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Candidate session number			
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Examination session (May or November)	May	Year	2013

Diploma Programme subject in which this extended essay is registered: FILM
(For an extended essay in the area of languages, state the language and whether it is group 1 or group 2.)

Title of the extended essay: Filming Techniques in Relation to Human Emotion

Candidate's declaration

This declaration must be signed by the candidate; otherwise a grade may not be issued.

The extended essay I am submitting is my own work (apart from guidance allowed by the International Baccalaureate).

I have acknowledged each use of the words, graphics or ideas of another person, whether written, oral or visual.

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Please comment, as appropriate, on the candidate's performance, the context in which the candidate undertook the research for the extended essay, any difficulties encountered and how these were overcome (see page 13 of the extended essay guide). The concluding interview (viva voce) may provide useful information. These comments can help the examiner award a level for criterion K (holistic judgment). Do not comment on any adverse personal circumstances that may have affected the candidate. If the amount of time spent with the candidate was zero, you must explain this, in particular how it was then possible to authenticate the essay as the candidate's own work. You may attach an additional sheet if there is insufficient space here.

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Assessment form (for examiner use only)

Achievement level

Criteria	Examiner 1	maximum	Examiner 2	maximum	Examiner 3
A research question	1	2		2	
B introduction	0	2		2	
C investigation	0	4		4	
D knowledge and understanding	2	4		4	
E reasoned argument	0	4		4	
F analysis and evaluation	0	4		4	
G use of subject language	2	4		4	
H conclusion	1	2		2	
I formal presentation	1	4		4	
J abstract	0	2		2	
K holistic judgment	1	4		4	
Total out of 36	8				

Filming Techniques in Relation to Human Emotion

Subject Area: Film

May 20, 2013

Word Count: 3539

Abstract

The art of filmmaking is one that has integrated itself into our society and has left an everlasting impression for future artists and audiences alike. Films have the potential to carry a remarkable amount of emotion. They bring about inspiration and often allow humans to connect with characters or storylines that speak to them. Yet, this outcome is rarely achieved without consideration towards certain filmmaking methods, which have been carefully devised throughout the history of the art form. This raises the question, how do camera and lighting techniques affect a viewer's emotions during a film? I have collected information specifically concerning shots, angles, movement, and lighting from a variety of sources. *Digital Video: An Introduction*, by Tom Ang, was an extremely valuable source in that its contents span over both camera and lighting techniques, providing valuable information for several portions of the essay. Certain sources contained only a page or two of beneficial insight towards my specific topic, while mainly focusing on film history or actor interviews. The source *Film Making*, by Tom Holden is an example of this. Holden discusses elements of filmmaking separate from those I required for research, including types of cameras, and filmmaking processes from scriptwriting to editing. However, I discovered that the source contained a section with highly useful information about lighting techniques, which I found to be particularly helpful in my quest for examples of different set-ups for lighting and situations in which to employ them. Camera and lighting techniques impact the way viewers' react to a film, and evoke distinct emotions. I have uncovered some of the secrets behind these techniques, along with *why* and *how* they make us feel the way we do.

Word Count: 281

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Introduction

While discoveries in photography begin as early as 1727, the art of motion picture does not start to emerge until 1878.¹ Eadweard Muybridge practiced with the idea of movement between slightly differing images and invented his Zoöpraxiscope, a wheel with various illustrations featured around the edge. A section of the wheel would be singled out through a slit and when the wheel spun, the pictures would fuse to appear as a single animation.² The world of motion picture has since grown tremendously and today makes an impact on day-to-day activities. Society praises actors and actresses for their delivery in films. Still, the storyline and characters which people become exceedingly passionate about are formed through many filmmaking elements whose complexities have been studied and experimented with throughout history. These elements include camera techniques such as angles, shots, and styles of movement, which are all implemented at appropriate times in a film to induce specific human reaction. Another element necessary for quality filmmaking is lighting. This is an underappreciated, yet important factor in keeping an audience engaged during a story. So how do specific camera and lighting techniques affect viewers' emotions during a film? There are many factors involved, and details for filmmakers to pay close attention to.

Camera Shots

One of the first things that a director must consider is the type of shots that will be used during a scene. Filmmakers create a shot list, in order to chronologically organize the shots and understand where to position the camera before shooting. A storyboard is

¹ http://www.digitalhistory.uh.edu/historyonline/film_chron.cfm

² http://www.eadweardmuybridge.co.uk/muybridge_image_and_context/zoopraxography

also drawn out, to visualize how the scene will appear to an audience. Many shots have been popularized, and the terms that define them recognized by the common people. However, not everyone understands the effect that each one sets out to achieve. In filmmaking, perspective is crucial because it links a character's perception of a situation with either their literal or figurative position in the plot. Perspective therefore puts the viewer in a particular position, which allows them to experience the film themselves rather than merely watch it.³ This creates the foundation for character development and allowing viewers to relate to specific characters based on their actions and overall outlook throughout the film.

Most films open with an *extreme long shot*. This type of shot takes place outdoors and establishes a broad setting for the first scene. Actors are usually not yet introduced, and the audience is given a chance to judge the mood of the scene to a certain extent.⁴ If the scene takes place on an island, viewers may assume that the characters are on vacation, or possibly in distress. The shot may display a beautiful neighborhood filled with extravagant homes, causing one to believe that the main characters are wealthy. Usually following an extreme long shot is a distant or *long shot*, which brings the viewer to a more specific position within the general location. This may be a particular house within the neighborhood, or a hut on the island. Viewers can now see where the action is about to take place. Long shots tend to be relaxed and simply lead the eye and mind to wherever the director has intended.³

³ Ang, Tom. *Digital Video: An Introduction*. New York: DK Pub., 2006. Print.

⁴ Piper, Jim. *Get the Picture?: The Movie Lover's Guide to Watching Films*. New York, NY: Allworth, 2008. Print.

If two characters in a film are speaking to one another, a *medium shot* is usually selected as the appropriate shot during dialogue. It will display each character from approximately the waist up while they are delivering their lines, and switch between the two during the conversation. This allows viewers to understand that neither of the characters in the scene have the dramatic upper hand. Whether or not one of the actors is more liked than the other does not mean that the viewer should be paying more attention to him. The medium shot creates equality between the two and helps to advance the storyline. An *over-the-shoulder* is a type of medium shot commonly used during dialogue, where one character is facing the camera while the other has his back slightly in the shot. This puts emphasis on the line that the character is delivering, and naturally de-emphasizes the other. It is implied where the audience should be focusing, and allows the plot to flow smoothly.⁴



Figure 1. Example of an over-the-shoulder shot. Source of image at "ACCAD Advanced Computing Center for the Arts and Design." *Osu.edu*. N.p., 2011. Web. 30 Nov. 2012. <<http://accad.osu.edu/>>.

⁴ Piper, Jim. *Get the Picture?: The Movie Lover's Guide to Watching Films*. New York, NY: Allworth, 2008. Print.

A type of shot that is recognized by the general public is a *close-up*. Close-ups show only the face or head and shoulders of an actor, and are used to isolate the character from his surroundings. This allows the audience to focus solely on this person for any given amount of time.⁴ The director may also choose to employ an *extreme close-up*, which creates a sense of intensity for the viewer. This may focus on a single body part, or even a portion of a crucial object, which affects the plot. Also, a *wide close-up* is essentially a close-up that uses a distorted angle to change mood quickly during a film. The off-center framing suggests potential movement in the upcoming scene, causing the viewer to anticipate action.³

Camera Angles

During a film, camera angles are either subtle or detectable strategies in positioning of a camera that enhance a shot. These angles send off messages to a viewer whether or not they directly notice it. An audience who is engaged in a scene may only be focused on the plot, but if a camera is set in such a way to create an illusion to viewers that one character is the hero or villain, the perspective of the viewer may change dramatically throughout the entire film. This is why film directors must carefully decide when to place certain angles on their actors to choose how they want their audience to feel.

The *Bird's-Eye view* is a well-known angle, in which the camera is set directly above the subject, facing down. This puts viewers in a godlike position and renders

³ Ang, Tom. *Digital Video: An Introduction*. New York: DK Pub., 2006. Print.

⁴ Piper, Jim. *Get the Picture?: The Movie Lover's Guide to Watching Films*. New York, NY: Allworth, 2008. Print.

objects like umbrellas or vehicles to look unusual and even beyond recognition at first glance. If a crowd of people is shot at this angle, the individual seems to be simply a trivial piece to a greater system, and a viewer may either feel as though humans are insignificant, or in great power depending on their line of perspective and the context of the angle. The shot allows the audience to look down on the action, and attempt to understand what the ensuing scene will consist of. Film director Alfred Hitchcock is known to use this angle, as he commonly produces films in the genre of horror. Bird's-Eye view is ideal for this, because the viewers are increasingly uncertain about why they are seeing this subject from such an abnormal angle and suspense is therefore escalated.⁵

One example of an angle that associates with character disposition is a *low-angle*. As its name suggests, this is when a camera is set facing up towards the actor or object, giving the subject an intimidating, dominant, frightening, confident, or powerful nature.⁸ This type of angle is commonly used in action-adventure films. Jim Piper writes, "For example, in *The Rock* (1996), a film loaded with heroics, every third shot of the twin heroes, Nicolas Cage and Sean Connery, is low angle." However, there is the contrasting angle, a *high-angle*. This forces the camera to look down upon a subject, causing them to be viewed as the victim or a weakling. Children are sometimes filmed at this angle, as well as people who are being harassed or bullied. The bully would be viewed by a low-angle, while his victim is seen at a high-angle. This type of angle manipulation implies to

⁴ Piper, Jim. *Get the Picture?: The Movie Lover's Guide to Watching Films*. New York, NY: Allworth, 2008. Print.

⁵ Wilson, Karina. "Camera Angles." *Mediaknowall.com*. N.p., 2000. Web. 30 Nov. 2012. <<http://www.mediaknowall.com/camangles.html>>.

⁸ Holden, Tom. *Film Making*. [Blacklck, OH]: McGraw-Hill Companies, 2007. Print.

viewers how they should judge the characters, usually without them taking significant notice of the change.⁴

Camera Movement

Camera movement brings visual pleasure to a film, and is often the most influential technique in captivating an audience. However, overuse of these techniques during a film can quickly become a bad thing. The movement should have purpose, and allow the viewer's eye to follow a path of action. Camera movement without meaning simply brings about confusion and headache. Though when used correctly, they are both fun to work with and to watch.⁶

A common way for directors to start a scene is high up, while craning down to the actors. This is called *starting off the action*, and has more purpose behind it than displaying the sky to viewers. It helps to bridge the transition from scene to scene, or from reality to movie while limiting complexity. An audience does not want to see a transition from one group of people to another group of people. In fact, starting off the action can begin with anything that is not an actor, such as a wall, a shadow, a hand gesture, or a cigarette butt being stomped out on the floor. This helps to relax the scene for viewers to sit back and enjoy the film without unnecessary confusion.⁶

The use of a dolly is common in filmmaking, and this instrument creates what are called *trucking* or *tracking* shots. As screenwriter, story consultant and media commentator Karina Wilson describes it, "The camera is placed on a moving vehicle and moves alongside the action, generally following a moving figure or object. Complicated

⁶ Becker, Josh. *The Complete Guide to Low-budget Feature Filmmaking*. [Rockville, MD]: Pointblank, 2006. Print.

dolly shots will involve a track being laid on set for the camera to follow, hence the name.” Independent filmmakers may choose to imitate this movement by attaching the camera to a car or any other easily accessible vehicle. A dolly shot is often used to follow the subject through a scene, and therefore the audience feels as if they are advancing through just as well. This type of movement may be commonly implemented in action films, to follow the hero’s expedition. However, it may also be used in an average setting to simply make an action more enjoyable to watch, such as in Stanley Kubrick’s *A Clockwork Orange*. A scene takes place with the main character lying in a hospital bed, as the nurse is preparing to administer a psychological test on him. She walks towards him through an extremely long hallway, and a dolly moves backwards as the camera faces the front of her body. This shot may have been chosen because it builds suspense and uncertainty as she is walking towards the room, and creates a visually pleasing encounter as opposed to an average shot of a hospital room.⁵

An example of camera movement that can be sickening when overused, or used in the wrong situation is handheld camera work. Yes, some laidback television sitcoms such as *The Office* and *Curb Your Enthusiasm* use this technique with no complications. In fact, it has been known to create a very realistic environment for viewers to feel as if they are walking around the set and ideal for certain genres of comedy or documentaries. However, when used incorrectly, viewers may see this type of movement as annoying and simply lazy. The work may quickly appear sloppy or even homemade. Major motion

⁵ Wilson, Karina. "Camera Angles." *Mediaknowall.com*. N.p., 2000. Web. 30 Nov. 2012. <<http://www.mediaknowall.com/camangles.html>>.

pictures tend to stray away from this type of camera movement, while it does have continual success in the appropriate situations.⁶

Another very common camera move is the *push*, where the camera moves in from a long or medium shot of the actor into a close-up. This move is Steven Spielberg's trademark, and can be found in a number of his major motion pictures. A push is generally used at the end of a scene, or any dramatic points in the film to add intensity. It is often accompanied by dramatic music. To viewers, the push may be much more effective during a film than zooming. A zoom gives off a vibe of machine-like movement, although in many situations it is the best option in relation to space, time, and equipment. A push, on the other hand, gives a realistic sense to an audience who feels as if they are moving towards the character or object themselves. Once again, the audience enjoys feeling as if they are a part of the action and does not want to be distracted by awkward camera techniques. Human emotion is considerably impacted by perspective, and directors pay close attention to this when planning a film.⁶

Lighting

Tom Holden, author of *Teach Yourself Film Making*, writes, "Lighting is something that all too often gets overlooked. First-time camera users have a tendency to start filming without having taken much stock of lighting requirements. If filming has taken place with low lighting levels then your footage will look hazy and grainy."⁷ Anyone who has experience with photography or filming indoors knows this to be true,

⁶ Becker, Josh. *The Complete Guide to Low-budget Feature Filmmaking*. [Rockville, MD]: Pointblank, 2006. Print.

⁶ Becker, Josh. *The Complete Guide to Low-budget Feature Filmmaking*. [Rockville, MD]: Pointblank, 2006. Print.

⁷ Holden, Tom. *Film Making*. [Blacklck, OH]: McGraw-Hill Companies, 2007. Print.

and has seen their work ruined by improper lighting. With basic knowledge of lighting, one can transform his gloomy footage into an appreciated piece of work that is easy to view with the human eye. Holden goes on to say, “Light is a vital ingredient to the film-making recipe and, just like any recipe, there are loads of ways to spice things up. Simple experimentation can produce some rather stunning effects.” With more experience and skill in the field of lighting, a filmmaker can learn to distort the mood of viewers by simply dimming the lights to a specific point or adjusting the angle in which lighting floods a scene.⁷

The standard lighting scheme is *three-point lighting*, which makes use of three types of lights: a key, a fill, and a backlight. Each one is positioned accordingly and utilized at the same time to light a scene in such a way that is agreeable with modern cameras.⁵ It creates even indoor lighting that is only acceptable in film, but would never seem normal in an average home. Houses in real life are lit differently in various areas, with some dark corners, certain lights brighter than others, and constant movement throughout the area. However, when recording a film indoors, this type of lighting is ideal and somehow presents no unusual atmosphere to viewers. People are used to seeing this type of lighting on television or in movies, and usually will not notice any outstanding complications.³ In addition to this, filmmakers often use an *incident light meter* to measure the amount of light gathered on an actor’s body or face, and can therefore control the outward appearance of the actor in relation to the character they are

³ Ang, Tom. *Digital Video: An Introduction*. New York: DK Pub., 2006. Print.

⁷ Holden, Tom. *Film Making*. [Blackleek, OH]: McGraw-Hill Companies, 2007. Print.

being portrayed as. An audience may then judge a character's nature by his "brightness".⁸

Positioning is clearly a crucial element in the art of lighting. Light placement can change the mood of a film from somber to joyful in a matter of moments and create a scene for viewers to observe with their perspective skewed to the desires of the director. A common example of this is an upward light positioning on an actors face to make them appear sinister. Many people have tried this before by turning off the lights in their home and tilting a flashlight to their face, often accompanied by a menacing laugh.⁷ On the other hand, lighting from above may imitate the sun or heavens. This makes the character or object in question appear vibrant, heroic, or even angelic. Horizontal lighting, from approximately the height of the actor's head, will "signify domestic lighting and the safety of home."³

Another type of lighting used to affect the overall mood of a scene is *side-lighting*. "A light is placed to the side of an actor and lights up only one side of the face. This is used a lot, especially on baddies in the corner of a darkened room, to emphasize their 'shady' side, or some other criminal/deranged type sitting at a table about to describe how they are going to torture the hero." Movie viewers recognize this, and understand that certain characters are supposed to be viewed as more detached or solitary in a situation when they are planning malevolence. Also, backlighting is used to give this same effect when the villain is being viewed from a front angle. The light is placed directly behind the actor, giving off a silhouette effect. While this lighting is not

⁸ Polish, Mark, Michael Polish, and Jonathan Sheldon. *The Declaration of Independent Filmmaking: An Insider's Guide to Making Movies outside of Hollywood*. Orlando: Harcourt, 2005. Print.

³ Ang, Tom. *Digital Video: An Introduction*. New York: DK Pub., 2006. Print.

⁷ Holden, Tom. *Film Making*. [Blacklck, OH]: McGraw-Hill Companies, 2007. Print.

recommended for professional settings such as news reporting, it is highly effective when placed in the plot of a mystery or science fiction film.⁷



Figure 2. Example of side-lighting. Source of image at "CHARLOTTE12YMPHOTO." Web log post. *Wordpress.com*. N.p., n.d. Web. 30 Nov. 2012. <<http://charlotte12ymphoto.wordpress.com/category/uncategorized/page/2/>>.

Lighting may even be used to trick the viewer into believing something is there when it is not. One example of this is filming a person or a group of people watching a television screen. Real television light is too bright for filming, and therefore must be simulated. The person or persons are filmed sitting in front of the television without the actual screen showing, while a bright blue light is set facing all of them. By quickly waving a piece of paper in front of the light, it appears as though pictures are changing on the television screen and gives a realistic appearance of people watching television. There are many more illusions like this that filmmakers use in order to portray an idea to the audience without it actually being there. The mind can easily be tricked into believing

certain camera shots in combination with lighting techniques, and the audience may never know the difference.⁷

Filters

In association with lighting, filmmakers often decide to add filters during the editing process in postproduction. Filters are digital additions to footage, and come in an assortment of both visual and audio overlays. It is common to see the use of color filters in place of utilizing actual lights of those colors, and each type alters the appearance of the footage. Viewers will most likely not be able to distinguish the filter from true light, and therefore judge the atmosphere of the scene with consideration towards this lighting. Just like with the real thing, the distinct vibes created by this process call for preconceived notions and specific emotions from a viewer.⁹

For example, a red filter creates the illusion of red light, which may be perceived by an audience as an alien planet of sorts, or some other out-of-this-world atmosphere. This may be useful in a sci-fi flick, as it will cause viewers to question where they are and whom they are about to meet. A dark blue filter can simulate nighttime or simply administer a dismal tone to the scene. While shooting at night may cause difficulties, a director may find it more practical to add this filter to the footage after shooting in daylight. Although this is not authentic lighting, it appears to be realistic to those who are unaware of the filter. Viewers will judge the setting accordingly based on this lighting trick along with all other factors.

Aside from color overlays, some filters make subtle modifications to the

⁷ Holden, Tom. *Film Making*. [Blacklck, OH]: McGraw-Hill Companies, 2007. Print.

⁹ Weynand, Diana, and Yongliang Xiao. *Final Cut Pro 6: Professional Editing in Final Cut Studio 2*. Beijing: Dian Zi Gong Ye Chu Ban She, 2008. Print.

appearance of the subject. Specifically in Final Cut Pro 6, the Viewfinder filter “creates the illusion that you are recording the image on a DV camera”. Anyone who is a beginner in the film industry or on a tight budget may find this tool quite useful in shooting footage that requires further clarity. An audience will feel as though the subjects are more realistic than if they were filmed with low quality. Of course, some filters are unique and make a drastic change to the footage, but these are only used in special circumstances. Usually, filters are not noticeable, and put into place by filmmakers for the purpose of pleasing the audience with stunning visual enhancements that will keep them engaged in the film.⁹

Conclusion

A successful film is not limited to a plot strewn with special effects. While this may convince the general public to go see a movie, a film is empty without unique filming strategies and appropriate methods of lighting. It is near impossible to be truly entertained by a dull directing job, regardless of any existing storyline. The characteristics that cause emotions to exude from a film are carefully woven bit by bit into the composition until the filmmakers are satisfied with their overall creation. Camera movement, angles, shots, and general lighting are no exception. Each one comes in a wide variety and is hand picked to ensure the ideal integration of human reaction wherever it is most suitable.

There is no element in the filmmaking process more crucial than another. Each and every detail has the potential to make a significant impact on the film as a whole, and therefore must be carefully taken into account. An audience will observe these elements,

⁹ Weyrand, Diana, and Yongliang Xiao. *Final Cut Pro 6: Professional Editing in Final Cut Studio 2*. Beijing: Dian Zi Gong-Ye Chu Ban She, 2008. Print.

and react to each one based on certain factors in their lives. They may relate the feelings that they experience while watching a scene with a real life experience that has affected them in a unique way. As mentioned earlier, humans understand that looking up towards any tall person, building, or any other object often feels extremely intimidating. They may then acquire feelings of inferiority, and remember a time when they once felt extremely inferior next to a large object or another human being.⁴

The connections that people find between a fictional tale and their real life are what separate a laugh-out-loud comedy from a tearjerker. Camera and lighting techniques surely play a part in developing these connections. Through all of this, films bring an audience into an entirely new world, and allow them to briefly experience the life of another. After all, this is what the art of filmmaking is all about, right?

(Word Count: 3,539)

⁴ Piper, Jim. *Get the Picture?: The Movie Lover's Guide to Watching Films*. New York, NY: Allworth, 2008. Print.

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