The personal research project animation essay

This research document was undertaken to discover and analyse character acting in animation, and the different methods used to express emotion and thought process. The document is focused around how an audience is influenced by techniques of character acting, and what elements contribute to its believability. Research of various literature, articles and online sources have been ventured to aid the analysis and conclusion.

The evidence researched, suggests that thought process must occur before an action takes place by the character. Developing a character with empathy through their emotions helps the audience relate to them, contributing to a richer, more believable outcome. Various techniques are used to express thought process and emotion, however, discovery has led to the understanding that body language can be just as expressive without dialogue. Internal thought process is best expressed through a characters eye movements in conjunction with body language.

Introduction

The aim of this research document is to gain a deeper knowledge and understanding of how acting methods in character animation can be utilised and articulated to express emotions through the display of internal thought processes in a character. This research will explore the methods used by animators to create the ' illusion of life' and discover how it can become believable and engaging for the audience.

" Acting is defined as the art of practise of representing a character on a stage or before cameras and derives from the Latin word ' agere', meaning

to do… an obsolete meaning for the word acting is animate." (John Kundert-Gibbs, 2009, p4)

Research will be applied to specific methods of real/stage acting to develop an understanding of acting in character animation.

Background to the Research

" Animate – verb /annimayt/ 1. bring to life or activity. 2 give (a film or character) the appearance of movement using animation.

adjective /annimt/ alive; having life.

Derives, animator noun.

Origin, Latin animare, from anima ' life, soul'." (Oxford English Dictionary)

Animation has been thought to have originated over 35, 000 years ago, after the discovery of ancient wall paintings in places like Altamira and Lascaux; which depicted various types of humans, objects and animals as Richard Williams (2001, p13) explains, sometimes with four pairs of legs to show motion. In the early 1800's, Williams shows (2001, p14-15) that there were various different devices developed for the sole purpose of creating an illusion of movement such as the Thaumatrope, the Phenakistoscope, the Zoetrope, the Paxinoscope and the Flipper book. All these devices were based on the rediscovery, in 1824, of ' The persistence of vision' by Peter Mark Roget. The principle of this rests,

"…on the fact that our eyes temporarily retain the image of anything they've just seen." (Williams, 2001, p13)

In 1896, this sparked the interest of Thomas Edison, who ended up publicly releasing a combination of drawings, drawn by James Stuart Blackton, in sequence called ' Humorous Phases of Funny Faces'.

Since then, we have seen many different approaches to the genre of animation. With the rise of Disney animation studios, in 1928, ' Steamboat Willie' was introduced with synchronised sound and a new character, Mickey Mouse. By 1936, ' Snow White and the Seven Dwarfs' was released which received amazing success. This was the starting point of the ' Golden Age' of animation which was shortly followed by the popular Disney titles: Pinocchio, Dumbo, Bambi and Fantasia.

It wasn't until November, 1995 that Toy Story, the first full-length computer animated film was released by Pixar Animation Studios. This sparked another new era of animation. Studios like Dreamworks and Blue Sky soon followed.

Acting in animation has been adopted as the key element for creating believability in an animated sequence,

" But to make these designs work, the movements have to be believable – which leads back to realism… What we want to achieve isn't realism, it's believability." (Williams, 2001, p. 34)

All animated acting is designed to give a character personality and believability. Just like in stage acting. Doron Meir (2008) explains that believable acting is a result of the audience feeling a character's actions of its own inner motives. Williams (2001) notes that animation principles that

were developed by Disney Studios very early on, are still being used today in all types of animation to bring characters to life.

Research Question

How are emotions and internal thought processes expressed through techniques of acting in character animation to make characters believable and engaging to the audience?

Survey of Literature & Works

Acting is a very broad subject, and can be applied to many different genres of acting for stage and camera. Animation has had a direct influence by the techniques and discoveries on how to portray a character through movement. This is why ' To the Actor: On the Technique of Acting' by Michael Chekhov is an ideal choice that links directly to acting. Chekhov is famously known for his in-depth acting methods, and has stood as an iconic teacher for famous actors of today. Chekhov reflects on the methods used to call up emotions, develop characters and strengthen awareness as an actor. All these things help to develop specific ' Psychological Gestures' that he explains within the book, that show the audience what the character is trying to express through body language, which is also the key to a character's believability in an animated sequence.

To get a more specific understanding of how characters move, and the principles surrounding character animation as an art, ' The Animators Survival Guide' by Richard Williams is an in-depth manual on the style and

techniques of hand-drawn animation. Containing the specific principles used by animators to achieve believable movement.

" Williams has been one of the true innovators, and serves as a link between the golden age of animation by hand and new computer animation successes." (Williams, 2001, blurb)

Everything in this book relates to the overall aim of producing a character that moves in a believable way. Acting relies on these techniques that are shown through drawing methods of frame by frame animation. By adopting these techniques, animators can be taught to study the anatomy of the human body to further understand how to produce successful animated characters.

The analysis of how characters display emotion needs to be taken into account throughout this research. ' Acting for Animators' by Ed Hooks explains the tried and tested methods in acting that reflect personality and feeling within a character. This book takes us through Hook's lessons on acting and the theoretical approach behind his techniques. Empathy occurs a lot in this book, answering the need to create characters with feeling, for the audience to empathise with.

Analysis into character movement and acting by example will allow the discovery of techniques used in popular film. ' Acting in Animation: A Look at 12 Films' is a second book by Ed Hooks, where he analyses twelve different animated films, going through chapter by chapter, describing the expressive and emotive methods used in each scene. Led by these film examples, the techniques discovered through research, can be firmly reinforced.

Theoretical Approach for Selecting Data

Data will be collected, analysed and displayed from a variety of published secondary sources including: books, articles, web articles, web blogs and conferences. All data and necessary information will be collected for the purpose of research, but will not all be related to the analysis of animation. Acting technique and method will be the main subject source of research, which will provide a broader context to base opinions, ideas and thoughts discovered in secondary literature sources by other people in the industry. Literature sources containing examples of proven practise will be used to further enforce the topic of research.

Description of Proposed Practise

By an extended discovery and analysis on the subject of character acting in animation, I plan to produce at least six interesting and achievable artefacts that reflect the knowledge gained through this research document, that will provide further understanding about how emotion can allow an audience to empathise with an animated character. The preliminary design practise will include the development of key character poses to emphasise specific emotions directly influenced by an internal thought process. This will then indicate how a character can be developed further into a collection of believable animation sequences. Each artefact plans to contain one of the six basic emotions, as stated by Ed Hooks,

"…happiness, surprise, fear, anger, disgust and sadness…" (2000, p. 36)

Characters used will be designed and rigged by a secondary source, which will provide a simple, easy to use marionette for the purpose of animation. Dialogue will not be used, as this may stand as a distraction from the emotions that are aimed to be expressed through body language and facial expressions. These artefacts will provide a clearer understanding of subconscious body movements that are often overlooked.

Discussion

Character animation can take many forms within the context of animation in both the traditional sense as well as in modern computer animation.

" The following principles were developed and named:

1. Squash and Stretch… 2. Timing and Motion… 3. Anticipation… 4. Staging… 5. Follow Through and Overlapping… 6. Straight Ahead Action and Pose-to-Pose… 7. Slow In and Out… 8. Arcs… 9. Exaggeration… 10. Secondary Action… 11. Appeal…Personality in character animation is the goal of all of the above." (John Lasseter, 1987, pp. 35-44, 21: 4)

Lasseter explains that these specific traditional animation principles and techniques developed in the 1930's by Walt Disney Studios should be incorporated into all animated media "…especially character animation…" to develop characters look to make them "…more realistic and entertaining" (Lasseter, 1987, pp. 35-44)

Richard Williams explains,

" The old knowledge applies to any style of approach to the medium no matter what the advances in technology." (2001, p. 20)

This shows that successful, believable animation of all types have spawned on the basis and influence of these traditional principles and techniques. Richard Williams also tells us that, in relation to ' classical' and computer animation,

" Both share the same problems of how to give a performance with movement, weight, timing and empathy." (2001, p. 20)

This underlines a key point into the advances of technology in animation, showing that 3D animation software packages only act as a technique of animating and not an easier way to influence believable movement.

Lasseter explains,

" To make a character's personality seem real to an audience, he must be different than the other characters on the screen. A simple way to distinguish the personalities of your characters is through contrast of movement. No two characters would do the same action in the same way." (1994)

Creating a unique character, develops its personality. John Kricfalusi (2006) reminisced of how he got drawn in by Chuck Jones' cartoons, noticing the unique expressions he drew. Specifically as an example, the way he draws two whites of the eyes joined together, one bigger than the other to form a " D-uh" expression.

We can see that individuality is very important when introducing personality to a character, Chekhov (1953, p. 83) explains on the subject of characterisation, that particular features indigenous to a character; like a typical movement, manner of speech, recurrent habit, odd way of walking and so on, expresses the ' finishing touches' to a character. Characters become more alive and more human with this small feature. Hooks (2000, p. 36) explains, " When we speak of creating the illusion of life in animation, it boils down not to mannerisms and naturalistic movement, but to emotion". Hooks continues to state that theoretically speaking, emotion is the essential element of acting as the point of empathy for the audience. Hooks,

" Empathy is as essential to dynamic acting as oxygen is to water." (2000, p. 9)

Characters of all descriptions, in an attempt to make them believable to an audience, need to have a particular personality. The audience needs to be directly affected by a character's on-screen emotion, to really feel a sense of empathy. Without, the audience will lose interest easily and the objectives within the storyline can diminish.

Hooks (2000, p. 41), reflects on Charlie Chaplin as one of the most influential comedians that used a great deal of empathy in his work to touch the audiences' emotions. He explains that his innovation as a performer has had a huge influence on the world of comics and animation. As Chuck Jones has said

" I admire Chaplin very much because you could see him think, and plan, and you cared for him." (Hooks, 2000, p. 40)

Chaplin's unique relationship with the audience has seen a great influence on character animation from the beginning of Walt Disney's profession. Dick Huemer (Hooks, 2000, p. 40), Disney storyman, tells us Walt had an image of Mickey Mouse as a little Chaplin.

In order to successfully accomplish empathy within a character, there needs to be elements of individuality to provoke emotions. These can be developed through simple recurring mannerisms that correlate with the character's thoughts and actions. In every respect, the audience needs to be the main influence when deciding a character's actions.

Hooks states humans express six basic emotions,

"…happiness, surprise, fear, anger, disgust and sadness…" (2000, p. 36)

He also tells us that there is disagreement on whether facial expression is primarily a reflection of the inner emotional state, or if it is simply a social ' display'. Hooks concludes that it could be either, depending on the situation. Emotion can be expressed through both facial expression and body language, although the influence of each method can be different. Williams (2001, p. 324) believes that words should be kept to a bare minimum and as an animator, make everything as clear as possible through pantomime using only the body to tell the story. The movements of the body are thought about a lot more by animators than real actors, as animators have to ' create' it rather than ' do' it, although the physical expressive nature of emotions are identical. Different types of feelings can be expressed easily as Chekhov shows,

"…grasping or catching (greed, avarice, cupidity, miserliness)… roughly with palms turned earthward… lusts to overpower, to possess." (1953, p. 67)

Equally, Chekhov (1953, p. 73) explains here that in order to build up your characters expressive nature, hands and arms should act first for example; hands up near the chin expresses unavoidability and loneliness, palms turned outward displays self-defence and slight humour is evoked when bending the three middle fingers of each hand. Hooks agrees,

" The truth is that our hands and arms are the most expressive parts of our bodies". (2000, p. 60)

An example to this, Hooks demonstrates,

" Arms folded across the chest indicate that the person is ' closed', intractable… When you are embarrassed, you tend to shrink in space." (2000, p. 62)

This reveals that many body language patterns in human figures are emphasised through the movement of hands and arms. Williams (2001, p. 324) explains a method called ' Twinning' where arms and hands are doing the same thing, symmetrically. He teaches that this is used to show authority by preachers, leaders, politicians and so forth. Kevan Shorey agrees that,

" Symmetry is a good way of adding force to an action to get a point across!" (2008)

Both animators, believe that twinning should be broken up to avoid an exact mirror image of movements that would produce unbelievable messages to

the audience. Jeff Lew (2004) explains that to make twinning animation look more interesting, the perspective of shot needs to be changed so they don't physically look identical at a particular camera angle.

Walt Disney in 1930s found that expression is better when the whole body is involved and not only the face,

" Movement begins in the area of your navel and radiates outwards into your limbs." (Hooks, 2000, p. 60)

John Kricfalusi (2006) explains that animators have evolved a style that has become more stagy than live action by reading characters' emotions through body language and poses. Evidentially, facial expressions aren't enough to provoke a meaningful emotion, and that the whole body needs to be articulating through hand gestures and arm movements to compliment facial expressions, to achieve a believable emotion through a character.

In an example from Toy Story 2, Hooks notes,

" She (Jessie) doesn't simply greet Woody enthusiastically, she turns him over and gives him nuggies! She tosses him this way and that. Her emotion is leading her to energetically celebrate." (2005, p. 90)

This is a specific example of how body language is reflecting emotion successfully. If this same bit of acting was acted on the stage, or in front of a camera with real actors – it would have a very different outcome. The emotion may be similar, but another way of emphasising actions used in animation is through exaggeration. Shawn Kelly (2009) informs us that he was taught to exaggerate something more than it should be, then double it.

Exaggeration is one of the original animation principles. Lasseter (1987, pp. 35-44, 21: 4) suggests exaggeration of characters by the animator must be very carefully chosen. If there is too much distortion it could result in an unrealistic look.

Looking back much earlier, to 1927, the classic film " Sunrise: A Song of Two Humans" was released. Without synchronised dialogue, films of this era had to rely on the character's acting and the backing compositions as the two main elements for the story.

" Sunrise is considered one of the finest films of the silent era, and Janet's Gaynor's performance is one its greatest virtues… Her supple face and soulful eyes convey a range of thoughts and emotions that pages of dialogue could only suggest." (DeFreitas, 2009)

Later, DeFreitas (2009) tells us that Sunrise became a winner of the 1929 ' Best Picture' Oscar for ' Unique and Artistic' Production. This film sets as an evidential example of how acting without dialogue can influence and empathise with an audience just as good, if not more so.

Often in animation, Lasseter (1987, pp. 35-44) explains that the eye can easily pick up when the motion of a character seems to die, which can come across as looking particularly fake and unbelievable. To overcome this loss of motion, Lasseter uses a ' moving hold' – which is a technique used that continues the motion of a body part after an action. This breaks up the animation and results in a smoother and more believable sequence. Preston Blair (Hooks, 2001, p. 60), states that an actor should never pause without a specific reason, and when a pause occurs, it should be shown for long

enough so the audience can register it. These are both techniques that engage the audience into what the character is acting out.

Before a movement of any sort can occur, thought processes need to become apparent through the character. Hooks outlines,

" Thinking tends to lead to conclusions; emotion tends to lead to action." (2000, p. 1)

Hooks defines a thought process as a method in discovering a conclusion. Lasseter (1994) mentions that every movement of a particular character must exist for a reason, and, ultimately, develop feelings in a character through their thought processes. As an observation, before a human being puts his body into action, a thought process must occur. In animation, this thought process must be shown to the audience to illustrate believability of an action that has just been revealed. To show a thought process in a character, Disney animator/teacher Eric Larson shows a technique, in Frank Thomas and Ollie Johnson's ' Illusion of Life',

" The subject gradually lowered his brows into a frown – paused – and then lifted one brow and glanced to the side, you immediately would sense a change from one thought to another…" (Richard Williams, 2001, p. 320)

This action was discovered when the first Mickey Mouse shorts were being created, and stands as a key element into how change of expression can reflect a meaningful thought process. Shawn Kelly (2009) expresses his ideas, explaining that there isn't anything more important than showing a character's thought process and changes which occur within it to provoke

emotions and actions. It is down to these thought processes, he concludes, that drives everything we do. Looking at character animation in Toy Story 2, Hooks (2005, p. 87) explains how Woody's realisation that Andy has gone to camp without him, leads him to his express sadness (emotion) which then leads him to withdraw to the back shelf, out of sight. He adds that,

" The more specific the character's thought process, the better the performance". (2005, p. 87)

Thought process in character animation, as mentioned, is very important for believability. This has been true for many years since the beginning of Disney's ' Golden Age' in animation. Walt Disney said,

" In most instances, the driving force behind the action is the mood, the personality, the attitude of the character-or all three. Therefore, the mind is the pilot. We think of things before the body does them." (Lasseter, 1987, pp. 35-44, 21: 4)

It is widely agreed that thought process is the main building block that needs to be perfected and shown successfully in any animated character. Bill Tytla (Hooks, 2005, p. 3), concluded that " the pose is a reaction to something". Hooks refers to Aristotle,

" Aristotle referred to this as a unity of action – small actions that lead to a bigger action, or objective. This simple rule lies at the base of all acting theory. An action without a thought is impossible, and action without an objective is just a mechanical thing, moving body parts." (Hooks, 2005, p. 4-5)

Aristotle finds that the thought process of a character separates a character with ' life' to a robotic, lifeless machine.

As mentioned earlier, Eric Larson's technique of showing a thought process in a character is very believable. But more specifically, it has been discovered that the eyes are the most important parts of the character to express and emphasis these thoughts. Williams (2001, p. 325) advises on how the eyes are the focal point that people watch in a character. As an example, he notes,

" When listening on the phone the eyes flicker around in a Staccato fashion reflecting the listener's shifting thoughts in reaction our eyes are rarely still." (2001, p. 326)

The eyes, the driving force behind a character's actions. Kelly agrees that decisions can be reflected successfully with the eyes,

" They will very often dart their eyes around a bit as they consider and weigh their options. It's almost as if they are reading an imaginary list of possible choices!" (2009)

Lasseter (1987), explains that eyes lead before the action, and that the only time they wouldn't lead, would be if there was an external force acting upon the character. He mentions further, that the trick to showing thought process through the eyes of a character is with anticipation. The eyes should move first, followed by the head and then the rest of the body.

" The eyes of a character are the windows to its thoughts; the character's thoughts are conveyed through the actions of its eyes." (Lasseter, 1987)

As well as eye movements, the timing and speed of a character's blinks can also affect the outcome of what is portrayed as a thought process. Kelly (2009), explains that different blinks can offer up our own different perceptions of what the character is thinking.

" A ton of blinks will feel as though the character is going to cry, is nervous, uncomfortable, shy, or possibly relieved after a big build up; while very little to no blinking will either feel dead, stoned worried, angry, or just very intense." (Kelly, 2009)

Kelly teaches that blinks should be there for a reason to further enhance a particular emotion. Before an animator can even start to animate a particular thought process, they need to know about the character to be able to understand what they would be feeling at a certain moment, in an attempt to achieve a believable outcome.

The most important foundation of believable character acting starts with finding out about a specific character. Williams states,

" Got to get inside the character. What does he/she/it want? and even more interesting – why does the character want it?" (2001, p. 20)

To develop our understanding of what a character is thinking, and in order to provoke emotion in a character, these questions need to be posed. Ed Hooks also explains to us that,

" Every character in a scene should be able to answer the question. ' What am I doing?' – in a theatrical sense. In other words, what action am I playing in pursuit of what objective? And what is the obstacle/conflict?" (2005, p. 89)

Just like this, in the context of acting for an audience, Michael Chekhov suggests to,

" Ask yourself what the main desires of the character might be" (1953, p. 67)

This approach sets the scene for any character in order to discover what the characters personality is trying to portray in what they are thinking or doing. Hooks notes,

" If you want to understand what a character is feeling, it is best to start by asking what the character is thinking and what his value system is." (2000, p. 2)

To understand how a character must move, the animator needs to discover the atmosphere and influence of the obstacle that the character is being confronted with. Only then can a thought process occur, and a feeling be evoked by a specific situation or conflict. Jeff Lew (2004) , expresses his thoughts on the development of a character's bio before learning how a character will react in any animated scene. This develops further understanding of a character's background that could be significant in influencing the way their emotions are expressed.

This evidence shows us that there are a lot of elements contributing to developing a character's emotional state and to make it believable to the audience. To develop his understanding of a character and what they are thinking, Ed Hooks uses a definition coined by Michael Chekhov called a " Psychological Gesture", which, Chekhov explains as the psychology of a character containing thoughts, feelings and a human free will which is

expressed physically through external feelings, thoughts and desires. Hooks gives the example,

" Have you ever noticed someone who wrings his hands a lot while he's talking?… A Bully punches someone in the chest with his finger. That is a psychological gesture." (2000, p. 66)

A psychological gesture is an internal thought process, manifesting itself into an external action to express an emotion. Chekhov gives an acting example,

" The qualities which fill and permeate each muscle of the entire body, will provoke within you feelings of hatred and disgust." (1953, p. 64)

The above, is very similar to the way animators approach the discovery of a character's psychological gesture by calling up ideas of how thoughts can influence the emotions that are displayed.

Conclusion

Character animation, in both the traditional and computer medium, rely heavily on the original animation principles that were discovered by Disney Studios. This emphasises how improvements in 3D animated software are used as only as a tool for the creation of animation, and does not rely on the computer to make things look believable by itself.

Analysis has shown that acting techniques in animation are almost identical to stage and film acting. It is the exaggeration of body language and the ability to adapt a character in specific detail that sets it apart.

It is evident that the emotional state of a character is a direct influence of it's thought process. Thought process can be best expressed through body language to enhance an emotion. This research has lead to discover that eye movements are one of the focal points that enhance a characters thought. Emotions need to be manifested into an external, physical body movement, however slight, in order to engage an audience.

The conclusion to the discussion has shown that creating empathy as a result of expressing an emotion, is the key element for engaging any audience. A character's believability is successful when an audience can relate to it in some way or another. This can be done by giving a character a personality through mannerisms and specific body language.

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