

CINEMA : FROM MONOCHROME TO POLYCHROME

Course aims: To explore the period during which cinema made the transition from monochrome to polychrome by looking at the technical processes involved and also by addressing the cultural issues surrounding the rejection of the colour image.

Examples will also be given of how colour is used in cinema to support a filmic message.

‘Cinema is historically, emblematically and mythologically linked to the world of black and white’ Michel Pastoureau

Unlike sound, which became established in the 1 year between the first sound film (Alan Crosland - The Jazz Singer, 1927) and the moment when the number of sound films produced exceeded the number of silent films in proportion, polychrome films took 30 years to become established on an industrial scale.

Today, using black and white is seen more as an artistic mannerism (mannerism: an artist's characteristic touch that contrasts with the rule of imitating nature).

This is because it is traditional in art to reproduce nature.

EXTRAIT : L'Artiste et son Modèle de Fernando Trueba (2012)

This is what was later called naturalism, when works began to break with the representations of imitation, which were more symbolic.

Otherwise, when black and white is used occasionally in the same film, it

refers to the past, because today's viewers associate black and white with the past.

Among the 6 vignettes is the first colour film, each using a different process. The first film to be considered in colour in the history of cinema was the one that used a process that could be exploited on an industrial scale and that allowed nature to be imitated. This was in 1934 (US).

Like the cinematograph, there were many inventions before arriving at a process that could be presented to the public (from the American point of view). And like the cinematograph, the first was Etienne Jules Marey.

EXTRAIT : Victor Herrmann et son Voliplane filmé par Etienne Jules Marey (1880s)

‘It seems that he used potato starch’, which is the same process used by the Lumière brothers when they marketed

the first colour photograph for the general public: autochrome.

Potato starch is made from potato starch and resembles flour. The process involved sorting the starch into more or less equivalent sizes and applying an orange, green or violet dye, other layers and a black and white emulsion. Development revealed the colour or not.

After WWII, the Kodak and Agfa process (24x36 film) supplanted autochrome because it offered more vibrant colours, more sensitive film and was less difficult to develop.

EXTRAIT : Le Voyage dans la Lune, Georges Méliès (1902)

Berthe and Elisabeth Thuillier were the first colourists in the history of cinema; they started with photographs and worked on the films of Méliès. Their brushes had only one bristle so they could be precise.

Later, they were recruited by the Pathé company, which also had a process using a stencil (as in serigraphy) to colour certain areas. Both these processes were very time-consuming and, unfortunately, the dyes didn't last and the film quickly faded.

Then came toning and tinting. Tinting consisted of dipping the film in dye baths, step by step, and then collecting the film.

EXTRAIT : Les Aventures du Prince Achmed, Lotte Reiniger (1926)

Toning, on the other hand, used a chemical reaction that transformed the silver bromide. The visual difference is that the whites are preserved.

EXTRAIT : Birth of a Nation, Griffith (1915)

Other processes followed, such as the screen process, with a juxtaposition of coloured dots to give the illusion of colour that the brain reconstructed.

Spatial synthesis, where different filters were used to record information in black and white. On projection, the same two or three strips were projected onto the screen at the same time, with a different filter in front of each one,

Temporal synthesis: the shutter alternated with a filter of a different colour on successive images. Each photogram was then dipped in the corresponding dye and each image of a different colour was projected one after the other.

But the process that really allowed colour to take off was 2-strip technicolor.

EXTRAIT : Fleur de Lotus, Chester M. Franklin (1922)

Problem: there was no blue. So they continued with the same process but on 3 different strips which were pressed together to give :

EXTRAIT : Becky Sharp, Rouben Mamoulian (1934)

When the film was screened, Mamoulian said, 'Colour should not be synonymous with bariolage. Restraint and selection are the essence of art.'

At the time, images of reality were in black and white: photographs in the newspaper, news at the cinema, everything. Polychrome images were like intruders!

Joel Finler reported that 'high-end directors, unconvinced by the aesthetic contribution of colour, persisted in avoiding it.'

Joseph Mankievich (an eminent Russian director), stated the precept that you can't build a drama and real characters in colour.

Producers and directors therefore decided that black and white worked much better for representing reality, substance and moving people, whereas colour was for glitz, appearance and deception, and therefore for adventure films, exotic films (set in another country) and musicals. Some aesthetes denounced the postcard impression of colour and its unrealism (naturalism from the beginning of the course).

EXTRAIT : Les Aventures de Robin des Bois, Michael Curtiz et William Keighley (1938)

But what also slowed down the transition to colour was that the equipment was very heavy (170kg for

the camera alone with reels), a huge amount of light was needed, which went against the expressionist movements for shadow work, and the colour of technicolour seemed exuberant.

According to Yannick Mouren, the development of colour cinema highlighted four uses of colour to justify its use: oppose it, make it rare, systematise it and intensify it.

OPPOSE COLOUR/B&W

EXTRAIT : Le Magicien d'Oz, Victor Fleming (1939)

The idea is to confront two diegetic universes. First, monochrome for a sad reality, and colour for a marvellous imagination.

Other directors have been able to do this in small touches to make the audience react and introduce colour to the audience, as De Sica did in *Il giudizio universale*/The Judgement Day (1961).

But the example that comes up most often in the history of cinema is the sequence in Ivan the Terrible Part 2. Eisenstein used Agfa's monopak system with a film that was more sensitive to red. The sequence was interpreted as blatant criticism of Stalin and was banned. For a long time, the film was only shown in black and white. Until 1958, 10 years after the director's death.

EXTRAIT : Ivan le terrible, Eisenstein (1944)

Kodak and Agfa were making great strides in making their film more sensitive, and monopack processes began to appear.

Lighter, cheaper, sufficiently sensitive from the end of the 50s, and more realistic! It was then that a director by the name of Alfred Hitchcock started making polychrome films. As this great name began, others followed, despite resistance from independent cinema.

To come back to the opposition.

The opposition between bichrome and polychrome took several forms: we saw the real and the imaginary, but also the past and the present, which could consist of inserting newsreel or archive images. And sometimes it was all at the same time!

EXTRAIT : Le Fabuleux Destin d'Amélie Poulain, Jean-Pierre Jeunet (2001)

In the context of this opposition, it has not always been a question of sequences or shots following one another. Garry Ross's *Pleasantville* (1998) contrasts colour and black and white within the image itself, and within the diegesis. In this film, in which two characters from the real world are projected into a sitcom typical of American TV in the 1950s, they move from their lives in colour to a fictional world in black and

white. The sitcom oozes American puritanism and political correctness. Time and space are also restricted: the end of a street turns in on itself, the parents have always been parents and the children have always been parents. Everything is tidy and undisturbed. But the arrival of these characters will turn the show upside down. First, the young woman introduces coitus into her school. She introduces something subversive into the world, and the people who taste the subversive begin to see colours, or become coloured themselves. The characters, normally in black and white, become aware of colour.

EXTRAITS : Pleasantville, Gary Ross (1998)

The use of colour in this film is a critical comment on society. Colour is subversive. Some of the characters who taste the subversive become coloured and segregation sets in, in reference to American history: 'no coloured allowed' can be seen in a shop window.

As well as being subversive or forbidden, colour is also associated with knowledge. When everything is in black and white, books have nothing but blank pages. When colour arrives, the pages are filled with black characters. (*to be compared with Marie's room by F. Jackson on learning with colour*)

This film is a perfect illustration of the quarrel that reigned between

directors who rejected the polychrome image and those who introduced it into their films.

By way of comparison, in *Schindler's List*, Steven Spielberg wanted the film to be with a dichromatic picture because he couldn't conceive of making a film about the Holocaust in colour. He also said that 'everything that anyone's ever been exposed to about the Shoah has been in black-and-white. I will not colourise the Holocaust.

However, he did leave a few touches of red. The best known is the little girl's dress, but there is also the candle flame. This touch of colour in a black and white film is a sign of hope. The symbolism of red in this film is hope.

PHOTOGRAMS

The producers had tried to put pressure on Spielberg to shoot the film in colour. They even wanted to negotiate a theatrical release in black and white but a VHS release in colour. But Spielberg refused to do this either.

RAREFY THE COLOUR

By 1968, the proportion of polychrome films had exceeded that of monochrome films because the process was less expensive. However,

some directors continued to oppose the use of colour as audiences became increasingly accustomed to this type of image. The studios lobbied to force films into colour, while some directors resisted head-on.

Jean-Pierre Melville wanted to make mainstream films but didn't like colour at all because what he wanted to do was make thrillers. As colour film was much more sensitive in his day, he was able to rediscover a light contrast that matched his love of detective films, but with colour. He justified himself by saying that he was making black and white films in colour. If you look at the first films in colour, you can see that there are very few shadows because Technicolor required a lot of light to print properly. In addition to lowering the cost, the films were more sensitive and made it possible to reuse so-called point lights to create the image. JP Melville was therefore able to make a compromise with colour so that he could do what he liked and what the studios wanted, thanks to monopak systems. He distanced himself from colour thanks to the contrast of the two-colour image.

EXTRAIT : *Le Samourai*, Jean-Pierre Melville (1967)

On the other hand, other directors persisted in making two-colour films, like Jean-Marie Straub, who was outraged that cinema cost so much money. He wanted to resist the industry by shooting in black and

white. Black and white symbolised the fight against mass culture.

Many people protested against the Technicolor laboratories, whose colours were considered garish. Some said that ‘the Technicolor laboratories were designed to produce marshmallows’ (Elia Kazan ex: *A Streetcar Named Desire* 1951).

For François Truffaut, colour was too close to life. He saw film-makers as storytellers and defended himself by saying that black and white allowed the viewer to be drawn into the film's narrative.

Another way of making colour scarce was to use white in the studio (THX 1138, Georges Lucas) or on location (Mc Cabe and Mrs Miller, Robert Altman 1971), with a whole sequence in the snow. Quintet, where the entire film takes place in a snowy landscape.

Michelangelo Antonioni wasn't so reluctant to use colour, he even intended to use it. But, for the public, he avoided it some times. As a young cinephile he wrote articles about cinema and declared: “Colour must be considered essential to the absolute of figurative beauty [...]. Black and white is to film what drawing is to painting”. So he devoted himself to filming in the Ferrara region, where he was born. This region was often invaded by fog, and he liked to shoot there to obliterate the colours, so dominating was the fog.

EXTRAIT : Identification d'une Femme, Michelangelo Antonioni (1982)

Then monochrome became a symbol of modernity, and Jacques Tati is a famous example of the use of variations of grey. In order to reduce the presence of colour in the image, Tati never used close-ups, so that it was only a detail. The use of coloured set pieces allowed him to emphasise an object without having to try to show it. In this way, Jacques Tati uses colour in dashes in a grey environment.

EXTRAIT : Playtime, Jacques Tati (1967)

Other directors turn to a form of monochrome in order to reduce the variety of colours on screen, such as Jean-Pierre Jeunet with yellow, Clint Easwood's *Letters from Iwo Jima* (2007) with black, Bergman's *Cries and Whispers* (1972) (influenced by Edvard Munch's *The Deathbed*), Andrzej Żuławski's *Possession* (1981) with blue (which launched a fashion for blue films). Then the monochrome of high-tech science fiction like *Matrix* (1999) by the Wachowskis or *Gattaca* (1998) by Andrew Nichol.

The most memorable example is Krzysztof Kieslowski's trilogy of colours: *Three Colours: Blue*, *Three Colours: White*, *Three Colours: Red*.

EXTRAIT : Un passage de chaque film (1982)

Reminiscent of the colours of the French flag, each film deals with a subject related to the motto: blue =

liberty, white = equality, red = fraternity.

Agnès Peck: 'In each film, colour is a visual leitmotif with emotional resonance. It suggests a system of poetic correspondences, a thematic continuity that is both sensory and emotional'.

Each colour permeates its corresponding film, which reduces the exuberance of a Technicolor film and supports the film's message.

It remains to be seen how to *systematise* colour and *intensify* it. But that will be the subject of the next course, because these ways of talking about it will take us further into the narrative.

TO CONCLUDE

Due to technological constraints and cultural reluctance, colour took a long time to make its mark in cinema. As the generations went by, a new way of looking at things was introduced, and the monochrome was gradually forgotten.

As André Bazin wrote, 'Cinema replaces our gaze with a world that matches our desires'. And with each new generation of audiences and filmmakers, the gaze has evolved. It would never occur to us to colourise a black and white masterpiece because it belongs to its time, just as it would seem criminal to replace a polychrome film with its colour. As

Paul Valéry said, 'Beautiful works are the offspring of their forms'.

And I can't help thinking of Michel Pastoureau, who underlines the inconsistency of colour representations over the centuries, an inconsistency that can be found in the History of Cinema, and which is still evolving.