Designing Your Animation Character

Prof. Amol Gupte[1], Mr. Vishal Firode[2]
Asst. Prof., Animation Dept, Suryadatta Group of Institutes, SPPU, Pune, India[1]
S.Y. M.Sc. Animation, Gujarat University, Ahmedabad, India[2]
gupteamol@gmail.com[1], vishal.firode@gmail.com[2]

Abstract: Designing a character for your animation may seem to be a piece of cake; however it is not as easy as you perceive it to be. Incorrect characteristics of your model are likely to attract failure. The researcher has put in efforts to provide few tips through his research in order to take a step towards improvisation of character modeling. He has discussed about some simple things which need to be a part of one's observation. The enhancement of such skills will only help animators/modelers to visualize their character in a much precise manner. While this process may not appeal to some, it is utmost important to get your character design right for conveying the intended message to the audience.
Keywords: Animation, Character design, Visualize.

1. Introduction

One of the most important aspects in animation is the "Character Design". While interacting with students, professional artists have revealed that they possess excellent talents from software abilities to conceptualization skills, however the students are unable to design their character well. Unfortunately, this proves to be a setback for the animators/modelers who are involved in an exceptionally creative field. Many animation students who are phenomenal in their work lose golden opportunities due to lack of observation skills. The animator/modeler may develop an extra-ordinary piece of work overall, however if the character design is not the way it should be, it will defeat the purpose. While you may possess exceptional drawing/sketching skills, designing your character requires you to take your creative thinking one step ahead by expanding your horizons further.
Keywords: character design, character modeling, 3d modeling, 3d character, 3d animation.
Objectives:
1. To highlight the lack of observation skills in animators/modelers.
2. To enhance observation skills amongst animators/modelers this in turn will help them in character designing.

To justify the character that animators/modelers have designed.

2. Concept of Character Design

Designing your character demands a lot of observations in your daily life. It primarily involves the character's physical attributes, dressing style, body language, various gestures, and to sum it up; an overall appearance. If you expect your protagonist and supporting characters to appeal to the audience, it goes unsaid that you design your characters appropriately. Hence, the researcher strongly recommends that you should identify the target audience on highest priority. Once you master this step, it becomes far more easier to visualize your character based on the story. Observing other's work (but not copying) is likely to help you develop your character design in a much focused manner. This may just direct you towards realizing the Do's and Dont's while designing a character, because it is important to understand why some characters click and some don't. There is abundant research material available in various forms such as TV Advertisements, Hoarding Ads, Food Boxes, Social Media Platforms, Mobile Phone Games, Books, and many more.

Your objective is to catch the audience's attention and make them believe what you have designed is truly appealing. There may be thousands of other artists who

may design a character the way you do. However, there has to be some unique element in your design which makes your character stand out from the rest. Though, it has to make visual sense in the audience's minds. It takes much more than you think to visualize and bring your character to life virtually. One of the principles of Animation is "Exaggeration". Hence, this is one opportunity and an additional liberty for you to make use of this principle while bringing down your character design on your sketching sheet. Let us consider the world famous sailor "Popeye" for instance. We all know that spinach is an amazingly versatile leafy vegetable, which is rich in vitamins, minerals, and extremely nutritional. However, when Popeye consumes a dose of spinach, he develops incomparable strength and agility within seconds, with an add-on as his bulging fore-arms. Though we are aware that this is practically not possible in real life, these are some elements which are well thought and designed to create an extra impact for that character.

Now, let us try to design a character of our own; a 20 year old female student who is cheerful, smart and is the center of attraction in her college. As we had discussed earlier, the first thing you need to do is identify the target audience. Before you start designing this character, there are few questions that you need to ask yourself; What is this girl's family background? What is her family's financial status? Is she good or bad in her academics? What are the girl's likes and dislikes? Who are her friends or who does she hang out with? Is the girl helpful to others or an arrogant girl with attitude? Is she moody? How will her dressing sense be? Is she shabby or very particular about her habits and hygiene? How does she commute? What are her food habits? There are many such questions, the answers to which will help you to visualize your character in a much better way and acquire a convincing outcome. While designing such a model it is also essential to take into consideration if the character is a real life human or a cartoon character. The reason for this thought is that the body proportions will vary in both cases. In case of a real life human model the body proportions will need to be as per the human body anatomy, while in case of a cartoon character there are no such limitations. In either cases, it is mandatory that you have the model ready on a paper sheet before you actually start modeling it in your preferred 3D software.

There are many other elements which are extremely important when it comes to the finished product. One of them is texturing. Once you have your 3D model ready it is time that you give it the right complexion along with appropriate clothes and other essential accessories which

are best suited to that character. You may assume that giving a texture to a 3D model is no big deal, and might just end up with a wrong cover to your valuable book. Here you are expected to consider the character's ethnicity, geographical location, and other such elements which are bound to affect its body type or skin type.

Once you have a concrete character design, one intricate step is to create a 3D model of that character in your preferred software. It is important that you think of preparing your model from animation point of view. Hence, having a quadrilateral polygon structure in your model is strongly recommended by the researcher. Acquiring this habit will make it easier for rigging, texturing, dynamics, as well as animation and all other purposes. In case you make a non-quad polygon structure the back-end system is likely to create complications while dividing the triangles, pentagons or polygons with higher vertices. It is a good idea to follow a specific pattern. As we all know, pattern represents repetition, hence you can save an enormous amount of time and complications if you are capable of identifying patterns before-hand for a specific 3D model. Also, if you develop this skill while creating various character models, it will be a cake-walk for you to edit your model within minimal time. This was you can also make modifications in larger models with an investment of lesser time and efforts, but getting the desired results effectively.

Ambition is the first step towards improvement. However, if you think you can create a masterpiece having an unmatched complexity by directly jumping into 3D modeling, BEWARE! You will undoubtedly attract a huge quantum of disappointment and frustration. While it is good to know that you may have had an image of your character model in your head from a long time, it is essential that you get your technical skills up to the required level. The reason to have this approach is that when it is time to plan your project you should be asking yourself about the technical hurdles which might cross roads with you and how you could solve them realistically. Many beginners have a misconception that a single seamless mesh will make the best 3D model. Instead, such an approach will complicate the model all the more. Making mistakes during learning is absolutely acceptable, because that will expose you to the "Don'ts" while modeling. This practice will also prove to be a learning process and ultimately help you in continual improvement.

The researcher strongly recommends that the 3D model that you create should necessarily have a simple mesh. In case you make a complicated structure, firstly the file will

be extremely heavy and secondly you will certainly come across a nightmare while making even the slightest modifications in the model. This carelessness again will invade your patience and eventually tie up your creativity in chains. Hence, it is advisable that you spend considerable amount of time to first have a clear sketch of your character, and then think of how you could make it even simpler as a 3D model instead of just rushing your way towards completion without any planning. Investing quality time in the initial stages will save you from disaster and humiliation.

3. Conclusions

1. The researcher has observed that though animators/modelers possess excellent skills as far as software and other tools are concerned, they lack the power of observation. This leads to failures and slower career progression. An effective way out is to interact with more and more people. This will improve your observation skills and enhance the way you see people. This process will automatically lead you to notice the different behaviors, gestures, styles, dressing sense, way of walking / running / sitting talking / laughing / crying and many such things, which will help you in designing the character very precisely.
2. Animators do a phenomenal job in designing 3D models, however it has also been observed that the character actually differs from the way it should be. This happens due to lack of observation. There are some minute but impactful elements which the animator misses out while making those 3D models. The animator can improvise his communication skills up to a great extent by reading, writing, watching, observing, and interacting with people. This process will be of extensive help in getting his character model correct and also conveying the right message to the audience as desired.

4. Suggestions for further research

Since researcher had certain limitations, he felt that an additional research needs to be done in order to understand the root cause of these hurdles along with the solutions for them. Researcher suggests following topics for further research.
1. Importance of learning Character Modeling.
2. Importance of Observation Skills for Character Modeling.

References

[1] https://www.creativebloq.com
[2] https://professional3dservices.com
.