

Workshop Films without a camera

GENERAL PRESENTATION

This pedagogical file on films without a camera is in three parts. First, there is a general introduction to film produced directly on film. Then, our attention will turn to The National Film Board of Canada (NFB) through one of its most emblematic figures, the director Norman McLaren. Finally, we will go back non-exhaustively over some of the proponents of this absolutely unique technique of cinematographic creation.

INTRODUCTION ON FILM DIRECTLY PRODUCED ON FILM

Embossed, drawn or painted with a roller film, animation without a camera is an animation technique in which Canadians quickly distinguished themselves. Some important directors have created significant works by using this technique.

All of these animation techniques require a lot of work and precision, but this is particularly true for animation without a camera, which does not require any filming. Directors can directly draw on the film with ink or carve the emulsion of the

film by using blades and knives. The craft workers must not only show patience, but this technique also requires great dexterity because the worker engraves or draws on a support which is sometimes less than 20mm wide.

In Canada, outstanding directors such as Norman McLaren and Pierre Hébert made use of this technique: first because it requires little money, second and foremost, because of its attractive qualities. Engraving on a small surface without the

usual registry system (which allows the drawing to be copied) led to instability in the animation. Far from being a handicap, this hopping gives the best engraved or painted films an incomparable energy and reveals to spectators the artist's spontaneous gesture that has a direct relationship with the animated material¹.

International Context

If we see direct animation on film as abstract animation in relation with abstract painting, then its pioneers are to be found in Germany, from the 1920s, as Oskar Fischinger² and Walter Ruttmann, and also as the Swede Viking Eggeling. If we just turn our attention to this technique, we have to mention Italy's Futurists Arnaldo Ginna, Bruno Corra and Giovanni Martedì³, the German Hans Stoltzenberg, the Belgians Henri Storck⁴ and Louis Van Maelder, the Canadians Richard Reeves and Pierre Hébert, and the Scottish guest of NFB, Norman McLaren, who will give his fame to this

technique with which he will always be associated.

Far from being a cinematographic movement as the New Wave or Neorealism were able to be, film directly produced on film is the work of artists, isolated individuals, who lead a plastic research thanks to this movement. The directors working directly on the film work throughout the world and outside of organization for the simple reason that they generally don't need it (for example, production companies). Nowadays, digital technology has flooded this technique, facilitating the shooting of every frame. While there were nearly no artists working on this technique anymore in the '70s and the '80s, it resurfaced in the '90s, in specific parts of the world.

1. Introductory text coming directly from the film *24 idées/seconde - Animation sans caméra* by Eric Barbeau, Canada (NFB), 2006 | VOF | colors | 24'
2. Many films from Oskar Fischinger are available on the Internet. The most understandable film for a young audience is *An optical Poem* (1938), or the excerpt from *Fantasia* (1940) by Walt Disney : *Toccata et Fugue*.
3. Giovanni Martedì pastes in *Film sans caméra 1* various colored pieces of tape. This film is distributed at Light Cone.
4. According to the Fond Henri Storck, several films were directly made on film. Unfortunately, the copies of those films do not exist anymore.



LE MERLE, NORMAN McLAREN



MOTHLIGHT, STAN BRAKHAGE

THE NFB & NORMAN MCLAREN

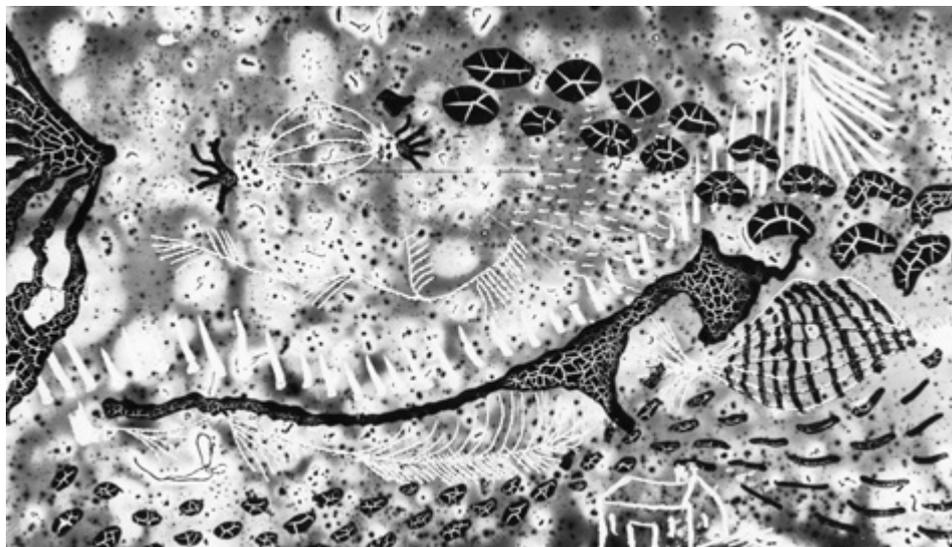
NFB (National Film Board)

On the 3rd of September 1939, Canada went to war, hastening the creation of the NFB. The creation of The National Film Board of Canada (NFB) was not particularly daring and corresponded, in itself, to the Canadian political context at the approach of war that favored the development of government agencies of information and propaganda. Furthermore, Canada was already known as a precursor regarding the use of cinema for promotional purposes. It is John Grierson, British director and cinema theorist, who was called, from London, to chair it.

There were four categories of government cinematographic propaganda: the educational film, the promotional film, the ministerial film (outside the commercial channels) and the prestige film, dedicated to conveying ideas or to arousing loyalty towards a country, a ministry or an organization.

Only the latter category interests Grierson because it allows the “creative handling of reality”. Then, he entrusted Norman McLaren, whom he already knew (they had already worked together, in London, for the GPO Film Unit⁵) with the responsibility to create, in 1941, an “animation” department. Between 1942 and 1944, McLaren gathered young Canadian artists who, at the beginning, had no cinematographic experience, but who subsequently became significant authors of expression methods that were in accordance with their artistic personality. In 1940, the NFB was composed of a dozen employees. It will have more than 800 in 1945.

In time of war, the themes of the movies that were part of the non-commercial distribution network (they were educational films) were agriculture, consumption,



BEGONE DULL CARE, NORMAN MCLAREN

work, social planning, ethnical variety, sport or war. The documentary aesthetic was subject to the message that had to be conveyed.

After the war, the NFB remained, until 1967, the only cinematographic organization in Canada, focusing essentially on short-films. Later, the Canadian Film Development Corporation will be created, which will allow the emergence of feature-length film production. At the end of the conflict, the films of the NFB disappeared from American cinemas; the interest for any “Canadian content” indeed drifted away. Nevertheless, the NFB had become the symbol of an artisanal alternative to American cinema; the documentary know-how remained an earmark for a long time. However, this Canadian experience was emulated, and the example was followed by New Zealand, Australia, South Africa, Ghana, Nigeria, Puerto-Rico and North Carolina.

In 1947, John Grierson was voted out of office and replaced by Ross McLaren, then by Arthur Irwin in 1950. During this period, the NFB was central to sensitive issues (financial and political) and subjected to inspection. The double-mission of Arthur Irwin during his mandate was

to reorganize the NFB and to return public confidence to it.

After 1950, the NFB transformed in any way possible and announced the aesthetical renewal which would begin from the 1960s. While Grierson foresaw the erasure of the directors in favor of the institution and public service, it was under Irwin, and after the atmosphere of mistrust inherent to the Cold War, that the emancipation of the directors will a new impetus to the NFB.

At this time, the presence and the activity of Norman McLaren had a determining effect on the production of the NFB as a whole. The activity center was a founding element, responsible for the most essential qualities of the NFB. The animation, introduced from the beginning of the Office, will impose a standard of excellence based on research and innovation, which will become its true “trademarks”⁶.

5. John Grierson founded in 1933 the GPO Film Unit in England, a department of the UK General Post Office specialized in documentary.

6. For an in-depth research on the producers from the NFB, see Caroline Zéau, *L'Office national du film et le cinéma canadien (1939-2003)*, ed. Peter Lang, Belgium, 2006.

Norman McLaren

Within the NFB, Norman McLaren managed to create a balance between artistic creation and institutional production, along with savings responsible for a certain liberty of creation. This freedom will have an impact on the other centers of the NFB, that is to say documentary and fiction feature film.

The technique often linked to Norman McLaren is the drawing directly on the film. His first attempt dates back to 1933, but the certainty of continuing working in that direction came to his mind after watching *A colour Box* by Len Lye, in 1935. The first (control) film directly produced on the film by McLaren was *Love on the Wing*, in 1938 ; a short film praising the air services of the Post Office. At this time, he was still at the service of the GPO in London.

The first film of the NFB (in 1941) is, once more, a control film for the Canadian postal services, *Early, Mail Early*. Norman McLaren's last personal contributions to wartime effort will be *Dollar Dance* (1943) and *Keep your Mouth Shut* (1944). It is around that period that he made his beginnings as organizer, recruitment consultant, tutor and creator of a real animation studio, with, among others, Evelyn Lambart, René Jodoin, Jean-Paul Ladouceur, George Dunning, Grant Munro, Collin Low, Robert Verall et Jim McKay. Together, they realised, between 1944 and 1945, the production of the series *Chants populaires*. This team sought to diversify her techniques. Objects animation, pastel and papercutting are then added to the drawing on film. For this nascent team, this match between experimentation and training created an attractive emulation climate.



NORMAN McLAREN

At the end of the war, McLaren abandoned his position as Animation studio manager ; on the one hand, in order to go back to his own researches and, on the other hand, even if he was a good teacher, he could adapt to his hierarchical position. Then, he started to devote himself to his more personal projects. From 1945, he enjoyed excellent conditions of work and creation, among which a monthly premium of the federal government. This premium allowed him to devote himself to the development of new techniques regarding animation, but mostly to carry out his in-depth research on synthetic sound. He burned directly the sound on the film in *Blinkity Blank* (1954), *Rythmetic* (1956) and *Mosaic* (1965). At the same time, he developed the technique of the sound drawn on a board and then photographed ; technique that he applied in *Now is the Time* (1951), *A phantasy* (1952), *Neighbours* and *Two Bagatelles* (1952) but also in *Synchrony* (1971).

Norman McLaren does not see animation cinema as an outcome of static arts forms such as drawing or painting, but rather as an art close to dance. That is how he could claim that, in animation, the most important is not what appears on every picture, but rather what is happening between the pictures. McLaren's sense of economy and the extremely modest conditions that marked the production of several of his films accommodated well to such a conception of cinema. Indeed, conceiving animation cinema first as a movement encourages to use a simple graphics (animation with paper-cuts and without camera). Therefore, his works painted or directly engraved in the film are without doubt the most kinetic. Often abstract and very rarely narrative, they rest on a remarkable sense of rhythm.

DIRECTORS WITHOUT CAMERA

Len Lye

Len Lye, who was born in New Zealand in 1901, boarded in 1929 as workman on a steamer to get to England. His art, mainly composed of experimental films and kinetic sculptures, is highly influenced by the Maori art.

During his first years in London, he provoked the astonishment and admiration of the artistic world. In 1929, his first movie, *Tusalava*, also struck with his exoticism and the difficulty which the critics experienced to understand him or categorize him. This movie belongs without any doubt to modernism – called «primitive art» at that time – whose approach was especially innovative.

In 1935, Len Lye produced his first movie (*A Colour Box*) for the GPO film Unit. John Grierson agreed to pay for the expenses related to the purchase of paint, the making of the soundtrack and the printing of copies. Lye was paid thirty pounds for his work providing that he add a promotional message for the British postal services at the end of his film. For Grierson, it was the only way to be able to use government subsidies to make an experimental film.

The difference of style between *Tusalava* and *A Colour Box* is amazing. We will also note the apparition of colors, but also its bright and dazzling use. Finally, there is freedom, fluidity, energy and the rhythm of the pictures, synchronized with a popular dancing music. *A Colour Box* paved the way to *A Rainbow Dance* in 1936.

The opportunity to make films for the GPO (General Post Office) came when the cinema in colors was still a novelty which was not available to all productions (during the 30s). Only films from the great studios such as Disney (with *Snow White and the Seven Dwarfs*, in 1937), Warner (*The Adventures of Robin Hood*, 1938) or Metro-Goldwyn-Mayer (*The Wizard of Oz*, 1939) had recourse to it.

“[...] Cinema has within its grasp innumerable symbols for emotions that have so far failed to find expression. Anger is not merely rant and rhetoric [...]. It is perhaps a black line wriggling upon a white sheet. ...”

Virginia Woolf, 1926.



LEN LYE AT WORK 1936, PHOTO JOHN PHILLIPS



A COLOUR BOX, LEN LYE

The technology of the time, associated to color, offered a new means of experimentation. In *Rainbow Dance* and *Trade Tatum*, Len Lye explored possibilities of the Technicolor and the Gasparcolor; techniques that implied the simultaneous exposure of three negatives to later reconstruction of one and only colored negative corresponding to the «real» colors.

Len Lye chose to work separately on each negative in order to retain total control over the final render of the colors. He added other elements by using *travelling mattes*, a photographic method combining several photographic elements. The Chroma Key, more commonly called «blue screen» or «green screen», is the modern technique (it captures a color on the picture) the most used to create mobile masks. Rotoscoping and motion control were more frequently used of that time.

Rotoscoping: pictures in motion created thanks to a camera and developed on positive copy so that they can be resized, picture by picture. This technique was created by the Fleisher Brothers⁸ and was abundantly used by Walt Disney.

Motion control: technique used to guide the movement of the camera and to reproduce it. It is the simplest technique to «duplicate» several times the same actor on the screen: the camera films, according to the movement and in a same place, the actor playing different parts that will have to be insert in the image.

7. The Three-strip Technicolor, the one we refer to nowadays when we talk about the «Golden Age of Technicolor».

8. Technique invented by Max Fleisher in order to be used for the character of Koko in the series *Out of the Inkwell* which began in 1918. It resulted in a nearly perfect likeness between the drawn movement and the actor's real movement.

Stan Brakhage



MOTHLIGHT, STAN BRAKHAGE



STAN BRAKHAGE

“Imagine an eye unruled by man-made laws of perspective, an eye unprejudiced by compositional logic, an eye which does not respond to the name of everything but which must know each object encountered in life through an adventure of perception.”

Stan Brakhage

Born in 1933 in the United States, Stan Brakhage will remain affected by the influence of artists who attended, as he did, the San Francisco Arts Institute in 1951. He formed a strong friendship with the avant-garde poets Robert Duncan and Kenneth Rexroth, representatives of the Black Mountain College – a transdisciplinary university in North Carolina – but also the poets from the Beat Generation (Allen Ginsberg, Philip Lamantia, Jack Kerouac).

Brakhage’s work maturity is fuelled by this poetic school. Brakhage is fascinated by the perception and exalt the magic of the creation. he is not directly associated with the technique of the film without camera but he made use of it in the past, when he was poorer. At that time, he lived with his wife and his three children, in a house borrowed by a friend. The desire to make films urged him to use two leader tapes of 16mm between which he inserted fragments of leaves, of flowers, of moth wings ...

The result will be entitled *Mothlight* (1963). In the same year, the film is presented and acclaimed at the third edition of Knokke Experimental Film Festival⁹.

9. Festival du film expérimental créé en 1949 par Jacques Ledoux, premier conservateur de la Cinémathèque Royale de Belgique.

Pierre Hébert

« *That is a delinquent work ! All the cinema technology is centered on the effort not to scrape the film. And the basis of that technique is exactly the opposite of what the genius of cinema is seeking to do. That's one of the reason that love thos technique (...) The reason why I managed to make a film as this one is that it was in my resources. »*

Pierre Hébert

Born in Montreal on the 19th January 1944, Pierre Hébert undertake archeology studies at the University of Montreal. At the same time as his studies, he engraved at the Atelier libre de recherche graphique of Richard Lacroix. At this time, there was little difference between his engravings and his films. The film directors that he admired came from the American underground community, and combined their filmmaking style with other plastic arts such as sculpture and painting (see, for example, Robert Breer's work). Long thought of as an "amateur film director", his status changed after his decisive encounter with Norman McLaren, in 1962, who would encourage him for his experiences of animation directly engraved in the film. McLaren didn't believe it was possible to tell a complex story while using this



SOUVENIRS DE GUERRE, PIERRE HÉBERT

technique. Pierre Hébert opted, at first, for an abstract style of work, to move towards a figurative and narrative work that will culminate in 1982, with the anti-militarist work *Souvenirs de guerre*. Following this movie, Hébert decided to go on stage to enrich is work. He live engraved pictures directly on the film projected in a continuous loop, accompanied by live music. The result of his performances.



ADIEU BIPÈDE, PIERRE HÉBERT

became the raw material of his film called *La lettre d'amour* (1988) and inspired the full-length feature *La plante humaine* (1996), a master work which synthesized the long way the artist has come. Pierre Hébert still experiments, multiplying projects, in films such as *Lieux et monuments*, where he transforms everyday images filmed during his trips.

Louis Van Maelder

Forgotten by the books on experimental cinema and particularly by the books on film without camera, Louis Van Maelder will keep, throughout his cinematographic experience, his status of amateur filmmaker. Out of the structures such

as the ones created in several countries like Canada, it was indeed hard for him to find his place in Belgium, even in the name of cinematographic research. Author of seven short films made between 1958 and 1995 (*Daily Rhythm*, 1958;

Le Canard Géométrique, 1966 ; *Three Cinematographic Fairy-Tales*, 1980 ; to name but a few), Louis Van Maelder he gave us a work very poetic and with a masterly technique.



LE CANARD GÉOMÉTRIQUE, LOUIS VAN MAELDER



L'ARBRE ET L'OISEAU, LOUIS VAN MAELDER



L'OISEAU QUI DORT, LOUIS VAN MAELDER

GO FURTHER

Books and articles to consult for further reading

- Aubenas Jacqueline, *Hommage à Henri Storck*, Communauté Française de Belgique, 1995.
- Bastianich Alfio, *Norman McLaren Précurseur des Nouvelles Images*, Dreamland, 1997.
- Bouhours Jean-Michel, *Len Lye*, Centre Georges Pompidou, 2000.
- Brakhage Stan, *Métaphores et vision*, Centre Georges Pompidou, 1998.
- Elder R. Bruce, *Harmony and Dissent: Film and Avant-garde Art Movements in the Early Twentieth century*, Wilfrid Laurier University Press, 2008.
- Marcel Jean, *Pierre Hébert, l'homme animé*, Les 400 coups, 1996.
- Zéau Caroline, *Office National du film et le cinéma canadien (1939-2003)*, Peter Lang, 2006.

DVD

- *Norman McLaren. The Master's Edition*
(The complete works of Norman McLaren, founder of the National Film Board of Canada's Animation Studio) – ONF 2006