Animatic Character Design – Manual, Digital & Present

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Abstract

Animation is the illusion of movement which is created by showing a series of still pictures in rapid sequence. "Animation" means "to give birth to". So, animation is the process of creating something what we can't easily see in realistic world. People are well acquainted with the term Animation. Our area of focus is Character designing technique in Animation. In animation, character is a very important thing. In early years animation was created through a fully manual technique that is known as "Cel animation or Traditional animation". Animators created frame by frame animation by hand drawing. They created all poses of each character & filled colour manually. But as the world progressed, technology got updated, digital media progressed, the process of animation also changed. In digital animation, 2D animation was first to develop. This with time simplified the process & was user friendly. Here, animators get more option to create the characters and animate them. In this context, animators create only some main poses & use these poses to create a full character animation like – walk cycle, jump cycle etc. Now a days, 3D animation is ruling the present field of animation and provides us with a promising future and a lot to expect from. 3D characters are much more realistic. In 3D, we can create a 3D model of a human being which looks like a real character.

*Keywords: Cel, Rigging, Tween, Texturing, Acetate sheet.*

Introduction

In early 1950's animation was created frame by frame & it was called manual or classical animation. Here, animators drew each frame one by one to create gradual changes in action. This was the Cel or traditional animation & they used transparent pages in the form of "acetate sheets" for drawing & Rostrum camera for capturing the photographs. Then character designers could not rig the characters' body part to blend the parts for other actions. So, they drew characters various times for every action & from various view points. This was very time consuming. So, if we wanted to create an animation by this process we took a lot of time, sometimes more some years for 1 story line.

Then, digital animation appeared in the scene and provided paperless & computer based technique of making animation characters. This was easier than manual animation and took less time. In 2D animation, we create characters digitally. Here we get some software features like rigging, tweening etc.

to help us in character designing. Furthermore in 2D animation, we need not create all views of a human figure. We need only five views which can be converted into all views with the help of software.
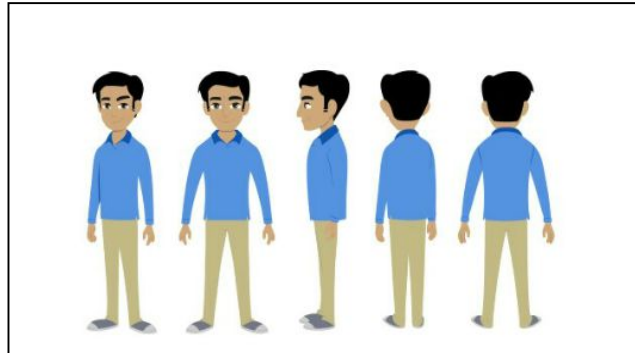

Now a days 3D animation has become quite popular. In 3D animation, we can create 3D characters model which look like more realistic & we can also use texturing, lighting to create great appeal.
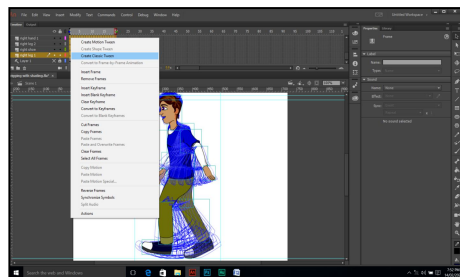

Manual character animation

On 1928 Cel animation or traditional animation was introduced. A Cel was like a transparent sheet on which artists drew object or painted for traditional animation. They drew every poses of each character for various characters they used in the animation project on each paper one by one. Then they filled colour manually one by one and captured the photograph of slightly different drawings onto motion picture film one by one by Rostrum camera to create the illusion. At this period of time they could not rig the character's body part for creating another action. It was very difficult and time taking process. But Walt Disney created outstanding cartoon through this technique, example of which can be seen in exemplary works of animation like Mickey Mouse and Donald Duck.
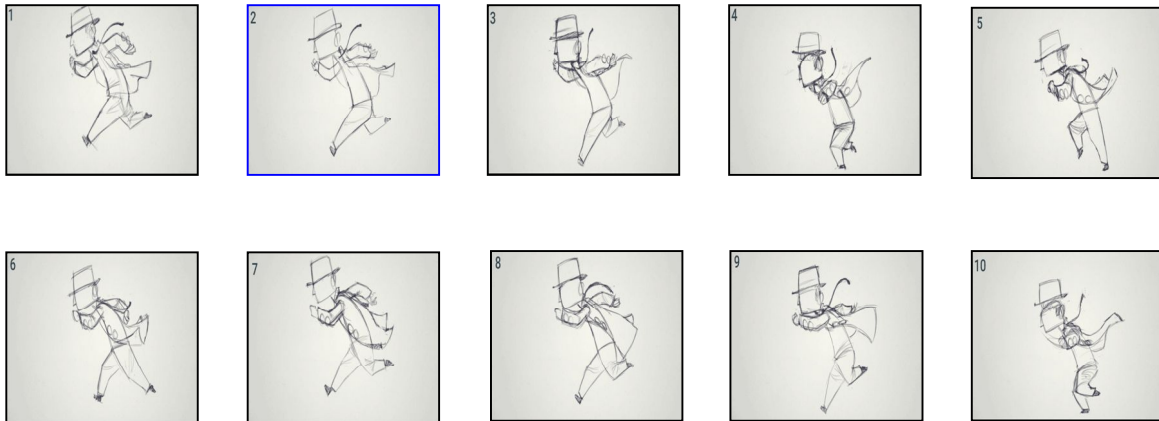
2D Digital Character Animation

In 1990 we started to use 2D Digital animation. In 2D Digital animation, we got various software features to create character animation. In this type of animation the software provides features to create the main poses which can then be used for in-between frames with the help of Tween feature.


Even, in 2D Digital animation, they can rig the characters body parts manually using pivot points i.e at first they created head & grouped it, then the other body parts and then hands' parts, etc. This way the other poses of the character can be created. So, this saves the time.
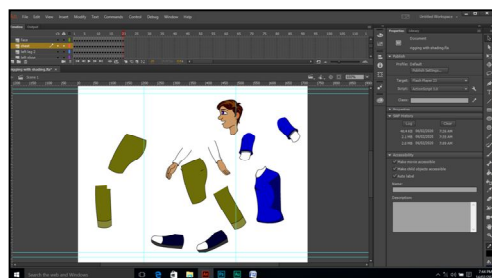

Further development in animation techniques led to the development of a tool called Bone tool which enabled to create a rig in a more effective manner. This could be used to create poses of the character easily and more effectively. Here, we can even effectively manipulate the amount of rotation of the

joints, the amount of stretch of a particular bone etc. Though 2D animation does not create a realistic appearance but it has its own feel and aesthetic face value.
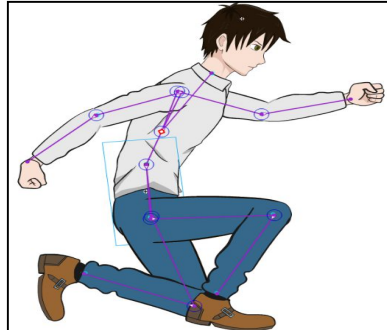

In 2D Digital animation we use various tones, like- 1 tone, 2 tone etc. to create the depth of a character & apply some depth to the characters.
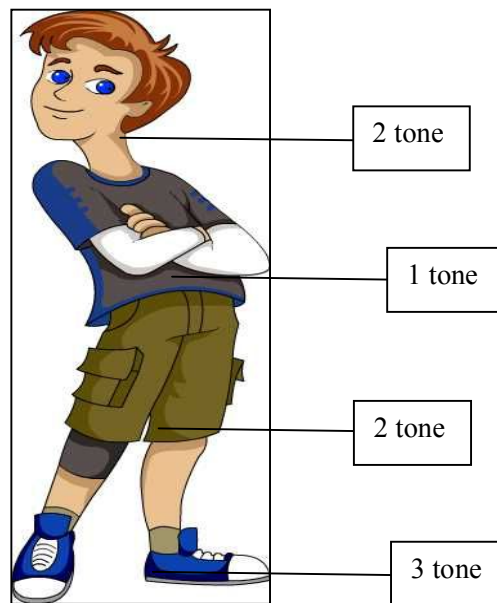
3D character Animation

In this digital world we can also create 3D character using some user friendly softwares like Maya, Autodesk, Z brush etc. 3D character making provides more features than 2D. Here we get four view ports displaying the state of four angles of the human figure. In this software, we create characters through only some geometric shapes like Polygons, NURBS, etc. So, if we draw one views of a character, from there we can derive the other views through modeling techniques. So, it is an advantage. Here we can also rig a character. But here to create a character model we should start from a basic shape, then add mesh to

the bone, skin modifier, and armature modifier. Then we also add texture on skin for more realistic character & lighting effects.
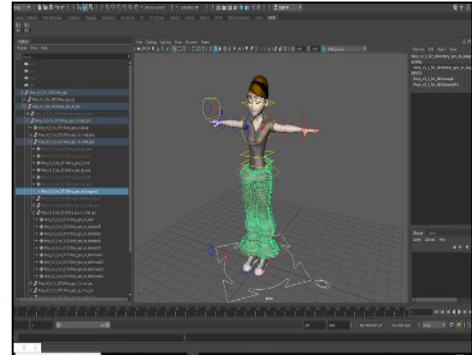
Conclusion

Some of animation films having some good examples of character are – Frozen 2, Lion king, Zoetrope, Spider man, Moana, Kubo and the two strings, Coco, Tangled, etc. Thus we find that with the change in technology the character designing has also undergone transformation rapidly, providing us a more realistic and appealing views of the characters and a smoother and realistic character movements.

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