

AESTHETIC ELEMENTS OF THE CINEMATOGRAPHIC IMAGE

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Abstract

A number of writers have attempted to list separate elements of film form across a number of filmmaking processes, narration, cinematography, sound, editing, or general aspects of mise en scène. My emphasis is on the cinematographic image itself, and whilst there are many similarities in the previous attempts to break down elements of a cinematographic image, there are gaps and omissions in the previous lists, and there are also comparable differences, particularly with terminology. A number of the earlier examples need updating, partly due to changing technologies. By synthesising, editing, and updating the numerous attempts that have been made by other writers, I will create an objective and complete taxonomy of aesthetic elements of the cinematographic image. My aim is to provide a comprehensive, yet workable, analytical tool.

Keywords

Aesthetics, film, cinematography, shot composition, image analysis

CONTEXT

The cinematographic image consists of a number of components, and there are a number of ways that these components can be analysed or discussed. One approach could be the technical qualities and processes in the production of the image (a technological approach). Another could simply discuss the content of the image in terms of narrative significance (a narrative approach). The third could consider the creative construction of the cinematographic image in terms of its expressive, aesthetic qualities (a representational approach). The first two approaches are fairly common, the third less so. The notion of representational I take from Nilsen's (1937) definition of the three stages in the evolution of cinematographic art; reproductional, pictorial, and representational. Reproductional cinematography is the simple technical recording of events that happen in front of the camera with no creative or expressive use of cinematographic techniques, which could be exemplified by news or documentary footage, but more subtly by the use of standard techniques like establishing shots, shot-reverse-shot, the purpose of which is simply to record and screen performances and locations in a purely objective manner. Pictorial cinematography, according to Nilsen, includes deliberate creative choices, which enhance the visual quality or interest of the image, but do not add any additional meaning to the image. Finally, representational images convey a meaning in the way they are constructed, beyond simply conveying content. Whereas Nilsen considers these types of cinematography a chronological evolution, I consider them alternative methods of applying cinematographic technique.

My aim here is to provide an analytical tool for the analysis of the construction of a representational cinematographic image. I wish to avoid some of the problems that image analysis has had in the past by avoiding any prescriptive interpretations of certain technical devices, nor do I wish to produce a list of meanings for specific cinematographic techniques. My intention is simply to identify aspects of the cinematographic image that could hold significance in any analytical approach. Nilsen (1937) wrote, "Cinema technique possesses such various means of constructing and expressing an art-image that it cannot be regarded as inevitably merely an

instrument of recording” (p. 16). My aim is to identify and isolate these specific expressive techniques. A number of writers have produced various taxonomies of the cinematographic image, and I aim to synthesise the previous work of Nilsen (1937), Arnheim (1957), Lindgren (1963), Spottiswoode (1950), Russell (1982), Bordwell and Thompson (1990), and Aumont, Bergala, Marie, and Vernet (1992). These previous taxonomies all vary in their approaches; some include a technological approach, isolating components of the cinematographic image by the technical processes used to create them. Others attempt to list all the variable applications of an individual technique. Some attempt to prescribe a fixed meaning to a specific technique. Some of these taxonomies emphasise camera components rather than aspects of lighting. Some omit obvious elements, for example, the early theorists do not discuss colour for obvious reasons.

I have attempted to isolate all the elements of a cinematographic image that could be utilised in a representational way. I wish to clarify and perhaps simplify the various approaches taken by others, and create a unified approach by questioning some of the contrasting, or at times conflicting, terminology each of the writers use. My aim is to have an objective list of representational elements of the cinematographic image that could be a useful tool to analyse, or construct, any cinematographic image.

1. CHARACTERISTICS OF THE MEDIUM

This category refers to those elements that are restricted by the general technicalities of film production and consumption. Although I intend my taxonomy to be free of technical definitions, there are certain characteristics of the medium that we need to consider as they impact the form. I have identified four characteristics.

1.1. The Frame-Line

‘The frame-line’ is fairly self-explanatory. The filmic image has a pre-defined boundary and aspect ratio. Contemporary films usually have a widescreen format (1.85:1), or sometimes Cinemascope (2.35:1). Histor-

ically, 1.33:1 was the norm. The frame-line limits what the viewer can see, and contains the image, and could be classed as a characteristic of the medium. Photography and paintings, in contrast, can be practically any shape, height, or width.

Most theorists highlight this element of the cinematographic image; however, their terminology varies. Arnheim (1957) refers to “the limitations of the picture” (p. 17). Aumont et al. (1992) talk of the film image’s “Limited Border” (p. 9). Nilsen (1937) refers to “The Limits of the Shot” (p. 27). Spottiswoode (1950) talks of the “Proportions of Composition” (p. 142). Lindgren (1963) mentions the “Standardized horizontal rectangle in the fixed proportions...” (p. 115). Frame-line is a clearer term. Frame often refers to the content of the image; frame-line clarifies that the discussion concerns the edges, or boundary, of the image.

1.2. Focus

Focus is another characteristic of the medium, which arises from the photographic nature of the cinematographic image. It is often emulated in digitally created images. Again this element is highlighted by most writers, with the exception of Lindgren. Arnheim talks of the “Manipulation of focus” (1957, p. 125). Bordwell and Thompson discuss focus within the context of the technical use of lenses (1990). This is characteristic of Bordwell and Thompson’s general approach, which is rooted in a discussion of the technical processes involved in the production of the cinematographic image.

1.3. Texture

I refer primarily to the quality of the image, often, but not always, influenced by the shooting format. Most of the theorists I have quoted do not consider texture in any way, with the exception of Bordwell and Thompson (1990), who talk about the texture created by the use of different filmstocks (p. 156).

There could be four broad origins for the textural quality of a cinematographic image; the first is film grain, which arises out of the use of different light-sensitive film stocks, as noted by Bordwell and Thompson. The second could be digital noise. Film grain comes from the physical properties of filmstock, whereas digital noise comes from poor signals, or lack of information. Grain or texture could also come from post-production effects added to the original image, or finally, the physical copying or transcoding of the image, which may degrade that image. The varying qualities of the texture of an image can affect an audience's experience or cognitive understanding of that image, regardless of how it is produced.

1.4. Duration, of the Shot

The duration of a shot is another element that I would consider a characteristic of the medium. Individual shots are on the screen for a finite length of time in a normal viewing. Arnheim (1957) and Aumont et al. (1992) explicitly list this as an element of the image. Nilsen (1937) refers to duration under his classification "The Time Factor", in which he also includes slow motion, fast motion, and time lapse effects (p. 65). Arnheim (1957) also lists four types of speed as separate components, "12. The Film Can Run Backward. 13. Acceleration. 14. Slow Motion. 15. Interpolation Of Still Photographs" (pp. 130-131). However, I would argue that this becomes a discussion of content rather than form. The specific element of movement that I shall introduce can consider the pacing of the movement within the shot. A number of the theorists I am referring to tend to complicate their lists by including various uses of specific techniques, including possibly variations of the application of techniques or elements, which obviously do not apply to every film. These lists are also not exhaustive. Arnheim is particularly guilty of this in his discussions of perspective and motion.

2. SPATIAL ELEMENTS

2.1. Orientation

Height on the vertical axis and angle on the horizontal axis between camera and subject are fairly straightforward elements, and discussed by most of the writers I am comparing, although some tend to categorise these together as either “viewpoint” or “point-of-view” (Arnheim, 1957; Lindgren, 1963; Aumont et al., 1992). Bordwell and Thompson (1990) group angle, height, distance, and level together when discussing framing. Level refers to tilted frames where the horizontal line is at an angle, which they refer to as a “canted frame” (p. 175).

Modern cinematographic techniques can allow a camera, or virtual camera, to be placed almost anywhere in relationship to a subject, and the somewhat two-directional aspects of height and angle do not appear sophisticated enough to allow for this. Bordwell and Thompson’s notion of level begins to add a further dimension, but there is an implied restriction to its application to a horizontal line. Geometry uses the notion of an Orientation Matrix to describe an object’s place in space. Whilst this could be described by using notions of height, angle, levelness, and distance (which I have paired with depth), it also includes notions of rotation, which could be described as ‘canted frames’ but is not restricted to horizontal off-sets, as it also applies to vertical, height, and angle off-sets. Whereas geometry is attempting to identify an object’s place in space, our aim is to describe the spatial relationship between the viewer and the subject. If one imagines an expandable bubble with the subject at its centre, the camera can be placed anywhere on the surface of that bubble, at any rotational angle (Figure 1).

The expanding bubble is linked to the apparent distance between the camera and the subject, often described as long shots, mid-shots, and close-ups. Whilst these definitions also depend on the use of depth perspective, for example, images that have more than one plane of interest, i.e. one figure in the foreground maybe in close-up, another character in the background in long shot. We cannot simply describe this as close-up or a long shot, as it is both simultaneously. I use the term apparent distance as the

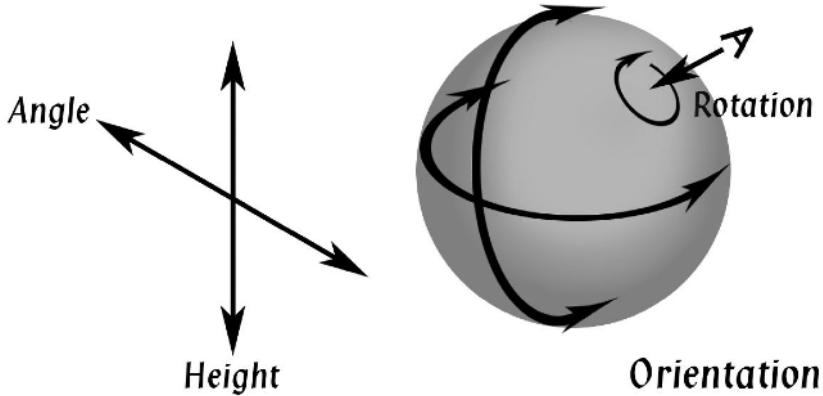


Figure 1: Possible camera positions represented by orientation bubble around subject.

focal length of any given lens affects the representation of physical distance. By imagining my orientation bubble, we can illustrate a more sophisticated notion of the audience's spatial relationship to the subject. I am deliberately avoiding the terms 'point-of-view' or 'viewpoint' as in film studies they often have stronger narrational connotations, which could result in misunderstandings, or confusion.

2.2. Depth Perspective

This refers to the relationship of foreground, mid-ground, and background elements of the shot. Depth, of course, remains an optical illusion in terms of the two-dimensional surface of a screen. Arnheim (1957) lists four separate uses of depth (pp. 128-130), Lindgren (1963) discusses perspective in terms of lens focal length. Nilsen also discusses perspective in relation to the technical notion of focal length under "The optical design of the image" (p. 55). Most theorists launch into a detailed technical explanation of the variety of focal length lenses available when discussing perspective. Although the cinematographer's choice of lens is an important factor in the creation of the image, I would view it as a technical process, which creates certain effects, and this functional effect is evident in terms of apparent distance and the two elements I describe, surface composition and depth perspective.

2.3. Surface Composition

I make a distinction between depth and surface composition. Surface composition refers to the arrangement of objects, shapes, and spaces on the two-dimensional surface of the image. Arnheim (1957) discusses “decorative surface patterns” in relation to the “lessening of depth perspective” (p. 130), and Aumont et al. (1992) discuss the two-dimensional quality of the cinematographic image, quoting Arnheim (p. 10). Bordwell and Thompson (1990) refer to “the flat screen space” in respect to surface composition (p. 143). Even though the majority of theorists discuss composition broadly, they do not separate issues of surface composition from other aspects of composition, for example depth. The reason I have made a distinction between surface composition and depth is that these two elements can be used independently. A series of objects may maintain a depth relationship, whilst being arranged in a variety of ways in terms of surface composition.

3. LIGHTING ELEMENTS

3.1. Quality of Light, Contrast Ratio, and Direction

Three of these elements come directly from Russell (1982), although she uses the term ‘intensity’ rather than ‘quality’. Lindgren (1963) also mentions three characteristics of lighting, “There are three principle ways in which the cameraman [sic] can control his [sic] lighting: in direction, in intensity, and in degree of diffusion” (p. 125). Lindgren uses ‘intensity’ as a term for both contrast and quality at different times in his text, so in principle, his three characteristics align with Russell’s, despite the fact that they both use the term ‘intensity’ for different elements. For me, intensity is an inappropriate term, as I consider it to relate to the power and brightness of the light source, which in practice is balanced or controlled with the use of the camera lens’s aperture, and this is evident in contrast.

In their chapter “Aspects of *Mise-en-Scène*”, Bordwell and Thompson (1990) discuss lighting, and isolate four major features; quality, direction,

source, and colour (pp. 133-137). Their discussion of ‘source’ implies the number of lights on the set used to achieve the illumination of the subject. They explicitly talk about key lights and fill lights, but this process affects contrast, which they discuss as part of “the range of tonalities” (p. 156) in the photographic image, and again my concern is not technical processes, but the resulting effects, so I would not include this.

Russell (1981) also adds the “location of the shadow” as a factor. She discusses Arnheim’s division of shadows into two categories, attached shadows, and cast shadows, “attached shadows – part of the subject and usually defining volume; cast shadows – including any shadow from one object onto another” (p. 45). Bordwell and Thompson (1990) also talk about attached shadows and cast shadows (p. 134). However, for me, shadows are formed as a result of light interacting with a subject, often a secondary consequence of other primary lighting elements. The direction of the light dictates how the attached shadows form on a subject, and it is the relationship between the light and the attached shadow, which gives volume and shape, and can be an indicator for the quality of the light, the contrast ratio, and the direction. Treating shadows as separate elements seems to me to be repetitive. I would consider shadows a result of light direction and the use of contrast, in respect to attached shadows, and cast shadows can be considered in terms of surface composition.

Some writers do not discuss light in any detail, for example, Spottiswood (1950) and Aumont et al. (1992).

3.2. Colour

Clearly, the early theorists were working when black and white films were the norm. However, colour plays a complex role in a contemporary audience’s experience of a cinematographic image. My article “The Democracy of Colour” does define three cognitive uses of colour in the cinematographic image; these are, for realism, psychological effects, or cultural associations (Cowan, 2015, pp. 1-16). As with other elements of the image, some theorists attempt to give a predefined meaning to certain colours, but these are not appropriate in every case. Meaning is often determined by contextual use. The majority of cinematographic images

attempt to reproduce colour in a straightforward naturalistic or realistic manner. Colour is sometimes used to stimulate a psychological effect on the audience; this could be seen as an emotional response to colour. There are also instances of colour being used for intellectual connotations. Often this has a cultural bias, which may vary in different parts of the world.

4. TEMPORAL ELEMENTS

Finally, we have to consider the distinguishing feature of cinematographic images, which is their temporal quality, and the fact that shots may change their formation over their duration.

4.1. Modifications in Characteristics

Modifications in characteristics can occur during a shot; most writers refer to ‘pull-focus’ or ‘rack-focus’, which shifts shallow, sharp focus from one area of a composition to another. Few films use changing aspect ratios; one example is *The Grand Budapest Hotel* (Anderson, 2014), which uses varying ‘virtual’ aspect ratios, therefore changing frame-lines, to represent different time periods.

4.2. Modifications in Spatial Elements

Any movement within the frame, or of the camera itself, will result in shifts in the spatial elements, and may affect light elements.

Most of the writers I am considering talk about subject movement and/or camera movement, although the majority do focus on camera movement. In terms of time and mise-en-scène, Bordwell and Thompson (1992) refer only to subject movement (pp. 145-146), and in their discussion of figure expression and movement they primarily talk about acting styles, rather than how subject movement can embody meaning (pp. 137-140).

Subject movement and camera movement can be applied in many complex ways. It is the analyst’s task to decipher their contextual use in individual films.

4.3. Modification in Light Elements

It is also possible that cinematographers will use independent lighting effects that will also actively change the light elements over the duration of a single shot. None of the quoted writers seem to have considered this.

5. CONCLUSION

My final table of aesthetic elements of the cinematographic image thus consists of four main categories, with fourteen elements overall. The interaction of one category on another can result in meaningful development of the image, particularly temporal. The elements that I have outlined provide a precise, objective tool to analyse any cinematographic image. Each element could be used to imply meaning in the way it is exploited.

5.1. Aesthetic Elements of the Cinematographic Image Table

(A) Characteristics	(1) Frame-Line
	(2) Focus
	(3) Texture
	(4) Duration, of the shot
(B) Spatial	(5) Orientation (Angle, Height, Rotation, and Apparent Distance)
	(6) Depth Perspective
	(7) Surface Composition
(C) Light	(8) Quality of Light (E.g. Hard or Soft)
	(9) Contrast Ratio
	(10) Direction
	(11) Colour (E.g. Realistic, Psychological, Cultural)
(D) Temporal	(12) Modification in Characteristics
	(13) Modification in Spatial Elements
	(14) Modification in Light Elements

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Philip Cowan has worked on over 80 film and television productions, including; drama, documentary, dance/performance, and animation projects, working for BBC, ITV, C4, S4C, and numerous independent companies. As a Director of Photography he has shot on 35mm, S16mm, & various digital formats, collecting twenty international ‘Best Short Film’ awards, including two BAFTA Cymru awards. His work has been screened on network television, and at festivals worldwide. He began teaching in 1994 as a guest lecturer at various institutions, becoming a per-

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