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The Legend of the Drum Beats (working title for the animated short)

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August 25, 2008

In every culture there are several schools of thought as far as the recognition or respect of professions that one chooses. The decisions that an individual makes about their career path not only reflect who they are, but also the way in which society sees them. In countries such as India, where culture and society have a heavy hand in influencing this decision, young people often choose “the respectable” profession to satisfy their parents and society. This is because of the non-acceptance of non-traditional professions. However, with changing times evolve new problems that need creative solving, and new professions are born. Nowadays world issues are being solved creatively through new media, gaming, art, music etc... As these efforts are providing solutions, Indian society should embrace these new professions.

As a young Asian Indian who underwent this decision making process when choosing a career in computer graphics, and knowing others who have gone through the same process, I feel strongly about educating youth, parents and educators on this issue. For my thesis, I will comment on this issue through a 3D animation short. The piece will be geared towards children between the ages of 8-14 as these are their influential years when they begin to think about what they want to do when they grow up.<sup>i</sup> The tone of the piece will be humorous with a powerful message. Research has shown that cartoons play a major role in influencing children as far as teaching them moral values and small lessons in life. Therefore for this age group, I feel that an animated short would work best. In India, currently most of the cartoons and animations are based on religious stories; as a result children have a very rich knowledge of their culture and religions.<sup>ii</sup> My concept is to tell the story of my 3D character’s journey through this issue of non-acceptance through actions and music that incorporate Indian drumbeats as these are attention grabbers for kids.

My first step was to research my assumptions on this issue which were the following:

- Many South Asian youth choose traditional professions such as law, medicine, or accounting because of their parent's non-acceptance of any other careers.
- Parents are influenced by society and traditions and therefore advise their children's career choices accordingly.

India has embraced modernization and many would say that this is no longer an issue especially because parents have become more open minded with the changing times. So can we really say that there is still non-acceptance of non-traditional professions?

It was important for me to research these assumptions and find out if this is still an issue that Indian youth face. Therefore I first looked into the various factors that influence young people in their decision making process.

In a study conducted in England on the influences in young people's career choices, an analysis was made on factors such as social standing, similarity to others in their position, personal enjoyment, and personal growth. A high percentage of students in the higher grades said that professional status and social standing were important to them in choosing careers when compared to the other ethnic groups. The second highest factor was being in contact with others that followed the same social values and also had respectable professional status in society. Career enjoyment and personal growth being factors were not considered very important especially among Asian youth when compared to the other ethnic groups.<sup>iii</sup>

It can be concluded that high levels of education and respectable professions are highly valued in Asian communities. When communities have gatherings, for example, in temples, mosques, and weddings etc... everyone becomes aware of what's going on each family. This leads to more competition with regards to status among the families and professional status among the youth. Research has also confirmed that parents are the single most influential factor for young people when choosing careers. One of the reasons that parents do not encourage their children in pursuing non traditional/ newer professions is because often times they do not understand what the career entails or it's usefulness to society. Concern for their child's future tends to make even the most open minded parents lean towards traditional occupations because they know that the earnings will secure their child's financial future and status in society. With divorce in India

becoming more common, single parents are more open minded with their children, as the concept of divorce is also new to Indian society. They tend to accept their children's choices more openly having gone through a battle with society themselves. However, concern for their child's future especially after an ordeal like this does tend to make them lean towards advising their children on careers that are more stable or familiar to them. Even those that move to the west come with the dream of a better future for their children as they know there are both educational and professional opportunities to be taken advantage of. The accomplishments of their children reflect the families status back home as well this providing immense pressure on the children to "do the right thing" and choose a "respectable profession". Therefore it becomes important for the children and schools to educate the parents on the different types of careers, their requirements and their worth to society and the individual.

This made me realize that my piece would be most useful if it were presented to schools and organizations that were interested in the educational development of children to get the message to them and instructors so that the issue can be dealt with. I decided to approach SAYA (The South Asian Youth Association) for research, a nonprofit group based in New York that holds activities to help Indian children of various ages rise as far as employment, deal with issues of racism, and deal with the pressures of the Indian Society in America and their parents. As SAYA deals with a majority of my target audience, I will talk to these kids and perhaps their parents to research the issue and test out effectiveness of the various character arcs that could be taken in my story. I have been able to get in touch with SAYA's Program Director Wida Amir<sup>iv</sup> who has expressed interest in my thesis and has promised an appointment with her soon, as the summer months were busy.

My next step was to think about the story and how my character's journey was going to make a statement on this issue. I had been working on a story that spoke in this issue since the end of last semester in Ethan Silverman's Narrative Strategies class. There I tested it out with extremely simplified characters to visualize the character arc, and received positive feedback and responses from both my professor and classmates. Therefore I decided to use this story as a base for my thesis.

The intention was to get the viewer attached to the emotional journey that the main character takes in order for him to get his father and his village to accept him for who he really was and what he wanted to do in life. The story would take place in a rainforest village. The premise is that the little boy is the son of a respectable rain doctor. The boy really wants to play the drums but his father wants him to follow in his footsteps and be a rain-doctor. Every time the boy tries to show his father that he wants to play the drums, he either gets mocked at by the villagers or his fathers sends him away in embarrassment. Finally one day when his father is caught in an emergency to summon the rain because the village is on fire, the rain doesn't come even with his famous rain-dance. The little boy joins his father and starts beating the drums as his father dances after which the rain falls and puts out the fire. Finally the father realizes that being a drummer isn't so bad and the villagers start to respect the boy.

While this story was good, it was a little too literal and the journey seemed like one that we have seen in many other movies. So I decided that I would use the summer to think about how to change the character arc so that the journey has more twists and turns, making sure that the audience takes away the same message at the end of it. Before I could start building new character arcs and designing new characters, it was important for me to test my current story with my audience (children 8-14yrs) to see pitching this story to my cousin's children along with the pictures I had created for the storyboard. (Matthew 8, Christopher 5, and Akshay 6).

They really liked the story and when I asked them what it was about, they were able to tell me what the message of the story was. However, they seemed to like the father's character a lot because he danced about. I realized that they like actions and I had to make my main character the son, more active than just paying the drums. This got me thinking that instead of playing the drums, he realizes that he is able to make drum beats with his hands when he touches things. It would also be interesting if he had a sibling, one who was different from him in that he wanted to conform and be like his father. This would better portray the social acceptance factor of this issue and help children relate to the character as this is something that happens in real life.

As research to improve upon my character designs and story, I watched several movies and analyzed character designs by various CG artists, and analyzed the various elements that made

the characters or the stories work well. Movies such as *Horton Hears a Who*<sup>v</sup>, *Kung Fu Panda*<sup>vi</sup>, *Bee Movie*<sup>vii</sup>, and *Musicotherapie*<sup>viii</sup> were excellent sources for story as they all hint upon the same issue of career acceptance in some way. The main character's son Jojo, from Horton Hears a Who played the role of a silent hero. He kept trying to tell his father that being mayor of Whoville was not what he imagined for his future. Every time he would try to tell him, his father would start talking to him about his dreams for his son and about the great legacy that he would be carrying on. Finally, when the entire fate of the town was in jeopardy of being destroyed because no one could hear that they existed, little Jojo stepped up and made a huge sound with his secret sound machine and saved the day.

Po, the main character from Kung Fu Panda faced a similar problem with his father. He ends up proving his father and townspeople wrong and fulfills his dream when he defeats the villain Tai Lung by realizing that his greatest strengths were his weaknesses. Bee Movie also touched upon this topic initially when Barry a recent graduate decided he wanted to be different and not make honey for the rest of his life. This issue leads him onto his journey of self-discovery from which point on the rest of the story unfolds. Musicotherapie, a thesis animation created by three animators from Supinfocom, was my biggest inspiration. Using Maya as their platform, the movie was rendered using the toon shader and the characters were very stylized. The way the story unfolded about the monkey doctor trying to stop the music being created by these other characters with their kitchen utensils was remarkable. Not to mention the animation was stupendous! This was very similar to what I wanted to achieve in my story as it was told only with music and action. I also watched *Ryan*<sup>ix</sup> on Anezka's suggestion as the animator focused heavily on character development. It was really interesting to see how each character was designed to intentionally portray their personality. For instance, Ryan's character was not all there and transparent because psychologically he had a lot of problems and didn't want to be seen. His portrayal of each character including his own was phenomenal both psychologically and visually. Although this is not the style of character design that I want to follow; it was interesting to note the thought process behind the creation of each character.

For my next steps, I wrote a treatment for the short and created biographies for each of my characters. The biographies helped tremendously when redesigning my characters as it helped

me keep in mind the physical features, as they would portray the personality. I also used *Creating Characters with Personality*<sup>x</sup> to help me through the re-design process. I ended up designing four different designs that I tested out with my audience.

The first two characters were cartoony with more human features. The third looked more like a creature from a different planet and the fourth was a human 13year old boy. The characters were tested through clay maquettes that I built of each and showed the children that were being directly interviewing. For the children I was not able to directly interview, I sent online surveys with illustrations of my characters so that they could choose their favorite one. I was very pleased to see that they chose one of my favorite designs and went ahead to build that character in Maya.

Over the summer I took a class at NYU in character modeling where we were taught how to create a character using polygons, nurbs and subdivisions, however we not shown how to build characters in Maya with human proportions. Learning how weighting, parenting, constraints and the skeleton system works definitely helped me understand how to structure my character so that it moves the right way. To build my characters, I used *Maya 8 Character Modeling*<sup>xi</sup> and *An Essential Introduction to Character Rigging*<sup>xii</sup> as reference. I then built my character using a combination of methods from the two books and the knowledge gained from my summer class at NYU.

Manually rigging and weighting a character can be very tricky and frustrating, therefore, I used the Setup Machine, a Maya plug-in that had been recently developed by Anzovin Studios. The Setup Machine was developed for gaming and film to allow studios to quickly and effectively build high quality, advanced character rigs so that they can save time and start the animation process.<sup>xiii</sup> The initial stage is to model the proxy around the character mesh so that it covers all areas that need to be weighted. It is then rigged based on the specs of the proxy that have been altered to fit the character and weighted accordingly. The weighting is not perfect but helps tremendously as it calculates the approximations for each bend. One can then make specific weighting tweaks and fine tune body deformations using the Maya weight-painting tool. The

advanced rig also allows for stretchiness and maintains the structure of the body as it deforms proving to be the most effective way for me to setup my character rig.

As I was testing out my story and pitching it, I started to realize that this was one that could be told without dialogue. I was interested in how lip synching worked and decided that I would make two prototypes, a character with a mouth and another version of the same character without a mouth to help me decide which direction I was going to go in. As this was a creature that might look human, he and his people exist in a world that's different; therefore it wouldn't be far fetched to have a character without a mouth. Another factor that helped me decide weather my character would speak was the amount of time the lip synching process takes. There were three ways for me to do this, the first was through blend shapes, for which I would need to create four blend shapes for each viseme<sup>xiv</sup> and animate each word using the viseme – phoneme relationship. The second is using MEL scripting and After Effects to create automated lip synchronization and the third is by creating a facial rig, which would allow for numerous facial expressions.

The best option of the three turned out to be using a character rig to animate the face. Blend shapes take extremely long to animate for lip-synching and would be a separate thesis process by itself. Even though the lips could be automated through MEL, it would take a long time to break down all the frames to each phoneme and viseme. Therefore I decided to use The Face Machine, a facial rigging UI created by Anzovin Studios.<sup>xv</sup> Similar to the Setup Machine, this UI also calculates approximate weighting with the face, saving the time it would take to create the same deformations with blend shapes. As analyzing sound versus frames is time consuming, I decided that my character would have a mouth. He would make expressions and emotive sounds but he would not speak.

As I now have my characters built, the next steps are for me to start animating in order to figure out how the characters will move in relation to each other. I was able to find an actress with a background in dance and will shoot reference footage for animation. I would like to use Tabla for the drumming portion of the music. Tabla is a traditional Indian drum that has been part of Indian music culture for centuries. The notes are very distinct and these drums have traditionally been used for Bharatanatyam, a form of Indian dance to guide the story that the dancer is trying

to tell.<sup>xvi</sup> I think it would be interesting to use this traditional form of drumming to tell a traditional issue that needs a modern solution. I will work with the composer to incorporate the Tabla notes to create a soundtrack that's lively and enjoyable for children in my age group.

Overall, the summer has been a time for me to research and explore my issue further. I have been able to test my story and characters and develop new ones for me to test. My character has been built so the next step will be for me to figure out the movement and build my environments so that I can start animating. I will continue to stay in touch with SAYA and talk to them about using my thesis in their programs as they deal with this issue every day. In the end, I see this thesis serving as a message for young people and as proof of my animation abilities.

## End Notes

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- <sup>ii</sup> Naomi Canton, Challenges/threats the industry faces, Hindustan Times, March 4, 2008.
- <sup>iii</sup> Pauline Lightbody and Stephen Nicholson, A respectable job: Factors which influence young Asians' choice of career, British Journal of Guidance & Counselling 25, no. 1 (1997): 67
- <sup>iv</sup> Wida Amir, (Program Director of SAYA: South Asian Youth Association), Correspondence by author, Queens, New York., 17 June 2008.
- <sup>v</sup> Horton Hears a Who, Dir. Jimmy Hayvard and Steve Martino, Blue Sky Studios, 2008.
- <sup>vi</sup> Kung Fu Panda, Dir. Mark Osborne and John Stevenson, Dreamworks Animation SKG, 2008.
- <sup>vii</sup> Bee Movie, Dir. Steve Hickner and Simon J. Smith, Dreamworks Animation SKG, 2007.
- <sup>viii</sup> Musicotherapie. Dir. Amael Isnard, Manuel Javelle, Clement Picon, Supinfocom, 2007.
- <sup>ix</sup> Ryan, Dir. Chris Landreth, Cooper Heart Entertainment, 2004.
- <sup>x</sup> Tom Bancroft, Creating Characters with Personality, Watson Guptill Publications, 2006.
- <sup>xi</sup> Gary Oliverio, Maya 8 Character Modeling, Wordware Publishing, Inc., 2007
- <sup>xii</sup> Cheryl Cabrera, An Essential Introduction to Character Rigging, Focal Press, 2008
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- <sup>xiv</sup> António Moura, Ingrida Mažonavičiute, João Nunes, Justinas Grigaravicius, Human Lip Synchronisation in Autodesk Maya, Vilnius Gediminas Technical University, 2007
- <sup>xv</sup> Anzovin Studios, The Setup Machine, 1999-2008,  
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- <sup>xvi</sup> Corvin Russell, Philosophical Reflections on Tal and Tabla, *Bansuri*, Volume 12 (1995): 30-41.

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## **Glossary**

### *South Asian Youth*

Indian children between the ages of 8-14 who are of Indian origin and living in India, or have moved to the U.S./ the west.

### *3D*

The use of Autodesk Maya for rendering and animation.

### *Tweens*

Children between the ages of 8-12 years of age. In other words, old enough for toys and cartoons but have not developed teen tendencies.

### *Society*

Indian communities in India and the Indian communities located in the U.S.

### *Acceptance*

Acceptance of children's career choice.

### *Professions*

The various career paths that one chooses.

### *Change*

Referring to social change over time and change in culture with the change in generations.

### *Humor*

The element of amusement that causes laughter in a story.

### *Culture*

Traditions and rules that ethnic groups (in this case Indian culture) have formed over time to guide the ways of its citizens.

### *Entertainment*

When a visual/ audio medium provides amusement to its audience.