

Teaching Machines; examining and re-imagining
the use of film in the classroom

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ABSTRACT

Teaching Machines; examining and re-imagining the use of film in the classroom

Kathryn C. Gilkes

This thesis investigates the use of film (both celluloid and video) in the classroom from 1920 to the present day in an effort to locate the gaps in our teaching approaches and to reinitiate dialogue among art educators regarding a unique tool for fostering cognitive and social development. Historically, films have been used as instructional aids that were relied upon to explicate everything from manners to Communism, in some cases, doing the teaching for teachers. Teaching machines were mechanical devices used for presenting a program of instructional material, ostensibly designed to lighten the teacher's load. Playing with the idea of the 'teacher-less' classroom, the installation presented here utilizes these (arguably) obsolete celluloid, slide, and filmstrip projectors to show a collection of instructional films and slides in continuous loops. In showcasing these machines and the absence of teachers, I aim to re-initiate a dialogue regarding the current lack of critical attention paid to the moving image. I believe it is imperative in an age of informal interaction with our tools of communication, that art educators consider the historical place of film in the classroom and reconsider the ways we teach with, and often underestimate film. This thesis concludes with strategies to aid our students in becoming truly critical with regards to new media.

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Introduction

We once used celluloid films extensively in our classrooms to educate and visually stimulate our students. While educational films were a visually compelling way to introduce teaching topics such as animal anatomy (i.e. *Animals breathe in many ways*, B.F.I. 1966) and nutrition (i.e. *Eat well, Grow well*, Coronet Films 1963) the methods of conveying this information has changed dramatically in the past forty years. The 16mm projectors that were used to show these films were the hot, sputtering tools of a now by-gone era, and have since been replaced by digital counterparts (i.e. internet streaming, pod casting, and 'smart classrooms'). These once integral classroom tools are now relegated to dusty school storage spaces and dumpsters, and with them, our connection to the very material and construction of film. This separation jeopardizes students' understanding and capacity to create meaning through a unique medium that is "more than just supplemental to the curriculum, but a tool of exploration in all teaching subjects that can aid cognitive development, and can be used as building blocks in the development of emotional and social intelligence." (Warden 2004, p.2)

While there are many contemporary works that express a 'celluloid nostalgia,' lamenting 'the death of cinema,' this will not be the specific focus of this work.

One hundred-and-ten years after the first cinema showmen presented actualities in fairgrounds, eighty years after the 16mm gauge helped film burst free of the darkened movie house, and sixty years after regularized television broadcasts began to animate living rooms, we

continue to hear the plaintive cry of the cinema-mourner, railing against the degradation of the magic of films and cinemagoing that has resulted from the ubiquity of moving images. (Acland 2009, p.148)

On the contrary, the democratization of film - in the form of readily available, affordable digital filmmaking technology, offers teachers and students a set of unparalleled tools to promote critical thinking and ultimately effect social change. In an era when students glean most of their cultural information at top speed and low quality - doing most, if not all of their learning online and in isolation via miniature ipod screens, a dialogue about the history of educational films and the medium of film itself can offer timely and significant insight for art educators. As we move into a *fully* digital age, where we are increasingly removed from the material of film and the methods of its construction, it is imperative that we look back at the history of film and the history of teaching; locating the gaps in our techniques and approaches.

...The reigning common sense concerning the indispensability of new media to contemporary education and training would not exist were it not for the years of advocacy for, and experiments with, those drab grey-green instructional aids. As film and media teachers and scholars, we tend to be stalwart supporters of access to certain kinds of projection and display formats. For this reason, it is essential that we understand the ways we have benefited from, and are implicated in, the history of the formation of this common sense about media use. (Acland 2009, p. 165)

This thesis will investigate how the educational community began by using film

as practical means to vocational ends in the 1920s and '30s, to using film as teaching machines, that could be relied on to explicate everything from manners to Communism, (in some cases doing the teaching for teachers) in the 1940s and '50s, and subsequently to teaching film *as art* in the 1960s and '70s. With the emergence of educational television, celluloid film departs from the *everyday* classroom and while it has thankfully been taken up by specialists (in film studies and film production departments at the university level) there is an absence of critical use of film and filmmaking within K-12 educational environments.

The call to approach the seductive and persuasive world of the movies critically, and to provide students with the cognitive tools to accomplish this on their own, is not a *new* conversation (think here of Rudolf Arnheim, June King McFee, Elliot Eisner, and Paul Duncum). In the 1960s, the widespread inclusion of instructional films in the classroom (perhaps in spite of them, based on their often less than desirable content) prompted many educators to encourage a more in depth approach; "important arts [such] as cinema and television have been ignored completely, as if youngsters needed no insight or understanding of these vital areas." (Karel & Schwarz 1968, p.11) I would argue that while many have illustrated the importance of film literacy, we are not, as educators, practicing what we preach. In a five year survey of the National Art Education Association's two main publications; *Art Education* and *Studies in Art Education*, only three articles directly related to film or video can be found (in *Studies* - Bequette et al. 2008, Taylor, P.G. 2007, and in *Art Education* - Nadaner, D. 2008). It is not only the academic world that has cast film aside in favor of new media technology such as the

internet, video games, and culture jamming - in their latest publication (revised for implementation in the Fall of 2009) the Ontario Ministry of Education has published a 162 page guideline for arts curriculum entitled *The Ontario Curriculum, Grades 1-8: The Arts* (2009) which outlines the "fundamental concepts in the arts" as dance, music, drama, and visual arts. (p.18) Within the visual arts category, media arts and media technology curriculum focuses on the internet, making short mention of film and filmmaking (primarily as a method of supporting the aforementioned concepts). Furthermore, it is an unfortunate fact that art (and film along with it) continues to require a defense as it becomes increasingly inaccessible within the public school system; "7% of schools with Grades 7&8 have a Design and Technology teacher, compared to 22% in 1998" and "54% of secondary schools charge fees for art classes and 23% charge fees for music classes." (People for Education Annual Report on Ontario's Public Schools 2009, p.3) Laurie Warden, in her work *An Eisensteinian and Vygotskian approach to the use of film as a valid teaching tool for children with emotional and behavioural exceptionalities* has echoed my point: "The topic of film in the classroom seems to have been almost ignored since the early 1990s in favor of *higher* technologies (i.e. the Internet, interactive software, authorware)...it is time to find a new way of looking at film, as well as a new way of using it." (Warden 2004, p.2)

Approaching the absence of film in our classrooms as a filmmaker and an educator, I wonder: how did we get here? And furthermore, why does it necessitate change? I believe that it is not only important to address this issue at the level of policy and curriculum, but also from my own personal perspective as an artist.

Accordingly, this thesis will proceed from the notion that "[t]he arts are ways of knowing." (Nielsen, 2002). The art installation that is central to this project has provided opportunity for self-reflection, as it is my final work as a student and one that I believe will inform my future teaching and art-making. More than lip-service to an important medium, it is my intention to use this studio-based thesis as a first step toward future celluloid workshops and lesson plans. It is also meant to act as a catalyst (or re-initiation) of dialogue amongst art educators concerning our collective teaching memories and future teaching approaches. ("...art practice, in its most elemental form, is an educational act, for the intent is to provoke dialogue and to initiate change." Sullivan 2006, p. 33) In light of my exploration of the history of 16mm educational films and projectors in my installation and literature review, I will conclude with some thoughts on new media education, illustrating that educational films and their companion machines influenced what we taught, how we taught and how we have come to approach the medium in general. Ultimately, "...the clearest way to see through a culture, is to attend to its tools for conversation." (Postman 1985, p.8)

Celluloid film and projection equipment are central components in my personal art practice, and as I embark on a career in art education, I am reminded of where my love for art making originated. My interest in becoming a filmmaker was as a result of my having to fill in for the regular projectionist at the repertory movie theatre where I worked as a 'snack girl' all throughout high school. Knowing next to nothing about how to thread a film projector (twice my size) and with a manager screaming the old cliché; "the show must go on" in the background, I inevitably got to see what few people ever

do; celluloid being projected while on fire. In that moment, watching a frame of film disintegrate in to a multi-colored, bubbling mass of chemicals, in front of a hundred shocked film goers, I cemented my love for film, becoming fascinated with deconstructing the medium in to its component parts; features in to filmstrips and filmstrips in to frames.

Research Questions:

This investigation into both the current and historical place that celluloid films (as a pedagogical tools) hold in our classrooms utilizes an arts-based inquiry model to address the following questions:

- How did educators once teach with film in the classroom and how have our methods changed with time and technological advancement?
- In my own art practice, what is the interaction between between my filmmaking and the machines necessary for display?
- What can these insights add to the contemporary dialogue amongst Art Educators?

I could not imagine approaching this subject matter in a way that was not simultaneously creative and analytical, and thus this investigation proceeds from the perspective that film is both a noun and verb (as Sullivan 2006, points out in his example using painting) and the subsequent research will be, to a certain extent "determined by the act of doing..." (Sullivan 2006, p. 30) Film viewing, making and theory have

shaped my life: I have worked on film sets, in laboratories, theatres, and schools and it is the language of film that (after being so heavily involved) comes most naturally for me. But rather than providing quick and easy answers to my research questions, my background has presented a challenge in reaching beyond tacit knowledge; how do I know what I know as a filmmaker? Why does it matter? How can I teach it? These are questions I cannot ignore as I embark on a teaching career or in my defense of film as a pedagogical tool, and for these reasons I have chosen to situate this thesis in the tradition of art-based educational inquiry.

Just as artists make a host of decisions as they craft a particular piece of art, arts-based educational researchers make numerous decisions as they craft a particular inquiry, beginning with the question, What is the purpose of the study, and what role(s) will art play in accomplishing this purpose? Providing a logic-of-justification makes the philosophical reasoning behind one's methodological decisions more visible, thereby broadening the educational research community's understanding of what it takes to fashion such studies. (Piantanida, McMahan and Garman 2003, p.186)

Following Piantanida, McMahan and Garman's suggestion of providing a logic-of-justification for this type of inquiry, the purpose of this study is to look at the way that film and technology have effected pedagogy, in order to assure its critical (and creative) use and presence in contemporary classrooms. The inclusion of my personal art practice (in the form of an installation involving film and '*obsolete*' technology) has functioned

not only as an opportunity for my immediate community of art educators to revisit their teaching memories and experiences with film, but also for myself as an artist and a teacher to reflect on my art practice, and to explicate the importance of creative acts in critical environments, "[o]ftentimes what is known can limit the possibility of what is not and this requires a creative act to see things through a new view."(Sullivan 2006, p.20) It is my hope that the written work and the creative work will flush out the absences in each other; namely the history of film and logical justification of its inclusion within classrooms in my creative work, and the act of making and working with the very material and technology in question in the writing.

Montage has been a productive and practical metaphor for this project. "In montage, several different images are superimposed onto one another to create a picture. In a sense, montage is like pentimento, in which something that has been painted out of a picture (an image the painter "repented" or denied) becomes visible again, creating something new. What is new is what had been obscured by a previous image." (Denzin and Lincoln 2003, p.6) Sergei Eisenstein (b. 1898, d. 1948), the pioneer of montage theory, made an important case for the power of cinema to cognitively and emotionally affect the spectator, "Eisenstein's theories clearly establish the emotional relationship between film and spectator, constructed through dynamism, rhythm, composition, syntax and organicity...an essential tool in helping students develop those essential cognitive skills fundamental to learning." (Warden 2004, p. 30-31) Eisenstein seized on temporal and spatial discontinuities between shots in order to "push the viewer to work out implicit meanings" (Bordwell and Thompson 2008, p.260) Much of our knowledge as teachers

and artists is tacit and instinctual, and this project encourages a self-reflective stance not just for myself (in an effort to become a more critical teacher and artist) but for educators in general "...[M]edia of still and moving image projection and of audio recording and playback are so familiar to teachers and students as to be easily ignored or forgotten. Yet they are precursors to today's reigning common sense about wired classrooms and communities." (Acland 2009, p.152)

Further on this idea, Warden (2004) compares teaching to montage:

Traditional approaches to teaching run parallel to the historical definition of montage as "placing single shots one after the other like building blocks...the movements within these building block shots, and the consequent length of the component pieces, was considered as rhythm." Teachers were to lay out blocks of knowledge that were categorized into subjects, units, and themes, etc., and the rhythm of teaching, that is the consequent length of time spent on all the curricular components... (p.24)

Chapter two of this thesis presents historical research into the production, distribution and exhibition of celluloid and 16mm projection technology in Canada and its subsequent inclusion in the classrooms of the 1920s and '30s. The collection and consideration of hundreds of instructional films, filmstrips and slides from the 1940s, '50s and '60s (many on the verge of becoming vinegar) as well as their companion machines (such as the fifty year old filmstrip projector purchased from a church in Ontario that needed a new bulb from Germany to get going again) are put into context in

chapter three as I catalogue their place in the curricula of the period - locating several examples of the misuse of instructional films on the part of teachers as well as discussing the aspects of propaganda and blatant social engineering found within them.

In Chapter four I present an installation that was constructed for the purpose of this investigation (please see included DVD) in which I created several 'teaching machines' using the celluloid, slide, filmstrip and overhead projectors that were once so ubiquitous in classrooms. In the show, I utilized my collection of instructional films and slides from the 1950s and '60s and altered both the projectors and the films to advance in continuous loops - a play on the idea of *teacher-less* classrooms; highlighting the pedagogical tools of the era and ultimately making an ironic comment on the absence of teachers, as the work was presented to a community of art educators as a starting point for a dialogue about film in the classroom. As part of my research, it was important to spend time with the films, slides and machines of this era; remembering my first experiences with film as student and reflecting on how my work as an artist combines pieces of the historical, personal, and theoretical. In this chapter I will explain my artistic motivations and process, the construction and alteration of the content chosen for the installation and my reflections on the work. Much of my time constructing the film loops and projector stands for the installation was spent considering the act of *making* with regards to the classroom. I wondered: does a student who connects a USB cable from a video camera to their computer or ipod, dumping digitized bits in to a software program that requires one click to add titles and music and another to publish the work online know how a film is made, or how it can tell a story (their story) with the careful

juxtaposition of one image to another? Perhaps not to the extent that many new media educators would hope to believe.

Research on the history of celluloid, the ways it has been used and misused in classrooms, and my own creative practice are then considered in relation to the era of the late '60s and early '70s which saw film's place in the classroom altered by auteur theory and the emergence of educational television, constituting chapter five. It is at this point I present my thoughts on our approach to digital new media technology, considering its place in light of the preceding chapters. My conclusions do not include a simplistic comparison between celluloid technology and digital technology, rather a focus on critical creativity (in juxtaposition to film criticism) which I describe as both teacher and student engaging in filmmaking as a tool for conversation, exposition and discussion in all subjects and in all types of classrooms.

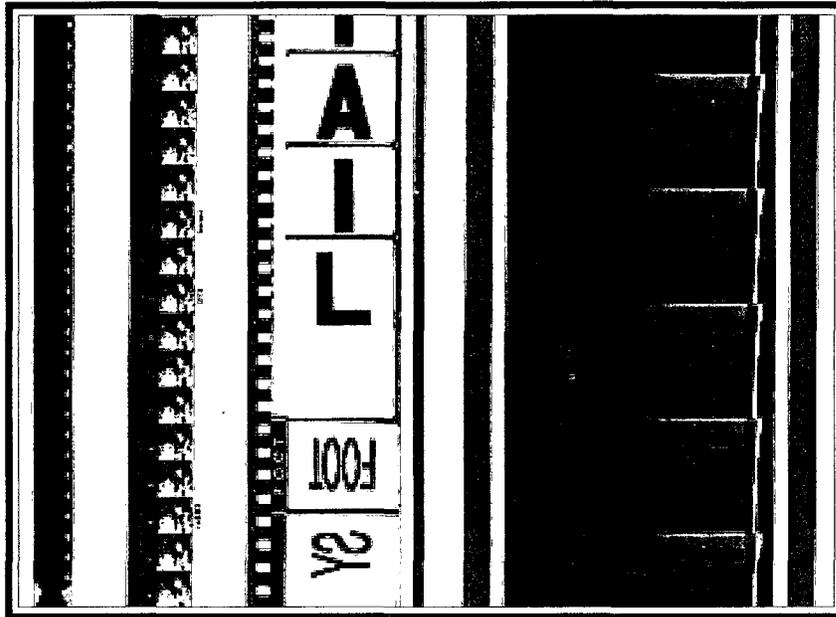


Figure 1: from left - 8mm, 16mm, 35mm, 70mm film

Chapter two: a brief history of celluloid in Canada.

Kodak introduced 16 mm motion picture film and equipment in 1923 "as an inexpensive amateur alternative to the 35 mm film format. Compared with 35 mm film, the 16 mm format offers advantages such as smaller, less-expensive cameras and lower film stock and developing costs. Because of these factors, the 16 mm format was quickly adopted for professional news reporting, corporate, and educational applications."(Kodak website) In addition, 1923 also saw the Victor Animatograph corporation make 16mm cameras and projectors available to the public (A. Slide qtd in Lester 2008, p. 99) The light weight and lower cost of the technology would not be the only reason 16mm film secured a place in schools, it also "...utilized slow-burning, non-nitrate, acetate-cellulose

based film stock, and was so nicknamed 'safety film' or 'safety stock' for this reason." (Lester 2008, p.105) This would have been an attractive attribute for schools considering the use of the technology within the classroom.

In his in depth investigation of the history of itinerant film exhibition in Canada, Peter Lester (2008) tracks the non-theatrical origins of 16mm film, and thus outlines how films first appeared in classrooms. Lester posits that the history of cinema was forged not in the darkened theatres of our cultural imaginations, but by travelling showmen in barns and church basements. While films were shown in these alternative venues primarily to entertain communities, the instructional capacity of film would rapidly become evident.

The technical capabilities that film offered proved conducive to pedagogical intents. For example, at a screening in 1918 on the topic of *Killing and Dressing Poultry*, the instructional film shown that night was played at reduced speed, making possible for the 'abattoir men' in attendance a more attentive form of reception to the techniques on display... During the screening of film no. 115 *The Conformation of a Holstein Dairy Cow*, a discussion reportedly arose concerning the 'comparative merits' of a local Holstein cow and a 'Mollie Rue Rattler'...to settle the debate, the agricultural representative from the bureau took his Pathéscope machine directly into the barn and hung the screen immediately beside the local Holstein, where the comparison could be made first hand. (Lester 2008, p.74)

The obvious pedagogical applications of film were aided by the mobility of the

technology and because many projectors were hand-cranked they circumvented the need for electricity. (Lester 2008, p. 81) Despite the fact that itinerant operators raised the ire of commercial theatre owners with their rogue technology and their refusal in many instances, to charge admission, these non-theatrical screenings became quite common in Canada. It is interesting to note that the public reaction with regards to 16mm technology has a repetitive pattern in history:

Mobility is perhaps the most frequently deployed descriptor of contemporary screen culture, though it is worth reminding ourselves that it has long been a feature of modern media. The printing press prompted the mobility of books. The telegraph so mobilized language that it was seen as an annihilation of space. Even Walter Benjamin's famous artwork essay was, in part, about the circulation of art in the age of film and photography. (Acland 2009, p.149)

It would not be long before governmental bodies began to get involved in production, distribution, and exhibition of instructional films, realizing the potential they had in circulating specific ideologies to a rural public; such as the "Ontario Motion Picture bureau, established in 1917. The bureau distributed films of a mostly educational nature, particularly in the field of agriculture, non-theatrically to schools, churches and various community associations...[which] complimented [the] home-front propaganda of the period." (Lester 2008, p.71) Government involvement in addition to the aforementioned attributes of the new, accessible, technology assured film's success as a classroom tool in the 1920s. "The year 1920 also witnessed the announcement of

Canadian Educational Films Ltd., a company devoted to the release of films for "non-entertaining purposes." (Lester 2008, p. 77) It would not be until 1939 that the National Film Board of Canada was formed, but by this time instructional films had secured their place in the classroom. WWII certainly expanded the use of instructional films, likely due to their ability to circulate propaganda - thus prompting the N.F.B. to run mobile theatre vans during the war which screened films without charging admission. (Lester 2008, p. 144) Perhaps because of film's instructional capacity, in 1940 16mm became "the gauge of choice for Canada's troops." (Lester 2008, p. 199)

These early examples illustrate 16mm film's ability to reach a wider public (paralleling today's digital technology) and echo Walter Benjamin's thoughts on the power of mechanically reproduced art to affect the masses. Benjamin (1936) wrote, "[f]or contemporary man the representation of reality by the film is incomparably more significant than that of the painter, since it offers, precisely because of the thoroughgoing permeation of reality with mechanical equipment, an aspect of reality which is free of all equipment. And that is what one is entitled to ask from a work of art." (part XIII). In light of Benjamin's prognostications, we continue to ask ourselves 'if art is democratized for the masses, does it lose its revolutionary power?' What does it mean when (to paraphrase Benjamin's argument) 'the copy' can reach farther than the original, despite its lost aura of authenticity (i.e. history and tradition). Benjamin would perhaps not be surprised by contemporary cinema's increased skill in obscuring its fundamental attributes; it is after all an *illusion* made possible by the persistence of human vision, causing many to focus on movie *magic*, and *tricks* of the trade. Benjamin did, however,

understand the most relevant aspects of cinema; "[t]he characteristics of the film lie not only in the manner in which man presents himself to mechanical equipment but also in the manner in which, by means of this apparatus, man can represent his environment."

(Benjamin 1936, part XII) In other words, the power of film is to facilitate the communication of images, stories, thoughts and sounds; to help us see ourselves and each other in the context of our surroundings - and that art should be about sharing, rather than social control. Mechanical reproduction, in essence, is about *mobility*. It is this attribute (of both film and projection technology) that assured the inclusion of the medium in the classrooms of the early part of the 20th Century and it is the same attributes that make digital technology so appealing today.

...[M]otion pictures have long circulated for instructional, scientific, promotional community and religious purposes, though film studies and theory have conventionally ignored or devalued these non-art and non-feature texts and venues. This 'useful cinema' of institutionally functional deployments of moving image materials exploited the relative mobility of the cinematic apparatus, and with it the conversion of sundry locations into screening sites. (Acland 2009, p. 152)

There is no reason, in an age where we are not directly threatened by the rise of Fascism, as Benjamin was when he wrote his famous essay, that art (and film) cannot regain its aura and still be revolutionary. This aura is cinema's connection to its own history and can only assist our longstanding need to share our stories. I believe that this may be accomplished through new and creative uses of celluloid, especially within classrooms.



Figure 2: Boy & Girl (1968) *Film News* vol. 2 p.21

Chapter three: teaching machines

As cinema flourished in both inside and outside commercial theatres, its place within the ensconced walls of the classroom were being experimented with after WWII. In his 1981 dissertation, *Communicating Perspectives: The Educational function of Film Art*, Daniel Nadaner distinguishes two early concepts of educational films. The first is film as 'visual aid', which privileged "the value of seeing microscopic phenomena on film, and seeing distant places that would otherwise not be accessible to the eye." (Nadaner 1981, p. 8) And the second concept is "film as surrogate instructor," which utilized instructional films to serve "...economic and political purposes." (Nadaner 1981, p.9)

Films such as *Poultry On The Farm* (Erpi Instructional Films, 1937) and *Sheet Metal Worker* (Vocational Guidance films inc., 1942) were meant to introduce students to their vocational options while providing visual instruction on accomplishing practical tasks (especially in times of war). These films cannot be viewed as necessarily meaningful additions to the learning environment of the 1940s and '50s, in fact "...the pervasive influence of the instructional conception has also helped to highlight its deficiencies. The first of these deficiencies is one of exaggerated promise. The notion that a film can give instruction has encouraged the claim that it is a replacement for teachers." (May & Lumsdaine 1968, qtd in Nadaner 1981, p.11)

Though instructional film production and distribution increased exponentially in the 1950s, the reluctance on the part of educators to incorporate films into the classroom is well documented. Some teachers felt that film "... challenged sacred cows like the grading system, the structure of the classroom, the conventional ideas about how we learn, and the teacher's role." (Lacey 1972, p. 6) And there were reports that teachers were "... fearful of the new technology. Film, slides, projectors...all epitomize the teacher's twentieth century fear of the machine's depersonalizing man...many are disturbed by the spectre of film replacing the teacher as the center of the educational galaxy...others are still living in a print-oriented world and are unwilling to make the effort to learn and accept a whole new expanded language..." (Amelio 1971, p. 1) Despite the skepticism of some (and a desire to retain teacherly control) "...the single student conversing directly with a teacher [became] an ancient approach to education. In contrast, 'the way in modern pedagogy' was the motion picture, the 'modern teacher' that could

bring ancient times to life for enthralled children." (Acland 2009, p. 159)

It was in this period that film production and distribution companies such as 'social guidance' pioneer, Coronet Films (formed 1946) began to make their appearance. With schools and teachers on board, educational films became a lucrative commercial market and advertisers targeted them successfully. "The Audio Visual Educator, [a 16mm projector] as it was known, retailed at \$585 in 1946 (roughly \$7,100 today) but it was available to tax exempt organizations for \$430 (\$5,200) ...it was actively promoted, and demand was known to exceed supply. By 1948, for instance, the principal distribution outlet in Montreal was a full six months behind in supplying new machines to customers." (Lester 2008, p.250)

Many films from this era offered teachers a way to address social and political issues they may not have felt comfortable or capable of expressing in their own words. *Are You Ready for Marriage?* (Coronet Films, 1950) is a cautionary tale about giving up education for the "impetuous, and unsuccessful marriages following World War II." (A/V Blog archive) It humorously features a church counsellor presenting "cupid's checklist" for successful marriages. *Getting Ready Physically* (Coronet films, 1951) was aimed at informing boys how to physically prepare for a military draft and instructed them to "have any defects corrected that showed up in [their] general health exam."

The model of the educational or instructional film would prove to be a dangerous misuse of film's potential; "It limits the formal possibilities of the film, and it limits the film's educational function to the facilitation of rote learning." (Nadanner 1981, p. 13) The didactic films of the '40s & '50s, and the lack of critical classroom interaction with them,

supported the idea that students were passive containers to be filled with (socially and politically) acceptable knowledge. The dated and offensive messages that can be located in these films are however, characteristic of the time. Arguably, the more troubling element was the manner in which these films were incorporated in to the curriculum as though they were 'babysitters'. Of his early experiences with film, one K-12 teacher wrote:

Friday was usually movie day. What could be more perfect for teacher and student alike than a cinematic experience to celebrate the closing of a tedious week of education? The teacher could rest his voice - and also his feet - after four days of intensive lecturing. And the students - well, movies in class gave [them] a chance to catch up on [their] sleep, eat potato chips, and sit and discuss the weekend's coming event. (Maynard 1971, p. ix)

Having been in the position of an overwhelmed teacher myself, it is difficult to see the harm in using films to have fun and relax in the classroom - it is when this becomes the default approach that something important is lost; the potential to provide access to images and ideas otherwise obscured, and to provide students the skills to create meaning for themselves. Teachers in the 1940s and '50s who embraced educational films and the companion machines, were anything but usurped, they helped legitimize the presence of the visual in the classroom and paved the way for the legitimization of film education in the subsequent decades. It will be helpful to take a more in depth (and creative) look at the instructional films and technology in question.

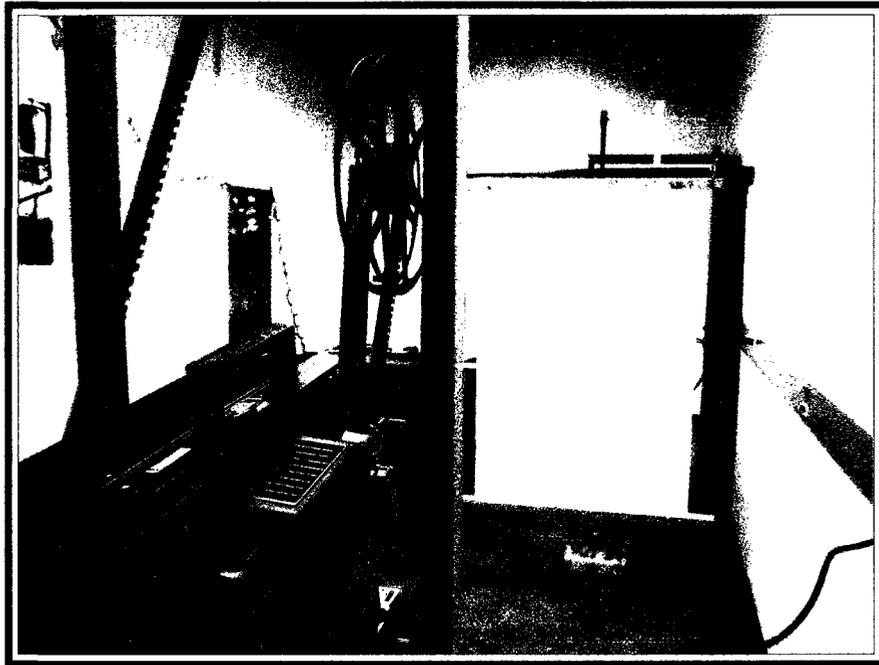


Figure 3: Installation doc. no.1

Chapter four: an installation.

Etienne Jules Marey and Edward Muybridge, (both b.1830 – d.1904) argued to be the forefathers of the moving image, both began their cinematographic investigations into human and animal locomotion by using technology to deconstruct, and thus visually understand the natural world. From Marey's photographic gun in 1882 to Muybridge's Zoopraxiscope in 1879, film has always embraced both the natural and mechanical, providing a glimpse into what cannot be seen with our eyes alone. Historically, classroom films have introduced students to time lapse images of flowers blooming, ants going about their business underground, and animations illustrating our solar system. For a visual person, such as myself, these are the images I have retained from my years as a

student (one who was not particularly interested in science at the time) and it is these images I return to in consideration of importance of film as a pedagogical tool. As a student, I did not succeed in art classes. One particularly crushing failure came at the end of a project where we had been instructed to replicate Canadian painter Alex Colville's iconic work *Horse and Train* (1954, pictured below). Our instructor rewarded the ability to replicate the line, colour and asymmetrical composition of the painting and if we were able to guess its meaning, or explain how the artist created an impending sense of disaster through his composition, so much the better. My replications of Colville's work included close-up sections of the horse's tail and legs, and in separate frames, the gears and steam of the oncoming train. This rendering (while admittedly quite poorly drawn) was criticized for altering the cohesion of the original - it was impossible to communicate Colville's themes through isolated separate frames, I was told. In retrospect, my focus in the project was to elucidate the parts of the painting that *moved*, feeling that the frozen image of both the horse and the train were somehow trapped inside a still painting (as I was trapped in class). Years later, I would come to see that the locomotion of both mammals and mechanical objects have fascinated many artists, such as Marey and Muybridge and subsequently the Lumière brothers in some of the first pieces of cinema (i.e. *L'Arrivée d'un train en gare à La Ciotat*, 1895).

It is the construction of the moving image that has shaped my life. From that lacklustre art class experience, I moved on to make stop motion animation films at home with video and Super 8 cameras, I went to film school, spent most of my adult life working as a camera operator on film sets, in theatres as a projectionist and finally to

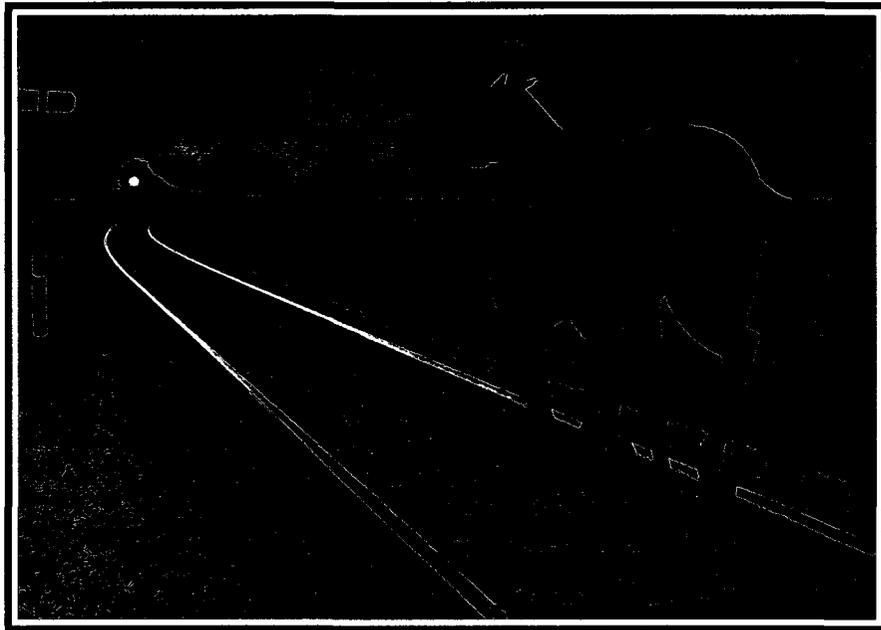


Figure 4: *Horse and Train* (1954) Alex Colville (www.canadacouncil.ca)

a career in art education. I often think back to that Alex Colville project - wondering how my instructor might have fully engaged her students and made the painting come alive for us by shifting her focus away from transmitting drawing skills through repetition. It would have been infinitely more constructive to have allowed for creative exploration through other art forms, including film, using Colville's painting as a starting point rather than an end point. I relate this anecdote here because it is the movement of images through filmmaking that marks the natural start point for my interest in art and teaching. Film, by its very nature, prompts one to look further into an image, enabling the viewer to see and hear a horse's gallop or a steam train hurtle along tracks. It is not my intention to discount painting, to draw out clichéd comparisons between moving and still images, or to discount the hard work of art teachers, only to illustrate the origin of my personal interest in art and cinema. It is worth noting however, that "the retinal image is seldom an

arrested image in life. Accordingly, we ought to treat the motion picture as the basic form of depiction and the painting or photograph as a special form of it." (Nadaner 2008, p.21)

My interest in film's formal attributes i.e. the moving image, the delicate and organic construction, and the juxtaposition of simple images to elicit "accidents, discoveries, failures; processes that lead in to unknown landscapes." (Double Negative, 2004) has led me to locate my practice within the domain of experimental filmmaking. While my appreciation extends to all forms and genres of film (sometimes including the vapid and entertaining examples) it is the formal experimentation with film that I am most drawn to (perhaps in continued exploration of ideas related to my Colville anecdote). In my experience, experimental filmmaking often conjures up feelings of boredom, displeasure, confusion and even revulsion when placed in juxtaposition to mainstream cinema. Examples of this form are traditionally short, independently constructed, often silent, utilizing basic structural devices such as flicker, repetition, variation and associational imagery, ostensibly rejecting cohesive narratives in favor of a more poetic form. It is through this form of filmmaking that I am able to explore the medium itself.

Experimental or avant-garde cinema has a robust history, some of the most inspiring examples can be found in the work of independent Canadian filmmaker Bruce Baillie (*Castro Street*, 1966 and *Valentin De Las Sierras*, 1967) and Bruce Connor (*A MOVIE*, 1958) both of whom utilize the aforementioned formal techniques in addition to a process of re-photography called optical printing. This process involves a film projector pointed at a film camera, enabling the filmmaker to isolate and alter particular sections of

film - typically used for handmade special effects such as fade ins and outs, and animations such as the title sequences from Alfred Hitchcock's films which involved lap dissolves and manipulations in slow and fast motion. Optical printing practice is utilized extensively in the Canadian experimental filmmaking community. For example, the work of filmmakers like Connor and Baillie from the '60s and '70s is currently being expanded on by groups such as the Montreal-based, Double Negative Film Collective. In their manifesto they distinguish their practice as a type of "postmodern avant-garde cinema" (not an oxymoron in their view) They claim to:

...reject the traditional forms of cinema and emphasize the creation of a new, formal, and personalized vision of the moving image...Our work serves as alternative to the complacent, passive viewer and will shed new light to the stale, traditional forms of cinema. In re-examining past concepts and re-interpreting future possibilities, the double negative film collective stresses the need for an expanded form of cinema, exploring the interaction of moving images and professing a postmodern re-mixture of the celluloid and the electronic. (Double Negative, 2004).

In their re-examination of celluloid through experimentations with form and content, the Double Negative Collective has often used film loops to create works that focus on the medium of film itself. This technique is aligned with my desire to examine the medium in relation to pedagogy and the place of the classroom by creating an installation that appears to operate on its own.

Teaching machines were short-lived mechanical devices that presented a program

of instructional material without the aid of a teacher. American psychologist B.F. Skinner (b. 1904, d. 1990) expanding on the work of Sidney L. Pressey (who created automatic intelligence testing machines in the 1920s) posited that the most efficient way to modify student behaviour and permit them to play an active role in their own learning was through "self-instruction *by machine*" (Skinner 1958, p.8) Skinner wrote, "There are more people in the world than ever before, and a far greater part of them want an education. The demand cannot be met simply by building more schools and training more teachers. Education must become more efficient." (1958, p.1) Writing in the late 1950s, Skinner envisioned these teaching machines as tutors or classroom assistants which shaped students' behaviour through automated operant conditioning.

An appropriate teaching machine will have several important features.

The student must compose his response rather than select it from a set of alternatives, as in a multiple-choice self-rater...The machine itself, of course, does not teach... but the effect upon each student is surprisingly like that of a private tutor... Like a good tutor, the machine insists that a given point be thoroughly understood, either frame by frame or set by set, before the student moves on. Lectures, textbooks, and their mechanized equivalents, on the other hand, proceed without making sure that the student understands and easily leave him behind. (Skinner 1958, p.3)

While Skinner's ideas with regards to education were to a certain extent, a progression on pedagogical approaches such as rote-learning and punishment for negative

behaviour, they have been critiqued in later years as being short-sighted. In focusing on outer behaviour rather than the inner (or cognitive) landscape of the learner, Skinner left little room for the creative. Teaching machines were intended to lead directly to the behaviour modification of students (echoing the intended purpose of many instructional films) and thus creativity in the classroom was positioned as incidental. Skinner wrote; "people who discover or create are behaving in ways that - by definition - cannot have been taught. " (Skinner 1986, p.110)

People like B.F. Skinner have characterized man as being molded, conditioned, and programmed by the environment in rigid, almost inescapable ways. Skinner should be appreciated for having shown the extent to which man can be affected in this manner; but...we must stress man's ability to escape his fate. Creativity is one of the major means by which the human being liberates himself from the fetters not only of his conditioned responses, but also of his usual choices. (Arieti, 1976)

Taking teaching machines as a metaphor for the absence of criticality and creativity (both historically, as referenced in chapter three and currently - to be discussed further in chapter six) with regards to film and film technology, I created my own teaching machines.

Construction

The installation (which took place on August 7th 2009 - please see DVD) presented three 16mm projectors, 1 super 8mm projector, 1 film strip projector and two slide carousel projectors projecting images in continuous loops. In order to accomplish this two of the 16mm projectors required internal mechanical modifications (I removed the plastic drive belts and replaced them with string in order to provide greater flexibility and less tension on the film loops) and the two slide projectors required dissolve boxes - which control the timed intervals between each projected image (both slide projector and accessory production have been discontinued for many years, the latter being extremely difficult to locate). I chose to work with the machines or visual aids that were most common to classroom environments prior to the introduction of educational television and the computer, primarily because of the inherent mobility of the various technologies. I also chose to include three static devices in the space: an overhead projector, a typewriter and a blackboard to draw attention to *obsolete* classroom tools in general, suggesting that visual aids have taken many forms, forms which dictated teaching content and method. Each of these items have arguably been replaced by powerpoint presentations, and with them the specialized knowledge and construction of preparatory teaching materials. In examining the space of the classroom, these items could not have been ignored and thus each of these items were used to support the show: the overhead projecting the image of the show invitation on the front door, the typewriter for spectator's comments and the blackboard itself as a screen for a filmstrip.

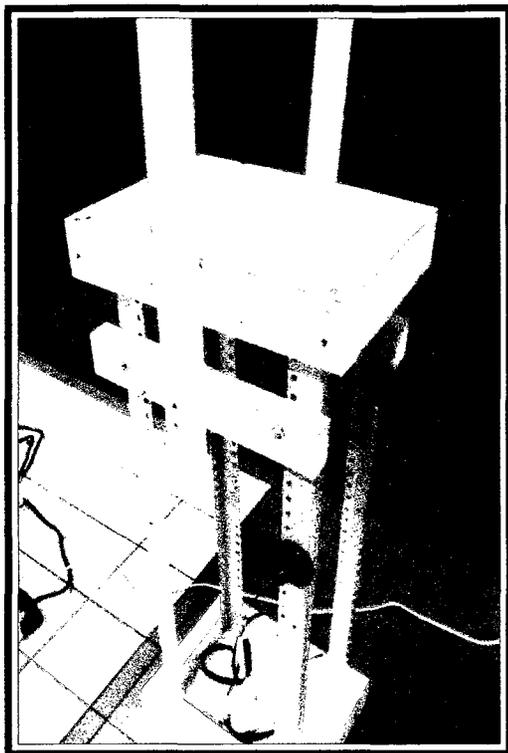


Figure 5: Installation doc. no.2

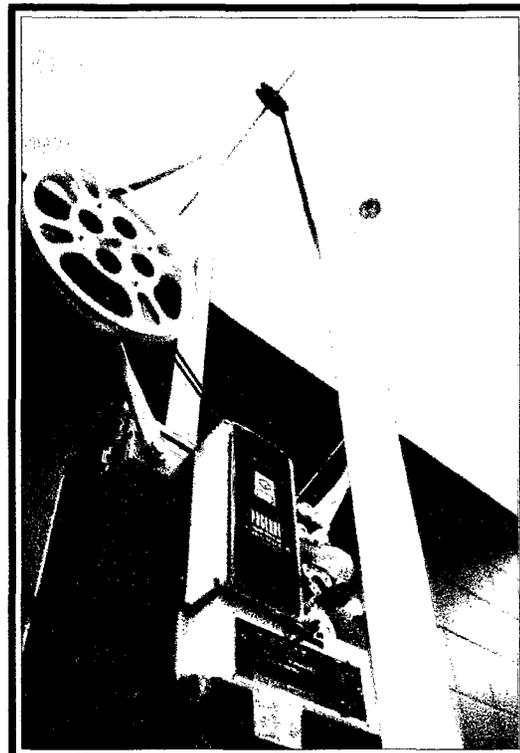


Figure 6: Installation doc. no.3

Each of the projectors required a display apparatus that facilitated the looping of images while foregrounding the machines themselves. Three 16mm loop stands were constructed from the salvaged wood and metal found in an abandoned textile factory, with the loop arms designed to be adjustable for various lengths of film and with future exhibitions in mind. Two screens for these projectors were also built using this material, utilizing velum paper so that the projected images could be seen from all angles. The process of constructing these stands was as laborious as the collection, selection and (in some cases) alteration of the content they displayed. I felt it was important that the method of display made a contribution to 'privileging' the machines and played with the idea of screens and projection.

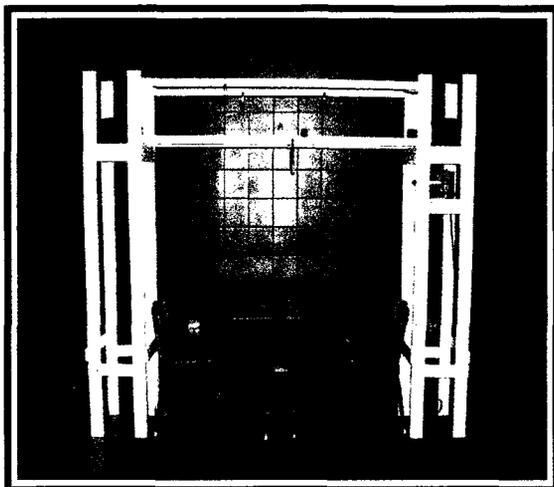


Figure 7: Installation doc. no.4

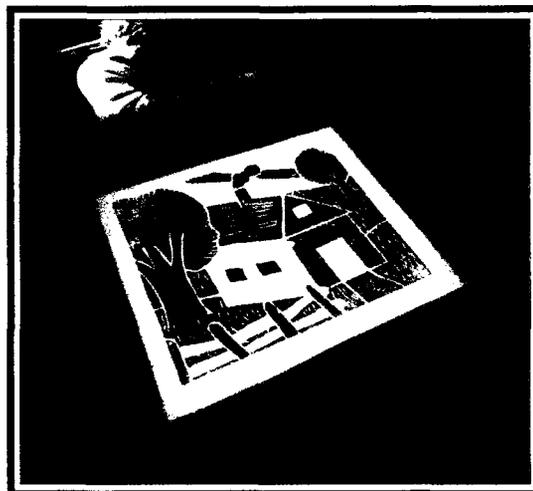


Figure 8: Installation doc. no.5

For example, the apparatus that was constructed to display two slide carousel projectors allowed the machines to be raised eight feet in the air, with the projected images reflecting horizontally into mirrors and projecting vertically on to two school desks below, creating an apparition- like image of students engaged in art-making, and the works that they produced. This quality added to the atmosphere of 'the empty classroom.'

Content

The slides that were used in the aforementioned apparatus came from a collection that once belonged to Leah Sherman, Professor Emerita in Art Education, archivist of the work of Anne Savage (Quebec painter and art educator b.1896 – d. 1971) and founding member of the faculty of fine arts at Concordia University (formerly Sir George Williams College). Professor Sherman has kindly distributed these slides among the current

graduate students in the Art Education department and they represent the history of art classes held at Sir George Williams. I felt that it was important to include these images (unaltered except for the aforementioned apparatus) because Professor Sherman's work has largely been an investigation of art teaching environments, examining how the space of the classroom (the way art rooms were set up, the relative rigidity or fluidity of the students and teachers) supports or deters from the activities conducted within. Professor Sherman has noted that Anne Savage's art room was a round room in which she physically moved around often during her teaching. The students and their desks were encouraged to move often as well. (personal notes from ARTE 670 classroom lecture, Sept. 17th, 2007) I believe that Professor Sherman's point in mentioning these aspects of mobility within art rooms, was that sometimes our teaching philosophies can run contrary to our activities i.e. the way we set up a room can stifle creativity. As historical documents, with connections to art teaching and art making, and in consideration of the space of the classroom, I found these images particularly relevant to the present installation.

As previously mentioned, in preparation for this exhibition I increased my already considerable collection of instructional films exponentially. Many films came from antique stores, some salvaged from school dumpsters and others from fellow collectors. I chose to present several of the best examples in their entirety in the cinema adjacent to my installation in order to display them in all their campy and hilarious glory. My favourite example from this group is *Eat Well, Grow Well* (Coronet Films, 1963) which features a young boy in awe of a circus performer. The boy wishes he too could perform

the impressive trapeze act he witnesses, but he discovers that he does not possess the physical energy to do so. The film quickly turns in to a lecture on nutrition, urging young aspiring circus performers to consume plenty of foods from the 'meat group' and the 'milk group' if they want to increase their stamina. (These foods are humorously displayed by being pulled out of a magic hat and include peanut butter and eggs in the 'meat group'.) Films such as *Eat Well, Grow Well* (Coronet Films, 1963) while humorous in its awkward (and rather absurd) approach to get children to make 'healthy' food choices, are examples of social guidance propaganda. The inclusion of these films in the classroom were inarguably methods of introducing social and political messages to children in an entertaining package (many of these nutrition films were sponsored by The National Dairy Council). These types of films were not designed to foster critical or creative thinking, but to engineer well-behaved, morally upright citizens who did not engage in pre-marital sex (as per the encouragement of the film strip *Sex and the Facts of Life* - included in the installation) and contributed to progressive (read; repressive) society. The lack of criticality becomes increasingly problematic in light of more blatant political propaganda such as *Getting Ready Emotionally* (Coronet Films, year unknown) which outlines "the reasons grown-ups are always right and know what's best for your emotional welfare, even when it involves being sent off to war. " (The Educational Archives, online resource).

In contrast to these politically questionable films, I became drawn to working with science-themed instructional films. Although it can be argued that science films are not altogether politically neutral (i.e. elements of creationism and all male narration) my

intention was to create a very simple examination of educational films - one that could possibly translate in to lesson plans with younger students (this will be discussed further). In addition, the visuals in these science films were extremely engaging, many of them featuring high-contrast animation and time lapse sequences i.e. the grasshopper from *Animals Breathe in Many Ways* (B.F.I., 1966) and plant reproduction in *Gymnosperms* (Encyclopedia Britannica, 1961) - both used in the installation. The subject matter reminded me of what I found so engaging in my first encounters with the moving image; the deconstruction of movement in order to gain deeper insight in to the natural world. In choosing the content of the film loops for the installation, it was my intention to highlight those high quality aspects of instructional films (rather than focusing on the politically or socially problematic examples) in an effort to concentrate on the medium of film itself. This was also the impetus for the omission of soundtracks and the simple two shot construction of the montage of the loops, I wanted the spectator to hear the machines and consider film's basic concepts: "two film pieces of any kind, placed together, inevitably combine into a new concept, a new quality, arising out of that juxtaposition." (Eisenstein, 1970, p.4) In essence, this very basic form of montage is a progression on my Triptych of Alex Colville's *Horse and Train* (1954).

In addition to the montage within the film loops, I chose to pair 'screens' by pointing two projectors at one another so that one loop projected above another on the same visual plane. Animated sequences of the earth's rotation from *Causes of the Seasons* (Coronet Films, 1967) were projected above the grasshopper (figure no.11) from *Animals Breathe in Many Ways* (B.F.I., 1966) with both screens displaying significant

movement within each frame. Film animation, often used to appeal to children in its ability to enhance, abstract, and re-conceptualize reality, continues (despite the involvement of computers) to be made one frame at a time. To my mind, animated sequences such as those chosen for this installation, display film's fundamental progression on photography and painting - epitomizing the vigor, energy; enthusiasm of the medium. One of film's most creative innovators, Norman McLaren, who after many years of teaching and filmmaking at The National Film Board stated, "I have tried to preserve in my relationship to the film, the same closeness and intimacy that exists between a painter and his canvas... and so my militant philosophy is this: to make with a brush on canvas is a simple and direct delight – to make with a movie should be the same." (National Film Board of Canada website) McLaren's films were largely hand-painted or engraved frame by frame i.e. *Blinkity Blank* (1955) and it is precisely his playfulness, creativity, and joy in the medium of film that in my personal experience, is missing from its current and historical uses within classrooms.

In an effort to explore some of the personal themes mentioned at the beginning of this chapter, I included three pieces of my own filmmaking in the installation. The first was a short Super 8mm film loop that was created for use in a film workshop I conducted with a community group which focused on lens flares, which are internal reflections of light sources within the camera's mechanism (used as an illustration of "beautiful accidents" in filmmaking). And the second and third were examples of 16mm optical printing, featuring step and skip printing (reprinting or omitting frames of film to alter movement and time) and layering multiple images over one another. The initial footage

was taken from an instructional film called *Flying Birds* (B.F.I. 1970) and included the freeze, reverse, and accelerated motion of a bird in flight as well as the image of a horse's tail in the wind layered and reprinted four times on itself. In my choice to manipulate and play with these images, and subsequently to include them within the installation, it was my intention to illustrate where the history of films in classrooms (as illustrated within the text) and the examples of misuse (i.e. propaganda, pedagogical approach/using films to 'baby-sit') can be replaced with critical creativity.

This thesis has been a first-step in my examination of instructional films and I hope to continue this exploration - perhaps in the form of creative projects in handmade filmmaking, challenging students to re-order instructional films, thereby subverting their often dated and pedantic messages and images, or creating their own instructional films from scratch. It is also my hope that on a practical level, installations such as this one and the creation of celluloid artwork might introduce a generation of students who have never considered what takes place in the 'dark little room at the back of the theatre' to the idea of making their own films, (an idea I expand upon in chapter six) increasing the deconstruction of the visual both inside and outside the classroom. "By seeing what constitutes motion in the camera and in the edited movie...one looks for motion with more energy and more acuteness in everyday visual perception." (Nadaner 2008, p.21)

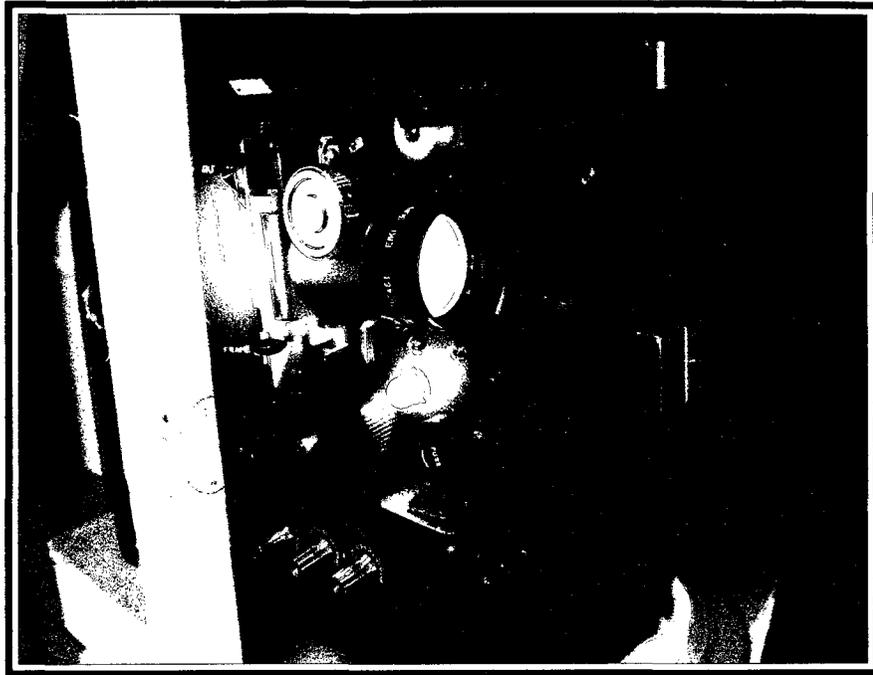


Figure 9: Installation doc. no.6

Reflections

There are, of course, with all art installations, only a finite amount of things you can build, think, and show, and in the process of defending my artistic choices (which originate as gut feelings) I have begun to consider additions and omissions, indicating that there may be a need for future incarnations of the show presented here. I have however, been able to explore the recurrent dichotomy of the natural and the mechanical in my work - and have begun to see it as a strength rather than a weakness.

Experimental filmmakers have long favoured the metaphor of cinema as handcrafting to draw sharp contrast with commercial film's "industry."

To a degree, this craft-making conceit is deceptive. Film stocks, labs, cameras and lenses all remain industrial tools no matter who is handling them. But the artisan's hand-and-eye attitude toward experimental filmmaking contains the larger truth of the metaphor. (Testa, 2001)

In a sense, my work goes back to my earliest fascinations with taking things apart and reassembling them by hand, using mechanical movement to gain a deeper visual understanding of organic movement (echoing Benjamin's statements regarding the power of the apparatus to represent one's environment) and this is the interaction between between my filmmaking and the machines necessary for its display. Ultimately, it has been my own engagement with creative play that flushed out the history and power of the medium of film, affirming that with regards to teaching, it is important to pair the critical with the creative.

In linking my personal art practice (such as the installation presented here) to my work as a teacher, I can envision several celluloid lessons or workshops that could be incorporated into both regular and arts-based curricula. The first would be to replicate my own discoveries with educational films, recreating film loops or reordering the montage as found footage projects. A project such as this could be easily executed at multiple grade levels, but for younger students hand scratched animation (with an introduction to the work of Norman McLaren) has in my experience, provided an understanding of the material and construction of film as well as an opportunity for creative play and exploration - this activity is similar to 'black magic' where an opaque black layer of crayon is placed over a multi-colored layer, using hand scratching with a

toothpick or paperclip to reveal the bright colors beneath the black surface. These celluloid animations would then be displayed through a projector to illustrate how a moving sequence can be formed frame by frame via celluloid technology.

Older students might enjoy focusing on some of the more ethically troubling or humorous aspects of the instructional and social guidance films from the 1950s and '60s. Because many of these celluloid films are being discarded, they make an affordable and accessible art room material for montage projects that make excellent links to larger social issues such as politics, propaganda, gender issues, and visual culture in general. Working with these films could lead to students making their own 'social guidance' pieces, perhaps focusing on one or two major themes as part of a larger unit of study. Though celluloid film production by companies like Kodak and Fuji has been steadily decreasing in recent years in favor of digital technology, film is still extremely cheap and easy to locate and work with (the mobility of the technology also means that the physical classroom can be *anywhere* - echoing the flexibility encouraged by Professor Sherman). Instructors may find many local film schools and professional production companies willing to donate 'short ends,' which are pieces of film that are discarded when a movie camera needs reloading. In addition, the chemical development of 16mm celluloid film is no more complicated than that of the still photography darkroom (and can provide an excellent science lesson!) In the construction of this installation, my skills as an artist have provided a means to solve problems, to create new meaning, and an opportunity to gain a deeper understanding of the space of the classroom - each of these are elements that I hope to share with my students through future incarnations of this project.

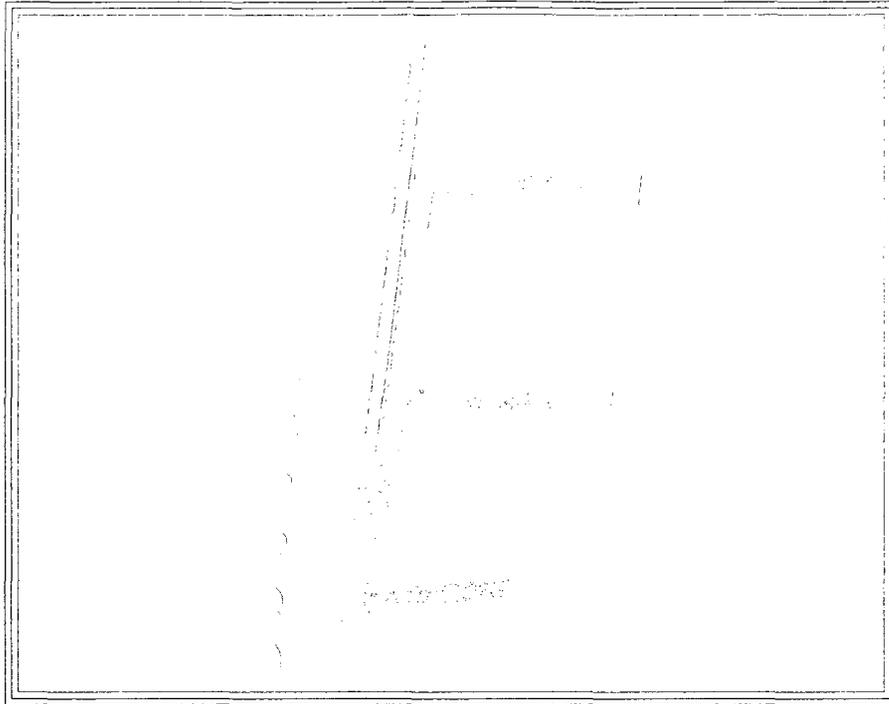


Figure 10: Installation doc. no.8



Figure 11: Installation doc. no.9

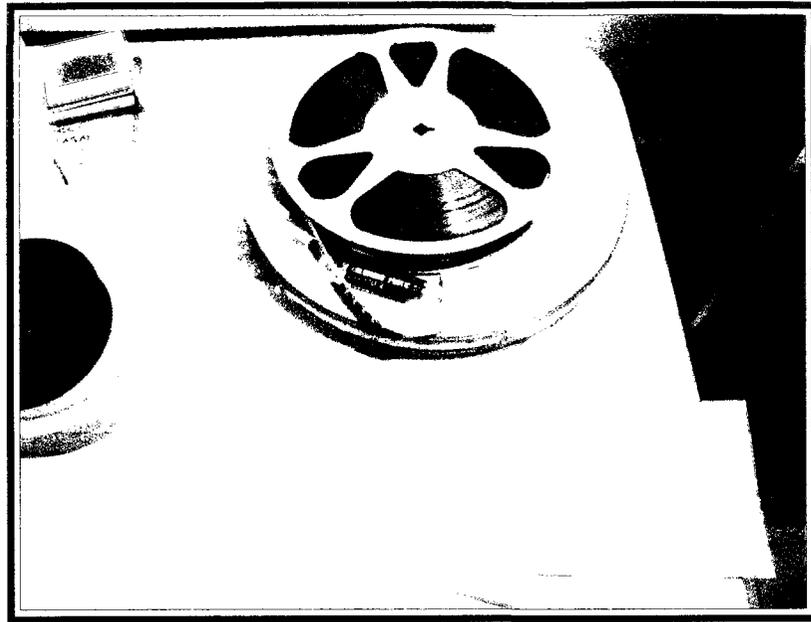


Figure 12: Installation doc. no.9



Figure 13: Installation doc. no.10

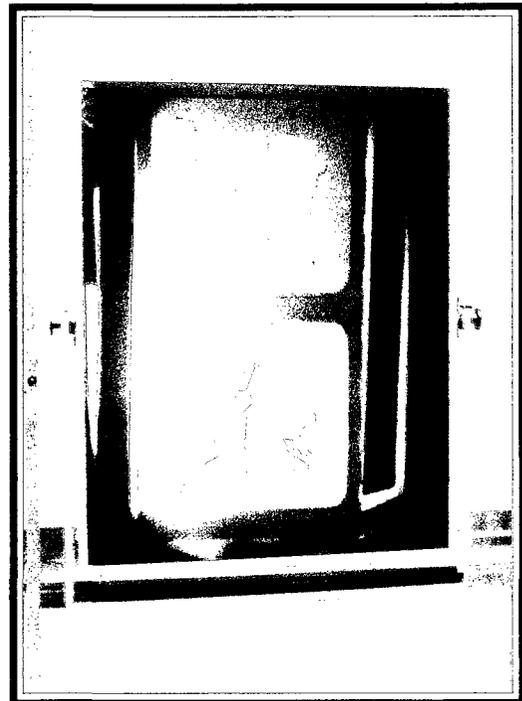


Figure 14: Installation doc. no.11

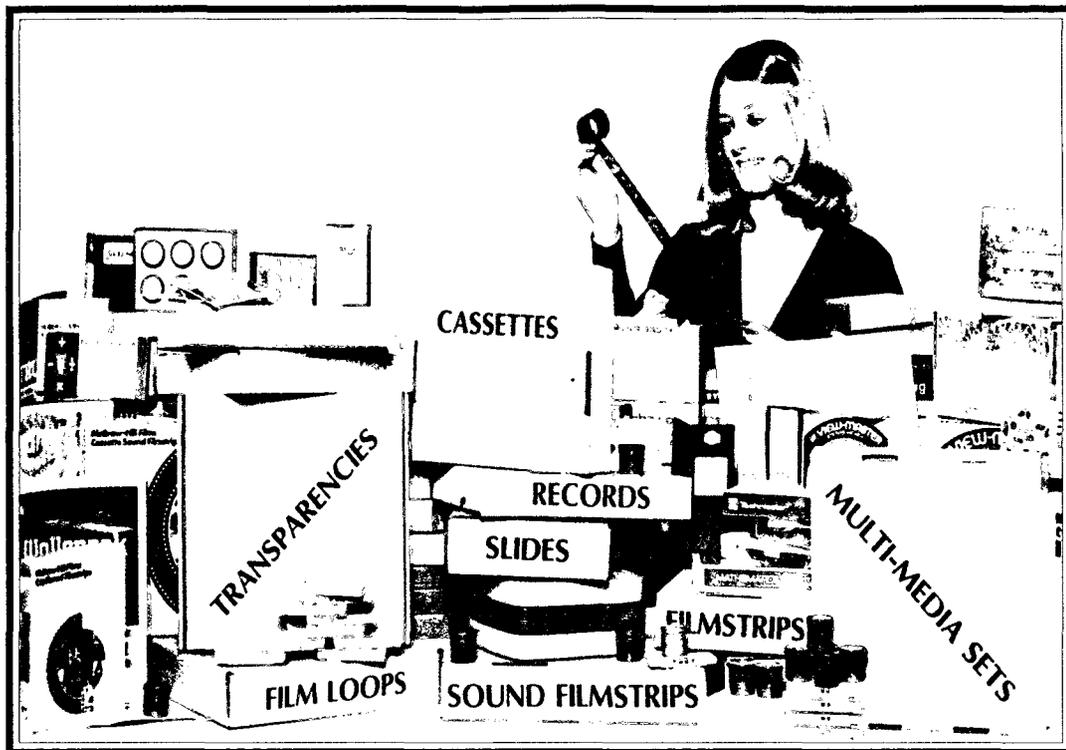


Figure 15: Film Strip Lady (1974) *Audio Visual Instruction vol.19*

Chapter five: teaching film as *art*.

There were many changes in the classroom by the beginning of the 1960s, not the least of which was an increased openness toward films - not only instructional films but *art* films as well. Film theory had entered the collective consciousness by this time, connecting cinema to psychoanalysis and semiotics and gaining respect as an academic discipline at the university and college levels. It is not surprising that the attitudes towards the art of film would infiltrate the classroom in the heyday of Fellini, Godard, Hitchcock and Kubrick. It was not only the types of films that were deemed appropriate

for classroom inclusion that were expanded, but the approach to teaching as well. "...The dominant rhetoric defined new roles for teachers, roles that stressed an expansion in the number of students managed and processed, whether through the integration of group discussion with instructional media or by teachers acting as guides and facilitators for individual learning. The facilitator role became a leading pedagogical approach in the 1960s." (Acland 2009, p. 160-61)

There were still a number of poor examples of instructional and social engineering films in circulation at this time, and in combination with the teaching approaches discussed in the preceding chapter, the state of film education left much to be desired - which may have prompted film critic Pauline Kael's comment; "If you think movies can't be killed, you underestimate the power of education." (1965 Dartmouth conference, qtd in Ellis 1985, p.51) Anyone who revisits the films of this era will likely be amused by the crude and coercive messages about health and conduct that often verge on propaganda, the poor production values, and the ubiquitous teacher/narrator who oscillated between friendly pedagogue and condescending preacher. Examples include *Parent to Child about Sex* (Producer unknown, 1966) which feature two stiff-mannered men in suits reading cue-card instructions to parents on how to navigate the "bugaboo" of talking to their children about sex and *Behavioral Effects of Drugs* (Lockheed Aircraft Corporation, 1969) which shows cartoon cavemen 'professors,' wearing graduation caps, demonstrating agitated and exaggerated behavior resulting from drug use. More troubling with regards to corporate presence in schools are films such as *It's Wonderful Being a Girl* (1968) which relates the 'perils and joys' of menstruation while blatantly advertising

Modess Sanitary Napkins (film produced by Johnson & Johnson).

In juxtaposition to these poor examples, critical film theory in this period extended beyond the work of Freud and Barthes. By the mid 1960s the critical writing of François Truffaut (b.1932- d.1984) via the *Cahiers du Cinema* had elevated the general perception of film art. Writing about his first hand experience teaching film in this era Jack C. Ellis wrote:

The films of Federico Fellini and Ingmar Bergman had increased the amount and intensity of interest in film more than those of us teaching it had previously managed to do. When Andrew Sarris's [*The American Cinema*] was published in 1968, many college students became caught up in the romanticism of the filmmaker as artist, of the director in control of her or his work, of the beauties to be found in the lowly Bs.
(Ellis 1985, p. 50)

Le Nouvelle Vague, formed in 1964, was comprised of a group of energetic young filmmakers who posited that the director of a film is its true author (subverting the novel's primacy). The style of filmmaking in this era capitalized on cinema's inherent mobility; utilizing location shooting, experiments with montage through jump cuts and narrative discontinuities which resulted in "causal connections bec[oming] quite loose." (Bordwell and Thompson 2008, p. 462) Founding member Jean Luc Godard stated; "We won the day in having it acknowledged in principle that a film by Hitchcock, for example, is as important as a book by Aragon. Film Auteurs, thanks to us, have finally entered the history of art." (Godard qtd in Bordwell and Thompson 2008, p.461)

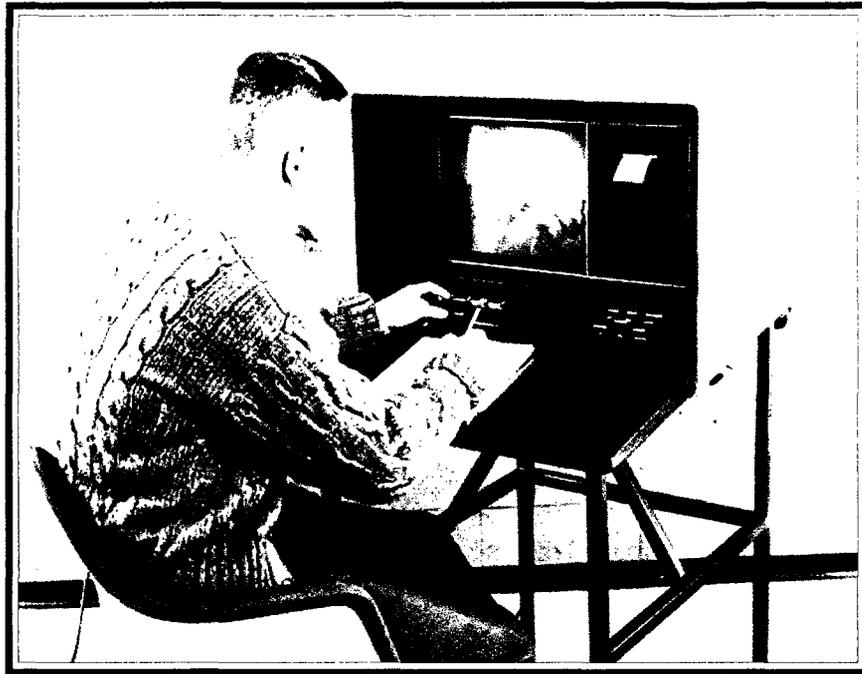


Figure 16: Film Based Teaching Machine (see references).

It is surprising that in the wake of auteur theory, which arguably still reigns on many academic campuses today, there is scant evidence of increased emphasis on creativity with regards to film. The most logical explanation for this is the boom in film education at the post secondary level. It was in this period that many film schools were founded, i.e. New York University (1965) Queens University (1967) and University of Montreal (1968) among others. (Feldman, 2009 para. 8). This critical attention validated film not only as an academic pursuit, but as an established art form in the mainstream. It is perhaps because of the success of these institutions, that film education remained stalled in K-12 classrooms - relegated to wrapping up units on literature and handing out heavy social messages.

Technology had, at this point, become deeply embedded in the classroom

environment. Teachers who had resisted *modern machines*, claiming the primacy of the printed word, were outnumbered by those inspired by their potential. This increased acceptance paved the way for the next sea-change in education; the television. Writing from an American perspective concerning the period of the late '60s early '70s (with a focus on the television's effect on culture) Neil Postman(1985) has stated, "[a]nyone who is even slightly familiar with the history of communications knows that every new technology for thinking involves a trade-off. It giveth and taketh away." (p.29) In *Amusing ourselves to death; public discourse in the age of show business*, Postman expands on the media studies work of Marshall McLuhan by putting our interaction with machines and technology into a familiar context:

Like the brain, a technology is a physical apparatus. Like the mind, a medium is a use to which a physical apparatus is put. A technology becomes a medium as it employs a particular symbolic code, as it finds its place in a particular social setting, as it insinuates itself into economic and political contexts. A technology, in other words is merely a machine. A medium is the social and intellectual environment a machine creates.

(Postman 1985, p.84)

Just as film was gaining credibility as a medium - in effect giving an audiovisual mode of expression a privileged position above typography and photography, the tele-visual "social and intellectual environment" was one that put entertainment above all else. Postman (1985) claims that television "...has made entertainment itself the natural format for the representation of all experience...the problem is not that television presents us

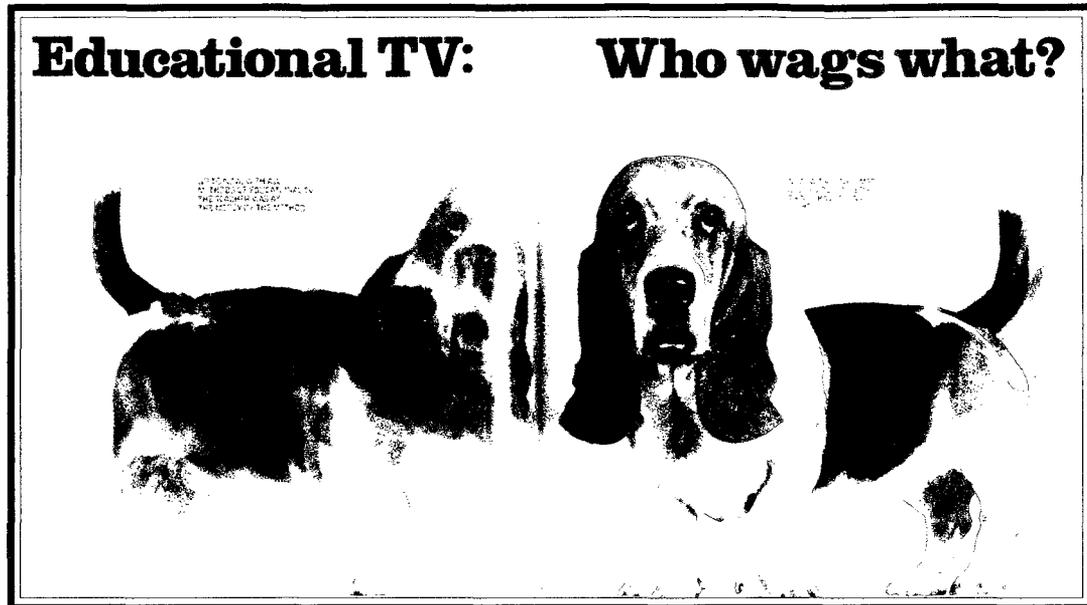


Figure 17: Wag Dog (1973) *Audio Visual Instruction* vol.18

with entertaining subject matter but that all subject matter is presented as entertaining, which is another issue all together."(p.87) Each medium, by its very attributes, allows for a certain level of discourse. Postman (1985) provides the analogy that it is impossible to discuss philosophy via smoke signals; "Its form excludes the content." (p.7) While it cannot be argued that every instance of educational television has been harmful (there are in fact a number of fantastic educational television series, i.e. TV Ontario's Art Blitz or the Discovery Channel's Planet Earth series) the overwhelming presence of television in our daily lives, has promoted a passive and oftentimes uncritical viewing relationship between student and screen. In my personal experience, the use of television and movies as babysitters by students' parents at home, often shapes the way they approach such material in the classroom. It is perhaps here that we can trace the beginning of film's demotion to 'Friday afternoon reward'. Laurie Warden has written about the apparent

dismissal of film as a critical pedagogical tool; "It is unfortunate that in many instances, film gets dismissed as "edutainment" in the classroom. Teachers use films as rewards for good behaviour or completed work...[this] often overshadows film's pedagogical use, and therefore the validity of its use as a teaching tool is overshadowed by its seemingly unconnected or irrelevant insertion into the classroom." (Warden 2004, p.79)

In light of Postman's (1985) claim that every medium both gives and takes something away - there is a logical progression to the current state of celluloid and digital video: with the ease and affordability of new media technology, making films becomes both the work and the reward. But without a connection to history, a visual vocabulary, and a comprehension of how films are constructed, we'll have a generation of music video directors instead of documentarians or animators. My concern is not so much for the quality of the artistic product (although it is ultimately important) but the quality of the cognitive, social, and emotional experience. On a practical level, using film with an emphasis on creativity and criticality, will assist students in becoming active participants in the visual culture that surrounds them both at home and in schools.

The Seventies; a focus on feelings.

While the inclusion of the medium of television in the classroom can be connected with a lingering casual approach to film, there were many educators in the early seventies who worked to counteract this by promoting an approach to film based on spectator feelings and dialogue. This approach would have been strengthened by the

general cultural focus in this period on the *individual* and psychoanalysis, which was reflected in the work of critical film theorists i.e. *Film Language: A Semiotics of Cinema* Christian Metz (1974) and Laura Mulvey's *Visual Pleasure and Narrative Cinema* (1975). Questions of pedagogical approach were quite common; "A lot of us once argued that film must not be taught as if it were literature, or drama, or painting-that we must find some special, filmic way of teaching....We worried over how film was to be taught; what kind of teaching was especially suitable to it?" (Ellis 1985, p. 51)

In a trickle-down response, there was an explosion of books and articles written by K-12 educators at this time (see Lacey, Amelio, Maynard, qtd here) advocating a movement away from teaching with the crude and coercive instructional films that were still being produced i.e. *Why Doesn't Cathy Eat Breakfast?* (Sponsored by interested parties at National Dairy Council, 1972) and from using film to prop up other subjects. These teachers suggested using art films in the classroom as critical tools to learn about new cultures, engage stereotypes and engender empathy. Richard Lacey (1972) wrote, "Film, in my view, should be a stimulus to enable the student to examine the self - the sense of identity, of relatedness to others, and of potency." (p.3)

Working in K-12 classrooms, these educators recommended using the "image and sound skim" (Lacey 1972, p. 24) (which was akin to 'filmic word association') to get students to reveal their feelings while developing their use of film language. In watching a 16mm print of *Citizen Kane* (1941, dir. Orson Welles), for example, Ralph Amelio (1971) surveyed the reactions of his highschool class to what they saw and heard as a starting point to introduce basic film terminology, explaining the function of each formal

element in relation to the narrative i.e. "depth photography with equally clear, foreground, middle, and background (the shot of a bottle of pills in the foreground, the gasping Susan Alexander in the middle ground, and the nervous Kane in the background allow the viewer to select the direct and indirect causes of her attempted suicide.)" and "[Welles'] use of natural sound -eerie echoes, screeches of birds, exaggerated footsteps - contributed to an exposition of Kane's unusual character." (p.43) This type of interpretative activity illustrated the semiotic power of film to communicate complicated meaning through simple composition. While Amelio's approach cannot be categorized as 'formal analysis' (since he only focused on discussion of visual elements referenced by the student's image and sound skin). The recognition of the importance of a filmic vocabulary was evident. It is certainly worth noting that *Citizen Kane* is an extremely dense visual text for use within K-12 environments (the film would have had to be screened over several classroom sessions). In contrast, many educators preferred to stick to using documentaries to expand on units about other cultures and steered away from 'getting too deep' in to the art of film. Though these books helped to legitimize film as a valid teaching tool, and presented practical ideas on introducing 'film language,' the discussion does not appear to have extended past treating film texts like written texts i.e. revealing themes, story structure and meaning via structural elements,

The emphasis during this time was on facilitating the after-film discussion, rather than explicating how films were made or fostering creativity. Lacey (1972) wrote: "the process of exploring a film should concentrate on creating possibilities for discovering and sharing personal meanings rather than on acquiring specific knowledge." (p.90)

If creative responses were encouraged, they almost never included filmmaking. "Our experience has led us to conclude that children's responses to movies are best understood through something they can express in an active, creative, uninhibited way - something they can paint about, dance about, dramatize, tell a story about." (Rice and Ludlum 1973, p.17) In fact, out of six authors surveyed from 1971-74, all suggested "...dramatization, role playing, discussion and writing." (Lacey 1972, p.75) as tools to reflect on the films shown in class. An approach that in my experience has not changed.

There are many reasons why teachers may have been reluctant to incorporate film into classrooms; the least of which are a lack of time, funds and energy. In addition, film educators were perhaps guilty of insecurity with regards to their subject of choice; "...film education is not, after all, a valid solution to a given problem and would probably not gain acceptance." (Lacey 1972, p.96) I would disagree with this last statement. It is precisely film education that can solve problems and can provide a rich resource for the cognitive and social development of students.

Chapter six: Current Considerations

At issue, is the current state of film education. As the preceding chapters have indicated, there are several indications (i.e. fear of technology, lack of quality films) as to why teachers are reluctant to utilize film critically and creatively in K-12 classrooms. But, as in cultural moments past, we find ourselves and our students in dire need of media navigation skills, as we are inundated daily with both aural and visual information. The

educators of the 1970s were aware of the need to equip their students with the cognitive tools required to accomplish this, but their approach did not promote creativity. Pioneer of visual culture education, June King McFee (1966) made the call for careful consideration of the moving image long ago when she wrote, "We need careful content analysis of the values being projected through mass media, as well as continued study of the diversity of values being projected in [our] society..." (p. 139). Further on this point, this thesis has argued that in order for students to truly understand the content of films and new media in general, they require an opportunity (such as the installation I have presented and other suggested film-based activities) to construct on their own, an opportunity in essence, to figure out how things are made, and find a means to participate in a global discourse. This act restores film's *aura* (in Walter Benjamin's terms) by reconnecting it to history and tradition, and its beneficial effects have been witnessed first hand by arts-based community educators such as Amy Schwartz, who uses celluloid film with her students and also in her personal art practice. Ms. Schwartz is an instructor at the Gulf Islands Film and Television school on Galiano Island in British Columbia and an award-winning experimental filmmaker, her perspective is particularly relevant with regards to using celluloid film in K-12 environments. Schwartz describes film as;

a tactile, tangible form that necessitates an understanding of chemistry, light and shadow, which is further demonstrated in a film's projection."

In her years of teaching handmade filmmaking to young people she has observed her students "...gaining a real sense of empowerment working with film. When they are finished, they're taking ownership of a

permanent work that they have created with their hands, not a digital copy. Their films cannot be erased and they provide an immediate connection not only to the history of film, but to photography before it.
(personal phone conversation, March 28, 2009)

In addition, students learn that from start to finish filmmaking is a collaborative effort, Schwartz states, "When you see kids watching movies alone on their ipods, you think, that technology is really fantastic, but film by its very nature is a collective experience and I fear [that] we are losing that collectivity." (personal phone conversation, March 28, 2009)

Film is uniquely positioned to offer students increased cognitive and social competence. The comprehension of "film language" is a type of textual literacy that involves more than story structure, plot and metaphor, it is understanding of these elements through moving image and sound. The mental and emotional engagement of film viewing provides young people an opportunity to identify with others, to associate themselves with characters while gaining objective distance from their own life circumstances. In making a film, young people are afforded an occasion to create meaning for themselves, to document and process their own existence, as the virtual film world is always safe for questions and ideas to be creatively explored. In addition, being able to make a film involves more than pressing buttons; youth write scripts, draw storyboards, edit, create sound tracks, design lighting, block actors, and communicate with their fellow crew-mates. This range of activities leaves room for many things to 'be good at' and provides students with the cognitive tools for understanding the

overwhelming world of the entertainment industry - "America's second largest export only to Military aircraft." (Giroux 2002, p.11)

It is certainly worth mentioning, that outside of the K-12 public school system there are successful examples of video workshops within communities. For example, groups such as *Les Productions Oracles* and *Leave Out Violence* both based in Montreal whose work using filmmaking with at-risk youth has produced tangible results in young people's lives i.e. filmmaking careers, reduction of harmful behavior, increased self-esteem and resilience. Of these few notable exceptions, the work of the British Film Institute in the United Kingdom has been groundbreaking with regards to using film as a pedagogical tool with young people and should be adopted (via legislative and financial support) as the North American model. In their publication *Look Again: A teaching guide to using film and television with three- to eleven-year-olds* (2003) the B.F.I. highlight what moving image education has to offer. "Our ability to see behind an image or text, to appreciate its constructedness, is vital in helping us to understand and engage with the worlds of the imagination and poetry, and of politics and ideology. This is essential in a culturally diverse, democratic and technological society." (B.F.I. 2003, p.6) On a practical level, moving image education assists students in understanding that:

- Every element of a visual image can carry meaning.
- Visual images can be 'read' like other texts.
- The position of elements within the image, the colours used, and the lighting, can all affect interpretation.

- Camera distance (i.e close-up, long shot etc), camera angle and camera movement all affect meaning.
- The number and order of shots affect meaning. (B.F.I. 2003, p.8)

The British Film Institute has also combined hard-nosed research with the practical experiences of educators;

Watching a film can powerfully engage children. They do not need to have mastered the 'mechanics' of reading in order to understand what they are seeing on a screen. A barrier is removed and their understanding, imagination and appreciation take centre stage, along with their natural desire to communicate... By introducing moving image texts as effective resources for literacy (including oracy) we are broadening children's experience of texts and encouraging more extensive use of more varied forms of communication. (B.F.I. 2003, p.19)

While their work is thorough and inspiring, the B.F.I's approach is focused solely on the digital world, and emphasis is placed on "cineliteracy" or cultivating the skill of reading visual texts, rather than on creative filmmaking. In light of the work of filmmakers like Amy Schwartz, and my own experiences using celluloid filmmaking with students, I believe it is important to list several suggested modifications to the B.F.I's public school approach below:

- A shift in emphasis to include individual and group project-based filmmaking as creative responses to viewing other films, or to any unit of study in question.

These creative documents would be evaluated on the same level as written counterparts (taking grade-level expectations in to account) i.e. if it's relevant to the subject matter, a student could choose to submit a short film in place of a final paper. This work could be considered for use in a variety of subjects (even math! making films involves angles, measuring distances, calculating footage etc.)

- A unit or workshop integrating celluloid film; including an explanation of the history of cinema, a critique of some examples of instructional films, culminating in a handmade animation or found footage montage project.
- Field trips to film sets, film labs, artist's workshops and exhibitions. Introduction to various career options (i.e. set design, costume, script writing, producing). Part and parcel to this is an increased emphasis on the artist's place in the classroom in general. Forming community partnerships between artists and schools (even surveying the student's parents for arts-related experience, specific skills and donated materials) is an easy way for teacher's who may be unfamiliar with film, or the arts to update their pedagogical techniques and lesson plans.
- Critical discussions of montage and visual literacy in the digital age. For younger students this could simply be addressed in after-workshop discussions, gauging whether a better understanding of how films are constructed has been gained - constructing a Zoopraxiscope would also be fun in this context.

The aforementioned ideas are, of course, dependant on teacher interest, class time and funding etc. but it is my hope that the work above has laid a strong foundation for the reconsideration of creative uses of film (celluloid and/or video) in the K-12 classroom.

Conclusion

This investigation has utilized an arts-based research method to provide an answer to the question 'How did educators once teach with film in the classroom and how have our methods changed with time and technological advancement'? This thesis has illustrated examples throughout history, where the pedagogical approach to film has been largely inflexible (contrary to film's inherent mobility). It has not been my intention to fault educators in this regard, but to make the case for new and creative forms of film education in the 21st century, forms that can provide students with the tools for increased cognitive and social competence. This question is especially relevant in light of the ever-increasing ubiquity of visual culture (to the extent that "moving images are most certainly ordinary and banal." Acland 2009, p. 148) In order to better understand a medium that is all too familiar for many of us, it was necessary to document the history of celluloid as well as the progression of pedagogical responses toward the medium throughout history. In addition to providing an historical context, it has been necessary to provide a personal, artistic one - in order to better understand my practice within the medium (i.e. the interaction between my filmmaking and the machines necessary for display) and to ascertain what I feel will be beneficial to share with future students. Much of the current thinking surrounding the moving image lacks an inclusion of history, and tradition, focusing solely on new media technology such as the internet. In this absence, an important tool for communication is in danger of being misused again (similar to the historical uses of the instructional film).

Motion pictures once had a precious status, needed care and skill in handling, and required special venues for exhibition. The formats that typify today's moving images - such as e-mail links to web-based clips, DVD recordings and episodes of serialized narratives specifically for mobile phones - are closer to crude ephemera of newspapers and brochures, so unremarkable have they become. (Acland 2009, p. 50)

While I find it counter-productive to bemoan the special attention film has received in other venues (such as post-secondary film schools) I do think it will be productive to incorporate some lessons from the past within the work to be done in the future; being able to truly understand the moving image; what we see/hear, how it affects us and can be used as a tool for communication, social control, or cognitive and emotional development, can only be accomplished if we engage in the critical creation of our own films. In as much as this investigation has been focused on making a serious case for film, it should also be noted that it is also extremely enjoyable for students, and that criticality can be playful as well.

It will likely be necessary to repeat an investigation in to the state of moving image education in the years to come, in an effort to address "[t]he essential impossibility of fully grasping and assessing a technology or a practice's true cultural impact within the moment itself." (Lester 2008, p. 2) It is my hope that within the work presented here, I have been able to provide a thorough list of connections between the past and present of a medium that should not be forgotten or discounted within our classrooms.

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Horse and Train (1954, figure 4) painting by Alex Colville image . Retrieved from:

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Film Based Teaching Machine, Glasses Boy and Machine Girl (figures 16, 20,21).

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Appendix A

TIMING—THE FILM VS. THE SCHEDULE

The teacher's lesson plan for the 2nd period (9:00 a.m.—9:45 a.m.) reads as follows:

- 9:00—Thread projector.
- 9:03—Class enters.
- 9:05—Introduce film *Circle of the Sun* (30 minutes).
- 9:08—Show film.
- 9:38—Survey class reactions.
- 9:43—Assignment.
- 9:45—Dismissed.

The actual class session deviated from it "slightly" (he told his department head):

- 8:48—Pick up projector in supply closet. It isn't there.
- 9:05—Projector located in faculty men's room. Last teacher to use it yesterday had no key for supply closet, so
- 9:08—Apologize to class for lateness.
- 9:09—Thread projector.
- 9:15—Start film.
- 9:16—Stop film and tighten loop around sound drum.
- 9:20—Principal makes public address system announcement. Two illegally parked cars blocking delivery entrance. Also, condolences to basketball team for "tough" 108-37 loss.
- 9:27—Resume film.
- 9:29—Projection lamp burns out, no picture. Stop machine.
- 9:30—Dispatch call for help to Instructional Materials Center. Desperately need bulb.
- 9:35—Student returns with bulb. Wrong one, filmstrip projector bulb sent by mistake.
- 9:36—Class discussion, unauthorized.
- 9:38—Teacher runs to IMC, grabs correct bulb, runs back to room. Alienates librarian he neglected to bid good morning to.
- 9:41—Returns to room. Class "discussion" at a roar.
- 9:42—Replace bulb. Teacher burns hand on the overheated bulb.
- 9:44½—Resume film.
- 9:45—Bell rings. Period over. Teacher buries head in arms and cries.

Excerpt from *The celluloid curriculum; how to use movies in the classroom*. Used as a humorous 'warning' to teachers about temperamental technology. (Maynard 1971, p.220)

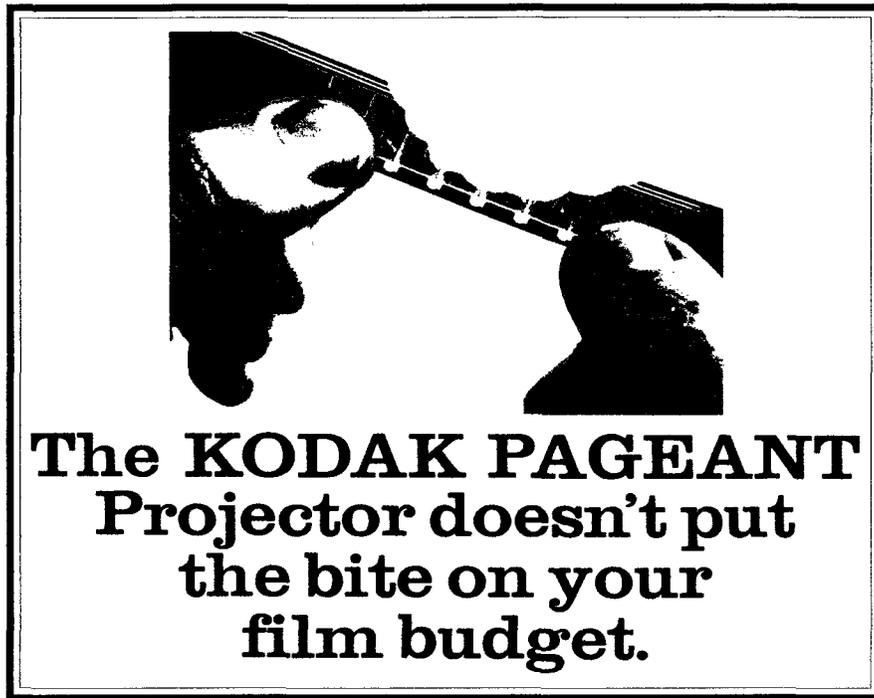


Figure 18: Projector Advertisement. *Film News* vol.3 p.39



Figure 19: Lantern Boys. *Film News* vol.25 p.7

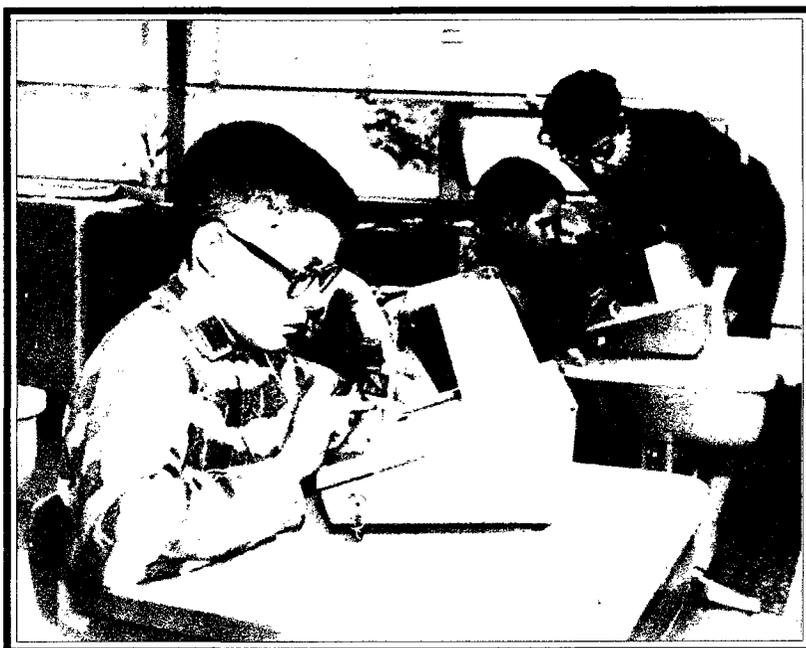


Figure 20: Glasses Boy. (see references)



Figure 21: Machine Girl. (see references)

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- Bruce Baillie (Director). (1967) *Valentin De Las Sierras.*
- Bruce Connor (Director). (1958) *A MOVIE.*
- Guidance Associates (Producers). (1973) *Jealousy: I Won't Be Your Friend.*
- Encyclopedia Britannica, (Producer). (1961) *Gymnosperms.*
- Coronet Films (Producer). (1967) *Causes of the Seasons.*
- Norman McLaren (Director). (1955) *Blinkity Blank.* National Film Board of Canada.
- British Film Institute (Producer). (1970) *Flying Birds.*