

Using the Concept of Timeframing to Implement Animation in the Motion Comic Adaptation of Bumi

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Abstract. Motion comics are known for their implementation of animation in static comics, but the goal of the animation itself is rarely thought about. Some use animation in comics just for the sake of creating a moving comic, without really thinking about the strengths animation can bring. Understanding the concept of timeframing and the seven characteristics of a motion comic will help improve the use of animation in a motion comic.

Keywords. Timeframing, motion comic, digital comic, animation

1. Introduction

With the advancement of technology, comics that were distributed through print, have now taken form digitally and can be read through phones, laptops and tablets. Not only are these comics uploaded online, but a lot of creative techniques are being used in the comics that can only be done digitally. One of them would be the use of animation. Digital comics combined with animation are often called interactive or motion comics.

There are a lot of different types of motion comics. Some may take the original static comic and add little animations in the panels, some have implemented voice-over and music, and some have even transformed the comic into full length 2D animation. This have caused a lot of controversy on what a comic truly is, and what essence animation can bring on an already well done static comic. Scott McCloud, an American cartoonist and comic theorist, brings up the idea that, “if partial sound and motion can create an immersive experience, won’t full sound and motion do the job more effectively?” [1]. But when one think about sound and motion, comics are usually not in the picture, since movies have already done a better job in that field. The question that comes up is in what way animation can be used in digital comics, and whether there are rules and boundaries in doing so.

To better understand the use of animation in motion comics, deeper research was done and the term *timeframing* was found. It was coined by Erik Loyer, a digital artist, with the help of Dr. Daniel Goodbrey’s research. One of the advantages that animation brings in motion comics is that it is able to portray space and time that runs in and between panels. With this in mind as what animation could achieve in a motion comic, it becomes an easier task to decide what to animate in a panel and why.

This project consists of making a motion comic adapted from the novel *Bumi* by Tere Liye, because of the demand of fiction-fantasy comics in Indonesia. The motion comic tells the story of three

friends exploring new worlds, with the design mainly focused on Indonesian Batik patterns and motifs.

1. Method

There are a few methods that needs to be known before implementing animation on a motion comic. The first would be the seven characteristics explored by Dr. Daniel Goodbrey.

1.1. Seven Characteristics in a Motion Comic

Dr. Daniel Goodbrey, on his journal, “The Impact of Digital Mediation and Hybridisation in the Form of Comics”, have explored and narrowed down certain characteristics to be a way for the form of comics to be discussed [2]. The seven characteristics are: space as time, simultaneous juxtaposition of images, closure between images, spatial networks, reader control of pacing, tablodoc images, and word and image blending. The first characteristic, space as time, is going to be the focus when talking about animation in comics.

It is important to remember that comics uses panels to communicate to readers about the flow of time in a scene. The arrangement of panels are all fixed images, different from moving cinema. Movies have sequences of images that creates the illusion of movement, and time is decided based on this movement. Comics are static, and the images rely on the space around them. Some experts in the field convey that the events shown inside the panels are the ones primarily dictating the flow of time within the story. Although, with the rise of digital comics and the various features the computer can offer, this idea may be challenged. Especially with the addition of animation in a panel, time can now be conveyed differently compared to static images.

1.2. Timeframing

Erik Loyer have formulized the ideas brought by McCloud and Goodbrey under the term *timeframing* [3]. He defines *timeframing* as “the creative juxtaposition of temporal vignettes”, or depiction of events unfolding over time which are bounded both spatially and temporally (Loyer 2020).

Spatial bounds refer to panelling, and how a scene is bounded by panels. This could be seen in traditional comics, where scenes are separated by panels, and a gutter (space) between them. But there are digital comics that have erased these gutters, where there are no panels between scenes. Some have implemented pop-ups, where images of different scenes would pop-up while scrolling, without panels being in the way.

Temporal bounds are scenes that are bounded by time, and refers to movement and animation used in a scene or panel. Some of these animations are exported in GIF (graphics interchange format), thus will loop infinitely. The loop may have a jarring loop point, where it doesn’t loop smoothly, but some are so smooth that there is no telling where the loop began. These could be seen in *cinemagraphs*.

There are four affective properties of animation that was discussed under *timeframing*, which are naturalistic, iconic, expressionistic, and rhythmic. Each of these properties are used to further understand the illusion of time one can give in a scene.

First is naturalistic, which is correlated to human movement to create the sense of naturalism. This includes eye blinks, waving hair, or other gestures done by the human body. An example given would be the characters blinking, but the animation is looped infinitely. This gives a false reality of time, as if the reader is looking at the characters in real-time, because the amount of blinking gives off a visual cue of how much time have passed. In contrast, when doing action sequences and fast panels, it would be weird to add eye blinks. This is because the intended time given in those scenes are supposed to be quick, instantaneous scenes. Adding eye blinks that loop infinitely will create a temporal dissonance, where the scene seems longer in real-time than it is intended to be.

Second is *iconic*, perfectly looped animations outside of the human movement, usually seen in

cinemagraphs. Some examples include infinitely looped waterfalls, candles, smoke, clouds, and other effects. The loops created will create a temporal dissonance that makes the scene seem longer than it seems. The unreality of the scene is the goal, to create a beautiful fantasy-like scene that never ends.

Third is *expressionistic*, movement and animation that is further away from reality and more into movement that suggests mood or tone. This could include animation or camera movements controlled by the reader and interactive animation that is made to be decided by the reader.

Fourth is *rhythmic*, which emphasizes repeated patterns. Of course these properties do not just stand on its own, they are able to merge to create something else entirely.

There are also different kinds of time that can be represented within a scene. One is *diegetic* time, which would be time inside the scene that are perceived and acknowledged by the characters. The other would be *non-diegetic* elements like movement of camera that only the reader is conscious of. And lastly there is *extra-diegetic* time that occurs outside of the story, in the interface of the comic itself.

2. Results and Discussion

The four properties of animation discussed under *timeframing* have helped a lot in deciding what animation should be done for the *Bumi* motion comic. Mostly the first two are used in the motion comic and will be discussed here.

The first one is *naturalistic*, involving human movement. A lot of scenes in the *Bumi* motion comic involve eye blinks, but only in scenes that are meant to seem long, and some, awkward. The scenes that are fast-paced, or does not require a long duration of time, does not involve eye blinks. One example could be seen in figure 1. It is a scene where the three main characters, Raib, Seli and Ali, are patiently waiting for answers. They are currently very confused, because they were transported to this house through a magical portal that they know nothing about. In this current scene they are waiting for the owner of the house to explain where they are. Eye blinks were added in this scene to make it seem longer that it would be if there were no looped animation. The eye blinks will give the reader a visual cue that time is running in that current scene with every eye blink that happens.



Figure 1. Scene in Bumi Motion Comic involving eye blinks.

There are a few scenes involving exaggerated body movements like head tilts and hand movements, but they are short and looped to avoid the readers having to wait for the animation to be done. Going back to Goodbrey's seven characteristics of a motion comic, one of them includes, "Reader's Control of Pacing". This is an important aspect in motion comics that some may forget. The animation isn't the one controlling the pacing of when to turn a page, but it should be the reader. When the reader has to wait for an animation to finish, it might cause discomfort and it strays away from the 'comic' aspect. Different from watching movies, the readers are able to have full control when reading a comic, and that itself is one of the keyparts of a comic. It is what separates comic from film.

A lot of the animation for the batik patterns and motifs fall under the *iconic* property. These batik patterns are used mainly as inspiration for the magic aspect of the story. From portals to magical books,

batik patterns appear as the designs. The pattern used is mostly *megamendung*, because the story takes place in Cirebon, the origin of this motif. The batik patterns uses *iconic* animation to greatly enhance the fantasy and beauty of the scene. They are mostly animated like waves, and it will loop infinitely until the reader clicks to the next page. Figure 2 shows one of the scenes that uses *megamendung* around its border, when the character Raib is talking about a magical clue. The *megamendung* motif is waving in the scene while the reader reads the magical clue, making the scene more fantasy-like.

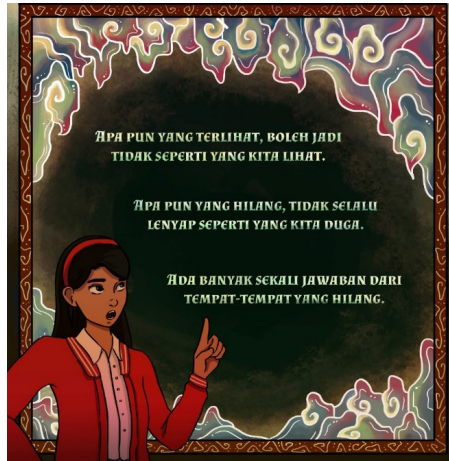


Figure 2. Megamendung motif is used in this scene involving magic.

There are a few scenes that combines these properties to really elevate the mood of the scene. Figure 3 shows a scene that uses both *naturalistic* and *iconic* animation. The *megamendung* motif around the border are animated like waves, and they loop smoothly. The plants and flowers around the area are also animated as if wind is blowing through them. The butterflies are flying but in the same spot, to avoid an unsettling loop point. The *naturalistic* aspect implemented would be the eye blinks of the characters. The eye blinks makes the scene feels even longer than it would be, to make the scene hypnotizing and dream-like.



Figure 3. A magical scene that uses both *naturalistic* and *iconic* animation.

Some scenes also include visual effects such as smoke and snow, hoping it would emphasize the fantasy aspect of the scene. *Iconic* animation is used a lot in this motion comic, especially because the genre of this motion comic is fiction-fantasy, and that is the focus of this project.

3. Conclusion

Deciding on what to animate in a motion comic can be done easier with the four characteristics of animation in *timeframing*. Understanding what animation can achieve and how animation can effect space and time can greatly elevate the scene. The *Bumi* motion comic uses a lot of *naturalistic* and *iconic* animation for different purposes on a scene, but mostly to emphasize the fantasy aspect of the comic.

4. References

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