

# Bengal Scroll Painting: An Early Interpretation of Animation

Ananda Karmakar<sup>1</sup>, Dr. Ravindra Singh<sup>2</sup>

<sup>1</sup>Associate professor Department of Visual arts, Graphic Era Hill University, Dehradun, Uttarakhand, India

<sup>2</sup>Humanities and Social Sciences, Graphic Era Deemed to be University, Dehradun

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## ABSTRACT

The handmade scroll painting painted by hereditary painters (Patuas) is depicted for visualizing visual stories in Bengal of India. The painters appeared as an existential community to communicate their concern to the audience through scroll painting. The purpose of the study paper is to create a relation between the early animation approach and Bengal Scroll painting. This paper investigates that Bengal scroll painting is an early interpretation of animation and it has all attributions that early animation has. The study follows a theoretical framework with descriptive mannerism. The research has been designed based on secondary data collection. The significance of the study to afford a new dimension to Bengal scroll painting, in order to an approach of animation.

**Keywords:** Bengal Scroll painting, Animation, Visual storytelling, Movement, Early animation

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## INTRODUCTION

Since the ancient period of communication through visual storytelling was one of the popular modes in India, Bengal scroll painting indicates the same unbroken link with the past, the tradition of communicating the story through song and visual illustration, which is a significant, characteristic of Bengal scroll painting (SenGupta, 2012). The handscroll painting painted by hereditary painters (*Patuas*) of India is depicted for the Eastern cause in Bengal. The painters appeared as an existential community to communicate their concern to the audience through scroll painting; originally scroll illustration was presented to the popular epics of the Mahabharata and the Ramayana (Ghosh, 2003). After going through so many literature reviews related to this study I have come to know that a lot of experiments and investigations have occurred with Bengal scroll painting but in spite of that, there is a research gap on what lots of scopes still remain. The current study is an attempt to unfold a secret about Bengal scroll painting followed by a series of frames or drawings, which is principally approached of early animation and its process.

**Research statement:** Bengal scroll painting is an early interpretation of animation

**Objective of the study:**

The objective of the study is to create a relation between the early animation approach and Bengal Scroll painting. To investigate that Bengal scroll painting is also an approach of the early animation process. The purpose the paper to state, that every aspect of Bengal scroll painting is related to the early animation approach and attributions. This study's aim is to provide a new dimension to Bengal scroll painting, in order to an approach of animation.

**Methodology:**

The study follows a theoretical framework with the descriptive mannerism. The research has been designed based on secondary data collection; data has been collected from reputed books, journals, and webpage. Many visual contents related to the research like Bengal scroll paintings, several other classical and ancient animations visual contents have also been gathered through various reputed books and sites. By conducting review have determined how the other researcher and have delineated and drawn their opinion and experiment on the key concept, after receiving various models of theories I have able to make the correlation between the existing theory of classic animation or traditional animation and Bengal scroll painting and have made an establishment that fit best my research in the approach of new adoption of traditional animation and its process.

**A brief on Bengal scroll painting:**

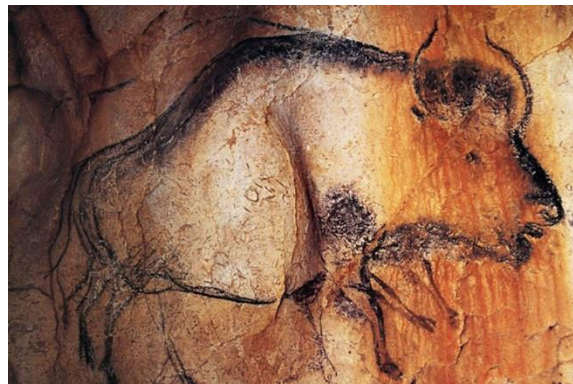
Bengal scroll painting is a traditional art style in Bankura, Purulia, West Mednipur, and Birbhum, West Bengal. The scroll-style artwork sequences Indian epics and mythological facts. The scroll artists perform visual narrative stories by scroll painting in front of the audience, seeking their attention in chronological order. This scroll painting demonstrates on hand-made paper, and to roll it, two bamboo sticks are attached with the painting. Scroll painters also draw the attention of audience aiming to present audiovisual presentations. (Singh, 2018).

**Discussion:**

As stated in the article, I used a theoretical framework with descriptive mannerism to construct a link between classical animation and Bengal scroll painting. This study gives every apparent reason in support of Bengal scroll painting and its method as an interpretation of conventional animation and its techniques, unfolding the hidden elements of motion still pleated from the universe. In this study, I will give several reputable current ideas regarding animation and its process, where diverse motion or movement of different pictures and frames generated by humans from ancient times have been deemed animation and its process by many distinguished scholars and experts.

Animating a succession of drawings provides the illusion of movement; this is the most basic principle of animation. This concept of animation depends on Peter Mark Roget's persistence of vision, an optical phenomenon where the illusion of motion or movement is created because the brain interprets multiple images alike. Illusion is created when multiple images are visible in a fast enough succession, and the brain blends them into a single image. (Maio, 2020). In this regard there are few lines wrote by Roman poet and philosopher, the lines are very close to fundamentals of animation or movement, he wrote "*...when the first image perishes and a second is then produced in*

*another position, the former seems to have altered its pose. Of course, this must be supposed to take place very swiftly: so great is their velocity, so great the store of particles in any single moment of sensation, to enable the supply to come up."* the mentioned concept refers to dream image, not an imagined technology (Wade, 2000). Here the Bengal scroll painting observes the identical perception of motion, although the scroll frame's drawing are not sequential image of a of a key image but it can be a motion of storytelling and we see every animator is also following the same understanding that persistence of vision, which helps animators to create smooth and reliable animations in the most efficient way by presenting only enough frames to the viewer to create a sense of motion including contemporary industry with the animatics story telling.



**Figure: 1, An early attempt of animation in Paleolithic age designed on cave at Chauvet Caves in the South of France. Courtesy: pinterest.com**

The concept of animation probably was attempted for the first time in the Paleolithic age in a cave by mankind, in the form of using multiple legs of an animal (Bison) (*Fig-1*) (Azéma & Rivère, 2012). In this reference, there is one of the richest examples that could be mentioned here, about prehistoric art and animation at Chauvet Caves in the South of France – is considered an expressing of movement in the prehistoric site of cave art (Azéma M. , 2015). The approach of CGI animation is still using the conventional method where the artist used to draw each frame by hand for creating a motion (Chen, Ono, & Nishita, 2005). According to a new French study on cave art, the world's earliest animation and graphical portrayal, according to the notion of picture animation, are without a doubt cave paintings. It's possible to discern in the cave a chronological sequence of characters represented as they go about their hunting activities, which is communicated via the paintings' use of animation-visual storytelling. Art has never before been utilised to convey a narrative that necessitates the use of animation. The cave inhabitants' movements and daily routines are well shown even though the images are static. (Deccanherald, 2012). Bengal storytelling scroll painting also incredibly similar to the early animation process where scroll paintings are also painted to communicate an event or storytelling and on this parameter Bengal scroll painting is very attached to animation-visual-like storytelling.

Paleolithic painters may have foreseen contemporary animation. Saied Magdalenian items may rebuild broken motions. Laugerie Basse cutouts (Roussot, 1984), voyage began since the 20th century; science and technology have revealed many secrets of the universe and humans. Curiosity about moving pictures has also led to exciting new developments in animation. Humans have

always been drawn to the illusion of moving visuals; therefore the notion began with frame-by-frame still photos, which led to CGI animation. For my current study, I've researched current thoughts regarding animation or motion methods and their procedure; there I found several sorts of animation, including credit claimed by academics and professionals worldwide. Marc Azema is a scholar and filmmaker who studied Paleolithic cave art. He established that the paintings and pictures found in 'Lascaux, Chauvet,' and other caves, represent early animations (32,000 years ago). Paleolithic artists developed narrative pictures with several episodes involving the same animal or group of animals, he said. Marc Azema believed Paleolithic humans invented sequential animation by overlapping animal images. Bengal scroll painting gives the appearance of movement by exhibiting all pictures in motion; the brain blends the shots in sequence. This strategy works with persistent audiences.

Mark Azma examined old motion drawings. In this work, he created two strategies Paleolithic painters used: superimposition and the combining of subsequent pictures for the deer's head. (Ahmed, 2018). Marc Azema says animation is a series of fast-paced drawings that give the appearance of movement. Paleolithic drawings are animated. In another investigation, the same evidence found on series of frames to be implied for motion, it is about a disc called 'Thaumatrope' with a hole in the middle and drawings on both sides is attached with two pieces of string, when the strings are twirled rapidly between the fingers and the two pictures it appears to blend into a single image due to persistence of vision, and superimposition were used to give sequential images a sense of motion. (Azema & Florent, 2012). In 1970 in Burnt City in Iran, a bowl with five repeated representations of the same goat (Fig. 2), which would leap and snooze at a tree at various phases for presenting motion, was reported. This discovery was made by Iranian archaeologist Dr. Mansur Sadjadi a few years later. (Ball , 2008).



***Figure: 2(a) An early attempt of animation, in the 1970 at Burnt City in Iran has been described a bowl as about five thousand and two hundred years old, with five successive images of the same goat***

***Courtesy: pinterest.com***



**Figure: 2(b)** An early attempt of animation, in the 1970 at Burnt City in Iran has been described a bowl as about five thousand and two hundred years old, with five successive images of the same goat.

*Courtesy: pinterest.com*

In this reference about the 2000 year BC, Egypt researchers found a series of drawing made in a chronological order intentioned to present a motion as every single picture has been drawn to be correlated with the next picture for conveying about an event or fact but may be due to lack of special equipment which could not show in motion (Bugaeu, 2017). The medieval codex Sigenot (circa 1470) has sequential illuminations with relatively short intervals between different phases of action. Each page has a picture inside a frame above the text, with great consistency in size and position throughout the book (with a consistent difference in size for the recto and verso sides of each page).



**Figure: 3** Sequential drawing which is clearly conveying a fact of the wrestling match (Fig:3), depicted to be the motion. *Courtesy: pinterest.com*

In another notion of the mural, the mural was produced about 4,000 years ago in the tomb of Khumhotep at the Beni Hassan graveyard, a very large sequence of consecutive drawings vividly communicating a reality of the wrestling fight (Fig. 3), (Bendazzi, 2016). Parthenon frieze is a 524-foot high-relief marble sculpture created between 443-437 BC in France. It has been displayed as an exhibition of motion by exhibiting successive relief frames with rhythm and movement.. (Bendazzi, 2016) ( Hardiman, 2006).



*Figure: 4, 5, 6, and 7 paintings example of Bengal scroll art with multiples frame depicting various visual stories are attempt of animation. Artist: Unknown, Courtesy: pinterest.com*

Walt Disney said, "Animation can explain everything the mind of man can imagine." With this phrase, it can be argued that anything going on in the human mind and apparent in the conscious or subconscious mind in fast succession is animation. ( Thomas & Johnston, 1995). I've already mentioned that Bengal scroll painting is created in scroll format with multiple frames, and each frame is shown its individuality. Each frame is also interconnected with the next frame in a sequential (visual storytelling) manner like an illusion of movement, so the audience can easily perceive the visual story in rapid succession. Marc Azema suggested that Paleolithic cave paintings used this method to create movement or motion. According to Carrier, scroll paintings contained figurative motifs that followed a synoptic mode of representation. By showing scroll images, viewers are asked to imagine and fill their own way. At a time, only a single frame is unrolled so that pictorial communication or motion could possible slowly. (Carrier, 2000). Pilling argued conventional animation is a movie that communicates a tale or fact via moving drawings or drawing pictures in a narrative fashion, based on cel animation; he also claimed the principle of exhibiting movement is akin to live-action movies. (Pilling, 2011).

Oster noted that the patua's singing of the scroll's story mirrored the priest's chanting to the clay image in a different social context. The Philadelphia scroll's dominating goddess as a celebration

motif shows that, as creators of clay figures and narrative scrolls, (Ostor, 2004). As it is said that when animation is functioned on a particular fact, audio process also going on along with the visual description, animation storytelling becomes more impactful and more understandable, and the performance of Bengal scroll painting has that audiovisual description quality for the audience to conceive the events or fact more easily and it creates more impact, scroll painters perform their presentation with a long scroll painting in front of them. In this sense, scholar Gosh explains, every frame of scroll painting is timed with the proper song performed by patuas. This was a prominent medium until televised versions took over. (Ghosh, 2003).

### **Conclusion**

Bengal scroll painting has maintained a blend of the audio-visual description of each frame which presents a stage of development of animation from earlier approach, it creates the illusion of movement by presenting all pictures in a sequential moment, and suddenly brain blends the pictures and song sung by patuas performer into a visual description. The basic purpose of this study to establish a relation between the early animation approach and Bengal Scroll painting, it is concluded that the Bengal scroll painting is also similar to the existing theory of traditional animation, which tells about frames with the rapid display, here Bengal scroll painting has also attempted the same theory, it creates the illusion of movement by presenting all pictures faster mood, and suddenly brain blends the pictures into a single, this practice also works with the audience like the persistence of vision, and the illusion is converted into movement of multiples frame (Pata Chitra) therefore, in Bengal scroll painting there is the sequence of drawings arranged with the flow of the story and each frame presents an event of the story and correlated with the next picture frame for conveying about an event or fact, but maybe due to lack of special equipment which could not show in motion.

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