

A STUDY ON ANIMATION ART WERE DEPICTED IN THE SCULPTURES OF CHOLA TEMPLES

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Abstract

The movies are surely the most widespread form of mass entertainment the world has ever known. Moreover, the techniques of the cinema especially in the way they are able to manipulate the factors of space and time have greatly influenced the techniques of other arts. But it is in its ability to record and arrange moving images that the art of the movies remains unique. From the beginning of cinema, movies showed the help of moving dolls behind the screen in the presence of light. Their movement of these shadows on the screen marked a new evolution. This technique was first used in Europe. These techniques captured moving images frame by frame. This technique of animation technology is hearty employed in modern days' movies. Present day movies are incomplete without graphics and animation. "By citing the example of animation art seen in drawing on a pottery vessel found in Shahr-e Sookhteh (IRAN), Sistan 2100 BC now in the national Museum of Iran." [1]. My paper discusses that similar evidence of animation art were depicted in the Sculptures of Chola period (Rajarajan II, 1146 AD- 1163AD) at laravathisuvarar temple, Dharasuram, Kumbakonam in Tamilnadu. My research proves that the Ancient Tamils were frontrunners in the art of animation and entertainment depicted in the modern day animation techniques portrayed in Cinema.

Keywords: *Sculptures, evolution, animation, cave paintings, videotape, Chola Kings*

Introduction

Animation

Animation refers to the creation of a sequence of images drawn, painted, or produced by other artistic methods that change over time to portray illusion of motion. Before the invention of film, humans depicted motion in static art as far back as the Paleolithic period. "The magic lantern is a early predecessor of the modern day projector. It consisted of a translucent oil painting, a simple lens and a candle or oil lamp. In a darkened room, the image would appear projected onto an adjacent flat surface. It was often used to project demonic, frightening images in a phantasmagoria that convinced people they were witnessing the supernatural. Some slides for the lanterns contained moving parts, which make the magic lantern the earliest known example of projected animation" [2].

The history of animation dates back to thousand years. Early examples of attempts to capture the phenomenon of motion drawing can be found in Paleolithic cave paintings, where animal are depicted with multiple legs in superimposed positions, clearly attempting to convey the perception of motion. "A 5,000 year old earthen bowl found in Iran in Shahr-e Sookhta has five images of a goat painted along the sides.



Figure 1 Paleolithic cave painting

This has been claimed to be an example of early animation. However, since no equipment existed to show the images in motion, such a series of images cannot be called animation in a true sense of the word.” [3]

The 12 basic principles of Animation [7]

1. Squash and stretch
2. Anticipation
3. Staging
4. Straight ahead action and pose to pose
5. Follow through and overlapping action
6. Slow in and slow out
7. Arcs
8. Secondary action
9. Timing
10. Exaggeration
11. Solid drawing
12. Appeal

Frames

You would have seen Cinema film roll. From this film roll you will find the same photo still image one after another , but if you see carefully you will find slight different one another in images. Each of one image denote certain movement of position, and this position is called frame. “The individual picture image on a strip of motion picture film. Also, one complete screen on videotape.” [4]. The common method of presenting animation is as a motion picture or video program. This type of presentation is usually accomplished with a camera and a projector or a computer viewing screen which can rapidly cycle through images in a sequence.

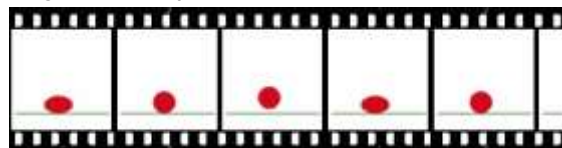


Figure 2 Film roll

Animation can be made with either hand rendered art, computer-generated imagery, or a combination of techniques. “When one image is swiftly followed by another that is only slightly different, we have the impression of seeing both images, superimposed upon each other, as one moving image. This so called persistence of vision is the fundamental principle upon which cinematography is based.” [5] The position of each object in any particular image relates to the position of that object in the previous and following images so that objects each appear to fluidly move independently of one another. The viewing device displays these images in rapid succession, usually 24, 25 or 30 frames per second.

Architectural Excellence of Chola Kings Iaravathisuvarar temple

South Indians especially the people of Tamilnadu are well known for their arts and literature. It is an amazing fact that Cholas showed the seed for Animation before thousand years. The main aim of this project is to do research and prove that Tamilnadu’s culture and entertainment feature are combined for a show, with the help of example gathered from Chola Temples. The given images taken from Iaravathisuvarar temple, Dharasuram, Kumbakonam in Tamilnadu. “This temple was added to the list of great living Chola temple in the year 2004, The great living Chola temple includes the Brihadeswara temple at Thanjavur, The Temple of Gangaikonda Cholapuram and the Iaravathisuvarar temple at Darasuram all of these temple were built by the Cholas between the 10th and 12th centuries CE and have a lot of similarities” [6]. Although there are many animation sculptures used in this temple, let us take one as an example.

Iconography

This example has been taken from a statue of Iaravathisuvarar Temple of Dharasuram. A street dancer appears in a seated posture supporting her hands on the floor, stretching her legs horizontally. Further six legs also appear in the same statue.



Figure 2 Source image

Most of the sculptures having animated sequence in this temple but we are taking a some particular sculptures for this research. This sculpture is placed in the Back side of mandapa in lower position Patti portion as a relief sculpture (Figure.2). You can find it clearly from the following images. In this main image depicts the sculpture and the other three images divided in to three frames. You can find the idea of animation by artist why design the sculpture.

Pose to pose

There are the different poses found and all the three poses are shown as frame I, frame II, frame III separately there are missing frame between 1, 2 and 3 but the technique of pose to pose has been handled effectively.



Fig.2 (a)-Frame 1



Fig.2(b)-Frame 2



Fig.2(c)-Frame 3

Squash and Stretch

The sample image satisfies most of the basic principles of Animation. The most important principle is “Squash and Stretch”. The important aspect of this principle is the fact that an object’s volume does not change when squashed or stretched. It is seen clearly that both the legs are stretched in the source image and in the frames that follow the length of the legs are a little shorter; while the legs are folded squash and stretch principle is handled.

Anticipation

The right leg of the statue is squashed and the left leg folded gives the normal physical movement of action before venturing to do any act. Hence the principle of anticipation has been followed ably in the statue. Anticipation is used to prepare the audience for an action and to make the action appear more realistic, has been followed here.

Arcs

This principle can be applied to a limb moving by rotating a joint. In frames 1, 2 and 3 feet are rotating from left to right. From this it is evident that arcs principle is used.

When the movement of both the legs are from the bottom to the top an arc is created (an arched & trajectory). Hence the principle of arcs serves as a complement.

Staging

The purpose of staging is to direct the audience's attention and make it clear what is of greatest importance in a scene, as what is happening and what is about to happen. In the series of the three frames are related to one another and they command the attention of the audience without any disturbance, No unnecessary images are there and hence the principle of staging is used here.

Dancing girl

This example also has been taken from a statue of laravathisuvarar Temple of Dharasuram. a street dancer appears in a dancing posture supporting her one leg on the floor. Further parts of her body also appear in the same statue (Fig.3). This sculpture is placed in the Back side of mandapa in upper position of a pillar as a relief sculpture. You can find it clearly from the following frames. A dancing girl lifting her body as standing position in one leg. In this main image depicts the sculpture and the other two images converted in to two frames. You can find the idea of animation by artist.



Fig.3 Source Image



Fig.3(a)-Frame 1



Fig.3(b)-Frame 2

Pose to pose

There are the different poses found and the two poses are shown as frame I and frame II, separately Fig.3(a),(b) there are missing frame between 1 and 2 but the technique of pose to pose has been handled effectively. These are two different approaches to the actual drawing process. "Straight ahead action" means drawing out a scene frame by frame from beginning to end, while "pose to pose" involves starting with drawing a few key frames, and then filling in the intervals later.

Arcs

From this image we observe Arcs principles. Since one foot is elevated and one foot is stepped in floor and body is looking like bending from top to bottom or bottom to top, we are able to observe the usage of Arcs principle.

Anticipation

The left leg of the statue is stretched and the right leg half folded gives the normal physical movement of action. Hence the principle of anticipation has been followed ably in the statue. Anticipation is used to prepare the audience for an action and to make the action appear more realistic, has been followed here.

Staging

The purpose of staging is to direct the audience's attention and make it clear what is of greatest importance in a scene, as what is happening and what is about to happen. In the series of the statue the four parts are related to one another and they command the attention of the audience without any disturbance, No unnecessary images are there and hence the principle of staging is used here.

Perception of motion

The technique of animation rules followed in the modern days with the help of computers. But the ancient Tamils made use of the principles of animation through the stone sculptures. This reveals the non-moving sculpture. Even though this may appear similar to a series of animation images with in a single sculpture. There was no way of viewing the images in motion. It does, however, indicate the artist's intention of depicting motion. From the above examples sculptures are depicted with clearly attempting to convey the perception of motion.

Conclusion

In the modern computer world, we have forgotten to preserve the traditional history and ancient treasure of Tamil culture. Animation concept has roots from the modern technology development. Our forefather already discovered the concept of animation 1000 years before is the proof of research. Our old artists have not mentioned their names in the sculpture. Therefore it is our duty to preserve and safeguard the cultural heritage and sculptures. This is the only way to honor the artists who contributes the valuable sculpture, in our country.

Footnote

1. Movie - is a Cinema film, Moving in motion.
2. Frame - The individual picture image on a strip of motion picture film. Also, one complete screen on videotape
3. Illusion - Something that deceives by producing a false or misleading impression of reality.
4. Paleolithic - Early phase of the stone age, Which appeared first in Africa and marked by the steady development of stone tools.

5. Phantasmagoria - A shifting series of phantasms, illusions, or deceptive appearances, as in a dream or as created by of many elements.
6. Superimposed - Motion pictures, TV. To print over another image so that both are seen at once.
7. Persistence - The continuance of an effect after its cause is removed.
8. Cinematography - A motion picture projector or camera.
9. Sequence - Motion pictures. A series of related scenes or shots that make up one episode of a film narrative.
10. Perception - The are or faculty of apprehending by means of the senses or the mind; understanding

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