceiling and the walls. Water is gushing from all the holes and is forming a pool on the floor.

The man tramps through ankle deep water, still shooting at the fish. The fish frantically swims from room to room trying to escape the blasts from the shot gun. The man wades chest deep in water as he moves back into the living room. The water gets deeper and deeper until the man is swimming in water that is over his head. The water fills the room. The man takes one last breath from the last pocket of air near the ceiling. As he holds his breath he sinks to the floor.

Looking straight ahead he notices the fish smiling at him. The man becomes enraged and lunges toward the fish. The large reservoir tank, now empty comes crashing through the damaged ceiling. The tank flips as it enters the water and traps a pocket of air within it. The tank sinks quickly trapping the man inside the tank just before he could grab the fish. The man gasps a large breath of air from inside the tank. The man spots the fish again and lunges for it smacking his face against the glass of the tank. The man looks around the tank with his hands pressed firmly against the glass. The man remains trapped in the glass. The fish has control of the house.

End treatment.
Lonely?
Fish make great companions!

Fish help reduce stress!
Title appears + dissipates as fluid

FLUID FORM OPENING SHOT
Camera moves to man sleeping in front of TV

TV commercial promotes pets

New research shows pets help you live longer

INT - Living Room / Man / Medium Shot - Night

INT - Close Shot / Living Room / TV - Night
Man watches TV and smiles

Man gets up from chair, heads off to bathroom

CLOSE SHOT / LIVING ROOM / MAN

MEDIUM SHOT / LIVING ROOM / MAN
SC: 2   PN: 5   BG: BR

TV Safe

WIDE SHOT of man taking a shower

DIAL.

WIDE SHOT/BATHROOM/SHPWER

SLUG.

SC: 3   PN: 1   BG: K

TV Safe

ZOOM OUT from fry pan to expose kitchen

DIAL.

INT.-CLOSE SHOT/KITCHEN/EGGS - DAY

SLUG.
Man enters his apartment

Man eats his breakfast at the table

MEDIUM SHOT / KITCHEN / MAN

WIDE SHOT / APARTMENT / MAN
**Scene 4**

**Panel 1:** Man walks down a city street.

**Panel 2:** Man notices pet shop window display.

**Shot:** Ext. - Wide Shot / City Street / Man - Day

**Shot:** Med. Shot / City Street / Man
MAN IS CURIOUS ABOUT FISH

ACTION

INT-CLOSE SHOT / PET SHOP / MAN + FISH

SLUG.
FISH IS SMILING + SWIMMING  POVs MAN

MAN SEES PRICE TAG, FISH IS EXPENSIVE

EXT- CLOSE SHOT / CITY STREET / FISH / MAN'S POVs

INT- CLOSE SHOT / CITY STREET / MAN + FISH
Man falls in love with fish.

Fish bowl pours red into pupils
pupils fill and fish swims in them

Man decides to buy fish.

Aquarium

INT. CLOSE SHOT / BATHROOM / MAN / FISH PON

TV Bath

8C
PGN: 8
BG: G

TV Bath

8C
PGN: 7
BG: G

L bully
ACTION
Fish is dropped on table. Money is dropped on table. Fish is angry

DIAL.

INT - MEDIUM SHOT / PET SHOP / COUNTER
Man carries fish.

Ext - close shot / city street / man + fish

 internally / man / etc.
Fish in bag is dropped on kitchen table. Fish is angry.

Man smiles at fish in bag.

**INT. CLOSE SHOT / KITCHEN / FISH - DAY**

**CLOSE SHOT / KITCHEN / FISH + MAN**
FISH IS THROWN INTO FISHBOWL

CLOSES HOT KITCHEN FISH
Comic book style panels swoop in and illustrate evening routine. Man making dinner, places fishbowl on kitchen table.

Man joyfully eats dinner with his new pet.

INT - KITCHEN / KITCHEN + FOOD ITEMS

MEDIUM SHOT / KITCHEN / MAN + FISH - NIGHT
Man places fishbowl on end table and sits down to watch TV

ACTION: TV commercial:
STUDIES SHOW PETS HELP REDUCE STRESS

DIAL:

MEDIUM SHOT/LIVING ROOM/MAN, FISH, TV

SLUG.

The man takes a shower with the fish

ACTION:

DIAL:

WIDE SHOT/BATHROOM/MAN + FISH

SLUG.
Man is sleeping with fish next to him on a nightstand.

Comic strip panels swap in. The illustrate the man's morning routine: waking up, making breakfast, etc.

Man brings his fish everywhere.

INT - MULTIPLE SHOTS / APARTMENT / ROUTINES - DAY
Man eats with fish and notices the fish is not smiling.

Fish is visibly upset.

DIAL.

DIAL.

MEDIUM SHOT / KITCHEN / MAN + FISH

INT - MEDIUM SHOT / FISH BOWL / FISH / MAN'S POV
Man smiles at the fish but becomes concerned because the fish is unhappy.

Fish does not smile back.

CLOSE SHOT | KITCHEN | MAN + FISH

MEDIUM SHOT | FISH BOWL | FISH | MAN'S POV

DIAL.

DIAL.
Man is concerned about fish, then gets an idea.

Man feeds the fish.
Man gets an idea to feed the fish. He's always thinking of ways to get fresh in the pet store.

Action:

Fish is still unhappy.

TV Sare

SC: 8
PL: 8
BG: K

TV Sare

SC: 7
PL: 9
BG: K

Medium shot of kettle

Fish bowl / fish

Inside shot of kitchen / man

Foot.
ACTION: He cuts a piece of egg.

ACTION: and drops it into the fishbowl.

DIAL: Close shot / Kitchen / Plate of food

DIAL: Close shot / Kitchen / Fish bowl
Fish does not show interest in food.
Fish is still unhappy.

Man is not sure what to do, he sits and wonders.

Medium Shot / Fish Bowl / Fish

Medium Shot / Kitchen / Man + Fish
SC: 8
PML: 1
BG: PS

PET SHOP

TV Safe

MOTION

Man arrives at the pet shop.

SC: 7
PML: 14
BG: K

TV Safe

MOTION

Man leaves for the pet shop.
Panels sweep in. Purchase of small aquarium castle.

Man puts new castle in the fishbowl.

INT./EXT. - CLOSE SHOT/PET SHOP/CASTLE

INT.- MEDIUM SHOT/KITCHEN/MAN & FISH
He looks to see if the fish is smiling. The fish isn't happy.

CLOSE SHOT | FISH BOWL / FISH

CLOSE SHOT | KITCHEN / MAN + FISH
Man thinks for a moment, then leaves again for the pet store.

Panels swoop in. Purchase of new, large aquarium.

MEDIUM SHOT / KITCHEN / MAN + FISH

MEDIUM SHOT / LIVING ROOM / AQUARIUM
He checks to see if the fish is happy

ACTION

The fish is not happy

ACTION

CLOSE SHOT/LIVING ROOM/MAN + FISH

SLUG.

CLOSE SHOT/AQUARIUM/FISH

SLUG.
Man ponders what to do about the fish.

Wheel cart is pushed by.

Medium shot/Living room/Man

Close shot/City street/Wheel cart
ACTION

**Man is pushing a cart with a larger aquarium**

ACTION

**He pushes the cart into his living room**

DIAL.

**EXT - MEDIUM SHOT / CITY STREET / MAN + CART**

DIAL.

**INT - WIDE SHOT / LIVING ROOM / MAN + CART**
Panel 10: Man takes a shower with the fish next to him.

Panel 4: Man is watching TV commercial with the fish beside him.
Man climbs into bed and turns toward fish.

Man smiles at the fish.

WIDE SHOT / BEDROOM / MAN + FISH

CLOSE SHOT / BEDROOM / FISH + MAN
Fish is still not happy

Man becomes frustrated

CLOSE SHOT/AQUARIUM/FISH

CLOSE SHOT/BEDROOM/MAN
Man turns away angry

Fish smiles deviously

WIDE SHOT / BEDROOM / FISH + MAN

MEDIUM SHOT / BEDROOM / MAN + FISH
Man suspiciously turns head toward fish. 

Fish quickly looks away innocently.
Man drifts off to sleep

Eggs are frying in a pan

Medium shot/bedroom/man+fish

Close shot/frypan/eggs - day
MAN SITS AT TABLE WITH FISH

PURCHASES OF LARGER AQUARIUM. MAN
PUTS FISH IN NEW AQUARIUM.
Man smiles at the fish

The fish does not smile back

Medium shot / Aquarium / Man + Fish

Close shot / Aquarium / Man + Fish
Man becomes angry

ACTION

Panels sweep in. Man is not sleeping. Eggs fry in a pan. Man leaves the apartment.

ACTION

SLUG: MEDIUM SHOT/LIVING ROOM/MAN + FISH - NIGHT
Man hoists giant fishbowl into ceiling

Reveal large tubes of water, and fish swimming through them.

DIAL.

WIDE SHOT / LIVING ROOM / MAN

CLOSE SHOT / LIVING ROOM / FISH
MAN sits down in front of fish eagerly and smiles

ACTION

THE FISH is not happy

ACTION

WIDE SHOT / KITCHEN / MAN + FISH

SLUG.

CLOSE UP / KITCHEN / FISH

SLUG.
Wide shot KETCHER, MAN

CLOSE SHOT DRAMA, FRESH

They confront each other. The man is fed up.
The fish is suddenly frightened.

The fishbowl explodes and water is gushing out onto the floor. The fish narrowly escapes the blast.
The man closes the fish throughout the apartment, shooting holes in the Aquarium.

The fish, frantically swims through the tubes trying to escape.

MEDIAN SHOT / TUBES / FISH

WIDE SHOT / LIVING ROOM / MAN
The man wades through water as his apartment continues to flood.

The apartment is filling up.

Medium shot/Living Room/Flooding water
The man begins to sink as he starts to run out of air.

He takes a deep breath just before the room is completely submerged.

Medium shot / diving room / hold
The fish swims up to him.

And smiles deviously.

Medium shot / living room / man + fish
The fish is grinning

The man becomes enraged

CLOSE SHOT / LIVING ROOM / FISH

CLOSE SHOT / LIVING ROOM / MAN
The ceiling is coming in.

He tries to grab the fish.
The giant aquarium reservoir comes crashing through the ceiling... and traps the man inside a bubble of air.

Wide shot / living room / reservoir

Medium shot / living room / man
The man is trapped in the bubble, the fish controls the house. The fish is happy.

WIDE SHOT/ LIVING ROOM/ MAN.

MEDIUM SHOT/ LIVING ROOM/ MAN + FISH.
APPENDIX D: ACKNOWLEDGEMENTS

I’d like to express my gratitude to my Thesis Committee.

Skip Battaglia: Above all I would like to express my overwhelming, heart-felt thanks to Skip Battaglia for his dedication, professionalism, understanding, and creative input. Skip maintained contact with me and provided advice and encouragement when I needed it most. The letters and music he sent in care packages during my deployment were huge morale boosters and helped me stay connected both physically and psychologically, to my dream of becoming an animator. Without his moral support, I would still be in Iraq today. In addition to moral support, Skip offered artistic advice. As an accomplished film maker, artist, animator, and script writer, Skip’s input was an important asset to my production. Skip remained in constant contact with me throughout the unbearably long production of my film providing guidance, inspiration, motivation and critique. For that I will be forever in his debt.

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Ferris Webby: For his efforts providing me with remote technical support for the numerous rigging and texturing issues I experienced throughout the production of this film. Thank you so much.

Warm, fuzzy thanks to my friends and family.

Maggie Messier: I love you a lot today. I have a feeling I’m going to love you even more tomorrow. Maybe we should get together sometime. What’s your schedule like for 2013?

My Family: For your love and support. Although I get distracted at times, please know that I love you and you are the most important part of my life.

C-Company: Special thanks to the soldiers of Charlie Company. You were an inspiration to my story, you were my friends, my brothers and my protectors. Thanks for keeping me alive. Ascend to victory! Hoo-ah.

The Bull Moose Club: Yessah! Nuff said.
James Bertolino: For his continued support, friendship, and service to his country. You are a true friend and a bull among the herd. Your loyalty, sense of humor, intelligence, and lust for life are the reasons I call you “brother”. Keep your head down, your safety off, and may the moose be with you.

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