

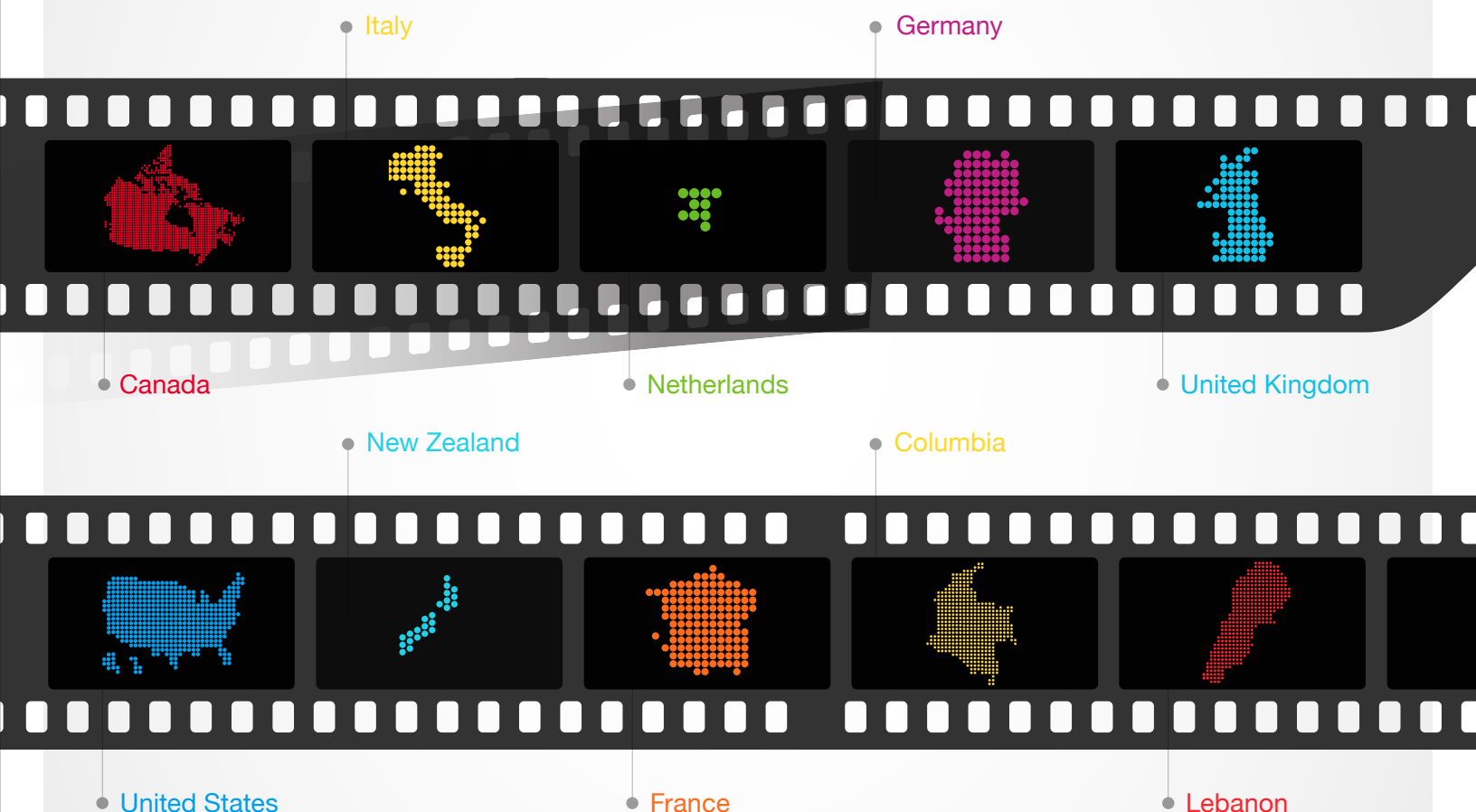
# State of the Art: Understanding, Appreciating & Promoting Analogue Film Practices in the 21st Century

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## Table of Contents

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<b>Acknowledgements</b>	<b>1</b>
<b>Table of Contents</b>	<b>2</b>
<b>Foreword</b>	<b>3</b>
<b>A. International Trends and the Analogue Film Ecology</b>	<b>5</b>
1. <i>Preamble</i>	5
2. <i>Two Approaches to Working with Analogue Film</i>	5
3. <i>An Ecology to Support Analogue Film</i>	6
4. <i>Trends in Analogue Film Production</i>	7
5. <i>Trends in Analogue Film Distribution and Exhibition</i>	10
6. <i>Trends in Analogue Film Education</i>	13
7. <i>Critical Discourse on Analogue Film</i>	14
<b>B. Profile of Analogue Film Production, Distribution, Exhibition and Education in Canada</b>	<b>16</b>
1. <i>Preamble</i>	16
2. <i>Size and Scope of Independent Analogue Film Production in Canada</i>	16
3. <i>Analogue Film Production</i>	18
4. <i>Analogue Film Distribution and Exhibition</i>	18
5. <i>Analogue Film Education and Training</i>	19
6. <i>Film Preservation</i>	20
<b>C. Best Practices, Innovative Initiatives and Other Tools for Supporting Analogue Film Practices</b>	<b>21</b>
1. <i>Preamble</i>	21
2. <i>Best Practices in Fostering New Opportunities for Artistic Excellence in Analogue Film Media</i>	21
3. <i>Best Practices in Promoting Interest in Analogue Film as a Vital Creative Medium Among New Audiences</i>	25
4. <i>Best Practices in Facilitating Engagement with Analogue Film by Artists and the Public at Large.</i>	26
<b>D. Conclusion</b>	<b>28</b>
1. <i>Summary Findings</i>	28
2. <i>Proposed Strategic Directions for a Supportive Ecology for Analogue Film</i>	29
<b>Annex 1: Resources for Filmmakers and Film Organizations</b>	<b>32</b>
<b>Annex 2: List of People Interviewed for the Study</b>	<b>42</b>
<b>Annex 3: Analysis of Analogue Film Production Support Provided by Artist-Run Centres</b>	<b>44</b>
<b>Annex 4: Estimated Number of Members of Canadian Film Production Cooperatives Working in Film</b>	<b>45</b>
<b>Annex 5: Glossary of Terms</b>	<b>46</b>

*“At the very beginning of cinema, the absence of industrial labs meant that the filmmaker had to work on all stages of film production, including chemical development and printing. The Lumière Brothers’ camera, which as we know was also a projector, was used as a printer as well, and the operators of the company at the time knew how to film, develop the negative, and expose, develop and then project a positive print.”*

- Nicolas Rey<sup>1</sup>

## Foreword

A post-industrial renewal of independent filmmaking is taking place around the globe, led by a significant and growing number of independent filmmakers and visual artists and integrating longstanding traditions of experimental filmmaking and other analogue film practices by artists. The findings of this study tell the story of this revival:

- ✓ Over 40 artist-run “labs” supporting experimental analogue film production in 23 countries around the globe.
- ✓ 16 major international festivals with programs of films in analogue formats.
- ✓ 10 festivals specialized in screening analogue films.
- ✓ 57% of independent “arthouse” cinemas surveyed in the US and Canada – 35 theatres in all - have maintained their 35mm analogue screening capacity and show classic films in their original formats.
- ✓ 35 specialized analogue film venues in North America and Europe.
- ✓ 18 nationally funded film production cooperatives in Canada (72%) support analogue filmmaking.
- ✓ 13 of these (also 72%) provide access to analogue filmmaking workshops.
- ✓ 11 (61%) have darkrooms where filmmakers can process their own films.
- ✓ 23% of Canadian filmmakers working in nationally funded independent film production cooperatives continue to capture images in analogue formats.
- ✓ 29% of filmmakers shooting in analogue formats are finishing their films on film.
- ✓ Over 20 Canadian colleges and universities have courses or assignments in analogue filmmaking.

This rekindling of awareness and passion for “analogue” filmmaking provides the basis of the present study. More precisely, the goals of this project were to:

<sup>1</sup> Nicola Baldini, Founder and CEO of Film Ferrania, “The Cine 8 – 16 Interview,” a translation of “News from Italy: An Exclusive Glimpse of FILM Ferrania” published by German magazine *Cine 8-16* in late 2015. Retrieved on February 16 from <http://www.filmferrania.it/news/2016/the-cine-8-16-interview>.

- 1) Provide evidence-based research profiling analogue filmmaking in Canada, including the size, scope and growth trends of this practice and including the wider international context for commissioning, materials sales and processing demand, distribution, exhibition, education and online forum activities.
- 2) Provide lessons learned that can assist media arts organizations to:
  - Foster new opportunities for artistic excellence in analogue film media.
  - Promote interest in analogue film as a vital creative medium among new audiences of producers and viewers.
  - Facilitate engagement with analogue film by artists and the public at large.

### Methodology

For this project the consultants undertook a review of web-based literature from Canadian and international sources. This included an exhaustive search of websites and critical publications created by artists and artist-run organizations, as well as coverage by commercial media outlets. A total of forty-two in-depth interviews were conducted with individual artists, critical theorists and programmers, representatives of artist-run film production and distribution organizations, archives, exhibitors and festivals. Twenty-five Canadian and seventeen international interviews were conducted.

### Limitations

There exist very few published reports of empirical data on the Media Arts that would help to describe the sector. Published research tends to be in the form of aesthetic and artistic criticism.<sup>2</sup> The lack of published data is compounded by the lack of capacity within most artist-run independent film centres to track and produce their own data. Where possible, quantitative data has been included in this report. This has been supplemented by qualitative evidence drawn from a substantive number of interviews with leading practitioners in the field.

### Structure of this document

The report that follows is divided into the following sections:

- Section A provides an overview of the international trends and the analogue film ecology
- Section B profiles analogue film in Canada today;
- Section C presents best practices and lessons learned to assist media arts organizations to support analogue film practices.

Additional resources are provided in Annex 1 at the end of this document, including links to organizations and initiatives discussed in this report.

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<sup>2</sup> McCarthy, Kevin F. and Elizabeth Heneghan Ondaatje. From Celluloid to Cyberspace: The Media Arts and the Changing Arts World. Santa Monica, CA: RAND Corporation, 2002.  
[http://www.rand.org/pubs/monograph\\_reports/MR1552.html](http://www.rand.org/pubs/monograph_reports/MR1552.html).

*“The Maker Movement re-establishes the place of crafts in society, highlighting their importance in a world which has increasingly turned away from the physical and the tangible in favour of the disconnected, abstract experience mediated by digital technologies.”*

- AMIA Film Advocacy Task Force<sup>3</sup>

## A. International Trends and the Analogue Film Ecology

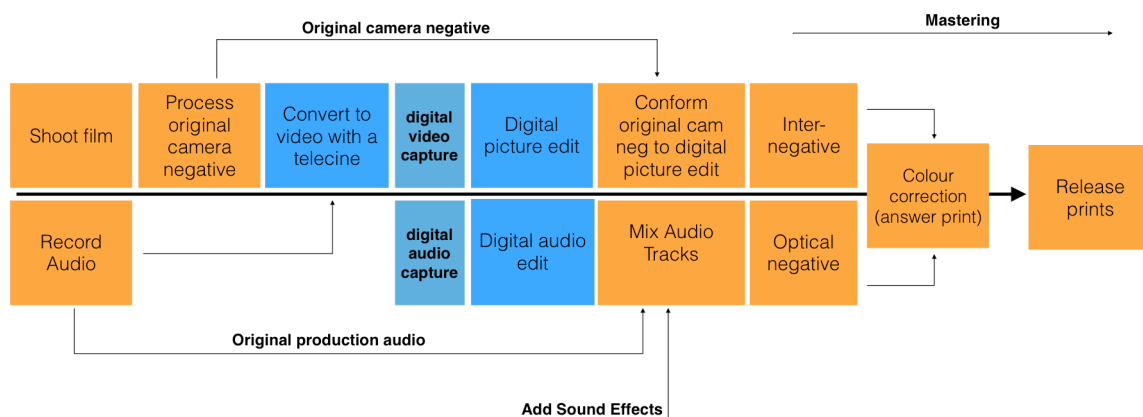
### 1. Preamble

This chapter describes the recent trends shaping the analogue film ecology internationally. We begin with a discussion of what we mean by analogue film and from there proceed with an overview of the ecology in which analogue film is created and disseminated. This is followed by discussion of trends in analogue film production, distribution and exhibition, education and critical practice.

### 2. Two Approaches to Working with Analogue Film

The findings of this study point to a small but significant number of artists around the globe who continue to seek out opportunities to work with analogue film for its aesthetic and expressive possibilities. The majority of artists working with analogue film today are working in a hybrid fashion, combining photochemical film and digital processes, often transferring filmed images to high-resolution digital video for editing. Many filmmakers elect to finish their films in a digital format. As noted by Randy Sterling Hunter in the pages of the *Mono No Aware Indie Mag*, this continued interest in the film medium does not necessarily constitute a complete retreat from digitization. Rather, it can be seen as “a marriage between the old and the new, using analogue techniques combined with digital technologies.”<sup>4</sup> Figure 1 provides one view of a hybrid analogue-digital workflow.

Figure 1: Hybrid Analogue-Digital Filmmaking Workflow

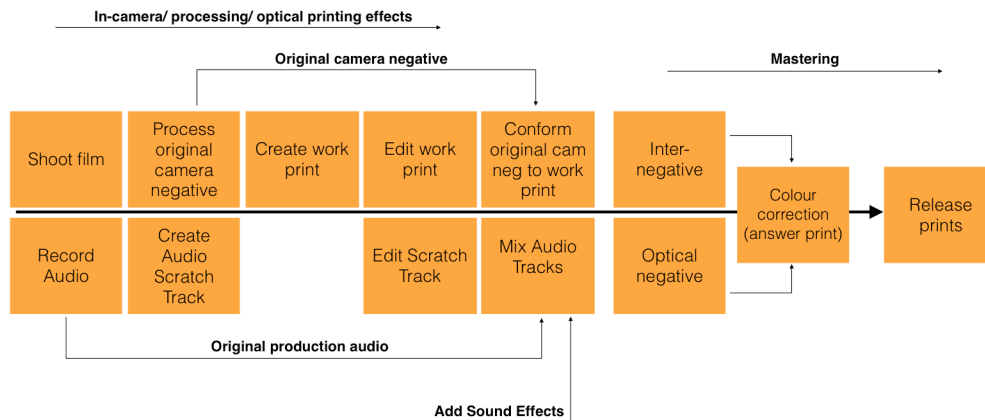


<sup>3</sup> Association of Moving Image Archivists (AMIA), Film Advocacy Task Force, “The Making of Film: The Marketplace and the Commons,” September 12, 2014, retrieved on January 31, 2016 from <http://www.filmadvocacy.org/>.

<sup>4</sup> Randy Sterling Hunter, “Why’d You Have To Take My Kodachrome Away?,” in *Mono No Aware Indie Mag*, 2013.

In a smaller number of cases, artists are choosing to work entirely within an analogue workflow: capturing their images, processing, editing and finishing on film. Finishing to film can be difficult. The final sound mix may need to be transferred to an optical negative, the camera original negative film cut and spliced together by hand and then married to the optical sound negative to produce a new inter-negative from which the final master print of the film will be printed. In general, films finished on film and screened on film are experimental films. It is estimated that a quarter of experimental films exhibited at festivals are projected in an analogue format.<sup>5</sup> Figure 2 shows a high-level view of the analogue workflow.

Figure 2: Analogue Filmmaking Workflow



### 3. An Ecology to Support Analogue Film

To make their films, analogue filmmakers rely on a host of suppliers and service providers to access basic necessities such as film stock and camera equipment, editing equipment, sound transfer services and film printing services. A supportive ecology for analogue film is key to enabling production, distribution and exhibition of artists' film works. Figure 3 provides an overview of this ecology.

As can be seen, the ecology comprises artist-run and commercial organizations that provide equipment, materials, services, training and access to the public. Over the same period that saw the radical decline in an economy for industrial analogue film, the arts have been party to a renaissance in photochemical filmmaking made possible by both existing and new artist-run and artist-friendly infrastructures.

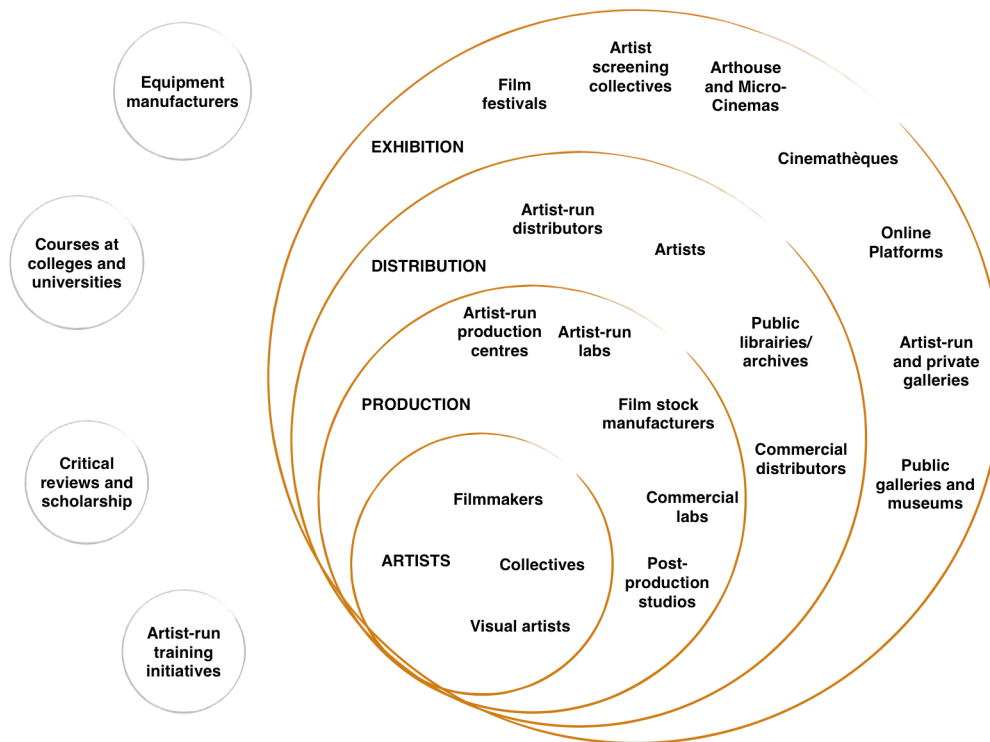
In addition to Kodak, a number of smaller film manufacturers continue to support analogue film production, including German-based ORWO and Wittner Cinetic, as well as FOMA Bohemia Ltd of the Czech Republic.<sup>6</sup>

<sup>5</sup> Interview with Richard Tuohy, Nanolab

<sup>6</sup> ORWO produces small gauge 8mm and 16mm black and white reversal and negative film stocks. FOMA Bohemia Ltd. produces 35mm black and white reversal film Fomapan R. Wittner Cinetica produces a variety of 8mm and 16mm black and white and colour reversal and negative films stocks and provides processing services as well. A small selection of AGFA 8mm and 16 mm colour reversal films have been repackaged by Wittner Cinetica.

Artists working in analogue include individual filmmakers, artists' collectives and visual artists. Professional training is provided by colleges and universities, and increasingly, by artist-run organizations. Production is being supported primarily by infrastructures created by artists, notably independent film production centres and artist-run labs. The ecology includes a small number of commercial suppliers including commercial laboratories, post-production studios and equipment manufacturers. There exist a variety of exhibition platforms, including online, specialized festivals, micro-cinemas, galleries and museums.

Figure 3: Analogue Film Ecology



#### 4. Trends in Analogue Film Production

##### 4.1 Former Industrial Supports for Analogue Filmmaking Have Largely Disappeared

It is important to note that the industrial supports that once enabled independent filmmakers to make their films have largely disappeared from the ecology. The collapse of the commercial film industry has led to significant reductions in the availability of film equipment, film stocks and commercial lab services. Major film manufacturers AGFA and Kodak have greatly reduced the variety of film stocks they produce.<sup>7</sup>

<sup>7</sup> Back from the brink of bankruptcy declared in 2011, Kodak has managed to salvage some part of its film manufacturing business, recently announcing commitments from all six major US studios to continue



Declining volumes in the manufacture of film stock has in turn resulted in significantly decreased demand for commercial film processing services. In Canada, only two commercial film processing labs remain. In Toronto, the Niagara Custom Lab is the last remaining full service lab in Canada, providing full processing and printing services for films in 8mm, 16mm and 35mm gauges. In Montreal Mel's Studios, which acquired Vision Globale, continues to provide film processing, printing and restoration services for 35mm films, and processing services for 16mm films.

In the United States, artists continue to have access to the services of a handful of full-service commercial labs, including Fotokem and Pro8mm in California, Colorlab in Maryland, Cinelab in Massachusetts. A few other labs provide limited services, such as the Continental Film and Digital Lab in Miami (16mm and 35mm processing only). In the Netherlands, the Super 8 Reversal Lab provides Super 8mm laboratory services. In Germany, Andec Filmtechnik is a full service lab serving Germany and surrounding countries. Reversal Cine operates out of New Zealand, processing 8mm, 16mm, super 16mm reversal black and white and colour film.

A consideration for artists whenever using labs that are remotely located is the loss of direct interaction with technicians, increased shipping costs, and increased turn-around times on services.

#### 4.2 A Worldwide Movement of Artist-run Labs and Collectives

The past two decades have seen an explosive growth in artist-run film laboratories, "a period of intense film activity,"<sup>8</sup> dominated by experimental film practices. This movement reflects the desire to take control of the entire filmmaking process, removing it from industrial processes. A number of people interviewed for this report noted a continuity with the earliest incarnations of artist-run film centres, notably the London Filmmakers' Coop in the UK, which in the 1960's opened a dark room for artists' use.<sup>9</sup>

Originating in Europe, the idea of artist-run labs quickly spreading to North America and other parts of the globe, particularly as the possibility of working through industrial supports disappeared. A number of Canadian artist-run centres interviewed for this report see themselves as players in this wider ecology of artist-run labs, including Cineworks, LIFT and AFSCOOP. Arguably, all Canadian artist-run centres that support analogue film production share in this movement.

Today, the world-wide movement counts well over forty labs in 23 countries, in North and South America, Europe, the Middle East and Oceania. The website [filmlabs.org](http://filmlabs.org), which serves as a portal for sharing information about labs, lists 37 artist-run or artist-friendly labs, located in Canada, the USA, Columbia, Uruguay, Australia, South Korea, France, the UK, Germany, Spain, the Netherlands, Switzerland, Portugal, Lithuania, Austria, Belgium, Croatia and Finland. Many interviewees, members of [filmlabs.org](http://filmlabs.org), noted that the website was not

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purchasing its film stock, a move that will guarantee a minimum volume of film sales over the coming years. Source: Laura Beeston, "Disciples of Analog film find a home in Winnipeg," *The Globe and Mail*, August 25, 2015.

<sup>8</sup> Kim Knowles, "Self-skilling and Home Brewing: Some Reflections on Photochemical Film Culture," in *Millenium Film Journal*, No. 60, Fall 2014.

<sup>9</sup> The emergence of artist-run labs has been written about by Pip Chodorov in his essay, "The Artist-Run Film Labs," in *Millenium Film Journal*, No. 60, Fall 2014.

entirely up to date and pointed to additional labs in New Zealand, Egypt, Greece, Indonesia, Lebanon and Italy. A list of labs is provided in Annex 1.

The goal of the labs is to “open the doors to anyone who wants to work on film material, whether they are beginners or expert filmmakers, whether they make experimental films, contemporary art or performance pieces.”<sup>10</sup> Labs typically provide film processing darkrooms, and may also give access to editing tables and optical printers (some of them DIY). A few labs either provide or aim to provide artists with access to machine processors and printers. Some have screening rooms in which they present programs of finished works to the public.

Artist-run labs have been instrumental in averting the total disappearance of once valuable equipment, rescuing film equipment intended for the scrap heap to build alternative facilities for artists. As Kim Knowles writes, “while professional film production facilities close their doors, artist-run labs open theirs, recuperating and rebuilding discarded machinery such as cameras, projectors, editing tables, optical and contact printers, developing tanks and rostrum cameras, often with the help of other labs.”<sup>11</sup> While some stockpile equipment for the day they can either use it themselves or find another organization to do so, others are frustrated by the lack of transport or storage needed to acquire equipment as it becomes available.

Interviewees noted the challenges associated with acquiring and maintaining analogue film equipment. Artists’ organizations have on many occasions benefitted from the drop in value of commercial film production and post-production equipment. As commercial studios and labs get rid of their analogue equipment, some centres have been able to acquire equipment for little or no cost. However, there can be challenges with respect to finding the resources to transport or install larger pieces of equipment, resulting in some larger pieces of equipment, such as machine processors or 35mm flatbed editing tables, sitting in storage. There are also challenges with finding and securing access to specialized equipment such as machine film processors.

However, acquiring equipment is only part of the solution. Artists have also had to learn skills once belonging to specialized technicians, teaching themselves how to operate and repair cameras, optical printers, projectors and machine processors. Expertise in the use, maintenance and repair of equipment is an issue in some organizations.

### L’abominable<sup>12</sup>

An important artist-run lab in Europe is L’abominable, founded by a group of filmmakers twenty years ago, in 1996. The lab’s ironic name is a play on the French words “laboratoire” (or “labo” for short) and “minable,” meaning pitiful, or mediocre. The lab offers artists the possibility of working in Super-8 mm, 16mm and 35mm, using processing machines, optical printers, editing tables and sound and printing equipment. The lab operates on the principle that experienced members share their skills with new members, so that they may work on their own.<sup>13</sup> The lab has also shared its expertise with others wishing to establish their own

<sup>10</sup> Pip Chodorov, Op. Cit.

<sup>11</sup> Kim Knowles, Op. Cit.

<sup>12</sup> [http://www.l-abominable.org/?lang=en\\_us](http://www.l-abominable.org/?lang=en_us)

<sup>13</sup> Website of L’abominable, [http://www.l-abominable.org/?lang=en\\_us](http://www.l-abominable.org/?lang=en_us).

labs. Highly sought after, the lab accepts 40 new members each year, and has a year-long wait list of artists wishing to join.<sup>14</sup> About ten films finished on film are produced each year.<sup>15</sup>

#### Labor Berlin<sup>16</sup>

Founded a decade ago in Berlin, Labor Berlin embraces an experimental and D.I.Y. craft approach to film production with a mission to support the use of film outside of the commercial film industry. Members can work hands-on with Super 8, 16mm and 35 mm film, developing, cutting, copying and experimenting freely with the material of film. Labor Berlin has a mission to offer members and the wider artistic community the entire range of workflows of motion picture filmmaking, from the DIY to the industry standard. To realize its goal and become sustainable over the long run, Labor Berlin has launched a major crowdfunding campaign on Indiegogo – *Film Ain't Dead* - that will allow it to secure equipment from a recent and almost final lab closure in the country. The organization has also supported the development of labs in other countries, notably Egypt and Lebanon.<sup>17</sup>

#### Mono No Aware<sup>18</sup>

Mono No Aware, based in Brooklyn, NY, promotes alternative film practices and encourages artists and individuals to discover and work in film. A key goal of the organization is to make analogue film practices accessible to interested artists. The organization is very strong on outreach. For ten years it has been hosting a major international exhibition of contemporary artists and international filmmakers whose work incorporates Super 8mm, 16mm, 35mm or altered light projections as part of a live performance or installation. Monthly screening programs provide additional opportunities for the public to engage with analogue film. They provide training in analogue filmmaking to hundreds of individuals each year, including a program for the public held at the Edison Museum in New Jersey.<sup>19</sup> Mono No Aware also provides access to film stocks.

## *5. Trends in Analogue Film Distribution and Exhibition*

### **5.1 A Changing Exhibition Market**

The exhibition market for analogue films has changed dramatically since the industry's full-on conversion of commercial cinemas to digital technologies. A significant impact resulting from this massive conversion is the disappearance of highly skilled projectionists, many of whom are said to have lost their jobs in the changeover.<sup>20</sup> Major film festivals are now largely screening digital copies of films. Many festivals simply no longer have the capacity to screen films in analogue formats, either due to reduced access to venues equipped with film projectors or lack of access to skilled projectionists, or both.

<sup>14</sup> Interview with Nicolas Rey, L'abominable.

<sup>15</sup> Gran Lux, *Kinetica: Lieux d'expérimentations cinématographiques en Europe*, Éditions la passe du vent, 2011.

<sup>16</sup> <http://www.laborberlin-film.org/>.

<sup>17</sup> Interview with Anja Dorneiden and Juan Gonzalez.

<sup>18</sup> <http://mononoawarefilm.com/>.

<sup>19</sup> Interview with Steve Cossman.

<sup>20</sup> Association of Moving Image Archivists, Film Advocacy Task Force, "Fight for 35mm: Interview with Julia Marchese," December 5, 2013, retrieved on January 29 from <http://www.filmadvocacy.org/2013/12/05/fight-for-35mm-an-interview-with-julia-marchese/>.

In traditional markets such as educational and institutional venues (i.e. libraries and archives, galleries and museums and community organizations), demand for film prints has also fallen off precipitously. Distributors in multiple jurisdictions interviewed for this report spoke of a significant drop in 16mm film print rentals in recent years. Educational institutions are said to have largely divested themselves of analogue projection equipment. While some film schools may occasionally screen film prints, this demand is being driven by individual instructors committed to screening analogue films in their classes. Public galleries and museums are also said to largely prefer screening films in digital formats.

At the same time, opportunities to screen digital copies of hybrid and analogue films are increasing. Films released in digital formats have increased dissemination opportunities through the increasing number of digital distribution and screening platforms. As noted by distributors, some filmmakers whose works are finished on film formats are also choosing to show their films digitally when a film projection is not possible.

## 5.2 Role of Distributors

Distributors of artists' films interviewed for this report remain committed to analogue film formats, with some – such as Canyon Cinema in San Francisco, and the New York Public Library - indicating that they continue to acquire film prints of analogue films, from both established and emerging artists. However, distributors interviewed also noted that demand for analogue film prints is declining, in favour of digital copies. Where possible, distributors such as Light Cone in Paris try to encourage clients to screen analogue prints of films, though this is not always possible where projection equipment or projection expertise is lacking. Distributors can and do rent or lend small gauge projectors to clients, though this is only practical in their local markets.

Distributors such as Light Cone in Paris and Lux in London are increasingly making their catalogues available digitally, including works captured or finished in analogue formats. For example, Lux is a distributor that has been in existence for decades and has been a leading provider of analogue experimental films. However, as artists themselves shift to hybrid practices and finish their works digitally, they are shifting to fully digital modes of distribution and are building an online platform to facilitate digital access to their collection. For its part Light Cone is working on a case-by-case basis to supply digital copies of analogue films where filmmakers have such copies and are comfortable making them available for rental. Light Cone is also developing an online platform to enhance access to its collection and where possible intends to include digital copies of analogue films.

A key consideration for distributors is the cost of shipping analogue film prints, which is high and adds to rental and operational costs. This situation is not specific to the Media Arts. A recent study found that in the Visual Arts, public funding for the crating, shipping and insurance costs of touring exhibitions has all but disappeared. While such costs are not excluded from operating grants per se, other competing priorities usually take precedence.<sup>21</sup>

## 5.3 Opportunities to Screen Analogue Films in Arthouse, Micro and Cinematheque Venues

In North America, many cinemathèques, art-house and “micro” cinemas also remain committed to exhibiting films on film. A recent study by the national association of independent theatres in the US confirms that over half of all arthouse cinemas continue to

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<sup>21</sup> Mela Constantini, *Touring Contemporary Art Exhibitions: The Situation for Canada's Public Galleries and Art Museums in 2012*, Canada Council for the Arts, May 2013.

have 35 mm screening equipment.<sup>22</sup> The study surveyed 62 cinemas of which 35 continue to use 35 mm projectors. For many this is a business decision, as the vast majority of classic films they show have never been converted to DCP format for digital exhibition in theatres.<sup>23</sup> Those that have been converted are often only available in low-resolution formats.<sup>24</sup> Audiences for analogue films include older audiences of classic films and younger audiences interested in underground and avant-garde analogue films.<sup>25</sup>

A number of cinema venues in North America are said to provide skilled film projection for analogue films. These include the Pacific Cinematheque in Vancouver, TIFF Bell Lighthouse Theatre in Toronto, the Black Hole Cinematheque in Oakland, the Echo Park Film Centre in Los Angeles, and the Hollywood Theatre in Portland (Oregon).

#### 5.4 New Opportunities to Exhibit Analogue Films

Artists, programmers and curators are creating new exhibition opportunities and markets. While major festivals are screening the majority of films in digital formats, individual programs of analogue films are being created by festival programmers with a professional interest and/or critical practice around the practice of analogue film. For example, analogue screenings have been recently programmed at the Rotterdam International Film Festival, the Leeds International Film Festival, the Antimatter festival in Victoria, the Ann Arbor Film Fest, the Images Festival, Toronto International Film Festival and the Edinburgh International Film Festival, the Paris Festival of Different and Experimental Cinemas, the Alchemy Film and Moving Image Festival (Scotland), and the Alternative film/video festival/Belgrade.<sup>26</sup>

Dedicated analogue film festivals such as the Chicago 8 Small Gauge Film Festival and London Analogue Film Festival create opportunities to access analogue films while promoting the artistic practice with the public and other artists. Analogue film screenings are also taking place in “underground” venues and events, including artist-run centres and labs. In Paris, the Etna artist-run lab hosts regular screenings of analogue films, while in Hanover, Germany, the Kino em Sprengel runs an analogue cinema. In this all-in-one space, everything is part of the screening experience, including the glass walled 16mm and 35mm projectors and the ticket sellers. Both of these venues extend the possibility to their members of organizing screenings. In Melbourne, the Artist Film Workshop presents programs of analogue films.

Interviewees from the Visual Arts commented on the number of exhibitions taking place that integrate analogue film, which for at least one artist was seen to be on the rise.<sup>27</sup> Analogue film is being exhibited within a Visual Arts context in commercial and artist-run galleries, contemporary art museums, and major international art fairs that involve analogue film. Some recent exhibitions include Elizabeth McAlpine at the Lord Bartlett Gallery, Ben Rivers at the Kate McGarry Gallery and Guy Sherwin at the Christine Park Gallery, in the UK. The

<sup>22</sup> Arthouse Convergence Audience Survey 2015.

<sup>23</sup> The Deadline Team, “Alamo Draft House’s Tim League: Make a Place for Christopher Nolan, Quentin Tarantino, and Film Stock in Digital Future,” in *Deadline.com*, October 19, 2014, retrieved from <http://deadline.com/2014/10/alamo-draffhouse-tim-league-christopher-nolan-quentin-tarantino-digital-film-projection-854765/>.

<sup>24</sup> Interview with Barbara Twist, Arthouse Convergence.

<sup>25</sup> Interview with Barbara Twist, Arthouse Convergence.

<sup>26</sup> Tijana Mamula, “Radical tradition,” in *Nero*, March 6, 2013, retrieved on February 5, 2016 from <http://www.neromagazine.it/n/wp-content/uploads/2013/03/Alternative-Film-1982.jpg>

<sup>27</sup> Interview with Louise Fairclough.

Tate Modern is said to be particularly attentive to the needs of analogue film presentation in the context of Visual Art exhibitions.<sup>28</sup>

The David Zwirner Gallery in New York represents Canadian artist Stan Douglas, who continues to exhibit some of his earlier works that were captured and projected in analogue film format. Canadian film scholar Erika Balsom credits Stan Douglas' early work *Ouverture* (1986) with stimulating a renewal of interest amongst visual artists for working with analogue film.<sup>29</sup>

Interest in analogue film is evident in Visual Arts venues even when the work is copied to digital format for presentation. For example, Galerie Lelong in New York is currently showing the "lost films" of the late Ana Mendieta, a key figure of feminist visual art. Many of the films on display in the gallery have never before been presented to the public. However for this exhibition the original analogue films have been transferred to digital formats.<sup>30</sup>

Performance-based film events, such as Mono No Aware, provide audiences with opportunities to experience "expanded cinema", including a "wide swath" of younger artists that integrate film into performance and visual arts practices.<sup>31</sup> An expanded cinema event will represent Ireland at this year's Venice Biennale. The artist Richard Mosse will represent Ireland with a multiple-screen film installation.<sup>32</sup>

## 6. Trends in Analogue Film Education

### 6.1 Film Programs in Higher Education Typically Offer Only a Few Analogue Film Courses

The industrial shift to digital technology has had ripple effects across related industries, including higher education. Here too, film programs have largely switched to digital video production, though a few courses in analogue filmmaking remain. Some see the value in teaching students to think in filmic terms using the constraints imposed by analogue film. (Analogue film limits the amount of material that can be shot as a film can contain a limited number of minutes of film, and delays the moment when these shots can actually be reviewed until after the film is processed.) While college and university film programs began divesting themselves of film equipment with the introduction of video, the position of analogue filmmaking as an introductory or elective subject within Film programs became more prevalent as schools began to prepare film students for careers in the burgeoning digital media industry. Today, the majority of analogue film courses offered by colleges and universities are electives, often taught by filmmakers who themselves continue to work in analogue film. The value of analogue filmmaking for pedagogical purposes is also

<sup>28</sup> Interview with Stan Douglas.

<sup>29</sup> Erika Balsom, *Exhibiting Cinema in Contemporary Art*, Amsterdam University Press, 2013.

<sup>30</sup> Haley Mlotek, "Review: Ana Mendieta's Lost Films at Galerie Lelong, New York," in *Canadianart.ca*, February 16, 2016, retrieved February 19, 2016 from: [http://canadianart.ca/reviews/unseen-films-by-ana-mendieta/?utm\\_medium=email&utm\\_campaign=Weekly%20February%2018%202016&utm\\_content=Weekly%20February%2018%202016+CID\\_f4c08a5b1fa1ccf2eadcdeb3b07c6e74&utm\\_source=E%25](http://canadianart.ca/reviews/unseen-films-by-ana-mendieta/?utm_medium=email&utm_campaign=Weekly%20February%2018%202016&utm_content=Weekly%20February%2018%202016+CID_f4c08a5b1fa1ccf2eadcdeb3b07c6e74&utm_source=E%25).

<sup>31</sup> Interview with Lindsay McIntyre, FAVA.

<sup>32</sup> Helen Brady, "Scenes of Struggle: Ireland's Journey Through Film at This Year's Venice Biennale, *The Culture Trip*, January 26, 2016, retrieved on February 10, 2016 from <http://theculturetrip.com/europe/ireland/articles/scenes-of-struggle-ireland-s-journey-through-film-at-this-year-s-venice-biennale/>.



recognized in programs that require students to learn the rudiments of analogue filmmaking, particularly image capture.

Interviewees are of the view that analogue shooting is still being taught at universities, particularly in North America, primarily in introductory film courses. However, the general perception is that the majority of film programs in North America, Europe and Australia do not provide any analogue instruction. 23 Canadian universities and colleges were mentioned as having run analogue courses in the past two years. A selection of major institutions is provided in Annex 1.

## 6.2 Artist-run Labs Play a Key Role in Education and Training

Driven by a do-it-yourself (DIY) ethic, it is typical for today's artist-run labs to offer training and/or mentoring to artists who then use the facilities to realize their own projects. In this way, artist-run labs "play a role in making this specialized knowledge accessible to the community, organizing filmmaking workshops, screenings and exhibitions."<sup>33</sup> Artist-run labs are popular with younger artists as was pointed out by many of those interviewed for the report. It was noted that students are often frustrated by the lack of access to learning about analogue filmmaking in educational institutions.

## 7. Critical Discourse on Analogue Film

### 7.1 Critical Writing on Analogue Film Practices Underscores the Vitality of the Sector

A critical discourse is developing that supports the advancement of analogue film practices. While a full treatment of the critical discourse around analogue film is beyond the scope of the present study, it is instructive to point to a few recent directions that underscore the vitality of the sector.

Writers, academics, and filmmakers are putting forward critical writing on recent analogue film practice. A lively critical discourse has emerged, not without contestations, which includes contributions from artists and theorists in the pages of film journals (*Film Comment*, *Millennium Film Journal*), academic books and artists' monographs, as well as on the webpages of artist-run labs and collective websites, such as [filmlabs.org](http://filmlabs.org), [savefilm.org](http://savefilm.org), and [filmadvocacy.org](http://filmadvocacy.org).<sup>34</sup> The FrameWorks online discussion list provides an international forum for critical inquiry and debate "on experimental film, avant-garde film, film as art, film as film, or film as visual poetry -- film's expressive qualities, aside from or in addition to its storytelling capacity."<sup>35</sup>

The review of literature identified a number of discursive threads, from critiques and defenders of anti-corporate DIY aesthetics, to a new generation of artists embracing and updating experimental film practices. Some in the artist-run lab movement see analogue film through the lens of anti-capitalism, for example, informing the vision for the lab No(w)ere in

<sup>33</sup> Randy Sterling Hunter, Op. Cit.

<sup>34</sup> One example is an essay by Nicolas Rey, "Artists Film Labs: An Historical Perspective," April 2009 (updated April 2012), retrieved on February 15, 2016 from <http://www.filmlabs.org/index.php/site/history/>.

<sup>35</sup> FrameWorks Discussion List, retrieved from <https://mailman-mail5.webfaction.com/listinfo/frameworks>.

London (UK).<sup>36</sup> This view aligns with the perspective of maker culture as oppositional to “shrink wrapped” corporate and consumer culture.<sup>37</sup>

Many frame the question of analogue film in terms of the choice of medium it provides to artists involved in the creation of moving image artworks. The concerns of experimental cinema are typically framed in terms of the material, structural or experiential qualities that are unique to the medium and presentations of experimental cinema continue to include analogue films. A recent example is The International Experimental Cinema Exposition (international travelling festival of independent film) curated by Christopher May. The festival originated in Colorado in 2000 and had its last iteration most recently in 2013.<sup>38</sup> Similarly, the material concerns of experimental filmmaking, including creative manipulation of image capture and processing are evident in many of the works being promoted on the websites of artist-run labs.

Some visual artists who employ analogue film have been criticized for romanticizing film’s obsolescence.<sup>39</sup> There are those who caution against romanticizing the medium of film, arguing that discourses that put forward essential qualities of analogue film can be a theoretical trap for a limited and nostalgic understanding of film practice.<sup>40</sup> However, as Erika Balsom notes,

“[T]he integration of cinema into the spaces of art after 1990 must be seen as abiding by an interplay between old and new media, whereby cinema is both an old medium in which one might encounter the redemptive possibilities of the outmoded and a new technology that has wrought dramatic changes to the place of the moving image in art and to the spaces of art more generally.”<sup>41</sup>

Our interviews suggest a generalized consensus that analogue film practices today combine an appreciation for the “post”- or “non-digital” materiality of film (i.e. the fact that you can hold it and see light past through it) and the expressive possibilities arising from hands-on filmmaking, together with the contemporary popularity and, in some cases, politics of DIY culture.<sup>42</sup>

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<sup>36</sup> Interview with James Holcombe.

<sup>37</sup> David M. Berry, Michael Dieter, *Post Digital Aesthetics: Art, Computation and Design*, Palgrave MacMillan, 2015;

<sup>38</sup> Robin Edwards, “Christopher May on the International Experimental Cinema Exposition Soiree This Friday,” in *Westword*, September 11, 2013.

<sup>39</sup> Tacita Dean was mentioned in a number of interviews as an artist who has done much to advance the idea that film is dead. She is cited by theorist Christine Ross as having said, “I am attracted to obsolescence so film is the perfect medium for me to work in.” Cited in Christine Ross, *The Past is the Present, It’s the Future Too: the temporal turn in contemporary art*, Continuum, 2010.

<sup>40</sup> Kim Knowles, Op. Cit.

<sup>41</sup> Erika Balsom, Op. Cit., page 19.

<sup>42</sup> David M. Berry, Michael Dieter, *Post Digital Aesthetics: Art, Computation and Design*, Palgrave MacMillan, 2015; Florian Cramer, “What is Post Digital?,” *APRJA*, 2014, retrieved on February 12, 2016 from <http://www.aprja.net/?p=1318>.



*“In a day and age when one would expect film labs to be disappearing, the opposite appears to be true: the creation of new labs is accelerating across the globe. The difference between those that are closing and the new ones opening is simple: the new ones are not for profit; they are run by artists.”*

- Pip Chodorov<sup>43</sup>

## **B. Profile of Analogue Film Production, Distribution, Exhibition and Education in Canada**

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### *1. Preamble*

This section profiles analogue film in Canada. We begin with an assessment of recent growth in the sector based on available evidence. This is followed by a discussion of the Canadian ecology for analogue film, including the production, distribution and exhibition, and educational environment.

### *2. Size and Scope of Independent Analogue Film Production in Canada*

#### **2.1 A Sizeable Proportion of Film Artists Continue to Work in Analogue**

A recent study commissioned by the Canada Council for the Arts estimated that of thirteen artist-run film production centres consulted in 2014, 22% of their members were engaged in analogue filmmaking in 8mm, 16mm and 35mm formats.<sup>44</sup> Interviews with Canadian media arts centres conducted for this study support these findings. The 11 film production cooperatives and collectives interviewed for this study reported a total of 1519 members actively producing films. 23% of these members are capturing images on analogue formats.

Of note, the proportion of artists finishing their films in analogue formats, was found to be almost double in the present study. It is estimated that 29% of filmmakers who capture their images in analogue formats are finishing their films on film, as compared to the 15% of filmmakers reported in the previous study.<sup>45</sup>

This trend is supported by interviews, which indicate that interest in analogue filmmaking has grown in recent years and that analogue filmmaking workshops are gaining in popularity and filling quickly. The majority of new interest is said to be coming from younger artists.

Rising sales of film stocks at AFSCOOP and LIFT provide additional evidence of this growing interest. Both coops shared statistical evidence of steady growth in sales of film stock in the past several years. AFSCOOP reported considerable growth in the last year alone. The number of hours of darkroom used at LIFT has also been increasing, doubling between

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<sup>43</sup> Pip Chodorov, Op. Cit.

<sup>44</sup> Marilyn Burgess and Maria De Rosa, “The Endurance of Celluloid Film and Enhancing Access, Presentation and Exhibition of Canadian Works”, prepared for the Canada Council for the Arts, September 2014.

<sup>45</sup> Marilyn Burgess and Maria De Rosa, “The Endurance of Celluloid Film and Enhancing Access, Presentation and Exhibition of Canadian Works”, prepared for the Canada Council for the Arts, September 2014.

2013 and 2014. While artists, including young artists, are purchasing 16 mm film stocks, the LIFT film store provides Super 8mm film to people doing home animation, wedding movies and music videos.

In Vancouver, there is sufficient interest to support a dedicated analogue facility operated by Cineworks volunteers. The “Annex” is a DIY studio for production, processing and editing of analogue film. Every month, new users are provided with an orientation to the studio. Cineworks has acquired a large format and a portable machine processor, the latter of which it has begun using to support artist projects and education initiatives.

## **2.2 The Majority of Artist-run Film Production Cooperatives Support Analogue Filmmaking**

In the global context of artists organizing to salvage the infrastructure to support analogue filmmaking, Canada is unique in having an established network of artist-run production centres with an existing array of analogue film production and editing equipment. About a quarter of the hundred or so nationally-funded artist-run organizations that support media arts production, distribution and exhibition,<sup>46</sup> are film production cooperatives established by independent artists to support independent filmmaking. Many of these centres promote access to film equipment for use by interested filmmakers and would-be filmmakers.

According to our interviews and information available on organization websites, eighteen artist-run film production organizations currently provide access to analogue film production equipment in 8mm, 16mm and/or 35 mm formats. Eleven centres provide access to darkrooms and/or film processing equipment, while eight either sell film stocks or place orders with film stock suppliers on behalf of their members. Seven centres provide members with the possibility to make digital transfers of their analogue images and films.

The Independent Filmmakers Cooperative of Ottawa (IFCO) is the only film cooperative focused exclusively on supporting an emulsion-based work-flow. The goal is to maintain the integrity of the analogue film art form and encourage artists to push the film medium forward.<sup>47</sup>

The darkrooms being made available at artist-run centres support hand processing and experimental processing techniques. Cineworks provides extensive lab services, including processing, optical printing, optical sound transfers and final married prints. It recently partnered with the Emily Carr University of Art and Design to process the films of students using its machine processor. Cineworks also has the capacity to support filmmakers wishing to work in optical sound and both note that there is interest for this.

The digital transfers made possible in artist-run centres are considered more artisanal. In some cases transfer equipment has been put together in-house. Transfers may be low-resolution and may not be frame accurate.

Annex 3 provides an analysis of the analogue film support services provided by Canadian artist-run production centres.

<sup>46</sup> Canada Council for the Arts grant recipients 2014-2015, Grants to Media Arts Organization: Multi-Year, retrieved February 15, 2016 from <http://canadacouncil.ca/council/grants/past-recipients?discipline=Media+Arts&program=Grants+to+Media+Arts+Organizations%3a+Multi-Year&sort1=discipline&sort2=program&sort3=recipient&page=2>.

<sup>47</sup> Interview with Patrice James, Executive Director of IFCO.

In addition to media arts production centres with a mandate to support artists, the media arts ecology includes artists' film collectives, groups of artists who pool resources to creating their work, and in some cases, providing some training to others. Production collectives include the Iris Film Collective in Vancouver, the Collectif double négatif (Double Negative Collective) in Montreal, the Windows Collective in Ottawa and the Loop Collective in Toronto. The Iris Film Collective, Double Negative Collectives and the Windows Collective own their own production, processing and projection equipment, which may be made available to other artists on a selective basis.

### *3. Analogue Film Production*

#### **3.1 Analogue Film Production Infrastructure Concentrated in Major Urban Centres**

As was noted by some interviewees, the infrastructure to support analogue filmmaking in Canada varies across the country. Toronto is well served with commercial labs and access to hand processing facilities, access to equipment and training, the ability to purchase film stocks and public screening opportunities. Other major centres, such as Montreal, Ottawa and Vancouver, tend to have a more limited mix of these services. In some cities, notably in the prairies, analogue film opportunities are said to depend on the interest of one or a few individuals who can provide training and share skills. At FAVA in Edmonton, staff have strong analogue skills to impart to others.

Interviews with commercial service providers suggest that the restructuring of the film technical services sector is ongoing with some work volumes declining and others increasing. There is a sense that services will continue to be available to filmmakers into the future.<sup>48</sup> There are a handful of professional commercial labs remaining in North America, two of them in Canada. The Niagara Custom Lab in Toronto provides processing and printing services for 8mm and 16mm gauge films. Mel's Studios in Montreal provides support for processing of 16mm film, and processing and printing of 35 mm films through its lab. Frame Discreet in Toronto and Mel's Studios transfers division provide professional quality digital transfers, as does Exclusive Film and Digital Media, which provides transfers of 8mm films to digital formats.

For filmmakers located in these cities, the proximity of the labs offers a measure of convenience and access to skilled technicians. For artists based in other cities, processing their films through a commercial lab comes at an extra expense and delays for shipping, as well as reduced access to lab technicians.

Access to expertise is a challenge in some centres. For example, technicians are largely self-taught at some smaller centres, such as Faucet Media. Some centres are reaching out to older filmmakers to pass on their skills. Quickdraw Animation Society brought in a former member to teach current members how to use their Oxberry camera stand and develop the necessary skills within the cooperative. An oft-repeated concern is the difficulty to find replacement parts or skilled technicians able to effect repairs.

### *4. Analogue Film Distribution and Exhibition*

Artists' film distributors, including the Canadian Film Makers Distribution Centre in Toronto and Moving Images Distribution in Vancouver, continue to acquire and distribute artists' films in analogue and hybrid formats. However the volume of distribution of purely analogue

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<sup>48</sup> Interviews conducted for this study with business owners.

films, particularly those in 16mm formats has declined in recent years, and for some distributors is a cause of concern. This decline is attributed to the smaller number of venues which have the capacity to project analogue films, as well as to the lack of analogue film festival programmers and visual arts curators knowledgeable about analogue film.

Key film venues continue to support and screen analogue films. These include the Hot Docs Cinema, the TIFF Bell Lightbox, Pacific Cinemathèque, Winnipeg Cinemathèque, Cinémathèque québécoise and Cinéma du parc.<sup>49</sup>

Antimatter (Victoria), the 8-Fest Small Gauge Film Festival (Toronto), the Halifax Independent Filmmakers Festival, the Hundred Dollar Film Festival (Calgary) – which has been dedicated to small gauge film formats for 24 years, Images Festival (Toronto), the Media City Film Festival (Windsor) and the Silver Wave Festival (Fredericton), present curated selections of analogue film, as does the Wavelengths program of the Toronto International Film Festival. These are created by programmers with a critical interest in analogue filmmaking. AFCCOOP curates analogue film installations and screenings at its Halifax Independent Film Festival.

#### The infrastructure for analogue exhibition varies across the country

Screening collectives that promote experimental and analogue films are another key part of the analogue film exhibition ecology, with the highest concentration in Toronto. In addition to the Windows Collective, the Iris Film Collective and the Collectif double négatif mentioned above, the Pleasure Dome, Early Monthly Segments and the Loop Collective host regular screenings of analogue films in Toronto. Artists' collectives are active on the international scene as well. The works of the Collectif double négatif were recently featured at the Rotterdam International Film Festival. Films by the Iris Film Collective will be shown this year at Labor Berlin, while the Pleasure Dome is collaborating with Mono No Aware to bring a collection of Canadian films to New York City audiences.

#### Canadian critical discourse on analogue films

Critical discourse is being advanced by Canadian artist-run centres, in catalogues, zines and critical publications. The Saskatchewan Filmpool publishes *Splice*, while the Calgary Society of Independent Filmmakers and EM Media publish *LUMA*, both quarterly journals on Canadian independent film, which have featured critical writing on DIY filmmaking. For its part, Cineworks publishes *Cinewords*, a series of essays on independent filmmaking, including analogue film. *Strategies of the Medium* is a series of experimental film screenings and critical essays produced by LIFT.

### *5. Analogue Film Education and Training*

As colleges and universities have scaled back their teaching of analogue film production to a few courses, or to specific assignments, artist-run organizations are providing workshops, master classes and mentoring to students interested in learning how to work with analogue film.

Responding to popular demand, thirteen artist-run production centres support training in analogue filmmaking, primarily through workshops in Super 8mm and 16mm film production and hand processing techniques. Faucet Media Arts identifies two types of workshops: lecture formats dedicated to building specific skills, and production workshops that support

<sup>49</sup> Interview with Barbara Twist, Arhouse Convergence.

holistic learning through creative doing. Three artists' collectives also offer some level of training.

Analogue film skills are also being shared at the Independent Imaging Retreat, or "Film Farm" created by experimental filmmaker Phil Hoffman. Structured as a workshop retreat, the Film Farm provides experimental filmmakers with the opportunity to work on their projects while learning and experimenting in a community of like-minded filmmakers.

## 6. Film Preservation

In the past decade, a number of key reports argued convincingly for film as the preferred long-term storage medium over digital files.<sup>50</sup> As digitization has created unprecedented access to countless film titles from the world's cultural heritage, it is perhaps not surprising that some film preservationists have opted for digital preservation of film heritage.<sup>51</sup> Having invested largely in digital technologies, some archives may find it difficult to fund the restoration and preservation of films on film. While digitization programs may save on preservation costs in the short term, others in the archival sector are concerned that a lack of demand for analogue services in archival labs could negatively impact on the future availability of needed film stocks and on the ongoing capacity of archival labs to preserve analogue films in analogue formats.

There is currently no national film preservation program focused on preserving films in analogue formats. It was noted in the course of this study that some public galleries and museums which own analogue film prints as part of their collections are not screening them in their original analogue formats. It was speculated that in the absence of resources for analogue preservation, institutions may wish to preserve existing prints from damage.

In recent years, some artists' works have been preserved or reprinted, providing new opportunities for these films to be experienced by audiences in Canadian and abroad. The restoration of the films of David Rimmer by the Academy of Motion Picture Arts and Sciences Film Archive in Los Angeles resulted in a retrospective screening at the TIFF Cinematheque. Newly printed films of Joyce Wieland toured the major cinematheques of Europe and Canada.<sup>52</sup>

Artists interviewed for this report note challenges with preservation and with ensuring that exhibition quality prints can continue to be made of their work. One artist noted that it is difficult to find a lab to create good quality transfers from digital outputs to 16 mm film. He has purchased his own vault to store his film elements. The artist notes that the Academy of Motion Picture Arts and Sciences Film Archive in Los Angeles is archiving the film works of visual artist Tacita Dean.<sup>53</sup>

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<sup>50</sup> Academy of Motion Picture Arts and Science, *The Digital Dilemma*, November 2007.

<sup>51</sup> Erin Engle, "Digitizing Motion Picture Film: FADGI Report on Current Practices and Future Directions," *The Signal – Digital Preservation*, Library of Congress, December 9, 2015, retrieved on February 18, 2016 from <https://blogs.loc.gov/digitalpreservation/2015/12/digitizing-motion-picture-film-fadgi-report-on-current-practices-and-future-directions-2/>.

<sup>52</sup> Marilyn Burgess and Maria De Rosa, "The Endurance of Celluloid Film and Enhancing Access, Presentation and Exhibition of Canadian Works", prepared for the Canada Council for the Arts, September 2014.

<sup>53</sup> Interview with Stan Douglas

*“As the landscape of contemporary mainstream film has changed to promote entirely digital production and distribution, a handful of people, scattered across the globe, are making a stand to teach others how to shoot, process and edit on film.”*

- Randy Sterling Hunter<sup>54</sup>

## C. Best Practices, Innovative Initiatives and Other Tools for Supporting Analogue Film Practices

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### 1. Preamble

This section provides examples of best practices and initiatives that can provide lessons learned for media arts organizations interested in 1) fostering new opportunities for artistic excellence in analogue film media, 2) promoting interest in analogue film as a vital creative medium among new audiences of producers and viewers and 3) facilitating engagement with analogue film by artists and the public at large.

### 2. Best Practices in Fostering New Opportunities for Artistic Excellence in Analogue Film Media

Opportunities for artistic excellence depend on developing creative and technical skills in analogue filmmaking, and access to strong organizations able to provide access to analogue equipment and technical services. The initiatives identified below are successful examples of individual skills building and organizational capacity building that are instructive for the Canadian context.

#### 2.1 Build Individual Skills by Sharing Knowledge

There are significant opportunities at the present moment to transfer skills from filmmakers and film technicians to a new generation of analogue filmmakers. As noted by many of those interviewed, access to knowledge is a pressing concern, as the skills gap widens. Interviewees pointed out that many younger artists are coming to analogue filmmaking without basic training in things such as exposure and focus as access to analogue film training at colleges and universities is greatly reduced. There is also a need to ensure that artists have access to the skills needed to operate lab equipment. There is an opportunity for artists' organizations to build on their leadership role in promoting valuable analogue skills sharing.

##### 2.1.1 Use Workshops, Artist Residencies and Visiting Artist Programs to Support Individual Skills Development

Training initiatives are a common practice amongst Canadian artist-run centres. Touring workshop programs to centres located outside major centres, as provided by Labor Berlin and LIFT, provides additional opportunities to expand the circle of creative excellence in analogue film to regions lacking a developed analogue infrastructure.

Other initiatives of note that provide access to knowledge not found locally are talks or workshops by visiting artists, and artistic residencies that allow for in-depth skills sharing

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<sup>54</sup> Randy Sterling Hunter, Op. Cit.



over a period of time.<sup>55</sup> As Penny McCann notes, artist residencies provide “opportunities for artists to make works on film while mentoring others in the community.”<sup>56</sup>

### 2.1.2 Build Skills Through International Collaboration

The German artist-run lab Labor Berlin piloted an innovative training initiative in partnership with artist-run labs in Cairo and Athens. *Analogue Zone* was a two year project exploring the art and practice of Super 8 and 16mm filmmaking. Designed as three extended workshop series, the project provided training in Super 8 and 16mm techniques for beginners, and then supported the production and exhibition of short films by practitioners who had gained experience.<sup>57</sup>

The project *Re-engineering Moving Image* (RE-MI) is a two-year collaborative project created by three artist-run labs: Mire (Nantes), WORM.Filmwerkplaats (Rotterdam) and Labor Berlin (Berlin). The project will be focused on the creation, preservation and circulation of technical knowledge of analogue film in order to support its use as a creative medium. It will involve other film labs, cinemas, art schools and film enthusiasts.<sup>58</sup> As part of the initiative RE-MI created a two day conference ringing together artists and scientists to discuss in depth the future of analogue film.

As Canadian artists tour internationally, many are assisting artists in other parts of the world to acquire or deepen their analogue filmmaking skills. American artist-run labs in particular are deeply appreciative of the opportunities for skills development provided by Canadian artists and organizations.

### 2.1.3 Use the Web to Build Knowledge and Skills

There are numerous examples of using web-based tools to share information and support skills development. The Colorado-based artist-lab Process Reversal has created the Formulary Database for Motion Picture Film to support experimentation. The site covers all topics involved with motion picture lab work, including the theory & practice of photo-chemistry; safety, handling and acquisition of photo-chemistry; photo-chemical formulas for motion picture film; and photo-chemical processes for motion picture film. The database includes documents from the early decades of cinema, mid-century textbooks and more recent publications.<sup>59</sup>

The development of critical and technical skills is supported by the online discussion list, FrameWorks, an international forum on experimental film. Discussions cover any genre of experimental film in all aspects, from filmmaking to criticism.<sup>60</sup>

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<sup>55</sup> Interview with Scott Miller Berry, Early Monthly Segments.

<sup>56</sup> Penny McCann, “40 Years @ 24 Frames Per Second: Film Cooperatives in Canada,” in *Reflecting Light: 40 Years of Canadian Cinema*, Winnipeg Film Group, May 2015.

<sup>57</sup> <http://cimatheque.org/wp-content/uploads/2013/06/AZ3-Presentation.pdf>

<sup>58</sup> Re-mi website: <http://re-mi.eu/>.

<sup>59</sup> Process Reversal, “Formulary Database of Motion Picture Film,” retrieved from <http://processreversal.org/formulary-database/>.

<sup>60</sup> FrameWorks Discussion List website: <https://mailman-mail5.webfaction.com/listinfo/frameworks>

## 2.2 Build Capacity Through Networks

Artists need access to materials, equipment and technical expertise to work in analogue film. The Canadian analogue film context is unique in having a network of nationally funded production cooperatives with substantial investments in film production and post-production equipment. Equipment is circulating and is accessible to organizations with the resources (financial, transportation, facilities and skills) to acquire and operate it. There are opportunities to build technical capacity by working together to ensure access to equipment and services.

With so few commercial labs and studios remaining that support analogue filmmaking, it may become necessary to expand services to ensure that artists have the ability to make new film prints, masters and copies, to transfer sound to optical formats and even to slit and perforate film stocks to new formats (should available stocks become too restrictive). There could also be an eventual need to provide analogue filmmakers with good telecine transfers to digital files (either for submitting their work to festivals or to distribute it digitally.) Success in building technical capacity rests on access to equipment and specialised skills. To build technical capacity, the pooling together of resources is identified as critical.

As noted by Genevieve Yue, “the pooling together of resources serves...as a calculated response to inevitable conditions. Where physical space is not guaranteed, the network helps to maintain and redistribute knowledge and equipment until a temporary home can be found. Quite simply, labs help secure the existence and future of each other.”<sup>61</sup> Quite simply, networks facilitate this pooling.

The following are examples of successful networks that can inform the continued development of analogue film networks in Canada.

### 2.2.1 Successful Networks – the Example of Filmlabs.org

There is evidence of an emerging formal network specifically of analogue filmmakers in Canada. In 2012, a group of media arts organizations calling themselves the Canadian Coalition for Celluloid Production met to discuss how the sector could collectively address what was then perceived as the immanent demise of celluloid. Two years later, the changing perception of analogue was evident at the Tidal Force National Media Arts Summit,<sup>62</sup> which hosted a panel called “The Celluloid Revival.” These meetings helped to raise the profile of analogue filmmaking and to gather artists interested in it around a special event. Additional meetings are planned, notably to present the findings of this study. The initiatives supported by filmlabs.org point to potential areas of collaboration for Canadian artists.

Beginning in 2005, a series of international meetings of artist-run labs have taken place, drawing participants from Europe, North America, Oceania and Asia. Meetings were held in Brussels (2005), Rotterdam (2008) and Zagreb (2011). A new meeting is planned for July 2016 in Nantes.<sup>63</sup>

<sup>61</sup> Genevieve Yue, “Kitchen Sink Cinema: Artist-Run Film Laboratories,” in *Film Comment*, March 15, 2015.

<sup>62</sup> Organized by the Independent Media Arts Alliance, the Tidal Force conference took place in Halifax in 2014.

<sup>63</sup> The meeting is a copresentation of LaborBerlin, Mire (in Nantes) and Filmwerkplaats (in Rotterdam). Meeting website: <http://www.re-mi.eu/wp-content/uploads/2015/11/Call-filmlabsmeeting.pdf>



The international meetings of film labs have resulted in international collaborations, including the online resource [filmlabs.org](http://filmlabs.org), which provides information on artist-run labs and contributions to a critical history of the movement. The network has also facilitated the identification and rescue of equipment from lab closures, and bulk buying of film stocks that it is hoped will ensure ongoing manufacturing and access.

From its earliest beginnings, the artist-run lab movement has been characterized by a spirit of sharing. Within a few years of its launch, one of the first artist-run labs to emerge in France, Atelier MTK, began assisting artists to set up other labs, thus initiating the creation of a lab network. The reason for doing so was simple: MTK could not keep up with demand for its lab.<sup>64</sup>

The practice of sharing knowledge to assist other labs continues to this day. For example, Richard Tuohy and Diana Barrie not only run the Nanolab in Australia, they also visit and help to set up labs elsewhere. The two are said to have visited roughly two-thirds of the labs in the [filmlabs.org](http://filmlabs.org) network.<sup>65</sup>

Another interesting example is Process Reversal in Denver, Colorado. For several years now the lab has existed virtually, without a space of its own, organizing lectures, workshops and screenings to share knowledge as well as providing a massive amount on the web in its Formulary Database for Motion Picture Film discussed above. By building an extensive network, the organization has amassed a significant amount of analogue film equipment. The goal ultimately is to equip its own lab for public access as well as to help launch and equip other labs.

### 2.2.2 Leverage Networks to Acquire Equipment

Some organizations within [filmlabs.org](http://filmlabs.org) currently post wish lists of equipment, spare parts, tools and equipment they are looking for to complete their labs.<sup>66</sup> List serves are being used in the USA to exchange information on equipment that may be available, although it was noted that there is no particular hub where analogue filmmakers gather.

### 2.2.4 Work with Other Networks in Related Sectors

The Association of Moving Image Archivists works to ensure continued access to analogue film stocks and hosts a website, a blog and conferences to raise awareness of the ongoing need for analogue film stocks and labs.<sup>67</sup>

Similarly, Arthouse Convergence, an alliance of American independent cinemas, conducts research on the state of independent cinemas and in working to promote ongoing use of 35mm projection equipment in independent theatres. As noted above, a recent study by the organization found that over half of all independent cinemas in the US still have the ability to project analogue films.<sup>68</sup> Arthouse Convergence is also exploring the possibility of creating a training program for projectionists.<sup>69</sup> These developments suggest opportunities to

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<sup>64</sup> Gran Lux, *Kinetica*, Op. Cit.

<sup>65</sup> Genevieve Yue, "Kitchen Sink Cinema: Artist-run Film Laboratories," *Film Comment*, March 30, 2015.

<sup>66</sup> For example, Labor Berlin posts a wish list of equipment and a dedicated email address to respond to.

<sup>67</sup> AMIA Film Advocacy Task Force

<sup>68</sup> Arthouse Convergence

<sup>69</sup> Interview with Barbara Twist

encourage greater use of independent cinemas to screen analogue films by independent artists.

### *3. Best Practices in Promoting Interest in Analogue Film as a Vital Creative Medium Among New Audiences*

#### **3.1 Leverage Partnerships to Stimulate Interest and Awareness**

Partnerships are said to be highly effective in growing audiences and stimulating interest in analogue film. Cineworks partnered with the Eastside culture crawl, a 20-year old event with an established outreach network. The event attracts 25,000 people in a single weekend. In addition to the open artists' studios, there are workshops and screenings. For its partnership, Cineworks offered a workshop on handmade 16mm b/w film, which sold out almost immediately to new participants not known to the centre. Cineworks approaches the workshop as a teaser to lead into a 5-part workshop where participants can create their own film and learn in more detail. Most participants expressed interest in this additional series of workshops. For an organization with a limited outreach budget, this event proved highly valuable.

#### **3.2 Leverage Screenings to Build Awareness**

Part of the appeal of repertory cinemas is said to be the experience of watching a film within a community of other like-minded people.<sup>70</sup> These venues provide interesting opportunities for festivals or collectives wishing to present analogue films to the public.

AFCOOP shows artists' loops outside the lobby of the cinema during the Halifax Independent Filmmakers Festival. Four 35mm films created by artists as part of an AFCOOP summer workshop were screened during the highly popular all night Halifax art event *Nocturne*.

Festivals also provide the opportunity to raise awareness of film in analogue formats, simply by including the information in catalogues and screening schedules.

As noted by film distributor Antonella Bonfanti (Canyon Cinema), a key to reaching a broader audience with analogue films is to make it easy for people who are not part of the art film world to be introduced to film. Canyon cinema sees itself as a resource to broker deals with art galleries and museums. Galleries and museums make up almost a third of experimental film rentals for European distributor Light Cone, indicating the interest from this market.<sup>71</sup>

#### **3.3 Commissioned Works Increase the Visibility of Analogue Filmmaking**

Commissions of new works not only increase production opportunities, they also have an air of prestige about them that lends itself to higher profile marketing. While not numerous, a number of examples were found of organizations commissioning analogue film works. Typically, these commissions including a production and an exhibition component. The Contemporary Art Centre of Vilnius commissioned *In the Traveler's Heart* by Melissa Dullius and Gustavo Jahan (AKA Distruktur) which was screened at Art Centre and then later shown

<sup>70</sup> Julia Marchese, AMIA film advocacy taskforce website

<sup>71</sup> Data provided by Light Cone.

in Germany at Labor Berlin.<sup>72</sup> In Scotland the Alchemy Film Festival commissioned *It's Quicker by Hearse/The Sun is But a Morning Star*, by Esther Johnson.<sup>73</sup> *The End*, a double screen Super 8 projection by Amanda Thomson, was commissioned by the by FLUSSI media-art festival.<sup>74</sup>

In Canada, Cineworks commissioned and toured new films by the Bent Light Collective in 2014.<sup>75</sup> For its part, AFSCOOP commissioned five new 35mm films from five filmmakers as part of the Summer of 35 mm program. These were then screened during Halifax's all-night arts event, Nocturne event late in 2015.<sup>76</sup> AFSCOOP will commission five new works in 2016 as part of its Expanded Cinema Summer program.<sup>77</sup>

#### *4. Best Practices in Facilitating Engagement with Analogue Film by Artists and the Public at Large.*

##### **4.1 Film Challenges Are Highly Successful at Engaging Filmmakers and Audiences**

As noted by artist and programmer Penny McCann, 'film challenges are a key strategy used to spark and retain interest in celluloid' in artist-run centres and at festivals around the country. McCann notes that in 2014, eight centres hosted Super 8 or 16mm challenges or commissioning projects.<sup>78</sup> Interviews support this view. A majority of those interviewed cited film challenges as particularly successful in engaging filmmakers and audiences with analogue film. Typically artists are invited to make a Super 8 or 16mm film in the context of a workshop. Many of the challenges involve basic filmmaking, using Super 8 reversal film that is edited in-camera. Screenings to these challenges are wildly popular with audiences made up largely of friends and family. Film challenges are popular with artists working through IFCO, FAVA and the Hundred Dollar Film Festival, through which each of these organizations support the production of up to 20 films each year.

It is believed that what makes these initiatives so successful is that both the filmmaking and screening elements are a lot of fun.

##### **4.2 Easy Access Facilitates Engagement**

To successfully engage with would-be practitioners, a number of interviewees noted the importance of easy access. For example, LIFT notes that the success of its film store has to do with making film available when people want to access it. They attribute this philosophy to their success as the only remaining film store in Toronto.<sup>79</sup>

For its part Cineworks holds regularly scheduled open events. For example, they have free walk in sessions where anyone can come with a question and they will help to answer it. Orientation sessions to the Annex are also regularly scheduled on the first Thursday of

<sup>72</sup> <http://www.cac.lt/en/cinema/films/in-the-travelers-heart>;

<https://laborberlin.wordpress.com/category/laborberlin-events/>.

<sup>73</sup> [http://www.alchemyfilmfestival.org.uk/2014\\_archive/downloads/Alchemy\\_2014\\_Full\\_Programme\\_low\\_res.pdf](http://www.alchemyfilmfestival.org.uk/2014_archive/downloads/Alchemy_2014_Full_Programme_low_res.pdf).

<sup>74</sup> [http://www.filmlabs.org/travaux\\_recents/liste\\_complete\\_fr.php](http://www.filmlabs.org/travaux_recents/liste_complete_fr.php).

<sup>75</sup> <http://www.cineworks.ca/see/film/52>.

<sup>76</sup> Interview with Martha Cooley. Additional information at: <http://afcoop.ca/summer-of-35mm-screening/>

<sup>77</sup> <http://afcoop.ca/2016/02/call-for-submissions-expanded-cinema-summer/>

<sup>78</sup> Penny McCann, Op. Cit.

<sup>79</sup> Interview with Chris Kennedy.

every month. The growth in interest in the Annex is attributed to the success of this open access.

FAVA provides privileged access to analogue filmmaking expertise and equipment for artists in the Prairie region.

The Iris Film Collective is said to have a twin focus on film exhibition and community engagement. Its many activities, including workshops, artist talks, dinners, open screenings, residencies, retrospectives and showcases of their own work, are said to “promote new connections between individuals and the medium, and also between audiences and community members.”<sup>80</sup>

The Independent Filmmakers Co-operative of Ottawa created an app, *Filmmaker EH!*, which provides up-to-the minute listings of key resources for filmmakers.

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<sup>80</sup> Jesse Cumming, “Our Lexicon of Dark Corners to Light Up is Always Expanding: an Interview with The Iris Film Collective,” in *LUMA*, Issue no. 001, Summer 2015.

*“As the moving picture industry gradually abandons the film medium, the equipment, the knowledge, the practices migrate into artists’ hands.”*

- Nicolas Rey<sup>81</sup>

## D. Conclusion

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### 1. Summary Findings

This study finds that a sizeable proportion of Canadian film artists continue to work with analogue film, supported by Canadian artist-run film production cooperatives. It is estimated that almost one quarter (23%) of producing members of artist-run film production cooperatives are capturing images on film-based media. Of these, almost a third (29%) are finishing their works on film. This is indicative of growing interest in working with analogue film as it represents a two-fold increase over a previous study conducted just over a year ago.<sup>82</sup>

As noted by many of the people interviewed for this report, we are currently at a critical moment if filmmakers are to continue to have access to analogue film as a vital medium of artistic inquiry and experimentation. While it is clear that the level of analogue filmmaking will not return to industrial levels, there are a number of reasons to believe that it can continue as an artistic practice.

The artist-run lab movement’s role in fostering a renewed interest in celluloid film amongst young people is profound and may be contributing to a modest comeback for analogue movies, as evidenced in a number of high-profile analogue holiday releases.<sup>83</sup> Clearly, Canadian artist-run film production centres are key players in this movement in Canada, providing access to equipment, training and expertise as well as organizing screenings and facilitating critical exchanges.

There continues to be a supply of film stocks as companies such as ORWO, Wittner Cinetic and Foma Bohemia Ltd. are succeeding with new niche business models. In Italy, the relaunch of Film Ferrania with the support of the Italian government and supporters on Kickstarter<sup>84</sup> is eagerly anticipated. Film Ferrania intends to produce a variety of its original films.<sup>85</sup>

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<sup>81</sup> Nicolas Rey, “Artist film labs: an historical perspective,” April 2009 (updated in April 2012). Retrieved from <http://www.filmlabs.org/index.php/site/history/>, on February 11, 2016.

<sup>82</sup> Marilyn Burgess and Maria De Rosa, “The Endurance of Celluloid Film and Enhancing Access, Presentation and Exhibition of Canadian Works”, prepared for the Canada Council for the Arts, September 2014.

<sup>83</sup> Paul Dempsey, “The Comeback of the Celluloid Film,” E&T Engineering & Technology Magazine, December 10, 2015, retrieved February 4, 2016 from <http://eandt.theiet.org/magazine/2015/12/celluloid-comeback.cfm>.

<sup>84</sup> Film Ferrania website: <http://www.filmferrania.it>.

<sup>85</sup> <http://www.filmferrania.it/news/2016/the-cine-8-16-interview>

There are also encouraging signs of growth in the anticipated launch of the new Kodak Super 8 camera.<sup>86</sup> Kodak's announcement that it aims to launch a new Super 8mm camera, complete with hybrid analogue and digital processing service, made considerable waves at the 2016 Las Vegas Consumer Electronics Show. Intended for mass consumption, Kodak aims to be a partner to filmmakers and reintroduce the pleasure of the Super 8mm film to the general public. These developments augur well for continued access by artists to filmmaking materials.

As this study shows, there are many successful initiatives developed by artists and artist-run organizations that have contributed to this renaissance in analogue filmmaking. Many of these stand as best practices from which others may learn and draw inspiration for further action. Knowledge sharing, network-building, and partnerships are key to the successful development of production and exhibition opportunities for Canadian artists. The prominence of DIY culture and what has been called the "experience economy" contribute to the public's interest and engagement with analogue film through screenings and challenges.

## *2. Proposed Strategic Directions for a Supportive Ecology for Analogue Film*

To maintain momentum, artists need access to a supportive ecology that provides equipment and services, promotes skills development, and the means to connect with and engage their audiences through distribution and exhibition. There are opportunities to enhance the current environment and ensure the growth and development of this supportive ecology through strategic responses aimed at overcoming challenges facing the sector. These are described here as a means of offering a way forward for Canadian artist-run film production cooperatives and their stakeholders interested in analogue film.

### 1. Networking and collaboration between film production cooperatives is vital to increase capacity

Networking and collaboration between cooperatives is vital to build skills and technical capacity needed to support analogue film production and exhibition.

The study finds that knowledge sharing supports individual creative and technical skills building. The study identifies gaps in skills surrounding the operation of technical equipment. This includes the need to train more lab technicians and projectionists. However, access to expertise and learning to build production skills varies across the country.

Smaller centres may not have the same breadth of resources to offer members. The Visiting Artist Member Program, which allows members of one Canadian artist-run cooperative to access equipment in another centre, is an example of resource sharing that builds capacity in the sector. This program or other programs that support visiting artists provide an excellent vehicle to share expertise and build skills.

Similarly, collaboration between cooperatives can enhance opportunities to share information and resources needed to acquire, set up and operate laboratory equipment. Opportunities to acquire equipment are sporadic and cooperatives need to have sufficient capacity to store, transport and set up equipment. Sharing information and resources between cooperatives may build capacity in this area. A wiki or other online tool could be used to gather information on the analogue equipment currently held or sought after by Canadian artist-run film production cooperatives.

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<sup>86</sup> Margaret Rhodes, "Kodak and Yves Béhar Revive the Legendary Super 8 Camera," *Wired Magazine*, January 6, 2016.

Joint initiatives for bulk purchases could support filmmakers' access to some film stocks.

## 2. Affordable access to high quality digital transfers is a priority

The prevalence of hybrid filmmaking, in which filmmakers are capturing images on film and transferring them to digital formats for editing and also for final output, points to a need for high quality digital transfer capability. Typically, the types of transfers that can be achieved in artist-run film production centres are more artisanal in nature. Artist-friendly commercial labs discussed in this report do provide high quality transfer services, including Mel's Studios and Exclusive Film and Video Transfer House in Canada, and Reversal Cine in New Zealand. However, there are technical limitations on the formats available for transferring, in particular smaller gauge formats, as noted by artists interviewed for this report.

It may be timely to develop a sector-wide strategy to ensure access to high quality transfers in the formats in which artists typically work. Such a strategy could take many forms, including bulk buying arrangements with a commercial provider to keep costs low, ensuring adequate funding for high quality transfers where these are available, and investing in coop-owned transfer equipment.

## 3. Need for more flexible funding to support screenings and critical exchanges

Opportunities to attend screenings, participate in workshops and in critical discussion with artists promotes both public and professional engagement.

Many media artists continue in the tradition of touring with their works to present screenings and discuss their works in person with audiences. Cinematic events of this type both harken back to the early days of the Media Arts and are increasingly in demand from audiences seeking authentic experiences. That artists continue to tour with their works presents opportunities for the milieu to increase the number of screenings, workshops and critical exchanges. It is also important for artists to have the opportunity to share their work with artists that may be visiting their regions.

However, few resources exist to support such impromptu activities. Typically, project funding requires significant advance planning, usually many months to a year in advance. Having access to more flexible funding would allow artist-run centres, their members and their publics to benefit from the proximity of travelling artists to host additional screenings, workshops and critical exchanges.

## 4. Greater promotion of Canadian artists nationally and internationally is needed

Promoting the work of Canadian artists across Canada and internationally, and supporting artists to travel with their work is of utmost importance to build professional and sector-wide capacity. The promotion of Canadian artists increases their visibility and professional development, building skills through knowledge sharing, and ultimately strengthening professional and organizational networks.

Providing easy access through free screenings in Canada would encourage greater participation and engagement. Additional funding may be required for these types of initiatives, allowing funders and the cooperatives to achieve greater impact.

#### 5. Resources are needed for the preservation of analogue films

Public galleries and museums may be reluctant to screen analogue film prints that they own for fear of damaging them and losing the work forever. There is a great need to provide funding for analogue film preservation that will guarantee that new prints can be made when older works are retired from exhibition due to damage. The security afforded by film preservation programs would allow institutions that own analogue films to seize opportunities to engage the public in search of authentic screening experiences.

Canadian artist-run centres could collaborate with organizations in related sectors such as the Association of Moving Image Archivists to raise awareness about the importance of film-based preservation. The independent theatrical exhibition sector, to the extent that it is committed to screening film prints, is another potential ally.



## Annex 1: Resources for Filmmakers and Film Organizations

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### 1. Production

#### 1.1 Canadian Artist Run Film Production Centres

Atlantic Filmmakers Cooperative  
<http://afcoop.ca>

Calgary Society of Independent Filmmakers  
<http://www.csif.org>

Cineworks  
<http://www.cineworks.ca>

Faucet Media Arts  
<http://www.strutsgallery.ca/>  
Super 8, 16mm production and post production

Film and Video Arts Society Alberta  
<http://fava.ca>

Independent Filmmakers Co-operative of Ottawa  
<http://www.ifco.ca>

Klondike Independent Arts Centre  
<http://kiac.ca>

Liaison of Independent Filmmakers of Toronto (LIFT)  
<http://lift.ca>

London Ontario Media Arts Association (LOMAA)  
<http://www.lomaa.ca/>

Mainfilm  
<http://www.mainfilm.qc.ca>

New Brunswick Filmmakers Co-operative  
<http://www.nbfilmcoop.com>

Quickdraw Animation Society  
<http://quickdrawanimation.ca>

#### 1.2 Canadian Film Collectives

Bent Light – a Post Cinema Collective (Winnipeg)  
<http://andrewjohnmilne.com/project/bent-light-collective/>

Collectif double négatif (Montreal)  
<http://doublenegativecollective.blogspot.ca;>  
[https://www.facebook.com/DoubleNegativeCollective/info/?tab=page\\_info](https://www.facebook.com/DoubleNegativeCollective/info/?tab=page_info)

Iris Film Collective (Vancouver)  
<http://www.irisfilmcollective.com>

Loop Collective (Toronto)  
<http://www.loopcollective.com>

Windows Collective (Ottawa)  
<http://www.windowcollective.ca>

### 1.3 International Artist-Run Film Labs and Collectives

BEEFBristol  
<http://www.beefbristol.org>

Bioskop (Saint-Sever-du-Moustier)  
<http://www.bioskoplab.com>

Cimathèque Alternative Film Centre (Cairo)  
<https://www.facebook.com/cimathe>, <http://cimatheque.org/>

Filmlabs.org  
[www.filmlabs.org](http://www.filmlabs.org)

This website provides links to 38 labs around the world dedicated to analogue filmmaking.

Handmade Film Institute (UK)  
<http://www.handmadefilm.org/aboutUs.html>

LabA (Athens)  
<https://plus.google.com/103460190507282747169/posts>

Labo Color Club (Beirut)  
<http://colorclublab.blogspot.ca>

Lab Laba Laba (Jakarta, Indonesia)  
<http://lablabalaba.weebly.com/>

Millenium Film Workshop (Brooklyn)  
<http://millenniumfilm.org/>

no(w)here (London)  
<http://www.no-w-here.org.uk/>

Unzalab (Italy)  
<https://www.facebook.com/media/set/?set=a.1117020211660408.1073741836.108521655843607&type=3>

### 1.4 Commercial Labs

Cinelab (Massachussets)  
<http://www.cinelab.com>

Colorlab (Maryland)

<http://www.colorlab.com>

Exclusive Film and Digital Media

<http://www.exclusivefilm.net/>

Fotokem (California)

<http://fotokem.com>

International listing of all labs operating in the world today.

<http://collections.libraries.indiana.edu/IULMIA/exhibits/show/film-lab-list/fiafphotochemicallablist>

Includes archival and commercial labs.

Mel's Studios Photochemical Laboratory

<http://mels-studios.com/fr/post-production/laboratory/>

16mm and 35mm film processing; 35mm printing and optical sound.

Niagara Custom Lab

<http://niagaracustomlab.com>

Pro8mm (California)

<http://www.pro8mm.com>

Reversal Cine (New Zealand)

<http://reversalcine.com/>

High quality digital transfers from 8mm, S8 and 16mm film

S8 Reversal Lab (Netherlands)

[https://www.super8.nl/english/e\\_index.htm](https://www.super8.nl/english/e_index.htm)

Super 8 film processing and duplication.

## 1.5 Film Manufacturers and Stores

AGFA

<http://agfa.com/sp/global/en/internet/main/solutions/cine/index.jsp>

Buy 8 mm

<http://www.buy8mmfilm.com/>

Online store specializing in hard to find film stocks.

Foma Bohemia Ltd.

<http://www.foma.cz/en/homepage>

Kodak

<http://motion.kodak.com/>

LIFT store

<http://lift.ca/equipment/store>

ORWO North America.

<http://www.orwona.com/>

16mm and 35mm black and white film stocks

Wittner-Cinetec

[http://www.wittner-kinotechnik.de/katalog/04\\_filmm/s8\\_filmm.php](http://www.wittner-kinotechnik.de/katalog/04_filmm/s8_filmm.php)

## *2. Distribution*

### **2.1 Canadian Distributors**

Canadian Film Makers Distribution Centre (Toronto)

<http://www.cfmdc.org/>

Moving Images Distribution

<https://www.movingimages.ca>

### **2.2 International Distributors**

Canyon Cinema (San Francisco)

<http://canyoncinema.com/>

Collectif Jeune Cinema (Paris)

<http://www.cjcinema.org/?langue=en>

Dinamo.Distribution Network of Artists' Moving Image Organizations

<http://www.dinamo-distributors.org/>

International organization of media arts distributors

Light Cone (Paris)

<http://lightcone.org/en>

Lux Artists' Moving Image (London)

<http://www.lux.org.uk/>

The Filmmakers' Coop

<http://film-makerscoop.com/>

## *3. Exhibition*

### **3.1 Major Canadian Festivals**

Antimatter (Victoria)

<http://www.antimatter.ws/>

Festival International Du Cinéma Francophone en Acadie

<http://www.ficfa.com/volet-arts-mediatiques>

hosts the Acadie Underground Super 8

Halifax Independent Filmmakers Festival

<http://www.hiff.ca>

Hundred Dollar Film Festival

<http://100dollarfilmfestival.org/festival/>

Images Festival

<http://www.imagesfestival.com>

Silver Wave Film Festival

<http://swfilmfest.com>

Toronto International Film Festival

<http://www.imagesfestival.com/index.php>

### 3.2 Major International Festivals

<http://www.filmlabs.org/index.php/liens/festivals/>

International list of analogue film festivals that screen analogue formats

Alternative film/video festival/Belgrade

<http://www.alternativefilmvideo.org>

Ann Arbor Film Fest

<http://www.aafilmfest.org>

Edinburgh International Film Festival

<http://www.edfilmfest.org.uk>

Festival de Cinema de Santa Maria da Feira (Brazil)

<http://www.cineclubedafeira.net>

Leeds International Film Festival

<http://www.leedsfilm.com>

Paris Festival of Different and Experimental Cinemas

[http://www.cjcinema.org/pages/festival\\_presentation.php?langue=en](http://www.cjcinema.org/pages/festival_presentation.php?langue=en)

Rotterdam International Film Festival

<https://iffr.com/en>

Torino Film Festival

<http://www.torinofilmfest.org>

### 3.3 Canadian Analogue Film Festivals and Screening Collectives

Canadian 8-Fest Small Gauge Film Festival

<http://the8fest.com/>

Early Monthly Segments

<http://earlymonthlysegments.org>

Loop Collective (Toronto)

<http://www.loopcollective.com>

Pleasure Dome

<http://pdome.org/about/>

### 3.4 International Analogue Film Festivals and Screening Collectives

40 Frames (Portland)

<http://40frames.org/about/>

Alchemy Film and Moving Image Festival (Scotland)

<http://www.alchemyfilmfestival.org.uk>

Chicago 8 Small Gauge Film Festival

<http://chicago8fest.org>

London Analogue Film Festival

<https://www.facebook.com/londonanalogue/>

Mono No Aware (Brooklyn)

<http://mononoawarefilm.com/>

Expanded cinema festival and workshop organization.

### 3.5 Key Canadian Exhibitors

List of analogue film exhibitors in Canada

[http://www.sprocketschool.org/wiki/List\\_of\\_analog\\_film\\_exhibitors#Canada](http://www.sprocketschool.org/wiki/List_of_analog_film_exhibitors#Canada)

Bloor Hot Docs Cinema

<http://bloorcinema.com>

Cinecycle

<http://www.super8porter.ca/CineCycle.htm>

Cineforum

<http://reghartt.ca/cineforum/?cat=34>

Cinéma du parc

<http://www.cinemaduparc.com>

Cinémathèque québécoise

<http://www.cinematheque.qc.ca>

Pacific Cinémathèque

<http://www.thecinematheque.ca>

TIFF Bell Lightbox

<http://tiff.net/explore/tblb>

Winnipeg Cinémathèque

<https://www.winnipegfilmgroup.com/cinematheque/>

### 3.6 Key International Exhibitors

International listing of alternative showcases

<http://www.hi-beam.net/links.html#Showcases>

Sprocket School List of Analogue Film Exhibitors

[http://www.sprocketschool.org/wiki/List\\_of\\_analog\\_film\\_exhibitors](http://www.sprocketschool.org/wiki/List_of_analog_film_exhibitors)

International list of exhibitors.

Anthology Film Archives (New York)

<http://anthologyfilmarchives.org/>

Screens 16mm and 35mm film and effects film preservation.

Artist Film Workshop (Melbourne)

<http://www.artistfilmworkshop.org/screenings>

Bijou Theatre, CalArts (Valencia)

<https://www.calarts.edu/library/services/film/bijou>

16mm and 35mm projection.

Black Hole Cinematheque (Oakland)

[https://localwiki.org/oakland/Black\\_Hole\\_Cinematheque](https://localwiki.org/oakland/Black_Hole_Cinematheque)

Cherry Kino and Wondermental (Leeds)

<http://www.cherrykino.blogspot.com>

Cube Microplex (Bristol)

<http://www.cubecinema.com>

Echo Park Film Centre (Los Angeles)

<http://www.echoparkfilmcenter.org/>

Screenings and workshops.

Gene Siskel Film Center (Chicago)

<http://www.siskelfilmcenter.org/>

Gran Lux (Saint Etienne)

<http://www.ornamentalfilms.org>

Harvard Film Archive (Cambridge)

<http://hcl.harvard.edu/hfa/>

Husets Biograf (Copenhagen)

<http://www.husetmagstraede.dk>

Labor Berlin (Berlin)

<http://laborberlin.wordpress.com>

L'Etna (Paris)

<http://www.etna-cinema.net/>

Experimental cinema collective

Kino Em Sprengel (Hanover)  
<http://www.kino-im-sprengel.de>

Le 102 (Grenoble)  
<http://www.le102.net>

Light Industry (Brooklyn)  
<http://www.lightindustry.org/about/>

Microscope Gallery (Brooklyn)  
[http://www.microscopegallery.com/?page\\_id=2](http://www.microscopegallery.com/?page_id=2)

Monoquini (Bordeaux)  
<http://www.monoquini.net>

New Beverly Cinema (Los Angeles)  
<http://www.thenewbev.com/>  
16mm and 35mm

Nova (Brussels)  
<http://www.nova-cinema.org>

OBLO (Lausanne)  
<http://www.oblo.ch>

OFFoff (Gand)  
<http://www.offoff.be>

Polygone Étoilé (Marseille)  
<http://www.polygone-etoile.com>

Regenbogenkino (Berlin)  
<http://www.regenbogenkino.de>

San Francisco Cinematheque  
<http://www.sfcinematheque.org/about/>

Sector 16 (Hanover)  
<http://www.sector16.de>

Star and Shadow (Newcastle Upon Tyne)  
<http://www.starandshadow.org.uk>

Worm (Rotterdam)  
<http://www.wormweb.nl>

#### *4. Education and Training*

list of film schools and other training opportunities  
<http://www.16mmdirectory.org/education-programs>



#### 4.1 Educational opportunities in Canada

16mm Director

<http://www.16mmdirectory.org/education-programs?country=CA&page=2>

Listing of educational institutions

Concordia University (Communications Department)

<http://cinema.concordia.ca>

Emily Carr University

<http://www.connect.ecuad.ca/node/2924/print>

Queens University

<http://www.queensu.ca/artsci/film>

Ryerson University

<http://imagearts.ryerson.ca/film/>

Simon Fraser University

<http://cgi.sfu.ca/~scahome/?q=film>

University of New Brunswick

<http://www.unb.ca/fredericton/arts/undergrad/ba/cals/filmprod.html>

Vancouver Film School

<http://www.vfs.com/>

York University

<http://www.yorku.ca/finearts/film>

#### 4.2 Analogue Film Camps

Independent Imaging Retreat

<http://www.philiphoffman.ca/filmfarm/>

Pacific Northwest Film Camp

<http://www.handmadefilm.org/classes/orcas/>

Rocky Mountain Hand Made Film Camp

<http://www.handmadefilm.org/RockyMountainHandMadeFilmCamp/>

#### 4.3 Technical Resources

The Formulary Database for Motion Picture Film

<http://processreversal.org/formulary-database/>

To Boldly Go: A Starters Guide to Hand Made and D-I-Y Films

<http://www.film labs.org/docs/toboldlygo.pdf>

## 5. Film Preservation

AMIA Film Advocacy Task Force

[www.filmadvocacy.org](http://www.filmadvocacy.org)

Savefilm.org

<http://www.savefilm.org/>

## 6. Online Forums

FrameWorks

<http://www.hi-beam.net/fw.html>

## 7. Publications That Critically Engage with Analogue Filmmaking

[http://monoskop.org/Experimental\\_film#Journals\\_and\\_Magazines](http://monoskop.org/Experimental_film#Journals_and_Magazines)

listing of journals and magazines

Cineworlds

<http://www.cineworlds.ca/see#reading-room>

Experimental Cinema

<http://expcinema.org/>

LUMA

<http://www.csif.org/programming/programming-archive/luma-quarterly-launch/>

Millenium Film Journal

<http://www.mfj-online.org/>

Splice

<http://www.filmpool.ca/splice/>

Super 8 Porter

<http://www.super8porter.ca/index.htm>

*Strategies of the Medium*

<http://lift.ca/category/publications/strategies-medium>

A series of experimental film screenings and critical essays produced by LIFT.

## Annex 2: List of People Interviewed for the Study

### 1. Canadian Interviewees

First Name	Last Name	Organization	City
Alex	Balkam	Atlantic Filmmakers Co-operative	Halifax
Amanda Dawn	Christie	Artist	Sackville
Ray	Cook	Transit Audio - Skyligh Studios	Toronto
Martha	Cooley	Atlantic Filmmakers Co-operative	Halifax
Stan	Douglas	Artist	Vancouver
Chris	Gehman	Artist/writer	Toronto
Peter	Hemminger	Quickdraw Animation Society	Calgary
Sebastjan	Henrickson	Niagara Custom Lab	Toronto
Phil	Hoffman	Independent Imaging Retreat/ York University	Toronto
Patrice	James	Independent Filmmakers Co-operative Ottawa	Ottawa
Chris	Kennedy	Liaison of Independent Filmmakers Toronto	Toronto
Kate	MacKay	Early Monthly Segments /Images Festival	Toronto
Alex	Mackenzie	Iris Film Collective	Vancouver
Lindsay	McIntyre	Film and Video Arts Society Alberta	Edmonton
Tony	Merzetti	New Brunswick Filmmakers Co-operative	Fredericton
Scott	Miller Berry	Early Monthly Segments/ 8-Fest Small Gauge Film Festival	Toronto
Jem	Noble	Cineworks	Vancouver
Jeremy	Rigsby	Media City Film Festival	Windsor
Daichi	Saito	Collectif double négatif	Montreal
Don	Sokolowski	Klondike Independent Arts Centre	Dawson City
Genne	Speers	Canadian Film Makers Distribution Centre	Toronto
Barbara	Sternberg	Artist	Toronto
Ryan	Suter	Faucet Media Arts	Sackville
Kyle	Whitehead	Calgary Society of Independent Filmmakers/ \$100 Film Festival	Calgary

### 2. International Interviewees

First Name	Last Name	Organization	Country
Antonella	Bonfanti	Canyon Cinema	USA
George	Campbell	ORWO North America	USA
Benjamin	Cook	LUX	UK
Steve	Cossman	Mono No Aware	USA
Anja	Dorneiden	Labor Berlin	Germany
Louisa	Fairclough	Bristol Expanded and Experimental Cinema	UK

Juan	Gonzalez	Labor Berlin	Germany
Barbara	Hamilton	Arthouse Convergence	USA
Christopher	Harris	Artist	USA
James	Holcombe	No(w)here	UK
Kim	Knowles	Bristol Expanded and Experimental Cinema	UK
Emmanuel	Lefrant	Light Cone	France
Ian	Powell	Reversal Cinema	New Zealand
Nicolas	Rey	L'abominable	France
Kevin	Rice	Process Reversal	USA
Elena	Rossi Snook	Reserve Film and Video Collection, New York Public Library	USA
Richard	Tuohy	Nanolab	Australia

### Annex 3: Analysis of Analogue Film Production Support Provided by Artist-Run Centres

	Organization	Access to Analogue Film Equipment	Access to Analogue Film Work- shops	Access to Darkroom and/or Processing Equipment	Sales of Film Stocks	Analogue to Digital Transfers
1	Atlantic Filmmakers Co-operative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Calgary Society of Independent Filmmakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Cineworks Society of Independent Filmmakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Faucet Media Arts/Struts Gallery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Film and Video Arts Society Alberta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Independent Filmmakers Cooperative of Ottawa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Liaison of Independent Filmmakers Toronto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	New Brunswick Filmmakers Co-op	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	Collectif double négatif	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10	Iris Film Collective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
11	KIAC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
12	Quickdraw Animation Society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
13	Windows Collective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
14	Winnipeg Film Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
15	Mainfilm	<input type="checkbox"/>		<input type="checkbox"/>		
16	Cinevic	<input type="checkbox"/>	<input type="checkbox"/>			
17	Newfoundland Independent Filmmakers Co-operative	<input type="checkbox"/>	<input type="checkbox"/>			
18	Saskatchewan Film Pool	<input type="checkbox"/>	<input type="checkbox"/>			
19	Island Media Arts Cooperative	<input type="checkbox"/>				
20	Spirafilm	<input type="checkbox"/>				
21	Yukon Film Society	<input type="checkbox"/>				

**Annex 4: Estimated Number of Members of Canadian Film Production Cooperatives Working in Film**

	Total number of producing members	Number of members capturing on film	% of members who capture on film	Number of members finishing on film	% of filmmaker s capturing on film who finish on film
<b>Atlantic Filmmakers Co-operative</b>	163	30	18%	0	0%
<b>Calgary Society of Independent Filmmakers</b>	40	12	30%	6	50%
<b>Cineworks</b>	200	18	9%	8	44%
<b>Collectif double négatif</b>	8	8	100%	8	100%
<b>Faucet Media</b>	100	20	20%	6	30%
<b>Film and Video Arts Society Alberta</b>	300	40	13%	18	45%
<b>Independent Filmmakers Cooperative of Ottawa</b>	100	100	100%	20	20%
<b>Iris Film Collective</b>	8	8	100%	8	100%
<b>Liaison of Independent Filmmakers Toronto</b>	250	100	40%	25	25%
<b>New Brunswick Filmmakers Co-op</b>	200	5	3%	0	0%
<b>Quickdraw Animation Society</b>	150	10	7%	4	40%
<b>TOTAL</b>	1519	351	<b>23%</b>	103	<b>29%</b>

## Annex 5: Glossary of Terms

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Analogue film – a plastic film strip with a photosensitive emulsion that comes in various formats for use with still and film cameras. When exposed to light, plastic-based film creates an "analogue" of the actual scene. The term "analogue" became current following the introduction of digital filmmaking technology. (Also called photochemical film.)

Photochemical film - film on which a light sensitive emulsion has been applied. (Also referred to as "analogue" film.)

Celluloid film – refers to filmstrips in which a cellulose-based substrate is coated with a photosensitive emulsion. (Also called "photochemical" film.)

Film emulsion - a light sensitive mixture of light sensitive material applied onto a film substrate and used in the making of a film.

Film base - a transparent substrate onto which is applied a light sensitive emulsion. Historically the three most common film bases in use have been made of cellulose nitrate, cellulose acetate and polyester.

Expanded cinema - Expanded cinema combines approaches from experimental film, sculpture, architecture, performance art, installation and various other disciplines, widening the potential experiences of the moving image and exploring forms of presentation outside of the traditional theatre space.

Experimental cinema - Experimental film, experimental cinema or avant-garde cinema is a mode of filmmaking that rigorously re-evaluates cinematic conventions and explores non-narrative forms and alternatives to traditional narratives or methods of working.[1]

### Sources:

<http://www.thefreedictionary.com/>

<http://www.pcmag.com>

<http://afcoop.ca/>

<https://en.wikipedia.org/>

A. L. Rees, *A History of Experimental Film and Video*, British Film Institute, 1999.