

## 1. CREATIVE BACKGROUND

The media that we, as human beings, enjoy the most are those that evoke certain feelings when we consume them. Visually, and from its early history, animation has consistently been able to create a sense of authentic charm, resonating from every meticulously crafted frame.

Pixel art was created in the early days of computer simulation. Back when the technology of computer games was in early development, programmers would use pixel art because, frankly, that's the highest resolution the computers at the time could take. However, the style and usability of pixel art are timeless in themselves, so it is still used in indie video games today to evoke a nostalgic, charming feeling. To some people, the simplistic art style of pixelated graphics may initially seem like a hindrance, but in reality, it helps these games play to their greatest strengths. Be it creating amazing platforming levels like in *Celeste*, building a relaxing, atmospheric world like *Stardew Valley*, or as a tool to tell stories as impactful as *Undertale* (Tink, 2022).

Pixel animation is a much different beast from traditional hand-drawn frame-by-frame animation, because it is specifically made to be easy to program into a game. Therefore, their movements are loopable and repeatable, so that game developers can program commands into said movements and still make them appealing. The pipeline in which pixel animation is created for games is exceedingly different compared to hand-drawn animation, for the main reason that pixel art is computer graphics, where placing each pixel is intentional, and the artist has total control over every single one (Azzi, 2019).

The film *Patching Up* uses pixel animation in a handful of shots to represent its protagonist, Lena's connection to her favorite childhood video game. Only when she rediscovers her love and passion for it does the animation transform into bigger pixels. The nostalgia she has for that game, the memory of a simpler time in her life, is represented by simpler visuals like the 16 pixels that make up her childhood comfort character, Patches. Ember (2024) states that

nothing is more comforting than the memories of playing old, low-resolution games as a kid.

In the climax of the film, Lena fights the part of herself that deprecates her passion, visualized through a video game boss fight with “The Gloop.” During this fight, she starts weak and inexperienced, failing to land a blow, and is knocked back. But after seeing Patches, she’s filled with determination to save them, so she locks in and succeeds in parrying the Gloop’s attacks and weakens it with her own attack. The whole scene is animated in a pixel style.

It is important for this author to study this particular animation style before putting it into practice, because pixel animation is most commonly used in video games and rarely in film. The pixel animation shots give appeal to the film, as well as being symbolically important to the story being told.

## 1.1 RESEARCH QUESTIONS AND SCOPE

Based on the background above, this author poses the following research question: How does one design motion for a pixel game-inspired animated character?

To keep this study focused, this author has narrowed down its scope as follows:

- a. This study will focus on the motion of the character Lena from the animated film *Patching Up* by Belimbing Productions, showing her improvement in her fighting style.
- b. Keying on the following shots:
  - 1) Scene 5, Shot 8: Lena strikes a weak attack but fails to dodge and gets knocked back.
  - 2) Scene 5, Shot 13: Lena lands a blow on the Gloop and parries its attack.
- c. Concentrating on how Lena improves her fighting style as the battle goes on, implementing the principles of animation, such as anticipation, exaggeration, and follow-through action.

## 1.2 CREATIVE OBJECTIVES

This study aims to design character motion for animation inspired by pixel games, focusing on the character Lena from the 2D animated short film *Patching Up*, in shots that show her improving fighting style, and covering the implementation of anticipation, exaggeration, and follow-through action.

Beyond that, this study intends to broaden the horizons of research in regards to college-level education for animation; exploring a unique process of the art form, in this case, pixel animation.

## 2. THEORETICAL FRAMEWORK

### 2.1. PRINCIPLES OF ANIMATION

Animators in the early 1930s had been searching for better methods of relating drawings to each other, methods and techniques that offered some security that their character in motion would result in creating the illusion of life. As they defined and perfected these methods, eventually Thomas & Johnston (1981) determined the 12 fundamental principles of animation: squash and stretch, anticipation, staging, straight ahead action and pose to pose, follow through and overlapping action, slow/ease in and out, arcs, secondary action, timing, exaggeration, solid drawing, and appeal.

- a. **Anticipation:** According to Thomas & Johnston (1981, as quoted by Adiwijaya & Ihwanny, 2023), anticipation is the method of implementing a specific movement/pose to anticipate the main action. For example, in an action where a character throws a small object, their arm is pulled back before it throws the object forward to portray a more realistic action to the audience.
- b. **Exaggeration:** Exaggeration as a principle is just as the name suggests: to exaggerate. If a character was to be sad, make them sadder; bright, make them brighter; worried, more worried; wild, make them wilder (Thomas & Johnston, 1981). It is not only the exaggeration of the action, forces, and