## INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA 800-521-0600



# **NOTE TO USERS**

This reproduction is the best copy available.

**UMI** 

# Taking Pictures, Making Movies and Telling Time: Charting the Domestication of a Producing and Consuming Visual Culture in North America

by Stacey Johnson

Graduate Program in Communications McGill University, Montreal

October 1998

A thesis
submitted to the
Faculty of Graduate Studies and Research
of
McGill University
in partial fulfilment of the requirements
of the doctoral degree in Communications

© Stacey Johnson, 1998



National Library of Canada

Acquisitions and Bibliographic Services

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque nationale du Canada

Acquisitions et services bibliographiques

395, rue Wellington Ottawa ON K1A 0N4 Canada

Your file Votre référence

Our file Notre référence

The author has granted a nonexclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation

0-612-50195-7



#### Acknowledgments

The combined elation, relief, and fatigue felt upon completion of an elephantine project such as this one, can not help but conjure in a person the magnanimous urge to thank the entire world. I will, however, be a bit more precise.

To begin, I would like to thank David Crowley and George Szanto for their encouragement and dialogue with me about this project over the years. It was in their seminars dealing with history, theory and technology, and cultural analysis, respectively, where I nested many of the ideas articulated in the dissertation. I thank my advisor Will Straw for his patience, support, and critical insight. I am grateful to Ron Burnett for having engaged with me about this project right from its seedling stages, in particular for suggesting that "it" might not necessarily begin and end with home movies. I am grateful to Kim Sawchuk for her wisdom, practicality, and collegial spirit.

This dissertation could not have been completed without the generous financial support of several fellowship and research funding organizations. I thank the J.W. McConnell Foundation; the Social Sciences and Humanities Research Council of Canada (SSHRC); the Faculty of Graduate Studies

and Research, the Centre for Research on Canadian Cultural Industries and Institutions, and the Centre for Research and Teaching on Women at McGill University; and, the Canada-U.S. Fulbright Program.

Through the Fulbright Program I was a visiting researcher in the Visual and Cultural Studies Program at the University of Rochester in 1997/98. While in residence there I participated in a seminar on memoir, social history, and cultural theory lead by Janet Wolff. Discussions in that seminar helped me to work through certain ideas expressed herein. I thank Janet Wolff for reading and commenting on parts of the dissertation at its early stages.

At George Eastman House, I am grateful for the archival assistance of Becky Simmons, Kathy Conner, Ed Stratmann, Mark Anderson, Joe Struble, and Todd Gustavson. I thank the Eastman Kodak Company for giving me permission to do research in their corporate library and archive, and for allowing me to have copies of certain research materials. In particular, I am grateful for the assistance of Andrea Imburgia in the Business Information Center. I am likewise grateful to Frank Brownell Mehlenbacher for sharing stories about George Eastman and Frank Brownell with me, and for opening up his camera collection to me.

Writing a dissertation is lonely. Friends make it less

so. For fear of forgetting someone, I will thank all of my friends and family for their encouragement. Friends, colleagues, and family members who had a direct hand in its realization are Jill Didur, Carolyn Voight, Teena Marie Johns, Darcelle Hall, Anna Kasirer, Bertie Mandelblatt, and Matthew Hays. I thank Jocelyne Houle for translating the abstract. I am grateful to Haidee Wasson for several enriching discussions about the subject matter, and for her wit. I thank both Shelley Johnson and Lora Rempel for sharing their thoughts on writing, not writing, and the pursuit of happiness. And to Kerry Johnson, for his tales of ribaldry from the "heartland," I express my gratitude.

I thank my parents, Lloyd and Eva Johnson, who never once questioned my intentions, nor badgered me about why I did not, by my early thirties, have a stable and steady job. I thank them especially for nurturing in me an adventurous spirit.

Enfin, à Louis Fradette qui a observé chaque jour ma joie et ma peine, et, de temps en temps, ma rage. Merci pour son soutien et bien sûr ses quelques bonnes bouteilles de vins.

#### Abstract

The dissertation examines how image-making, a common pastime, was made common. It investigates the ways in which the production and consumption of images in the context of the North American family contributed to the development of a distinctly domestic and privatized visual culture, and the transformation of the home into a site for privatized spectatorship.

Four cultural forms (No. 1 Kodak, Box Brownie, Ciné Kodak and Ciné Kodak 8) are specified in this development, all pioneered by the Eastman Kodak Company. The dissertation traces Eastman Kodak's direct involvement in the popularization of image practices. It analyzes strategies used by them to make this possible, namely an appeal to the becoming lifestyles of the bourgeois and middle-classes.

The analysis links the popularization of image-making and consuming practices to other popular amusements (i.e. cycling, cinema-going) to work against an artifact-centred analysis. Issues of gender and generation are critically evaluated as concepts used to instill image-making as a popular, family practice. Shifts in modern temporal and spatial experience, as well as mobility are also explored in relation to popular image-making.

#### Résumé

Cette thèse examine comment on a façonné l'utilisation de la photographie et du cinéma-maison, des passe-temps répandus, afin qu'ils deviennent des passe-temps populaires. D'une part, on y étudie comment la production et la consommation d'images par la famille nord-américaine ont contribué au développement d'une culture visuelle qui se distingue par son caractère domestique et intime, et d'autre part, comment le foyer familial est devenu un lieu de projection privée.

La compagnie Eastman Kodak a été le précurseur des quatre formes culturelles qui ont permis ce développement (incluant les caméras Kodak Numéro 1, Box Brownie, Ciné Kodak et Ciné Kodak 8). Cette thèse montre comment l'implication directe de cette compagnie a popularisé l'usage de l'image. Nous analysons les stratégies auxquelles elle a eu recours et qui sont à l'origine de ce succès, comme entre autres l'exploitation du style de vie propre aux classes bourgeoise et moyenne.

Afin que cette analyse ne soit pas basée uniquement sur l'étude des technologies à l'origine de ces changements, nous établissons un rapport entre, d'une part, l'exercice de ces pratiques (photographie et cinéma-maison) et les

habitudes de consommation contemporaines, et d'autre part, des loisirs populaires comme la bicyclette ou la fréquentation des cinémas. En outre, nous analysons de manière critique l'exploitation de concepts, comme les différences entre les sexes et les générations, qui ont servi à inculquer aux gens que la photographie et le cinéma-maison sont des pratiques populaires et familiales. Nous explorons aussi, dans la perspective de ces pratiques populaires, les changements dans l'expérience temporelle et spatiale de l'homme moderne, aussi bien que ceux touchant sa mobilité.

# Table of Contents

Acknowledgments	ii
Abstract	1
Résumé	vi
I Introduction	1
1888 in 1998: Foreword	
Core Arguments and Contributions	1 3
Related Works: A Critical Dispensation	14
Chapter Summary	25
Experience and History	32
II Chapter One	
Theory and Methodology	35
Historical Time Frame	42
Methodology, Technology and Cultural Form	
i) defining key terms	49
ii) structures and feeling	54
iii) media history and biography	61
iv) domestic spaces	75
Situating the Archive and Research Practice	82
From History and Experience, to Method,	
and Back	92
III Chapter Two	
Regarding Eastman and "Photographing by the Yard"	93
The Kodak Way	101
Promotion and Distribution	114
The Brownie Revolution	125
Photographing by the Yard	134
Making Movies	144
Toward Cultural Production and Consumption	154
IV Chapter Three	
The Culture of Popular Image-making, 1888-1918	
New Technologies	
On the Move	
Time and the Hand Camera	
Camera Culture and Gender	
Going Home	208
V Chapter Four	
Domestic Space/Place and the Production and	^
Consumption of Moving Images	
Experimenting with Projection	
Links to Still Image Practices	
Image-making and Domestic Transformations	231

	The Manufacture of Space: Movie-going	
	and Movies at Home	241
	Furnishing Memory and the "Home Theatre"	249
	Putting Home Movies Within the Reach of All?	272
	Conclusion: Reconciling Image Practices	278
VI Po	stscript	281
Bibli	ography	285
Appen	dices	303

#### Introduction

1888 in 1998: Foreword

"You push the button, we do the rest." Although by now trite and hackneyed, this Eastman Kodak Company slogan embodied a very pregnant moment in both the emergence of popular image-making, and, more presciently, cultural history. "Pushing buttons" is how the Eastman Kodak Company promoted its first hand camera, a simplified system of photography. The No. 1 Kodak, a "good honest little camera," was more than a technology. It was an innovation and cultural form that "practically" revolutionized the practice of image-making, not to mention the representation of personal life in late modernity.

This dissertation critically and historically traces the emergent cultural practices which made this simple, yet potent slogan so meaningful. In it I will argue that the "naturalization" of image-making practices, and the consumption of images in the context of the North American family helped to set in motion the development of a distinctly domestic, and privatized visual culture. By the 1920s and the standardization of amateur film apparatuses, this domestic and privatized visual culture would situate itself between the consumption of personal history in

images, and the transformation of the home into a site for privatized spectatorship.

Central to this inquiry is evaluating how the popular dissemination of certain camera technologies at different historical moments, and the promotional measures engaged to associate them with particularized and personal notions of historical representation, were supported by and also supported shifting social and cultural relations. One of the overall goals of this dissertation, then, is to investigate the photographic materials and publications industries' reconciliation of popular photographic practices in personal contexts, and popular film-making practices in the same. While the dissertation observes and recognizes the epistemological distance which separates the moving and the still image1, it reserves the right to subvert this distance in the analysis, but only in so far as the strategies used to promote these practices in family contexts extended the same nostalgic fortitude to the moving image, as had been previously commandeered in the popularization of

I do not expressly discuss still and moving images as an epistemological matter in the dissertation; nonetheless, epistemological questions and issues do lurk in the background. For a concentrated discussion of these issues see Ron Burnett, Cultures of Vision: Images Media and the Imaginary (Bloomington: University of Indiana Press, 1995); Jonathan Crary, Techniques of the Observer: On Vision and Modernity in the Nineteenth Century (Cambridge, MA: MIT Press, 1990).

photographic practices.

### Core Arguments and Contributions

The dissertation focuses on four cultural and technological forms, and their introductory moments to make its arguments. It claims George Eastman's introduction of the first hand-held camera for use with roll film (No. 1 Kodak, 1888) as the defining moment in the popular dissemination of image-making practices. It represents the core moment around which the dissertation and its debates build. Although Eastman's No. 1 Kodak followed in the wake of William Henry Fox Talbot's and Jacques Louis Mandé Daguerre's introductions of their experiments to Royal Societies in England and France, respectively, in 1839, initiating the possibility for the widest popular use of photographic apparatuses would not be fully realized until 1888. The No. 1 Kodak breached the glass ceiling of what had for 50 years been a marginally accessible, and predominantly scientific, fine arts, and commercially-applied practice of image-making. With it came the phenomenon of "snapshooting," and with that, an egregious cultural criticism (attacks, really) launched by those who had very narrow, and high-brow designs on the future of photography.

Together with the introduction of the No. 1 Kodak, the dissertation observes three other cultural and technological

moments. These are: the introduction of the Eastman Kodak Box Brownie (1900); the introduction and standardization of 16mm film as an amateur and family format (1923); and the introduction of 8mm film, intended specifically for family use (1932). These particular cultural forms are identified for their relevance as image-making practices expressly for personal use and their intervention in the representation of personal history. The dissertation explores how these innovative moments linked the personal expression of temporal experience (history) to spatial experience (the home and beyond). The No. 1 Kodak and the Box Brownie, in particular, are drawn out as ground-breaking prototypes which evinced image-making as a diversely attainable practice, especially with respect to the erasure of generational and gender barriers to the appropriation of image-making practices.

The Ciné Kodak and Ciné Kodak 8 engendered the moving image in the same. They signaled the intensification of image consumption central to the home as a site for privatized spectatorship; however, different from earlier experiments with projection, these apparatuses fused the possibility for the personal production and consumption of moving images with the possibility for the home and private consumption of commercially-produced film titles. Three developments made this possible. The dissertation asserts

that the passage of moving image entertainment into the home was propelled by the popularization of photographic practices in the family; by previous and non-standardized home projection ventures forged in the teens by companies such as T.A. Edison Inc., Mutoscope, Victor, and Pathé; and, finally, by the silent cinema-going craze. A critical discussion of these overlapping processes is one of the dissertation's major contributions.

It is not explainable by technological evolution, a determinist argument, that certain image-making technologies of the late nineteenth century, approximately 50 years after the invention of photography, appeared accessible, either by capital expense or technical design. The physical and financial accessibility of Eastman Kodak's No. 1 Kodak and Box Brownie cameras responded to changing and diversifying leisure practices which were realized in the on-going mobilization of bourgeois consumption and privilege.

becoming increasingly more accessible to a growing North

American bourgeois and middle-class. Image-making fit well

with the kind of mobility that economic privilege suggested.

Both in terms of upward mobility, and travel/transportation

and leisure, the practices associated with image-making

signified it as a leisure pursuit in its own right (i.e.

taking a tour and taking pictures). More importantly, the

accessibility of image-making practices for personal pleasure, both in terms of technical ease and monetary investment, reinvigorated the image as a conduit to the representation and recollection of personal and family history.

The use of cameras in the mediation of personal history was not, as we may consider it today, a common practice, but rather was a practice made common. One of the contributions of the dissertation is to chart this movement. Making camera use common involved more than pricing and marketing (although these are significant). It involved defining social as well as technical accessibility, two aspects underwritten by practicality. Camera technology is one piece of the puzzle, social definitions of practicality and usefulness, the other.

Image-making harmonized with the consumption of travel and leisure, and likewise the reminiscence of family events. The new means of image-making signaled the popularization of photography as a cultural form with widespread applications, and they were also novelty items. Thus, in the same moment that image-making became a common and bourgeois pastime, it also became a common denominator in the provision of evidence of "good" living, just when the potential for achieving "good" living trickled beyond a conspicuously

"leisure class."<sup>2</sup> Realist discourses in photography had been circulating since Talbot's and Daguerre's announcements in 1839. In its appropriation to relay news of events in the Crimean and American Civil Wars, as well as in the production of scientific knowledge, photographic representation had been imbued with the discursive power to disburse "truth."<sup>3</sup> This elevation to the status of fact filtered through popular photographic discourse to produce the camera as the "impartial historian;" to produce family images as evidence of "real" life; and, to bolster the potency of discourses of the modern family which were in formation.

In a bid to divert the totalizing effects of discourse,

<sup>&</sup>lt;sup>2</sup> My use of the term refers to Thorstein Veblen, who, in writing about conspicuous consumption and leisure in the United States of the same period, sharply critiqued the "requirement of the abstention from productive work" of a "superior pecuniary class." See Thorstein Veblen, The Theory of the Leisure Class: An Economic Study of Institutions, introd. C. Wright Mills (New York: The New American Library, 1953). In particular see chapter three, "Conspicuous Leisure."

<sup>&</sup>lt;sup>3</sup> See, for example, Jennifer Green Lewis, Framing the Victorians: Photography and the Culture of Realism (Ithaca: Cornell University Press, 1996); Alan Trachtenberg, Reading American Photographs: Images as History, Matthew Brady to Walker Evans (New York: Hill and Wang, 1989); Beaumont Newhall, The History of Photography (New York: Museum of Modern Art, 1964); Lisa Cartwright, Screening the Body: Tracing Medicine's Visual Culture (Minneapolis: University of Minnesota Press, 1995); Lorraine Daston and Peter Galison, "The Image of Objectivity," Representations 40 (Fall 1992): 81-128.

however, the dissertation will make the claim that image production and consumption allied with other popular phenomena (i.e. social mobility, travel and tourism, cinemagoing), and so was established in social and personal life. To understand the formation of productive and consumptive image practices in family and personal contexts, then, requires thinking about experience, and not simply about the effects of discursive regimes in producing subjects. A treatment of discourse is crucial to the dissertation; however, so is a negotiation of these practices as lived relations. For example, the dissertation draws attention to George Eastman's status as a late-nineteenth century nouveau bourgeois, and situates the representation of this "experience" in relation to how Eastman's ideas regarding popular photography were mediated through cultural form(s) (i.e. the hand camera system). These cultural forms were mediated through promotional and distribution practices, and scrutinized and appropriated by a variety of constituents in their crossover into social life and practice. To understand the complexities of these movements, the dissertation leverages the possibility for a theoretically-informed treatment of experience and lived relations against the totalizing potential of discourse. It is in the maelstrom of this tension that the dissertation and its arguments are located.

To date, the popularization of image-making practices as a technological as well as cultural phenomena has been under-theorized and under-researched in the field of communications. We know that cameras are a common family technology. We also know that the celebration of life's high points, and the exploration of our identities, for example, are also linked to image-making and consuming practices. How we might begin to situate the home movie theatre and its accoutrements in the genealogy of television and video in domestic contexts, for instance, or how we may begin to think historically and theoretically about the congregation of multiple technological and domestic amusements around twentieth-century domestic relations remain to be investigated. Charting the domestication of a visual culture in the family, as well as connecting it to other social and cultural phenomena, is a means by which to enter into such a research project. These are also contributions of the dissertation.

Another blindspot has been to critically elaborate the role that the Eastman Kodak Company and its founder, George Eastman, played in the constitution of image-making as a popular practice and media form. Few are unaware of the factual matter of Eastman's status as the "one" responsible for mass-popularizing and re-inventing photography in North America (and the world). However, the circumstances and

strategies by which this was accomplished and sustained has been critically discussed in but a handful of cases.

Reese Jenkins's Images and Enterprise: Technology and the American Photographic Industry, 1839 to 1925 (1975), and Brian Winston's Technologies of Seeing: Photography, Cinematography and Television (1996) are two examples of critical and historical research. Jenkins provides a thorough profile of approximately the first 100 years of the "industry," its players, their holdings and takeovers, patent squabbles, distribution, and so on. His work has been central to characterizing the industrial terrain in question in the dissertation. Winston theoretically and critically examines the inventive process, and qualifies important distinctions between invention and diffusion. In particular, his reconciliation of the term "supervening social necessity," which I will redress in the next chapter, has been useful for adhering to an understanding of the cultural process of technological invention and diffusion.

The re-invention of photography and its connection to other cultural practices should be of particular interest to communications scholars for what these circumstances can bring to bear on our understanding of late-nineteenth, and turn-of-the century relations with respect to technology and culture, especially in personal contexts. A rigorous and

critical treatment of George Eastman and the Eastman Kodak
Company, and the popularization of image practices as
integral to communications and media history, then, is also
a contribution of the dissertation.

I propose that we seriously consider the hand camera and its progeny, and their appropriation in personal life alongside late-nineteenth century industrial and communication ventures, despite the detachment of personal image-making practices from a readily apparent national and/or international communications infrastructure. The communicative possibilities implicit in the personal production of images should not be separated out from late-nineteenth century innovations in communication simply because they converge on the site of private and family life. On the contrary, their appropriation in personal and familial contexts is precisely why communication scholars and historians should bring these media practices into the fold of communication and media theory, and history.

With any work of this magnitude, there are inevitably research questions and inquiries that do not make it into the discussion, either for reasons involving remote intellectual interests, methodological differences, or both. I will discuss these briefly. The dissertation does not interpret the events of this cultural production in terms of the transformation of real life into images (Baudrillard,

1983). Nor does it assess amateur/family practices for how they appear as simulacra in light of more professional pursuits. This distinction has been explored elsewhere (Zimmermann, 1995). Similarly, it does not attempt to represent a total history of amateur image practices in lieu of an examination of four cultural artifacts and their pursuant practices.

Instead, the dissertation draws attention to these four historical and technological moments as a means by which to interpret the relationship between technology and culture vis à vis the appropriation of photography and film in family contexts. It does not rike the claim that all North American families used these particular apparatuses, nor that these apparatuses were only ever used in familial contexts. Rather, these practices are identified as a set of remarkable instances whose overlap with extra social and cultural circumstances succeeded in guiding image-making toward the celebration of bourgeois personal and family history, as well as leisure.

In the remainder of this introductory chapter I will respond to current critical research in the field of amateur image-making and consumption. In so doing, I will situate the dissertation's aim as a critical treatment of communication and technology history in relation to this corpus of work. There are three areas of family image-making

research to which this literature review refers, and with respect to which the claims of the dissertation are situated. These include, first, a body of critical work, predominantly but not exclusively feminist, whose chief concerns are to mete out the kinds of identity issues associated with the representational practice of image-making; second, examples of visual communication research that focus on the use of images and cameras as a means by which to derive meaning from life experience; and, third, current research in film studies/film history which explores amateur practice in terms of filtering an understanding of it through discursive regimes.

Finally, this introduction will provide a summary of each of the four core chapters in the dissertation. In each of these synopses I will outline the aims of each chapter in relation to the dissertation as a whole. Briefly, the chapters are arranged in order of the theoretical and methodological structure of the dissertation; an examination of the early photographic materials industry with special attention given to the Eastman Kodak Company; the cultural and temporal conditions out of which popular image-making practices emerged; and, finally, a discussion of spatial considerations most notably with respect to the standardization of amateur film technology, and the transformation of the home as a site for privatized

spectatorship, a process which was underwritten by the popular concept of the "home theatre." The resemblance of the dissertation chapters to a linear representation of historical events is meant superficially and as an organization strategy only. It does not pertain to a theoretical interpretation of these events as a linear progression. The matters of historical time line and periods will be discussed more fluently in the next chapter.

#### Related Works: A Critical Dispensation

A considerable amount of academic literature related to family images has surfaced in the form of individually—authored works (Lury, 1998; Hirsch, 1997; Nicholson, 1997; Hale and Loffreda, 1996; Kuhn, 1995; Zimmermann, 1995; Bourdieu, 1990; Kostelanetz, 1989; Chalfen, 1982; 1986; 1987; Hirsch, 1981; Lesy, 1980) and anthologies (Spence and Solomon, 1995; Willis, 1994; Spence and Holland, 1991). Not surprisingly and given the subject matter of family images, many of these inquiries deal with the vexed issue of personal identity formation. Several of these works are underwritten by questions concerning the critical possibilities for using autobiography. In particular they evaluate its methodological value for the project of articulating the overlap of personal history with collective history, and the representation of both in terms of the

paradoxically barbed and precious practice of producing family images. They inquire into what kind of "evidence" can be garnered from family images. Annette Kuhn (1995), for example, rejects the authenticity of the family image, and instead situates the contests over its meanings beyond the frame (i.e. captions and notes at the time of exposure and/or long after, family and social relations). Nicholson (1997), and Hale and Loffreda (1996), by contrast, tend toward conjuring family moving images as quasi-authentic markers of time, "clocks for seeing" to borrow from the title of Hale and Loffreda's essay.

The autobiographical contributions to this growing body literature of Marianne Hirsch (1997) and Annette Kuhn (1995), and those featured in the anthologies of Jo Spence and Joan Solomon (1995), Jo Spence and Patricia Holland (1991) focus on the politics of identity formation, and how family images can be mined for what they impart in the representation of power relations. In these works, the authors' personal images are the image "texts" from which each's critique proceeds. They function as examples of autobiographical writing at the same time that they wrestle with what Hirsch, following Pierre Bourdieu, describes as "the integral connection between the ever-spreading practice

of photography and the ideology of the modern family."4

The late Jo Spence was particularly influential along with Rosy Martin in advocating personal photography in therapeutic contexts. Somewhat differently, although faithful to autobiographical and biographical form, the essays in Deborah Willis's edited anthology, Picturing Us: African American Identity in Photography (1994), consider the effects that photographic representation (family, journalism, institutional) have had on African American identity formation and consciousness-raising in terms of the authors' personal and collective experiences. These works also convene with therapeutic issues as it is through the image, and "picturing oneself" that healing the wounds of generationally endured and experienced racism is pursued.

Identity formation is foregrounded in these works, yet each acknowledges, however remotely, the stakes of industry in these practices, past and present. This abbreviated list of works also reveals a trend in feminist academic research toward writing memoir and autobiography<sup>5</sup>, and the collusion

<sup>&</sup>lt;sup>4</sup> Marianne Hirsch, Family Frames: photography, narrative and postmemory (Cambridge, MA: Harvard University Press, 1997) 48.

<sup>&</sup>lt;sup>5</sup> Some examples are Annette Kuhn, Family Secrets: Acts of Memory and Imagination (London: Verso, 1995); Alice Kaplan, French Lessons (Chicago: University of Chicago Press, 1993); Carolyn Steedman, Landscape for a Good Woman: A Story of Two Lives (Rutgers, NJ: Rutgers University Press,

of alternative readings of the family image archive with such deconstructive and representational endeavours. These examples also help to illustrate how family images and the conditions of their production and consumption have done more than pepper academic work, but have in fact become primary objects of inquiry in their own right.

The main focus of these research endeavours, however, has been to deconstruct representational practices and their connection to the formation of a politics of identity. The effects of representational practice are heeded in the dissertation, but as one of the endpoints of the research undertaken herein. Comparatively, the chief concern raised in the dissertation is the business of situating these family modes of representation in a cultural history context.

Elsewhere, links to family image-making practices through visual communication research have worked at devising strategies for interpreting what some believe is a pictorial grammar. Anthropologists Sol Worth and John Adair are lurking in the shadows here. Worth and Adair's (1975) study of Navajo reception of film-making practices is an important precursor to visual communication work. Their

<sup>1987);</sup> Sara Suleri, Meatless Days (Chicago: University of Chicago Press, 1989); Valerie Walkerdine, School Girl Fictions (London: Verso, 1990).

study set out to document what would happen if someone from a culture that makes and uses motion pictures taught people who had never used motion pictures to do so for the first time. Their research questions also fit with claims about the democratizing potential of media, advancing and supporting the corollary that media appropriation leads to effective communication.

With respect to family image practices, Richard Chalfen (1982; 1986; 1987), for example, has attempted to articulate what he believes is a universal (at least Western) and symbolic code implicit in home mode communication—a covering term he uses to describe family uses of Polaroid and snapshot photography, film and video. Chalfen transparently observes the theoretical proposition that certain views of life are structured and represented through media and media conventions. In other words, he perpetuates not only an overly simplistic acceptance of the problematic notion that media structure and are the mirrors of our lives, but he also directly transposes these ideas onto private and personal communication. What he is in fact negligent of negotiating are the intervening institutional and social circumstances and phenomena which taint personal practices. Thus, the divide between his ethnographic work and the present project is drawn both along methodological lines (ethnography in comparison to cultural history), as well as

theoretical ones (semiotic and text-based inquiry in comparison to contextual inquiry).

To produce a critical and historical account of the industrial and social means by which image-making and consumptive practices arrived at the site of the home and family, then, is first and foremost the analytical goal of the dissertation. Attention only to the results and impacts of representational practices, while central to issues raised in terms of visual culture inquiry, risks preempting, if not treating superficially, the combined technological and social conditions that contributed to shaping these practices as cultural practices. It is precisely the parity between the popularization of image-making and the ideology of the modern family that needs not only to be explored and critiqued, but indeed examined as a historically-embedded, and variously-tentacled cultural practice of lived relations.

Patricia Zimmermann's (1995; 1988a; 1988b; 1987; 1984) work on defining amateur film-making has articulated the industrial and social forces at work in shaping the appropriation of different film formats. Hers appears as the only work to date to consider these amateur and technological practices in the context of cultural history. Patricia Zimmermann also contests both a negligence toward historical context on the one hand, and a negligence with

regard to the influential role that industry has played in shaping family image production, on the other, as it has been exemplified in very basic visual communication analyses. Less technologies "developed as a means to critique social and political structures," she argues, "consumer technologies like movie cameras [were] drafted into an idealization of the family." To make this argument she undertakes a reading of amateur film practices in terms of the discourses responsible for politically and economically situating them.

Her work gets closest to the heart of the research terrain forged in the dissertation, especially as it dips into the historical register of popular promotional materials and industrial relations. In its very general representation of amateur film in film history, however, Reel Families: A Social History of Amateur Film does not sustain the complexities involved in the popularization of

of Amateur Film (Bloomington: University of Indiana Press, 1995) xii. Her rejection of the democratic and political possibilities of the media is also read through Hans Magnus Enzensberger's essay from the 1970s, "Constituents of a Theory of the Media," in which he argues that the electronic media are ideological tools of an elite, but, due to the technological capacities of the "new media," they may also be appropriated for subversive means. See his, The Consciousness Industry, trans. Michael Roloff (New York: Seabury, 1974) 95-128. Zimmermann argues that the production of alternative and amateur media use in discourse impedes this possibility.

image-making practices in North America dating from the 1880s, which, the dissertation insists, is the sine qua non of amateur film practices in family history contexts.

With a social history of amateur film as her object of inquiry, Zimmermann proceeds to establish how discourses of amateur film wedged a divide between amateur practice and its potential as a ladder to professional ascension. This is its most cogent contribution. In the preface to Reel Families: A Social History of Amateur Film she explains:

From 1897 to 1962 amateur-film discourse incrementally relocated amateur filmmaking within a romanticized vision of the bourgeois nuclear family, thereby amputating its more resistant economic and political potential for critique. This book analyzes how that public discourse positioned amateur film within specific economic, aesthetic, social and political processes.<sup>7</sup>

She distinguishes amateur film, "a covering term for the complex power relations defining amateur filmmaking," from home movies, "a descriptive term for actual films produced by families." She traces the separation of professional and amateur film practice to a discursively

<sup>&</sup>lt;sup>7</sup> Zimmermann 1995, x.

<sup>&</sup>lt;sup>8</sup> Zimmermann 1995, x.

championed dichotomy "between the public sphere of the economy and the private sphere of the home and personal life." The binary separation between the professional and amateur realms in film is not a function of the latter being an essentially authentic and unintentional mode of communication in contrast to the former. Rather, this binary endures precisely because professionally-derived discourses of amateur practice disciplined and regulated it through the establishment of technological standards, and the rationalization of professionalism.

The shortcomings of this work are neither in its objectives nor in its definition of research problems and terms, but in its preoccupation with discursive regimes in such a way that experience is thoroughly permeated by ideology. While its title claims to be a social history, locating the people as other than ideological constructs is a challenge. There are shades of Louis Althusser along this intellectual trail. In particular are his ideas about ideology, and how, vis à vis ideological state apparatuses (i.e. family, education), ideology interpellates individuals as specific kinds of subjects. 10 More overtly is the

<sup>&</sup>lt;sup>9</sup> Zimmermann 1995, 2.

<sup>&</sup>lt;sup>10</sup> See Louis Althusser, "Ideology and Ideological State Apparatuses: Notes Towards an Investigation," Video Culture: A Critical Investigation, John G. Hanhardt, ed. (Rochester, NY: Visual Studies Workshop Press, 1986): 56-95. For a

connection to Foucault and an epistemological approach that rejects the history of events as unified and linear, and explores historiography in terms of the relationship between historical events and discourses. 11 Although Zimmermann is clear about her commitment to a discussion about "reel families," and the ideological representation of family production in the discourse of amateur film, she makes the unfortunate leap to the actual analysis of film reels which conveniently satisfies her pre-disposed conclusions. As a result, she unwittingly reproduces the discourse of amateur film in actual family productions in spite of the fact that she concludes that there is not necessarily a fit between discourse and production. In the end, practices are reduced to discourse, and experience is the fulfilment of ideology. The material of history is, well, immaterial.

The industries and institutions (i.e. the bourgeois

discussion and critique of the influence of Althusser in cinema studies see Robert Sklar, "Oh! Althusser! Historiography and the Rise of Cinema Studies," Resisting Images: Essays on Cinema and History, Robert Sklar and Charles Musser, eds. (Philadelphia: Temple University Press, 1990): 12-35.

In This is discussed in several of Foucault's works. See in particular, Michel Foucault, The Archaeology of Knowledge and the Discourse on Language, trans. A.M. Sheridan (New York: Pantheon Books, 1972). Discursive formations are "a system of dispersion, whenever, between objects, types of statements, concepts or thematic choices, one can define a regularity (an order, correlations, positions, and functions and transformations)" (38).

family) that clustered around popular image-making most certainly played a role in shaping image-making practices in light of the family. Whether or not these practices were wholly formed in discourse is debatable. Furthermore, industry should not be considered as a unified field; rather, it is a diversified field which stretches across the film-making and entertainment industry, including the producers and suppliers of materials, equipment and commercially-produced film titles for home consumption, as well as the producers of trade magazines and popular film and photographic literature, all with highly specialized and, perhaps, even divergent motivations, especially when we consider motivation in terms of historical context.

From this review of related works we can begin to identify a tension that pulls at the subject matter of family images from several directions. This tension harbours a stand-off between discursive regimes and experience. A study of family image practices practically cries out for experience to nourish it. And then there are the contesting matters of discourse, the analysis of which commits to serving as an intellectual corrective to empiricism, and/or populist interpretations of history. The dissertation recognizes these tensions, but does not sacrifice one for the other. In this respect, it negotiates the relationship between experience and image-making practice, and their

structuring.

## Chapter Summary

In chapter one, "Theory and Methodology," I lay out the dissertation's theoretical and methodological strategies, and definitions of key terminology. The chapter builds around Raymond Williams's notion of "structure of feeling." It relies on Williams to make a claim for the importance of doing historical analyses in cultural research, and to unravel the tightly-wound, if not restrictive, casings of discursive analyses, as I have evidenced them in the contributions of Patricia Zimmermann. It follows Williams's proposition that signification is "the social creation of meanings" and "a practical material activity." "Feeling" is also informed by the work of feminist historians and critics of science Evelyn Fox Keller (1983; 1985), Donna Haraway (1988), and Sandra Harding (1991).

"Experience" comes to the dissertation by way of personal and business correspondence (Eastman's outgoing and incoming correspondence) and through the statements and actions of a variety of constituents who rallied around popular image-making practices as both its supporters, and its critics. These examples of experience include a

<sup>12</sup> Raymond Williams, *Marxism and Literature* (Oxford: Oxford University Press, 1977) 38.

burgeoning popular writing and poetry which was inspired by "kodaking" in its various technological forms; letters to column editors in popular photographic journals of the late nineteenth century; and popular material that connects image-making to other popular amusements (i.e. cycling at the turn of the century, and movie-going in the 1920s). All of these help to situate popular responses to image-making practices, not as authentic responses, but as a means by which to "close the circle" comprised of the producers of equipment and literature, as well as those who appropriated popular image-making practices.<sup>13</sup>

Methodologically, the dissertation locates the popularization and dissemination of image-making among other technological and infrastructural innovations of the late nineteenth century. These are telegraphy, telephony, and wireless communication, as well as national rail route expansion projects. One of the theoretical and conceptual challenges in the dissertation has also involved thinking carefully about the meaning of "place" and "space,"

<sup>13</sup> This notion of "closing the circle" comes from Lesley Johnson's work on early Australian radio in the home. She explains, "[Letters to the editor] supplemented the publicity language working to produce a powerful sense of-an 'as if'-listeners, broadcasters and families of radio serials who [sic] all shared the same orientation-of the 'human,' the everyday-ordinary and the centrality of family." Lesley Johnson, The Unseen Voice: A Cultural Study of Early Australian Radio (London: Routledge, 1988) 100.

specifically with respect to the domestic space and technology. The work of geographer Doreen Massey (1994), Space, Place and Gender, has been influential in this regard, especially with respect to the problem of negotiating the fluidity of domestic spatial boundaries.

Finally, the chapter reconciles the complex practice of working in research archives, and how thinking critically about archival experience worked its way into the research design.

Chapter two, "Regarding Eastman and 'Photographing by the Yard'," examines George Eastman's and the Eastman Kodak Company's (used interchangeably in the dissertation) ascension to corporate dominance vis à vis their popularization and re-invention of photographic practice. In it I locate Eastman and the Eastman Kodak Company among a host of industry players who all jockeyed for position in the late-nineteenth century photographic materials trade. Why the Eastman Kodak Company stands out has in part to do with its introduction of the No. 1 Kodak, and in part with the way in which it used vertical and horizontal integration to leverage its industrial stronghold.

It pinpoints the four technological moments (No. 1 Kodak, Box Brownie, 16mm film and 8mm film) around which the dissertation gels, and discusses how the Eastman Kodak Company exploited forms of commercial distribution new to

the late nineteenth century (national rail expansion, national advertising, department stores) in order to project these popular image-making practices onto the social and cultural fabric. Herein I explore how both hardware (cameras) and software (film) innovations were joined together to carry out the popular dissemination of image-making practices.

A vital term in this chapter is the notion of generation, and how Eastman Kodak extended the possibilities for, and the accessibility of image-making to different age groups in the family lineage in order to generate lifetime consumers. Particularly noteworthy are the strategies used to proffer the Box Brownie-the camera for a buck-into the lives of both young and old.

Chapter three, "The Culture of Popular Image-Making, 1888-1918," unpacks a variety of social and cultural phenomena associated with popular photographic practices. It links the popularization of image practices to new expressions of leisure fulfilment, such as cycling and travel and tourism, which were coming into the reach of bourgeois and middle-classes at the end of the nineteenth century, and the beginning of the twentieth. The purpose of forging these links is to demonstrate the dissertation's aims to avoid an artifact-centred analysis of technology.

The chapter draws from Stephen Kern's (1983), The

Culture of Time and Space, 1880-1918, in order to conceptualize a time frame in which modern interpretations of time and space were in formation, and under consideration. Likewise, it incorporates ideas expressed in Peter Gay's (1984) multi-volume archaeology of the "bourgeois experience," aptly titled The Bourgeois Experience, Victoria to Freud, in order to augment an understanding of how popular image-making was aligned with bourgeois pleasure, leisure, and representations of personal history. With Kern as a quide, this chapter juxtaposes homogeneous expressions of temporality with expressions of personal temporality as evidenced in the popular dissemination of photographic practice. Personal temporal experience is read in terms of photographic practice, and in terms of how popular literature portrayed the craft of making photo albums and photo calendars as a means by which to organize representations of temporal experience. The idea of the photo album and calendar tie into the production of a conservation discourse into which was folded the image and image practices.

Arts and crafts projects and family images
automatically direct our attention to gender issues, also
explored in this chapter. Women's appropriation of popular
photographic practice was "naturalized" as a familial

historical imperative, in part owing to women's domestic responsibilities and in part to the kind of intrusive and "unladylike" social circulation the use of cameras suggested. In contrast, this chapter reveals how such "naturalization" was also met with a certain modicum of resistance as evidenced in the popular photographic journal columns and writings of Catherine Weed Barnes and Adelaide Skeel, both writing and photographing in the late nineteenth and early twentieth centuries. Their columns and writings illustrate diversity in women's relationships to cameras, and they prompt us to consider the limited spaces and places in which women may have come into contact with image practices and learning about them, the home being a possible—although qualified—site for experimentation and knowledge production.

In chapter four, "Domestic Space/Place and the Production and Consumption of Moving Images," the dissertation investigates the progression of standardized moving image producing and consuming practices into the domestic scene, and, theoretically, the conceptualization of "space" and "place." It charts the domestic progression of moving image practices first through experiments in projection which preceded the market introduction of 16mm film practices in 1923. Second, it glances back on the popularization of still image practices to make the claim

that precedents set by Eastman Kodak's earlier innovative schemes helped to guide moving image practices into the home and family. Third, it analyzes how producers of moving image apparatuses and distributors of films for home consumption, especially Eastman Kodak and its Kodascope Libraries, used the silent cinema-going craze in order to solidify home production and consumption as a multi-faceted practice.

This chapter also deals with the emergence of the concept of the "home theatre" which first appeared in popular film-making literature in the 1920s. Herein I survey how the producers of film-making apparatuses and decorative film consoles, as well as the producers of literature convened to produce the ideas of privatized spectatorship, the "home theatre," and "putting on the home show." Different from the photo album, the idea of the home screen doubled as a gateway to both the projection of commercial titles and personally-produced ones. Personal and family films signified the representation of personal temporal experience in moving images, and they could be juxtaposed with the representation of "other" experiences as offered in film library catalogues. This juxtaposition lent itself to the possibility for locating the personal in terms of the collective in moving images.

Of equal importance is the persistence of discourses of image conservation. The furniture of moving image

consumption suggested decorative strategies for integrating film into the home, and through these strategies was parlayed an imperative for the conservation of any and all images. The persistence of film vision in the family as both a personal history and exploratory practice, and domestic amusement was, however, a short-lived possibility. Just when the more affordable 8mm allowed for the social diversification of home film practices, it also retreated to become a predominantly family history format, and television took up its place in the "home theatre."

## Experience and History

I would like to add a few concluding and beginning words that are best situated outside the construction of arguments, their chapters, and a literature review. These have to do with the highly controversial quotient of "experience." As this is a historical piece of work, and a work on decidedly old, and, in some cases, defunct technological forms, there are always the issues of slippage when interpreting documents with respect to the social and cultural conditions in which they took shape. Where, for example, does discourse rear its ugly head, and when is experience valid? This has been one of the greatest challenges of the dissertation.

With the possible and qualified exception of George

Eastman's correspondence, mediation of historical documents is forever a concern. This is especially the case when some of the few popular writings on this subject matter (that is, writings of the people who were neither the producers and promoters of equipment, nor the producers of publications) survive only in popular magazines and advice columns, and are appropriated in the dissertation as a feat of mediating their textual locations, as well as their historical ones.

In her mammoth reconstruction of Walter Benjamin's Passagen Werk, Susan Buck-Morss writes against the grain of chronological development and, as did Benjamin, in absence of the Paris arcades. She states:

It [Benjamin's work] is grounded, rather, on philosophical intuitions sparked by cognitive experiences reaching as far back as childhood. These 'develop' only in the sense that a photographic plate develops: time deepens definition and contrast, but the imprint of the image has been there from the start. In spite of the metamorphoses that his writing undergoes in style and form of expression, he held onto his philosophical intuitions tenaciously because, quite simply, he believed them to be true. 14

<sup>&</sup>lt;sup>14</sup> Susan Buck-Morss, The Dialectics of Seeing: Walter Benjamin and the Arcades Project (Cambridge, MA: MIT Press, 1991) 7.

That the dissertation has involved thinking diachronically about image-making practices and the image's institution in the representation of personal history, and, however remotely, personally about family images, this quotation is copiously meaningful. It is in the spirit of Benjamin's tenacity, then, that the dissertation appreciates "experience" in light of its "structure" as it goes about its own task of rethinking, and synthesizing the excitement and practices around a laconic and antiquated slogan: "you push the button, we do the rest."

## Chapter One

# Theory and Methodology

This chapter will develop the dissertation methodology, whose overall strategy is informed by historical inquiry. It stitches together interdisciplinary methodological components to render how, historically speaking, the mass-production and mass-popularization of still and moving image practices at both the end of the nineteenth century, and the beginning of the twentieth aligned photography and film with the pursuit of leisure, and, with respect to film especially, the domestic integration of technologies for visual pleasure.

The methodological tactics that inform the interpretation of historical events discussed in the dissertation are motivated by partial perspective, and not by a desire to write the complete "history of" a particular phenomenon. To set the terms for writing a partial cultural history in which certain image-making and consuming practices are highlighted, then, is the aim of the present chapter.

This chapter is organized in three parts. The first part singles out and defines several key terms as they are used throughout the dissertation. These are amateur, popular

and popularization, and bourgeois. The second and longest part of the chapter develops the dissertation's theoretical and methodological strategies. These strategies are acutely sensitive to context. With this said, the dissertation mines primary and secondary sources—including industry documents, personal and business correspondence, and popular periodical literature—in order to culturally and historically contextualize the overlap of the image—making materials industry, its promotional campaigns and communicative organs, with wider social and leisure phenomena, all of which converged upon the familial and personal appropriation of still and moving image apparatuses (technology).

There are two issues that are central to the methodology. These are, first, to evaluate the relationship of technology to history and culture, and, second, to situate the relationship of George Eastman and the Eastman Kodak Company to the cultural history charted in the dissertation. Methodologically, the dissertation does not position technology in a direct and determining relationship with cultural and social change. Rather, it will argue in favour of a perspective which plots technology as coinciding with social and cultural change. These coincidental relations, however, are not to be misconstrued as accidental and without intention. This is where attention to George

Eastman and the Eastman Kodak Company is imperative. On the contrary, these relations draw our attention to a shift in sensibility at the end of the nineteenth century which can be measured by increasingly penetrative bourgeois and middle-class claims to the material world. One of the most notorious members of this emergent demographic was George Eastman. Emergent middle-class claims to the material world and the middle-class "experience" would eventually fold back onto the structuring of a conceptually-defined middle-class (identified herein in terms of demographic shifts) as an ideal constituency for the consumption of products and services, in particular, personal photographic and film products and services.

The period between the late nineteenth century and the beginning of the twentieth ushered in technological changes that would have lasting impacts on the social and cultural mapping in process in North America, in large part due to the cultivation of new technological infrastructures and communication networks. Coeval transformations in communication (telegraphy and wireless) and transportation (railway) furthered the compression of time and space, and the comparative mobility of populations. These advancements hastened notions of collective and homogeneous temporal experience (at least in the West and their colonial

possessions), and were counterbalanced by new technological means by which to personalize cultural expressions of temporality, the camera being an important example.

As this is a dissertation which is invested in the project of renarrating history, this chapter complies with Michael Pickering's (1997) counsel regarding the cavalier treatment of history and historical issues in contemporary cultural studies research. The dissertation, as does Pickering, considers Raymond Williams's (1977) methodological strategy of "structure of feeling" as a means by which to restate the importance of historical issues and debate. A sense of "feeling" for the location and lived relations in history, and "feeling" as a feminist strategy contributed directly to the dissertation design. "Feeling" is understood both in terms of Raymond Williams's contributions and as a feminist concept which is evidenced in the methodological practices of Evelyn Fox Keller (1983; 1985), Donna Haraway (1988), and Sandra Harding (1991).

To set its terms of reference, this chapter foregrounds a handful of works in the field of technology and media history and theory (Williams, 1974; Douglas, 1987; Eisenstein, 1983; Marvin, 1988; 1989; Carey, 1988; Spigel, 1992; Zimmermann, 1995). These research examples are noteworthy in that they combine history, technology and

culture together, and at a distance from technologically determinist conclusions and hypotheses. James Carey, Elizabeth Eisenstein, and Raymond Williams, especially, critique the limitations implicit in projects which attempt to bracket media and their effects from cultural and institutional contexts. The cultural histories of Carolyn Marvin (electric communication), Lynn Spigel (television), Susan Douglas (wireless and radio), and Patricia Zimmermann (amateur film), together with Carey (telegraph), Eisenstein (printing press), and Williams (television) use cultural analysis to capture the incidence of media in society. Each historian, with the exception of Elizabeth Eisenstein, focuses on late-nineteenth and twentieth-century media and technological artifacts, and, more importantly for the present discussion, the cultural and modern conditions out of which each developed. In some cases the overlap in artifactual content is acutely pronounced (the discussions of Douglas and Marvin, for example), and in others more remote (those of Spigel and Zimmermann, for example). Artifactual consistency aside, these works serve as examples to assist us in sorting through methodological issues concerning the relationship of media and technology to consumption; to gender and class issues; to temporal and spatial experience; to literacy, technical fluency, and the

invention of expertise; and, finally, to the interplay of industry with all of these.

Finally, and third, I discuss the process of doing archival research and how the practice of searching and researching influenced the methodology design. Here I distinguish between the theory-building and methodology portion of this chapter and the experiential aspects of doing archival research, including thinking about research materials. "Adequate cultural analysis," as Michael Pickering reminds us, "depends upon a dialectic of conceptual apparatus and object of enquiry, which demands that we think critically about both our methods and our materials."

Thus, I propose a rethinking of the research archive to push the limits of its perceived status as a clearing house for a research trade that deals in documents, facts, artifacts, and related paraphernalia—the materials of particular and championed interests in the preservation of culture. Archives are intersections for academic exchange, and they are "places" whose locations (spatial as well as temporal) have bearing on the research process. Such a proposal links the archive socially and historically to

<sup>&</sup>lt;sup>1</sup> Michael Pickering, History Experience and Cultural Studies (New York: St. Martin's Press, 1997) 8.

academic inquiry, and considers the archive's broader impact on the realization of research practices. The archive, then, is neither spatially nor temporally innocent.

In the context of research gathered for the present project, I considered the dual function of the archive. On one level it figured into the research plan as the destination for finding materials with which to answer intended research questions. On a different level, and as if by transmogrification, archival holdings and their functionaries played a key and mediating role in the ongoing dialogue between the researcher/writer (myself) and the research plan. In this way the archive took on a meaning different from any superficial assessment of it as an unmediated holding centre for documents, and became an essential methodological guidepost.

As structural markers for sets of relations both respecting and pushing their boundaries, archival sites penetrated the articulation of unintended research problems and consequences, their significance neither temporally nor spatially static. In addition to, and in the evolving process of fact and information finding, archival sites (specifically George Eastman House) also served as a ground zero and point of contact for forging relations among other researchers, librarians, archivists, members of research

communities at large and in the Rochester area, and community members not necessarily part of any formal research community. All were important links in the dissertation's research chain.

George Eastman House, International Museum of
Photography and Film, the Eastman Kodak Company, and
geographically and historically, the City of Rochester,
specifically, represented the clustering of cells and links
in what became my own research hive. Each brought meaning to
the dissertation in their current and practical contexts,
and in their historical contexts, either by way of local
folklore, or, simply and metaphorically put, by imagining
Eastman's traversing of the route between home (the present
site of George Eastman House) and Kodak Office as I
traversed mine.

#### Historical Time Frame

To begin, I would like to bracket the historical time frame of the dissertation which will tie into a discussion of the methodology. The time frame breaks from a linear dispensation of periods, and relies on periodization only in so far as it relates to the market dissemination of specific technological forms. To reiterate, these forms are the No. 1 Kodak (1888), the Box Brownie (1900), the Ciné Kodak (1923),

and the Ciné Kodak 8 (1932). Temporally, the dissertation culls these "moments" from the historical record and threads its critical narrative through them. These are remarkable points along a journey whose purpose is to chart the development of a producing and consuming visual culture central to the home and family.

I could say that the time period for the dissertation is from 1888 to 1965 (marking a decline in the diligent promotion of family film-making), but this would be misleading, not to mention betray notions of cultural difference in history. Cultural difference aside, the Box Brownie, for example, although the name of a specific series of cameras, also became a concept to describe simplified and, especially, child-friendly technology. It was introduced in 1900 as a still image camera and reproduced as such long after; in 1951 its name and concept were also attached to an 8mm movie camera. My purpose here is twofold. First it is to retain a sensitivity to cultural difference, and to consider the brash "continuity" with which the promotional arm of the image-making materials industry has consistently folded the family into it; and, second, to dissect the ways in which industry relied upon specific technological forms and technological innovation (and, in the case of the Brownie, reproduction) for its own purposes

in order to encourage production and consumption among still larger groups of consumers.

I will, for heuristic purposes only, retain a temporal breakdown which loosely follows the arrangement of subject matter outlined in the chapter summary in the previous chapter, and qualify that there is both difference and repetition/continuity in the historical events represented and interpreted in the dissertation. In other words, these periods are not interpreted as being distinct and hermetically-sealed packets of historical time which bear connection to each other only in so far as they rub elbows on a linear time line, or are misconstrued as sharing simplified cause/effect relations. On the contrary, the dissertation aims to explore how, for example, the historical event of the popularization of still image practices in 1888 could be refracted (and not reflected) in the standardization and popularization of amateur moving image practices in 1923.

The temporal division 1888 to 1923 brackets the period between the popularization of an accessible system of photography in North America (in comparison to preceding practices), and the introduction of a standardized system of amateur film-making. It was also during this period that George Eastman introduced the No. 1 Kodak, which was then

followed by the Eastman Kodak Box Brownie, and, later, standardized amateur film-making gear. This temporal division also borrows loosely from Stephen Kern's (1983) temporal demarcation as discussed in his, The Culture of Time and Space: 1880-1918, and attempts to incorporate shifts in modern experiences of collective and personal time in conjunction with the making-accessible of photographic practices for the documentation of personal history/time. It corresponds generally to arguments laid out in Chapters Two and Three.

The division 1923 to 1945 marks the period between the introduction of 16mm film-making equipment and its more socially accessible derivative, 8mm, whose rise in popularity as a family apparatus is set up in comparison to 16mm's growing alignment with semi-professional practice.<sup>2</sup> The 1920s and 1930s marked a turn toward the domestic integration of film production and consumption as both a "living" and moving image memory practice, and as domestic entertainment. The latter, I argue, especially connected home image consumption to public cinema-going practices of the silent era. This period and the following, 1945-1965, link up with the discussion in Chapter Four.

<sup>&</sup>lt;sup>2</sup> See Zimmermann 1995. For a discussion of her temporal distinctions see in particular chapter two, "Entrepreneurs, Artists, Hobbyists, and Workers: 1897-1923."

1945 to 1965 coincides with the post-World War II period, social phenomena such as the baby boom, and responses to this "boom" in the form of the intensification of discourses of family. These are especially noted in the sustained promotion of still and moving image apparatuses and, particular to movie-making, production advice. Eastman Kodak began to track amateur consumption in its annual reports for the first time in the early 1950s. The substantial figures documented in these reports are evidence of a swell in the consumption of image-making materials, a swell that can in part be attributed to an internal history of generations of camera appropriation in families building upon itself, and also to an increasingly market-savvy industry. The year 1965 marks the debut of Super 8 moviemaking; however, by this time the promotion of movie-making practices was noticeably in decline in comparison to the 40 years previous.

The dissertation does not include a discussion of video practices, and supports this decision with the claim that precedents for the appropriation of these technologies for family and personal history purposes were set first by the historical event of Eastman Kodak's intention to popularize photography for the "masses," and furthered with respect to amateur film practices, aesthetics excepted.

The post-World War II period is given minor and cursory attention in the dissertation, even though the postwar baby boom and the intensification of conservative and family values-oriented discourses would, on the contrary, seem to direct our attention to this mid-twentieth century cleavage. This decision is not arbitrary. I argue that the core social and cultural strategies for shaping the significance of image-making and its relationship to family contexts surfaced between 1888 and the early 1930s, approximately over a period of 50 years, with the defining moments of these family practices gelling around the technological innovations of the No. 1 Kodak and Box Brownie. By the 1950s, the terms for situating image-making as a family practice were well entrenched. As one of the premiere aims of the dissertation is to articulate the making-common of family image-making practices, the post-World War II period and the 1950s, while saturated with social and cultural curiosity, are of secondary importance in comparison to the 50 year period between 1888 and the 1930s.

With this said, the dissertation considers the prospect of historical continuity, specifically in the promotion and delivery of an idea of popular image-making and consumption in a general, North American family context. It is pivotal that we distinguish between what is the promotion of image-

making practices and apparatuses (including the various discourses through which they were/are diffused), and the multiple social and cultural uses to which they were put in terms of actual production, and in terms of historical context. Although promotional materials in which the family was concerned consistently portrayed very specific uses of both still and moving image apparatuses, there is little we know of appropriation, and less still about aesthetics from what has already been interpreted theoretically through the prism of ideology, the example of Patricia Zimmermann's Reel Families being a case in point. In other words, we cannot assume one camera, one purpose. While the production and consumption of images for family history purposes is the theoretical focus of the dissertation, it concentrates on the family by maintaining a peripheral awareness of the multiple social and cultural appropriations of productive and consumptive image apparatuses, and the diverse groupings of constituents who rallied around them.

It is also necessary to distinguish between appropriation as acquisition of technical apparatuses and consumption of images, and appropriation as the exercising of aesthetic decision-making which, due to time and material constraints, the dissertation does not cover. We can, to a certain degree of certainty, build upon the imagined and

intended uses of cameras in the family, and with relative assuredness about the parity between the promotion of these devices for family history representation and their uses in families, generally, for such purposes. We must, however, also proceed with caution with respect to falling into misguided and negligent assumptions based on one camera, one purpose. It is indeed possible to consider continuity as long as we are culturally specific and prudent. Richard Chalfen (1987) has produced evidence to suggest such continuity in image content over time and in a North American cultural context, but determining continuity in production and consumption remain, however tenuous, speculative. Without proper ethnographies to cross a variety of production situations, we may only provide a sketch of these. The dissertation, in this regard, commits to producing the historical groundwork deemed indispensable for such future endeavours.

Methodology, Technology and Cultural Form

# i) defining key terms

To begin, I would like to reconcile a few key terms as they are used in the dissertation. It uses "amateur" to describe practices that are not for profit, and, more specifically, that directly refer to family and personal

history-oriented practices. To reiterate, it is not safe to assume that because certain practices were promoted with the family in mind (i.e. 16mm and more intensely 8mm), they were only ever used as such. The dissertation uses the term "amateur" to refer to overall amateur production (a distinction particularly relevant with respect to a discussion of film practices). It specifies family practices when referring to the appropriation of image-making for the purposes of documenting personal and family history. The designation of "family" does not preclude other potential media uses emanating from the family; it is meant to elaborate context. Thus, the dissertation does not specifically evaluate practices associated with either film or photography clubs in the scope of this project except to acknowledge their existence.

Patricia Zimmermann's contribution (1995), as discussed in the previous chapter, locates the historical origins of the term amateur in the separation of public and private spheres, and the rise of professional rationalization.

"Amateur," she explains, is associated with the private sphere as a function of the particular cultural formation of the "fragmentation of labor experience between the public sphere of the economy and the private sphere of the home."

<sup>&</sup>lt;sup>3</sup> Patricia Zimmermann, "Reel Families: A Social History of the Discourse on Amateur Film, 1897-1962," diss.,

Her definitions have been useful in framing a discussion of amateur as it relates to film in the present project. Since formulating a critique of the distinctions between amateurism and professionalism is not the mainstay of the dissertation, the dissertation appropriates these terms accordingly, and with respect to their relevance vis à vis its aims set out in the Introduction.

It is a fair assumption to assess definitions of amateur film according to equipment and standards. With respect to the popularization of photography, the same may not necessarily be true. It is worth noting that when George Eastman introduced the No. 1 Kodak in 1888 he did not single it out as an "amateur" apparatus in comparison to "professional" equipment, as was the case with amateur film in the 1920s. While definitions of what it meant to be an "amateur" were in germ in the late nineteenth century, with respect to photographic practices prior to the No. 1 Kodak, and even after, most people were "amateurs." That is, those who could afford to indulge in the personal appropriation of photographic apparatuses (interest-wise, time-wise and money-wise as photography was cumbersome and time-consuming) might already have been dabbling in the craft, and some (exclusively men of course) may even have belonged to clubs

University of Wisconsin-Madison, 1984, 96.

as a means by which to seek out technical discussions, forge relationships, and improve skill sets.

It can be argued that relations coming forth from clubs contributed to drawing important distinctions between "snapshooters" and more seriously invested amateurs; however, these distinctions were not readily attached to popularized photographic technology in the same way that they were to standardized amateur film formats. Regardless, what is crucial to understand is that the status of photography at the end of the nineteenth century was by no means comparable to the status of film in the 1920s, which with developed studio systems held for a very different set of cultural and cultural industry circumstances.

The dissertation uses "popular" and "popularization" to signify the making-common of a thing or practice. These terms pertain directly to an idea of "mass" as it relates to the birth of the "mass media" (namely the press) at the end of the nineteenth century, and an idea of "mass" used simultaneously to refer generally to the production of a new social category of consumers and users of new cultural forms. The "popular dissemination of image-making apparatuses," or the "popularization of image-making practices" strategically coincides with the development of consumer culture in terms of late-nineteenth century changes

in industrial production, and new channels of distribution (i.e., department stores) and promotion (i.e., the nationalization of products and advertising, and, in the case of Eastman Kodak, internationalization).

Popularization, then, is not simply to be understood as apparatuses being used by many people in a novelty sense, but is embedded in the means by which this could be made possible.

Finally, the dissertation incorporates the term "bourgeois" as a covering term to refer to a North American "social class" that was already in formation by the late nineteenth century. By the late nineteenth century, however, bourgeois capital accumulation had intensified, precisely due to post-1870s industrial expansion (United States), and new commercial and employment opportunities. The term "bourgeois" is not meant to identify the political interests and pursuits, and the power relations implicit among a set of historical agents, nor does it reckon with the term "bourgeois" as it pertains to the genesis of the public sphere. This is not to say that a certain set of historical agents in the context of late-nineteenth century North America was without political interests and power relations

<sup>&</sup>lt;sup>4</sup> See Jürgen Habermas, The Structural Transformation of the Public Sphere, trans. Thomas Burger (Cambridge, MA: MIT Press, 1991).

either. More loosely defined, and less statistically derived, "bourgeois" and "bourgeoisie" are meant to signify the confluence of new forms of consumption and new forms of leisure, and their overlap as historical phenomena with the rise of a diversely monied (as in disposable income) and increasingly expanding "demographic" for whom leisure was becoming accessible, desirable, and even virtuous. This does not include making assumptions about a firmly-established "bourgeois class" teeming with a well-defined set of "family values" in residence at the close of the nineteenth century. This "demographic," and I acknowledge the potential for anachronism here, was not without "values;" put differently, values, as was "it," were in formation and flux.

## ii) structures and feeling

In History, Experience and Cultural Studies (1997),
Michael Pickering lobbies for a return in cultural studies
work to the critical and historical bases from whence it
developed, namely the potent historicity disclosed in the
contributions of Raymond Williams. Pickering is mindful of a
turn in cultural studies toward privileging theory and text
over history and context which he traces intellectually to
the research influences of the Birmingham Centre for
Contemporary Cultural Studies in the late 1970s and early

1980s.<sup>5</sup> The turn of which Pickering speaks is one in which contextual concerns took a backseat to textual ones. He writes that "although historically informed work was produced there at the time, the interest in history was generally theoretically motivated." It is this "deficit" in cultural studies, what Pickering refers to as "historical myopia," that he calls into question. In the following quotation, Pickering emphasizes the importance of historical inquiry to the research task of conceptually reckoning with the past:

The past is therefore always a produced past where certain events and episodes, certain expressions and forms, become fixed and explicit to the exclusion and concealment of others. The task for cultural analysis in this respect is that of trying to get behind such features of time's traces in order to regain a fuller sense, once again, of the felt 'social character' and experiential specificities of past cultures, past 'ways of life'.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> See for example the essays in *Culture*, *Media*, *Language*, Stuart Hall et al, eds. (London: Hutchinson and The Centre for Contemporary Cultural Studies, University of Birmingham, 1980). In particular, see Stuart Hall's famous essay, "Encoding/Decoding."

<sup>&</sup>lt;sup>6</sup> Pickering 3.

<sup>&</sup>lt;sup>7</sup> Pickering 32.

In so doing, Pickering revisits Raymond Williams's (1977) notion of "structure of feeling," the real and lived relations and motivations of diverse social groups at different historical moments, in order to re-insert experience and history into cultural debates. By it Williams meant to signify a means by which to understand cultural material in history as those phenomena which cannot be reduced to ideological belief systems and institutions, but are part of a cultural process. "[W]hat distinguishes a structure of feeling," Pickering adheres, "is that it is emergent and provisional, not so much a fully articulated realisation or achievement as one in the creative throes of becoming articulated."

It should be noted that the purpose of the present project is not to take to task the corpus of cultural studies methodologies. Rather, it is to argue in favour of the fruitfulness of historical analyses, and, more importantly, not to surrender history to theory (and vice versa), nor experience to discourse (and vice versa). A "structure of feeling" in the context of the dissertation lends itself to negotiating and navigating the historical process of image-making popularization as that which, in its

<sup>&</sup>lt;sup>6</sup> Williams 1977, 128-135.

<sup>9</sup> Pickering 33.

anteriority, was in formation, and, currently, will always be reinterpreted with privileged insight into the structuring process. The production of image-making as a popular practice is a discursively-informed one; however, what needs to be ferreted-out is the incidence of image-making as a developing and experiential practice which is both socially and culturally contingent.

To seque, feminist critiques of scientific and research practice are worth noting here as a set of guidelines for conceptualizing the analytical and, indeed, emotional labour involved in setting up the research process. While located somewhat differently with respect to Williams's attention to lived relations and motivations in historical research, they also embellish "structure of feeling" by contemplating in contemporary and feminist terms what it means to do scientific research, and what it means to be a feminist and, in fact, outlaw historian of science. Combined with Raymond Williams's ideas about the meaningfulness of historical research, these feminist approaches have helped to situate the dissertation's methodological approach as a historical project, as well as to situate the relationship of archival research experience to the dissertation as a whole, a matter I will return to later in this chapter.

Evelyn Fox Keller (1983) has used the term "feeling for

the organism" to describe geneticist and Nobel laureate Barbara McClintock's approach to scientific research. McClintock's methodology, while steeped in an acute awareness of the complexity of her objects of inquiry, is likewise wary of the personal and collective interests, goals, and values that are part and parcel of producing scientific knowledge. 10 McClintock's maverick method of intimate observation fed by the necessity to "listen to the material," and to "let the experiment tell you what to do" lead her to identify genetic transposition in maize. 11 Her insider/outsider status in her chosen scientific community, drawn along methodological and gender lines, is precisely what directed her to perceptions of difference in her research material. In McClintock's work is a sense of methodological patience, compassion and empathy which can be traced directly to her respect for the complexity of the very small, as well as to a willingness to see dynamic potential in the infinitesimal. Empathy in the case of McClintock's research does not assume living the life of the organism, or "going native"; rather, it is a mode of access

<sup>10</sup> Evelyn Fox Keller, A Feeling for the Organism: The Life and Work of Barbara McClintock (New York: Freeman, 1983).

<sup>11</sup> Evelyn Fox Keller, Reflections on Gender and Science (New Haven: Yale University Press, 1985), especially Chapter 9.

underwritten by emotional and affective proximity.

Barbara McClintock's scientific contributions pertain to non-human relations; however, there is a methodological crossover in her work which is relevant in the context of the current project. We might associate McClintock's maverick science, as told to us by biographer and historian of science Evelyn Fox Keller, with other critiques of valuefree methodologies, such as Donna Haraway's demand for "situated knowledge"—a position which strays from omniscience in order to proffer the "ability to partially translate knowledge among very different-and powerdifferentiated-communities"12-and Sandra Harding's notion of "strong objectivity-a position which approaches nature as always already mediated. "To enact or operationalize the directive of strong objectivity," argues Harding, "is to value the Other's perspective and to pass over in thought into the social condition that creates it-not in order to stay there to "go native" or to merge the self with the Other, but in order to look back at the self in all its cultural particularity from a more distant, critical, and

<sup>12</sup> Donna Haraway, "Situated Knowledges: the Science Question in Feminism and the Privilege of Partial Perspective," Feminist Studies 1(3) (1988): 579.

objectifying location."13

A common strategic thread runs through these works: to inhabit the research by taking up residence in it rather than distancing oneself from it. What can be gleaned, then, from Barbara McClintock's "feeling for the organism," Donna Haraway's "situated knowledge," and Sandra Harding's "strong objectivity" is the imperative that any research practice is always mediated by other practices, and that this mediation is a defining methodological principle. In her own way each frames her respective research practice in terms of inhabiting it. Inhabiting the research means first to figure one's own subject position in relation to the object of inquiry; second, to negotiate how one's mediated subject position is the prism through which the research endeavour is refracted; and finally, to potentialize the subject status of the research material in question.

Mindful of the exploration of "feeling" as it figures into the work of Raymond Williams, and Michael Pickering's reinterpretation of Williams's contributions, as well as feminist critiques of science, I will now elaborate the dissertation methodology as it relates to communications research paradigms. In particular, I flag the historical

<sup>13</sup> Sandra Harding, Whose Science? Whose Knowledge? Thinking from Women's Lives (Ithaca: Cornell University Press, 1991) 151.

representation of technological artifacts and their relationship to social and cultural relations.

## iii) media history and biography

Elsewhere, Carolyn Marvin (1989) has selected the term "grazing" to illustrate how communications research is constituted. The verb "to graze" is both an expression of her methodological necessity to seek out interdisciplinary practices, and a self-reflexive critique about "illusory and possibly undesirable disciplinary solidity." To paraphrase Marvin, the notion of a paradigmatic approach to the study of communications is driven less because our objects require and are better off with particular approaches—"allegories" as her article title suggests—and more because the adoption of specific approaches, or paradigms is driven by institutional and theoretical concerns. Paradigms 15 or

<sup>14</sup> Carolyn Marvin, "Experts, Black Boxes, and Artifacts: New Allegories for the History of Electric Media," Rethinking Communication, Volume 2: Paradigm Exemplars, Brenda Dervin et al, eds. (London: Sage Publications, 1989): 188.

<sup>15 &</sup>quot;Paradigm" entered the lexicon in the controversial work of Thomas Kuhn, whose *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970) raised eyebrows in the "scientific community" because it challenged previously uncontested views of science, and scientific methodology as apolitical, objective, and essentially unified. On the contrary, science is a campaign to promote some ways of seeing research problems over others.

orthodoxies, to cite the terms she uses, are neither politically estranged, nor consummately neutral; in fact quite a different set of relations is the case when we begin to scrutinize self-reflexively the "politics" and "poetics" of doing historical research, and representing it. 16

Marvin's evocation of such an explorational and masticatory metaphor fits with the research strategy employed in the dissertation. The dissertation's object of inquiry has been marginal to communications studies even though aspects of it have been central to historical developments in the media, and not just technically speaking either. The fields opened to the dissertation are several and include media and technology history and theory, social and cultural histories pertaining to nineteenth and twentieth century North America, feminist theory, and film studies. The dissertation also reflects the intellectual and institutional biases implicit in a mode of training. Had

In his introduction to Writing Culture: The Poetics and Politics of Ethnography, James Clifford makes the claim that "the writing and reading of ethnography are overdetermined by forces ultimately beyond the control of either the author or an interpretive community" (25). Research practices are political practices (personal, institutional) whose data gathering is eventually translated into narrative form, the politics of writing. See James Clifford, "Introduction: Partial Truths," Writing Culture: The Poetics and Politics of Ethnography, James Clifford and George E. Marcus, eds. (Berkeley: University of California Press, 1986): 1-26.

this study been undertaken from institutional perches in visual anthropology or film studies, it would likely have incorporated different research strategies, at the very least emphasized different research questions, as the methodological divide between Richard Chalfen and Patricia Zimmermann attests.

To date, the incorporation of film and photography as personal memory practices into the research vocabulary of communications has been under-researched. Attention to photography has filtered through studies of the press; however, these practices in situ in the family and in domestic contexts is just beginning to receive attention in terms of cultural and critical inquiry. Likewise, the matter of amateur film practices and questions about alternative exhibition and consumption have also clung to the periphery of scholarly work in communications, especially respecting domestic contexts. This gap cannot adequately be explained by an absence of any institutional context to which these practices can be linked. The dissertation's attention to the Eastman Kodak Company in this regard is meant to interrogate and reckon with institutional influence.

The fit between the dissertation's research questions, and the blending of methodological approaches to respond to these questions relates more to a recognition and

"reevaluation of former political and epistemological certainties,"17 and less to shared objects of inquiry and shared methodologies, to partially paraphrase Carolyn Marvin. It is for this reason that the dissertation can pull together such diametrically opposed technological subject matter as Elizabeth Eisenstein's work on the printing press; Carolyn Marvin's work on nineteenth century electric communication; James Carey's work on the telegraph; Raymond Williams's work on the institutional development of television in Britain; Lynn Spigel's work on the installation of television in the family circle; Susan Douglas's work on radio and wireless communication; Patricia Zimmermann's work on amateur film; and Brian Winston's work on photography, cinematography and television. Each of these projects, as does the dissertation, observes uncertainties left behind in the wake of preceding inquiries.

Carolyn Marvin (1988; 1989) and Raymond Williams (1974) have been instrumental to the present project's negotiation of image-making's rise to the status of popular phenomenon. Their work has proven useful for distinguishing between artifactual analyses which champion technologically determinist perspectives, and analyses which call for less determining approaches to the study of artifacts as

<sup>&</sup>lt;sup>17</sup> Marvin 1989, 189.

mediators in social relations, and not primary motivators of them.

"The most precise and discriminating local study of 'effects' can remain superficial if we have not looked into the notions of cause and effect, as between a technology and society, a technology and a culture, a technology and a psychology, which underlie our questions and may often determine our answers."18 It has been almost 25 years since Raymond Williams published Television: Technology and Cultural Form, from which this quotation is excerpted, and it remains valuable for shaping and realizing research in the area of technology and culture. In the previous statement Williams commands that researchers consider the matter of taking responsibility for terms of reference, and the biases that terms of reference bring to the research endeavour. He is after a process-oriented methodology, one whose conclusions are not directed at matching social and cultural effects to technological causes, but rather conclusions that question a priori the viability of a specific technological form as either a function of technological determinism, or, alternatively, an indirectly related symptom holding no more significance in the

<sup>18</sup> Raymond Williams, Television: Technology and Cultural Form (London: Fontana, 1974) 9.

historical equation than any other. The methodological distinction here is between hard determinism, where agency is given over to technology, and soft determinism, where agency resides with human actions. Williams elaborates the process in this way:

Such an interpretation would differ from technological determinism in that it would restore intention to the process of research and development. The technology would be seen, that is to say, as being looked for and developed with certain purposes and practices already in mind. At the same time the interpretation would differ from symptomatic technology in that these purposes and practices would be seen as direct: as known social needs, purposes and practices to which the technology is not marginal but central.<sup>20</sup>

Technologies as artifacts are not the prime motivators of events in history; nor are they symptomatic of events in history in the same way that a sore throat could be interchangeable with congestion as symptoms of the common cold. For example, I argue that bicycle touring of the late

<sup>19</sup> See Leo Marx and Merritt Roe Smith, "Introduction," Does Technology Drive History: The Dilemma of Technological Determinism, Leo Marx and Merritt Roe Smith, eds. (Cambridge, MA: MIT Press, 1994): ix-xv.

<sup>&</sup>lt;sup>20</sup> Williams 1974, 14.

nineteenth century coincided with the mass-popularization of photography (Chapter Three). Both are prototypical examples of the new leisure which attracted the attention of an expanding North American bourgeoisie at the close of the nineteenth century. Different from bicycling, however, the appropriation of photography for pleasure, especially in the context of the family, fed directly into the personalization of history, and extended to any and all who could afford it the privilege of chronicling personal and collective time in images.

As the first of the hand-held cameras were still relatively pricey, the popularization of image-making apparatuses also meant that a means by which to represent the material world in images was extended to a bourgeois and middle-class. We might also argue, although carefully, that the incorporation of image-making and consumption into the new leisure also made possible the representation of the material world from a bourgeois perspective, and indeed in its own image, as contemporary critiques of family image-making have concurred. What is key here is how portability and less so affordability (although still important) underwrote the dissemination of the No. 1 Kodak. I argue that while such an apparatus coincided with, and catered to the becoming lifestyles of an expanding social demographic,

the promotional strategies used to push the No. 1 Kodak onto the market and into people's lives evoked an undifferentiated sense of "mass," wherein we can also identify early evidence of a populist and ideological championing of democratic, and unlimited access to media production.

In a similar way, Marvin rejects the study of media artifacts as the prime motivators in media events:

Long an uncontested ordering principle in communications history, this artifactual classification needs to be reconsidered, because artifactual conceptions of media history commit to a synecdochical fallacy in which apparatus is taken to be the constitutive element in a larger communicative event of which it is only part, and for many purposes not the main part.<sup>21</sup>

Wary of "synecdochical fallacy," I would like to clarify once more that this dissertation does not expect to write the complete history of amateur practices in terms of a handful of apparatuses; nor does it promise to provide an exhaustive tally of all photographic and film apparatuses, as would a collector's catalogue. While it is a dissertation that deals with image-making technology, it should be noted

<sup>&</sup>lt;sup>21</sup> Marvin 1989, 190.

that it deals with very specific models in a technological genus precisely because of the cultural moments around which each of these apparatuses congealed. The dissertation's attention to "moments," in this regard, is a strategy embraced to both interrupt a linear portrayal of historical development, and to flush out connections between precedents set in the late-nineteenth century popularization of photography in North America and North American families, and the endurance of these precedents in the extension of film practices to the family circle.

To reiterate, the dissertation locates the popularization of image-making practices amidst changing attitudes toward leisure which were supported by increasing bourgeois claims to the material world. Consummately, it argues that this popularization could not have been realized on such a grand scale had it not also have coincided with the development of national and international communication infrastructures which allowed George Eastman and the Eastman Kodak Company to create national and international markets for promotion and sales. The dissertation's interest in connecting the popularization of photography to telegraphy and rail expansion (Chapter Two), for example, supports the strategy to specify historical "moments" and their connection to other social and cultural phenomena. An

appreciation of this popularization in terms of a "total" history of photographic apparatuses would otherwise leave critical attention to supporting developments lacking.

As this dissertation relies upon a great deal of historical materials, it is imperative to consider the implications involved in interpreting the representation of historical data in narrative form, and to grasp the researcher's own position in the reconstruction of narratives. On the denarrativizing and renarrativizing of history, John Nerone writes, "one takes narrative data and piles them up to form bigger narratives, but the big narratives do not dissolve the little ones, and, in fact, the smallest narratives always seem the most real, because they are always the most demonstrable and the most concrete. This is why history always seems to return to biography."22 As far as biographies go, they inevitably and usually chronicle great moments in the lives of great people, and so pay homage, and perhaps even uncritically so.

With this in mind, the methodology relies on biographical and historical information culled from secondary sources, as well as it mines data from primary sources (interviews, personal and business correspondence

John Nerone, "Theory and History," Communication Theory 3(2) (May 1993): 149.

and records, trade and popular magazines from certain periods) from the late nineteenth century as well as the twentieth. It evaluates as important and relevant certain aspects of, and events in the life of George Eastman as these relate to the popularization of image-making practices, and those aspects of, and events in the corporate history of the Eastman Kodak Company concerning the popularization of these artifacts, and Eastman Kodak's monopolization thereof.

George Eastman does not represent the figure of the "great man;" he is, however, a particularly outstanding one in that he stands out in the history and, so, is hard to miss. The dissertation situates aspects of the "life of the man" in terms of other social and cultural developments so as not to privilege Eastman as extraordinary and unique. The same is true for its treatment of the Eastman Kodak Company. The combined analyses of Eastman and the Eastman Kodak Company are mediated in the dissertation through the primary and secondary sources I refer to above. In terms of the latter, I refer to Elizabeth Brayer's (1997) biography of George Eastman<sup>23</sup> and Reese Jenkins's (1975) analysis of the

<sup>&</sup>lt;sup>23</sup> The only other full-length and authorized biography is *George Eastman* by Carl Ackerman (Boston and New York: Houghton Mifflin, 1930). Elizabeth Brayer writes that Eastman "suppressed many attempts to record his life." Her biography, authorized (although not commissioned) by the

photographic industry at the end of the nineteenth and beginning of the twentieth centuries.

The Eastman Kodak Company is an important historical agent in the popularization of image-making practices in North America (and indeed, the world). It lead the race to introduce the first, hand-held camera with which it, and more specifically George Eastman, overtly intended to masspopularize the practice of photography. It is not simply the invention of the apparatus that is of importance here, but the process by which the apparatus, and its sister apparatuses, entered everyday life and leisure. Brian Winston (1996) uses the term "supervening social necessity" to describe the social and market circumstances which push a prototype through invention and into diffusion. The social and market circumstances that nourished the No. 1 Kodak draw attention to a historical moment at the close of the nineteenth century at which point new forms of distribution and promotion (owing in large part to the telegraph) invigorated capitalist potential. Eastman Kodak notoriously exploited the potential of these uses and leveraged its industrial position-which included the acquisition and

Eastman Kodak Company, is the most recent, and considered to be the most comprehensive and definitive. See Elizabeth Brayer, George Eastman: A Biography (Baltimore: Johns Hopkins University Press, 1997), especially pp. 532-538.

retirement of patents and the maximization of new commercial forms of distribution (i.e. department stores, national promotion and sales networks)—against emergent trends in consumption.

Methodologically, the dissertation establishes a crucial distinction between apparatuses (hardware) and film/celluloid (software), and uses this distinction to subdue any misunderstanding as to the over-importance of the first hand-held camera, or any other technological apparatus for that matter. Although the Eastman Kodak Company was the first to disseminate the hand-held camera, other players also followed suit in a tightly and intensely concentrated industry. Eastman Kodak's success in the field had as much if not more to do with ongoing and leading efforts to simplify image-making processes in terms of software innovation. The notion of an invention of a groundbreaking technology, then, needs to be enhanced with an acute sense of circumstance. The dissertation recognizes this fact and brings to its methodology an awareness of hardware and software complexities (Chapter Two).

The decision to track the efforts of the Eastman Kodak Company and not others in this early history has in part to do with its prowess and ingenuity, and also the paper trail of documents and archives left in its wake. It was the only

one of its North American contemporaries to expand its corporate and market stronghold well into the twentieth century, and also one of the few to weather well the storms of several economic depressions without either folding, or being taken over. This is a very important point and takes us back to John Nerone's comments about renarrativizing historical events. While it would be patently wrong to ignore Eastman Kodak's industrial potency and longevity, it is imperative that we take stock of its position among other industry participants, and expressly because documentation from these sources is either at large, or, more likely, no longer existent.

Certain aspects of the life of George Eastman are important. They are deemed important because they situate Eastman among a bourgeoisie that was making its claims to the material world and its fruits at century's end, and not because they line up great events in a great life. George Eastman was himself a nouveau bourgeois who worked his way into the monied echelons of society, first as a part time inventor (and full time bank clerk) and eventually as a full time entrepreneur. This style of entrepreneurship was most definitely in decline toward the end of the nineteenth century as large-scale corporate formations (of which Eastman Kodak was one) began to dominate the industrial

landscape, and redirect invention and innovation away from individual entrepreneurship and toward a corporate style of entrepreneurship.

Eastman joined in the new leisure trends such as cycling, motoring, and travel, all pastimes the popular presses aligned with "snapshooting." Travel for Eastman, while a leisure pursuit, was also a business necessity in which passage to London and Paris, key points on the map of the image-making materials industry, was essential to forging contacts and establishing corporate dominance. As Eastman fully and openly intended to mass-popularize photography, and as the dissertation situates popular photography among the rise of other bourgeois amusements, the use of biography in this regard is relevant, from both an industry standpoint and because of its links to cultural history.

#### iv) domestic spaces

The home as a category of analysis is also central to the methodology. I identify its importance to the dissertation as a destination for the consumption of images and also as a site for production, a debate which is most fluently explored in Chapter Four. It should be qualified that "home" is not conceived of in the dissertation as an

exclusive site of production. This would undermine the mobility and versatility of image-making practices configured in their popular dissemination.

In popular literature pre-dating 1888 the home appeared as a site for the consumption and display of personal images and as photographic content (including its trappings) on its own. The domestic also figures prominently in the development of film stocks and accessories for it is through the induction into the dark spaces of recreation rooms (a 1920s domestic addition) that image production and consumption took a dramatic turn. This is most noticeable with respect to the standardization of amateur film practices and safety film in the 1920s, and the simultaneous appearance of the concept, "home theatre," in popular moviemaking and consuming literature. As I will argue in Chapter Four, however, the integration of film into domestic living was connected by a variety of industry players to patterns of public, silent cinema-going practices. This was most definitely the case in the emergence of amateur film technologies for personal production, and home and privatized spectatorship, as well as in the emergence of home film libraries, the proprietors of which connected "putting on the show" at home to screening practices in the silent cinemas. Both suggest that we need to consider home

image practices in a much wider context, and in fluid connection with a world beyond the front door.

Discussions of the domestic space and its relationship to the integration of media into it have entered communications research in the study of consumptive practices. A few examples are Ann Gray's (1992) research on gender and the VCR; Roger Silverstone's and Eric Hirsch's edited anthology, Consuming Techologies: Media and Information in Domestic Spaces (1992) which includes essays dealing with the cultural reception of mediated "texts" (Miller; Eng), the consumption of mediating technologies (Wheelock; Murdoch et al), and the appropriation of household commodities (Putnam); David Morley's (1986) study of television and domestic leisure; Lesley Johnson's (1988) work on domestic appropriations of radio in Australia; Lynn Spigel's (1992) research on the installation of television in the domestic space; and Keir Keightley's (1996) research on the hi-fi. With the exceptions of Johnson, Spigel and Keightley, attention to historical context in these works is marginal, a point which takes us back to Michael Pickering's critique of historically-myopic cultural inquiry. Ann Gray writes that "technologies have a developing biography within the household after they have been acquired, "24 and so raises the question of "history" along with appropriation, at least on one level. A "developing biography" also precedes technological appropriation, and it is this attention to formative discourses and practices that the dissertation aims to address.

In the case of the present inquiry, then, a developing biography of image-making practices attempted to script the appropriation of image-making apparatuses and processes, a line of inquiry that demands historical consideration and excavation. I estimate that this "scripting" should not be reduced to an interpretation of ideologies of the family doing their work on the cultivation of image-making as a popular practice, but that an effort be made to do the "dirty" work of situating experience rather than assuming it is always thwarted by discourse. A "developing biography" with respect to image practices, then, should more generally give attention to the overall exploitation of material consumption at century's close, and consider how social and industrial relations helped to make it so.

A conceptual problem with respect to image-making in the family and its positioning in the dissertation has been

<sup>&</sup>lt;sup>24</sup> Ann Gray, Video Playtime: The gendering of a leisure technology (London: Routledge, 1992) 164.

to first test if there is a relationship between such practices and domestic "space," and, if so, to then verify and make sense of it in terms of connections between this "place," and spaces and places beyond it. This returns us to the professional/amateur stand-off drawn out by Patricia Zimmermann. She interprets this distinction in terms of the fragmentation of the labour experience between public and private spheres whereby neither is the binary opposite of the other.

The home is tricky. It evokes a set of research coordinates that shares a determining relationship with institutions (the "family" for one), and that are situated along a consumer pipeline. Silverstone, Hirsch and Morley phrase this in terms of a "moral economy of the household." With image-making, that moral economy, as they put it, is diffused across an expansive terrain which includes not only the appropriation and use of apparatuses, but the very means by which their use in production is gauged by the memory practices they are enlisted to enable. This is less disconcerting if we think historically only about the display and storage of images (frames, photo

<sup>&</sup>lt;sup>25</sup> Roger Silverstone, Eric Hirsch and David Morley, "Information and communication technologies and the moral economy of the household," Consuming Technologies: Media and Information in Domestic Spaces (London: Routledge, 1994): 15-31.

albums, shoeboxes), but the issues escalate when we add the very fluid matter of production, and then some when we approach this all over again from a film and projection perspective. Vis à vis the phenomenon of the "home movie," the domestic place enters as an image archive and storage site, a production site (but not exclusively), and a projection site whose "idea" industry players merged with cinema-going practices. These practices in the home could not possibly duplicate the experience of being in the cinema; however, the possibilities for the "home theatre" as a "place" in which to screen a mixed bag of personal "home movies" along with films plucked from distributor catalogues (also coined as "home movies") warrants careful examination.

The work of geographer Doreen Massey (1994; 1993) has influenced the conception of this problem in the dissertation. Massey has wrestled with "space" and "place" as these pertain to her project of wresting spatial considerations from the shadows of temporal dominance. Time, to paraphrase her, has been unnecessarily authorized as the dominant marker of social change and difference, when space has been misconstrued as passive. Massey localizes "place" (micro-relations), relates it to "space" (macro-relations), and situates both actively in the eye of power relations (and not just economic power relations), and contests over

meaning. A "progressive sense of place," then, elaborates "space," or rather, spaces and places as becoming terrains that do not weather change because time washes over them, but change precisely because of inter- and extra-spatial relations.

The dissertation uses Massey to define domestic place as it relates to the consumption, exhibition, and storage of images, specifically with respect to the home movie phenomenon (Chapter Four). The integration of image-making and consuming practices in the family and home is a cultural moment, or rather a succession of cultural moments, complex by definition and intermeshed with practices and their connected spatial relations that play out beyond them. It considers the "home movie" among networked relations whose connection to cinema-going practices, particularly toward the end of the silent era, overlapped with the standardization of amateur apparatuses and the domestication of moving image consumption in the early 1920s.

In so doing, the dissertation submits to negotiating these relations differently from a limited understanding of them in a negative and compensatory relationship to professional film. Likewise, to develop the home in this respect will enable the dissertation to stretch beyond family film and photography narratives to situate these

practices and technologies among other technological and domestic amusement developments central to the home.

## Situating the Archive and Research Practice

The primary archival research for this project, carried out over several months in Rochester, New York, was done at George Eastman House, International Museum of Photography and Film, and the Eastman Kodak Company. This primary archival experience contributed uniquely to the project's historical narrative, concomitantly a critical assessment of the emergence and domestication of amateur and personalized image-making practices, and Eastman Kodak's central involvement in the cultivation of these practices as mass-popularized amusements.

Rochester is, and has always been the world headquarters of the Eastman Kodak Company, the company's self-proclaimed "Image Centre of the World," and the "Kodak City." This civic locale is also the principal site for Eastman Kodak corporate archival holdings, other amateur archival holdings (documents and technology), and George Eastman's personal holdings, the only exception being an archive of advertising materials acquired by Duke University. What this suggests is just how integral notions of a centralized bureaucracy, owing to spatial and temporal

consistency, were to carrying out the research, not to mention solidifying the corporate "legend" of Eastman Kodak.

As a research site directly tied into the dissertation's historical focus, Rochester brought to bear on this project a sense of spatial and temporal continuity as 1) a primary site for archival holdings; 2) the location of a corporate headquarters from which a transnational image-making materials empire would expand; and, finally, 3) a regional meeting place for the forging of technical relationships, the resulting technological prototypes, processes and industrial relations of which would foment significant social and cultural consequences at the close of the nineteenth century, and for the century to come.

As mentioned, the main research component of the dissertation involved literally inhabiting Rochester; however, as I will argue, this geographical circumstance fed directly into the research process, first as a heuristic tool (distinguishing Rochester as the "place" for discovery) and later as a conceptual component. When imported to the methodological design, thinking about spatial location and temporal significance challenged preconceived hypotheses expressed in the preliminary research draft, namely the distorted assumption that movie-making as a personal and familial historical practice could be separated out, as an

egg white from its yolk, from the popularization of photographic practice as a bourgeois amusement.

The next in this series of methodological Russian dolls, if you will, returned to a reading or reconceptualization of the project through the industrial prerogative claimed by the Eastman Kodak Company and its founder, George Eastman. To borrow from Raymond Williams's "structure of feeling," and to use Evelyn Fox Keller's language, inhabiting the research and listening to the "experiment" awakened a "feeling" for my object of inquiry (the popular appropriation of image-making practices) as a complex of lived relations and motivations brought together at the late-nineteenth and early-twentieth century junctures of geography (the industrial U.S. northeast); business practice and acumen (the photographic materials industry of the day); and the introduction at the close of the nineteenth century of new forms of bourgeois leisure which coincided with the popularization of photographic practice.

Residence in the formerly private, corporate, and urban spaces of Eastman House, the Eastman Kodak Company, and Rochester respectively afforded an aural, more so than a visual privilege which was directly transposed on the research design. Although the dissertation focuses on visually-oriented subject matter, it was hearing and

listening, and not seeing that in the end held for greater and unintended research consequences. Ironically, privileging vision at times actually clouded perception. The initial research plan's preconceived hypotheses noted above are testimony to this. I will specify how in the archival research process this "aural privilege," having traveled to the dissertation through Keller and McClintock, informed the research methodology.

The metaphor archival "noise" aptly describes the way in which research materials "speak" to their users. At the risk of anthropomorphizing research documents, this "noise" forced a preferred listening to the object of inquiry (as mediated through archival documents), and steered the research in the direction of several previously unconsidered research "places." These included digging into George Eastman's intertwined personal and business relations in order to key into an industrial Zeitgeist; mapping the cutthroat business of the late-nineteenth century photographic materials market, its patent protectors and poachers, and the exploitation of new commercial forms of distribution; and an understanding of Eastman Kodak's strategic advancement of cameras (hardware) as well as film (software). This latter component was as integral to popular image-making practice as Eastman Kodak's ongoing efforts to

deliver accessible cameras (the hardware of memory) to an ever-expanding "mass" of consumers. Finally, "archival noise" offered itself to a representation of Eastman Kodak's interests in advancing the promotion of its own film library (Kodascope Libraries) which it connected to both the standardization of amateur film outfits, and existing cinema-going practices.

What I cite as an aural technique in the reconciliation of research documents also surfaced literally in the form of listening skills. Rochester, beyond being an archival site, served as a ground zero for the transaction and trade of oral histories and casual storytelling about the social relations in relief of the technologically-informed histories I set out in search of through the dissertation process. These included everything from anecdotes and speculation in local history about Eastman and Eastman Kodak (i.e. Eastman's "suspect" lifelong bachelor status), to personal conversations with people about their family images (Rochester and elsewhere) after having divulged my research inquiry to them.

My interlocutors extended to archivists, curators, librarians, and other visiting researchers at Eastman House; staff at the Eastman Kodak Company; and still further into the community of collectors and hobbyists, in particular

those whose personal histories were embroiled in a larger technological and cultural history (i.e. Frank Brownell Mehlenbacher, the grandson of the Brownie inventor). Eastman House, specifically, was a central exchange through which passed people with local and global interests in Eastman and Eastman Kodak, photography and film, some with academic and professional interests, and others with personal motivations. I would describe many of these exchanges as conversational and not per se as elements of a formal ethnography to be incorporated officially into the research methodology as these occasions happened disparately along the way of the research process, and without any established regularity.

The decision not to formalize these encounters also had to do with how they were valued in the dissertation process. To have framed all of these encounters in terms of empirical content would have been to betray their conversational and jocular appeal. The spirit in which these stories were shared was clearly not rooted in empirical evidence, but something else. That something else can only be put into words as "colour" and "texture." In fact, it was precisely the informality and serendipity of these exchanges that allowed their value to appreciate, if not as dissertation content then most certainly as a set of navigational tools

with which to 1) survey the topography of the dissertation and its outposts; and 2) re-enter the research process each time from a different angle.

The formal archival and textual documents which make up the bulk of the research in the dissertation were offset by what can best be described as a folk knowledge. This folk knowledge permeated the research process in the form of isolated stories about Eastman's and Eastman Kodak's impact on the community of Rochester. The bearers of these "folk" stories all put their own spin on what has unmistakably become the legend of Eastman's "invention" of popular photography and the re-invention of photography. Whether or not these stories legitimately captured the impact of Eastman Kodak, or even were critical of it, is less important than the way in which each textured and coloured the partial history of which the dissertation was in pursuit. In this sense, Eastman House, as the focal point of research hunting and gathering, doubled as a communication network whose benefits could neither be reaped, nor fully enjoyed from a distance.

Carlo Ginzburg (1982) alludes to the unintended consequences of a central communication exchange in his historical narrative of a sixteenth-century, Italian miller and this unfortunate soul's brush with the inquisition. The

historical narrative of the inquisition, as pieced together through the surviving letters and notes of this miller, is secondary to Ginzburg's intimation that it was method and not content which incriminated the miller. Ginzburg's own retrieval of the miller's tale from the dustbin of history was itself a serendipitous and accidental discovery that had resulted from doing research on witchcraft trials of the late sixteenth and early seventeenth centuries.<sup>26</sup>

The heretic in Ginzburg's, The Cheese and the Worms is targeted in part for the content of his beliefs (committed to the Church, yet oddly devotional in his interpretation of creation), but more precisely for their circulation by way of an alternative and accidental communications network.

This accidental network came to fruition at the site of a mill in a northern Italian village, a commercial as well as social venue for the casual exchange of stories, reading material, and ideas, at the very least a place where

Mennochio, the miller, imparted his.

The dissertation borrows from Ginzburg's privileging of an alternative communications network. It uses the notion of an alternative communications network as a research example of how unconventional communicative circumstances can hold

<sup>&</sup>lt;sup>26</sup> Carlo Ginzburg, The Cheese and the Worms, trans.

John and Anne Tedeschi (New York: Penguin Books, 1982) xix.

significant consequences, be they the transformation of an unfortunate soul into an exemplar of inquisitional mite, or the advancement of a research process intent upon piecing together the historical conditions for the development of a producing and consuming visual culture on the domestic front.

With this said, I will assume the role of the dissertation's own devil's advocate and concur that the dissertation research could have proceeded without having taken up residence in Rochester; however, it would have proceeded differently, as previous drafts of the research design indicate. Nowhere could such a well-orchestrated and intended performance of technological success have rung louder in the dissertation than in the grand halls of the palatial, pseudo-Georgian mansion at 900 East Avenue, known internationally as a museum and archive, and also as the place where Eastman announced in 1932, "my work here is done." The cultural significance and implications of that "work" are precisely what the dissertation intends to investigate. In this sense, one could say that the dissertation in part represents the intermingling of a personal academic autobiography with the professional biography of one of its key historical informants.

To return to the specific matter of biography

introduced earlier, the dissertation depends as much on biographical data culled from the life of George Eastman as it does on corporate data pulled from Eastman Kodak documents, circulars, and publicity. In fact, in many respects George Eastman, the person and fiercely ambitious entrepreneur, and Eastman Kodak, the fiercely competitive organization, were interchangeable. To this day, Eastman remains posthumously a key figure in the Rochester community and in the world, even when Eastman Kodak's own position in the industry has been expertly challenged by such contemporary competitors as Fujifilm, which received regulatory permission in the autumn of 1997 to operationalize production in the United States.

The dissertation is careful not to read Eastman's role as a feat of solitary entrepreneurship and individual genius. What makes Eastman a central figure in this history is a body of statements, culled from his own correspondence, which serve us now as evidence of his will to popularize image-making practices. It is for this reason, and this alone, that the dissertation methodologically draws from biography in its representation of a partial and cultural history of technology.

From History and Experience, to Method, and Back

History, it would appear, does not offer the possibility of forgetting certain events. In fact it pleads with us to remember them. Nowhere is this more true than in the "legend of Kodak." To quote Hanno Hardt and Bonnie Brennen:

The discourse of communication research is marked by an absence of history as cultural context and condition for the development of theoretical work. An invitation to discuss theory and history, therefore, should not be considered a consuming intellectual passion of a marginalized academic clique but rather a much needed exercise in consciousness raising of a field whose expert knowledge has been in recent years, adopted, absorbed, and significantly changed by a renewed interest in issues of culture and communication in American studies [sic], cultural anthropology, comparative literature, feminist studies, and other fields.<sup>27</sup>

Herein is an attempt to both forget and remember the legend of Eastman and popular image-making differently.

<sup>&</sup>lt;sup>27</sup> Hanno Hardt and Bonnie Brennen, "Introduction: Communication and the Question of History," Communication Theory 3(2) (May 1993): 130.

### Chapter Two

# Regarding Eastman and "Photographing by the Yard"

"Plant the Brownie acorn and the Kodak oak will grow."

As far as slogans go, the Eastman Kodak Company had a way with them. This one first appeared in a May 1900 instalment of Eastman Kodak Trade Circular, the company's motivational monthly publication for Kodak dealers, and would stick in Eastman Kodak's promotional lexicon for some time. Earlier in February of that same year, the Eastman Kodak Company had introduced the Box Brownie. It was a new camera for a new century. The Brownie's ease, simplicity, and affordability said something about technological innovation and the new industrial techniques for mass-production, and a whole lot more about a newly-defined and socially-categorized "mass" of image and camera enthusiasts that had emerged over the twelve years previous.

In 1888 George Eastman introduced the No. 1 Kodak. It was a practical hand camera, the technological realization of a process with which he had set out to re-invent photography as a mass-popularized leisure pursuit. He did so by simplifying the shape and size of photographic hardware

<sup>&</sup>lt;sup>1</sup> This pledge in the form of a corporate mantra first appeared in *Eastman Kodak Company Trade Circular* 1(6) (May 1900).

(camera), and the design and processing of software (roll film as opposed to plates). Eastman combined his earlier contributions to the advancement of roll film (1884) with the No. 1 Kodak. Together these aspects thoroughly streamlined a system of photography, and put the practice and "pleasure" of photography within economic and technical reach of many, but not necessarily all. Comparatively, the Box Brownie solidified the potential for diversity in camera use, and the potential for diversity among camera users.

As important as his modifications to photographic practice, and this is the crux of the matter, Eastman Kodak took advantage of new and evolving commercial means by which to disseminate the No. 1 Kodak system and Box Brownie, as well as pursuant models for the widest popular use. "You push the button, we do the rest," is how the then Eastman Kodak Dry Plate and Film Company promoted its new system of photography, and how it set the rhythm for a turn of events in image-making and its social dispersion.

This slogan became the Eastman Kodak Company's trump card and would be called up successively to associate its products and processes with accessibility and ease. Eastman Kodak stood out among its competitors. The company crowed victoriously about its patented image-making processes, but, more importantly, could also boast about holding the claim,

at least in collective imaginations, to having invented the concept of practical image-making. It matters little if the company was or was not, technically speaking, the best, but it does matter that it was first.

These clichés endure as evidence of the profoundly aggressive and innovative business practices by which George Eastman came to be sentimentally memorialized by many for his hand in popularizing image-making, and reviled by others in the industry for his "anti-competitive" practices and callous corporate strategies. They also remind us that any discussion of popular image-making practices in North America cannot be entered into without reconciling how the Eastman Kodak Company and, more specifically, George Eastman, captain of industry and co-founder of the Eastman Kodak Company along with his patron Henry Strong, mediated their popularization. It is not by leap of faith that the dissertation's representation of this history refers interchangeably to George Eastman, the individual and diehard entrepreneur, and the Eastman Kodak Company, the business. It is a matter of strategic necessity.

In this chapter I will attempt to map a set of remarkable points and their traces in the development of image-making innovation, and the connection of these points to the Eastman Kodak Company. The chapter does not pursue a

historical summary of photographic and film technology; however, it does pinpoint exceptional technological outbursts in a much larger history. While the tributaries of photographic practice might lead us to those advancements made by Jacques Louis Mandé Daguerre and William Henry Fox Talbot-and much earlier if we consider the camera obscura-its popularization for mass consumption is a phenomenon that would not insinuate itself upon a larger public until the last two decades of the nineteenth century, and the early twentieth century. With this said, this chapter brackets a handful of popular image-making technologies, and the technical processes which made them operational. They are points on a grid which depicts innovation in the means by which to make and consume images. These are the No. 1 Kodak (1888), the Box Brownie (1900), the Ciné-Kodak (1923), and the Ciné-Kodak 8 (1932).

Each of these apparatuses and processes is important for its intervention in the defining moments of a widely accessible form of still image-making practice, and later in the standardization of moving image-making practices. This chapter and Chapter Three are intended as companion pieces. Some of the ideas only mentioned in this chapter are followed up in detail in the next, while some of the ideas voiced in Chapter Three will necessarily refer back to the

present chapter. The dissertation pertains to a densely and intricately woven series of cultural and technological events in history, events which bear no logical separation from each other except to categorize them thematically (and loosely so) in the form of chapters. In the present chapter I will put forth a critical assessment of Eastman Kodak's role in the simplification and popularization of imagemaking practices. In the next I critically situate cultural contexts, especially those among which still image-making practices took flight.

While the dissertation's historical renarrativization may appear narrow in its attention to the Eastman Kodak Company, it is done with the awareness that the implications of Eastman Kodak's achievements stretched beyond the denotation of an internal corporate history, and into a broader historical narrative about the intended consumption and appropriation of image-making practices in family and personal contexts, the focus of the dissertation. The dissertation's attention to Eastman Kodak is both particular and general in this regard.

I acknowledge a certain incommensurability with respect to treating still and moving image practices together, a methodological choice I will reiterate. Each is earmarked for its instance as a technique largely amenable to popular

and, especially, bourgeois family appropriation. To chart the development of a producing and consuming visual culture in the home and family, I argue, must necessarily investigate these technological links. The hiving-off in part of these specific techniques of image production to the family is at the forefront; in the background is the incessant rhythm of innovation and product enhancement which characterized this intensely competitive industry.

The No. 1 Kodak, for example, soon after its introduction was followed up by the No. 2 model owing to certain "bugs" in its earlier design. While, as I have noted, this dissertation does not pursue the meticulous cataloguing of each and every Eastman Kodak innovation (and there were many), the particular innovations I have chosen to focus on are exemplary precisely because they capture moments in a cultural history, and draw attention to what Brian Winston (1996) has identified as a "supervening social necessity," the social and market circumstances that nudge a prototype on to the invention stage and, finally, to diffusion. In this regard, what is most important to impute with respect to the miniaturized and simplified Brownie, for example, is that with it Eastman Kodak found a way to embrace youth along with the outlying legions of potential "shutterbugs," those who could never afford the No. 1 Kodak,

but for whom the Box Brownie was within reach.

Comparatively, the introduction of the Ciné-Kodak 8 outfits represented a ploy to extend moving image practices to those for whom the more costly 16mm outfits were inaccessible.

In all of these examples, Eastman Kodak recognized the potential for, and its ability to create a social demand for accessible image-making techniques, and positioned themselves accordingly. Scholarly and popular interpretations of Eastman's pursuit of a new "public" of amateurs have yet to elaborate social distinctions such as family, generation, and even gender. In terms of Eastman's re-invention of photography, all three were strategically used by Eastman Kodak to broaden the scope of image-making, and to set some of the terms for a popular discourse on personalized image production and consumption.

I propose that we might do as Carolyn Marvin (1988) in thinking about electric communication in the late nineteenth century, and begin to think about the domestication of image-making practices in their first incarnations in the late nineteenth and early twentieth centuries. She brackets the last quarter of the nineteenth century as being important to an understanding of media history in that "five proto-mass media of the twentieth-century were invented during this period: the telephone,

phonograph, electric light, wireless, and cinema."<sup>2</sup> I would like to embellish Marvin's list with the addition of a popularized means of image-making, the residual impacts of which were hardly marginal to family and domestic relations. Marvin's glance back on the nineteenth century afforded her a means by which to begin to conceptualize the social formation of expert and professional cultures (contemporary computer cultures being an example) through an examination of the distribution of social status, and the legitimation of knowledge claims relative to access to electrical communication (telephone and telegraph), and their companion technical and popular literatures.

The distribution of social status lurks in the background of the present inquiry. I connect Marvin's exploration of social status and electrical communication to the bearing that social status had on the popularization of image-making practices, and the conceptualization of domestic relations. My strategy is twofold. First, I will chart how a popular amusement such as image-making came to be "naturalized" and "humanized" as a family and domestic practice of production and consumption whereby women, as moral guardians of the family, figured prominently in this

<sup>&</sup>lt;sup>2</sup> Carolyn Marvin, When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century (New York: Oxford University Press, 1988) 3.

regard.<sup>3</sup> Second, I will situate image-making practices in conjunction with the ongoing morphing, if you will, of twentieth-century, North American "homes" into locales for privatized spectatorship and privatized image archives.

Thinking about mass-popularized image-making practices in their infancy, along with their imagined and invented usefulness, then, will yield a means by which to unpack the often taken-for-granted instance of image-making as a "natural" appendage to family rearing. I contend that Eastman's re-invention of photography and the popularization of hand camera practices were not born into the status of common pastime, and family fixture. Rather, they were practices made common through a variety of promotional techniques, the pursuit of new leisure, and personal history practices. The critical lynchpin was a burgeoning middle-class.

The Kodak Way

The Eastman Kodak Company' was the first to formally

<sup>3</sup> Zimmermann 1995, 8.

<sup>&#</sup>x27;There are several corporate name changes here. The Eastman Kodak Company wasn't the official company name until 1892. Prior to this time the company did business under the names The Eastman Company (1889), The Eastman Dry Plate and Film Company (1884), and The Eastman Dry Plate Company (1881). For all intents and purposes the paper uses the 1892 name, by which we know the company today.

begin looking to personal and domestic relations as sites wherein cameras would have useful applications. What Eastman Kodak needed to make such a pursuit possible was a camera that would be easy to use and portable, and one that could bypass the use of the debilitating and chemically messy plate process. Amateur and quasi-popular appropriation of photographic apparatuses were not unheard of prior to Eastman's stab at popularization. The problem, and Eastman realized this, was in the bulkiness of existing outfits due in large part to the requisite use of plates which imposed upon mobility and portability.

The use of plates also meant that developing procedures were the responsibility of operators who, with the use of wet plates, were required to have some knowledge of mixing and applying chemicals, as well as a knowledge of darkroom procedures. The use of dry plates, the innovation of which Eastman contributed to, helped to alleviate matters, but only slightly. Dry plates, although chemically efficient, remained awkward to cart around. The key point here is mobility, not just as a personal privilege, but as an underlying factor in the transition to late modernity.

Aside from Eastman Kodak, there were other corporate and individual players who participated in the popularization of image-making practices. This fact begs

acknowledgment. E & H.T. Anthony, Boston Camera Company, Blair Camera Company, Scovill & Adams, and Reverend Hannibal Goodwin (nitrocellulose film process) are some names with respect to early photography, while Bell & Howell, Victor, and DeVry loom large with respect to standardized amateur film-making in the 1920s. Eastman Kodak rose to the top because it either bought out its competitors and its competitors' patents5, or dwarfed their competitors' participation in the photographic materials market, something that the institution of trusts and combines among economically powerful agents rapidly facilitated. With the matter of trusts and combines in mind, it should also be recognized that the possibilities for maverick intervention in the North American image-making materials industry were most surely a late-nineteenth century phenomenon, George Eastman standing out as exemplary. Reese Jenkins (1975), Patricia Zimmermann (1995), Elizabeth Brayer (1996), and Brian Winston (1996) have all expertly documented that the possibilities for maverick intervention were well constrained by both corporate strong-arm tactics, product and process standardization, as well as the solidification of patents.

<sup>&</sup>lt;sup>5</sup> Brayer 1996; Reese Jenkins, *Images and Enterprise:* Technology and the American Photographic Industry, 1839-1925 (Baltimore: Johns Hopkins, 1975).

The first of the portable, hand-held cameras, The Patent Detective Camera, invented and patented by William Schmid of Brooklyn in 18836, was a step in the direction of portability and freedom from the use of tripods; however, portability was still somewhat hamstrung by the necessity of plates. Imagine the difficulty, not to mention the commitment of users, involved in having to carry around a stack of unexposed and exposed plates if one so intended to go out for a day of shooting. These barriers to ease of use as well as speculation about the viability of image-making as a potential, popular amusement were what kept Eastman, and others like him, at the drawing board to bypass existing and impractical processes, and, indeed, "scoop" the market.

The No. 1 Kodak (1888), the first hand-held, portable, roll film camera conceived of for amateur and family use did the trick. Before its formal introduction to the market, Eastman showed the camera for the first time publicly at the Photographers' National Convention in Minneapolis where it earned a first prize, a matter of little surprise to Eastman, or so it seemed. In Eastman's own words, all modesty aside, "the Kodaks promise to have a very large sale, and we think the convention was about right when they

<sup>&</sup>lt;sup>6</sup> Brayer 60.

awarded it the Medal."7

The Kodak was for all intents and purposes an imitation of the Detective camera, named so for its intended application in matters of police work. The Detective's design feigned the look of a rectangular wooden box which when discretely placed on a table or surface could be engaged for exposure without fanfare. Unlike the Detective, however, the No. 1 Kodak was specifically designed for the use of roll film, and for holding close to the chest in making an exposure. These factors differentiated it from the rest. It was roll film (software) together with the camera (hardware) that revolutionized image-making practices. This distinction is vital.

In 1884 Eastman applied for a patent on what he referred to as "American Film," a paper film. Eastman and his partner, William H. Walker, one year later patented a roll holder (the Eastman-Walker Roll Holder) which they had designed for existing cameras and the use of film as opposed to plates. The departure from a paper process toward a nitrocellulose process was something that others were also in pursuit of, in particular an individual inventor by the name of Reverend Hannibal Goodwin. In 1889, Eastman Kodak

<sup>&</sup>lt;sup>7</sup> George Eastman (GE) to Minnesota Tribune Company, 23 July 1888, George Eastman Correspondence (GEC), George Eastman House International Museum of Photography and Film (GEH), Rochester, New York.

patented its process for a nitrocellulose-based, transparent film, a process which, it had been argued by the parties concerned, infringed upon processes for transparent film individually patented by Goodwin in 1887, and Henry Reichenbach/Eastman Kodak Company in 1889. Reichenbach was an Eastman Kodak chemist recruited by George Eastman, and had been working on a nitrocellulose-based process while employed there; Reichenbach later had a falling-out with the company after the Eastman process was patented in 1889.8 Goodwin's patent was considered by the Patent Office to lack any clearly-defined specificity; the Reichenbach/Eastman patent, on the other hand, was specific enough to make their process unique and therefore patent worthy.9 Strategy and a meticulous attention to detail were the prime motivating factors here, and less so individual genius.

The example of the botched Goodwin patent locates

Eastman and Eastman Kodak among a universe of innovators who

were all busy at work to secure apparatus and film patents.

These manoeuvres help to discourage an interpretation of

Eastman's innovative schemes as the result of individual

genius and ingenuity. At the end of the 1880s, Eastman was

among a slough of inventors who were eager to claim their

<sup>&</sup>lt;sup>6</sup> Brayer 1996; Jenkins 1975.

<sup>&</sup>lt;sup>3</sup> Brayer 70.

places in the encyclopedia of patents. He was for all intents and purposes another Hannibal Goodwin who leveraged his personal ambitions to rise to the top of the photographic materials industry. If Eastman is to be remembered as a genius at all, and this term is slippery, his was more attributable to business acumen and a sixth sense about the changing industrial climate at century's close. If one were to plot only the North American geographical locations of the industry's players at century's close, the result would generate a densely concentrated cluster in the north eastern United States, namely the states of New York and New Jersey, not surprisingly among the sites of late-nineteenth century industrial expansion.

In such a tightly distributed community of designers and manufacturers the chances of communication among Eastman and other players (E & H.T. Anthony, Blair Camera, Scovill) was not unlikely. Trade fairs and conventions were all zones of contact and surveillance among these players who all rallied for privileged positions in the photographic materials industry at the time. A preserved cache of Eastman's business and personal correspondence provides evidence of Eastman's and the Eastman Kodak Company's ongoing exchanges with competitors. Some of these exchanges

were adversarial. These "old boys" and "new boys" were all well aware of what each other was doing, and were all well aware of looming competition.

Eastman Kodak's patent and distribution arrangements provide clues with respect to the company's manipulation of industry information, namely who owned what patents, under what conditions, and who was in the process of submitting new ones. The inventor of the Box Brownie, Frank Brownell's arrangement with the Eastman Kodak Company was exemplary in this regard, a discussion of which I will return to shortly. Eastman Kodak recognized the benefits of monopoly control over certain items and processes, as well as the benefits to be garnered from monopolizing sales venues. A succession of economic recessions and depressions riddled the United States in the 1890s, recessions which made players unwilling or unable to adapt to changing market conditions extremely vulnerable. Two such opportunities presented themselves to the Eastman Kodak company at that time.

Eastman Kodak arranged to purchase the Boston Camera Company because it held an important combination of patents which allowed the Boston company to "circumvent the Eastman roll film system." Similarly, through acquisition of the American Camera Manufacturing Company in the late 1890s,

<sup>10</sup> Jenkins 189.

Eastman Kodak obtained the patent on a roll film system which had been in direct competition with its own roll film system. If Eastman Kodak couldn't acquire individual patents, it would set out to acquire entire companies instead. Shifts in the economy made this possible. These shifts in the economy would also have been felt by Eastman Kodak's corporate acquisitions as well as by Eastman Kodak even though it managed to weather well such storms. The difference, however, was the way in which the company adapted its sales and distribution to fit with the changing climate.

Corporate takeovers, patent acquisitions, and patent retirements were methods that Eastman Kodak used to insulate its processes, and most importantly film processes, from direct competition. What this suggests is that Eastman Kodak was not necessarily alone in process innovation, nor was it untouchable. That is, if Eastman Kodak could buy up "fire sale" patents, so too could its competitors who were still in the game. There is no question that Eastman Kodak was a leader in the field, but its success was neither serendipitous, nor sustained by a few good inventions. While it was not alone in the high-stakes gaming of the photographic materials industry, it most certainly stacked

<sup>11</sup> Jenkins 190.

the deck in its favour in order to handicap any potential rivals. Collectively, we remember George Eastman as the inventor of popular photography, but as we learn from a thorough going-over of this history it is process and not necessarily invention that sealed the deal.

It is crucial to emphasize Eastman Kodak's "system" of photography for it was George Eastman who "realized from the beginning that it would be the sale of film, not cameras, that was the key to the success of the system." In other words, to evoke an anachronism, it was the "software" and not the "hardware" per se that would bolster Eastman Kodak's economic profile. Let us not forget that Eastman was a part of the burgeoning middle-class to whom he figured his camera hardware and film software would appeal. His re-invented photographic processes would never have taken-off on their own, but instead had to be strategically inserted into the marketplace.

By contrast, Raymond Williams has argued that with respect to radio and television the situation was different:

In broadcasting, both in sound radio and later in television, the major investment was in the means of distribution, and was devoted to production only so far as to make the distribution technically possible and

<sup>12</sup> Brayer 68.

then attractive. Unlike all previous communication technologies, radio and television were systems primarily devised for transmission and reception as abstract processes, with little or no definition of preceding content.<sup>13</sup>

I would like to explore Williams's reference to "content" and assess it in terms of the hardware/software distinction I have proposed. I claim that when drawing attention to the success of the No. 1 Kodak, that emphasis be placed on the notion of a practical method of image production. By this I mean mechanical apparatus and easy to use, and easy to develop film which together as a system could conform to a multitude of instances and occasions. The No. 1 Kodaks came pre-loaded with a roll of 100 exposures. Once the film was exposed, the camera could be returned by mail to Eastman Kodak in Rochester for unloading and developing, and then the pictures would be returned to the user along with the camera, ingeniously replenished with a roll of 100 exposures to start the cycle all over again.

Eastman's system was not only conducive to image-making ease, but its portability also afforded mobility in image-making to the user whose only other option would have been

<sup>13</sup> Raymond Williams, Television: Technology and Cultural Form (London: Fontana, 1974) 25. Italics are his.

to use plates. Put differently, the "system" combined aspects of what has come to be identified in our cultural patois as a "do-it-yourself" ethos, along with a comparable dose of "we'll-do-it-for you." Together these added up to hardware (camera), software (film), and service: the trilogy of the Eastman Kodak Company's success. Ease, then, meant both use of apparatus and a lifestyle concept. "You push the button, we do the rest" drives home this point clearly.

The Eastman Kodak system was immensely popular. In the following letter to Frank Brownell, Eastman pre-confirmed what historians would later write about:

You will perhaps recollect that when we were working on the first models of the Kodak that I told you that I proposed with that instrument to change the very name of photography.

A perusal of the accompanying book (Mrs. Collis' [sic] Alaska) will show you that this prophesy if not already fulfilled is in a fair way to be. When the writer of such a book says she "Kodaked" a subject in preference to "photographed" it, it shows that the word has got in its work. 14

"You push the button, we do the rest" suggested more than a departure from the drudgery of cumbersome technology

<sup>&</sup>lt;sup>14</sup> GE to Frank Brownell, 15 January 1891, GEC, GEH, Rochester, New York.

and plate processes; it juxtaposed the possibility for the personal and "photo-realist" documentation of public events, with the personal and "photo-realist" documentation of private ones, thereby incorporating expressions of personal time into shared, public time. Eastman demonstrated the know-how to bring already-existing popular recreations and practices, family and home, sentimentality and history, the social accessibility of personal memory, and socially accessible technologies together in the collective imagination. The No. 1 Kodak, a technological and patented first, represented less a technologically-determined phenomenon of popular image-making practices, than a device that would link together a multitude of leisure practices, as well as people to each other. In this sense it warrants a more complex examination as an invention.

Shifts in collective and personal temporal experience, the transportation and communication mechanisms (railroad and telegraphy) to facilitate the promotion of goods nationally and not just regionally or locally, and the diversification of venues for the distribution of goods

<sup>15</sup> Railroads in the United States established uniform time on November 18, 1883, and participants met in 1884 at The Prime Meridian Conference in Washington to establish Greenwich mean time. Standard time was not adopted around the world immediately thereafter, but was certainly prodded along by the decisions made in Washington. See Stephen Kern, The Culture of Time and Space, 1880-1918 (Cambridge, MA: Harvard University Press, 1983).

(i.e. department stores) all textured the universe into which the No. 1 Kodak was inserted. Eastman's No. 1 Kodak became a node in this network. It was the network of relations that affected image-making as a popular practice, and not the camera as root cause. The time was ripe, and Eastman Kodak, who by century's close would succeed in dominating and steering the amateur sector of the photographic materials market, harvested it. Of course not even Eastman could have predicted the phenomenal success of the No. 1 Kodak and subsequent products, but it is interesting to note that he expressed the desire to.

## Promotion and Distribution

Why Eastman Kodak stands out among its ilk is attributable to relentless patent documentation and acquisitions that secured for the company many "firsts." It also used the No. 1 Kodak and roll film to take a firm grasp on the industry, a stronghold that would allow it to outlast its nineteenth and early-twentieth century competitors. It was not necessarily the quality of Eastman Kodak merchandise in comparison to its competitors' merchandise which made the company a leader in the amateur market. As discussed, the Goodwin nitrocellulose patent reveals the similarity of this process to the Eastman/Reichenbach process, and likewise the No. 1 Kodak, a knock-off of the Detective camera. Even in

the late 1880s, the photographic materials industry was tightly woven, and intensely competitive. Once again, it is necessary to reiterate that we must think less about romanticized versions of technological invention, and more about strategy and process. Two of the strategies Eastman Kodak used to figure the domination of its products were vertical and horizontal integration, the survival tactics for a shifting corporate and industrial climate.

By the late 1890s Eastman Kodak, already having proven to be adept at horizontal integration with the buy-up of the Boston Camera and American Camera Manufacturing Companies, had begun to reorganize its sales operations, and to vertically integrate by opening its own stores (nationally and worldwide), as well as by leveraging its interests in raw materials production. <sup>16</sup> It restructured and reorganized its sales operations by dispatching salesmen to regions and assigning them to specific and regular client rosters. It also set up sister companies around the globe.

Canadian Kodak Company Limited, established in 1899, was one of its expansion projects. Eastman Kodak bought out a small photographic paper business, Palmer and Croughton, in the 1890s and retained the services of one of that company's partners, John G. Palmer, to set up a Canadian

<sup>16</sup> Jenkins 238-245.

subsidiary. In a letter to one of the directors of operations in London, Eastman wrote: "There is not a very large field in Canada, but it is one which we think ought to be occupied by us...The whole thing amounts merely to our establishing a small branch in Canada and stocking it with goods." Within ten years the "small branch" in Canada was producing film, chemical preparations, and Kodaks and Brownie cameras. 18

nationally (and very soon after internationally) just six months after introducing the No. 1 Kodak. It was Eastman's intention from the beginning to make the Kodak a household word, and more importantly to make the camera a ubiquitous technology, both succeeding in revolutionizing the practice of popular photography, and, in fact, fashioning it. In the company's first national advertising campaign, Eastman specifically requested that the Kodak be shown in use "for every possible purpose." In a letter to one of his graphic designers, Eastman, overseer of Eastman Kodak's advertising affairs for most of his time as president and CEO, ordered a series of pen sketches depicting individuals and families

<sup>&</sup>lt;sup>17</sup> GE to George Davison, 6 December 1899, GEC, GEH, Rochester, New York.

<sup>18 &</sup>quot;A Canadian Business," Canadian Kodak Co., Limited Trade Circular 5(9) (January 1909): 1-2.

out and about with Kodaks in a variety of activities which included sports (use on a bicycle), travel, family leisure, parties, and so on. 19 Mobility, activity, and family accessibility were significant denominators for Eastman's campaign, as were women.

Soon after the introduction of the No. 1 Kodak, Eastman in correspondence with a different designer wrote, "we want a drawing of the figure of a lady stylishly and suitably dressed with a Kodak case slung over her shoulder and a Kodak in her hand in position to make an exposure."20 This stylish figure would become the Kodak Girl, the feminized icon memorialized in Eastman Kodak advertising copy from the 1890s up to the 1960s. She was not only a suggested camera operator, but was also one to be photographed. A certain amount of social skepticism, however, intervened in the cultivation of photography as a popular leisure pursuit. These "machines" and the kind of invasive social circulation their appropriation suggested were not considered to be particularly "ladylike," and conjured notions of "a modern girl" with which existing social mores were unfamiliar. This

<sup>19</sup> GE to C. W. Sumner, 15 August 1888, GEC, GEH, Rochester, New York.

<sup>&</sup>lt;sup>20</sup> This design was for Harpers Bazaar. See GE to C.K. Darrow & Brothers, October 17, 1888, GEC, GEH, Rochester, New York. This is also the likely origin of Kodak Girl, the title given to a succession of models who promoted Kodak products from the 1890s up until the 1960s.

unfamiliarity was shortlived, as I will discuss in the next chapter. With its rapid succession of increasingly simplified camera models throughout the 1890s and culminating in the Box Brownie in 1900, Eastman Kodak intervened in the moral divide between women and cameras in such a way that the connection between women, cameras and family was, by the turn of the century, hardly a moral issue, and had, in the case of family, become a moral imperative to record "history," and to seek out pleasure in images, their production and consumption as an inclusive, family activity.

From the distribution end of the business, Eastman Kodak would offer special discounts to camera dealers if they dealt exclusively in Eastman Kodak products. This was a big incentive for small dealers who could clearly benefit from the break. This was also Eastman Kodak's way of buying retail venues without actually having to manage them. It also shows how important the word, "kodak," was to the whole operation. These were not "touring cameras," and nor were they "hand cameras;" they were "Kodaks." If Eastman could, by supervening social necessity, identify a demand for the practice of popular image-making, and solidify the recognition of a brand name, he could, in effect, monopolize sales venues by leveraging the cultivated public demand for "Kodaks" and "kodaking" against privileged distribution, and

fixed wholesale and retail pricing scales.

If people couldn't get to Eastman Kodak products, then Eastman Kodak and its subsidiaries would take its products and a stable of demonstrators to the people. The expansion of railroads from east to west in the United States and Canada in the 1870s and 1880s helped to facilitate the distribution of Eastman's "system." Underlying this infrastructural expansion were both the transportation of goods and services, and the potential for the creation of national markets, a matter underwritten by the integration of disparately situated populations into widespread communication and transportation networks, the telegraph being an important link.<sup>21</sup>

In 1905 the Kodak Exhibition took to the road for the first time to tour the United States, having previously toured England. These shows included lectures and demonstrations, lantern slides, pictures, and even motion pictures to fill gaps between photographic demonstrations as "fillers and entertainers," as the company put it.

Canadian Kodak had its own version of this road show, appropriately named the "Made-In-Canada Train," which

<sup>&</sup>lt;sup>21</sup> See, for example, James Carey, Culture and Communication (Boston: Unwin Hyman, 1988).

<sup>22 &</sup>quot;Again the Big Show," Eastman Kodak Company Trade Circular 13(10) (September 1912): 2.

traveled throughout the country making literally hundreds of stops in small towns dotted along the Canadian rails. The impact of these traveling road shows could be measured by their substantial attendance records. Eastman Kodak was acutely sensitive to attendance remarking about the utility of these shows in terms of "broad gauge advertising that will help the whole photographic business."<sup>23</sup>

The Kodak Exhibitions incorporated rural populations into the consumption and first-hand examination of Eastman Kodak products which otherwise may only have been accessible in mail order catalogues. Montgomery Ward & Co. issued its first mail order catalogue in 1872, the year it opened, and Spiegel, May and Sears Roebuck and Company soon after followed suit. Eastman Kodak stocked goods in the new consumer outlets and fed-off of the numbers their convenience and opulence attracted. It was all part of an expertly-tuned system of distribution that the company voraciously exploited, not unlike other businesses at the time.

Why Eastman Kodak is noteworthy can be attributed to its quickness among producers of photographic materials to

<sup>&</sup>lt;sup>23</sup> "Again the Big Show," Eastman Kodak Company Trade Circular 13(10) (September 1912): 1.

<sup>&</sup>lt;sup>24</sup> James D. Norris, Advertising and the Transformation of American Society, 1865-1920 (New York: Greenwood Press, 1990).

integrate these new forms of distribution, an awareness it shared with the new department stores. The railroad and telegraph contributed to the nationalization of markets; Eastman Kodak in concert leveraged its No. 1 Kodak to create a national and international brand of camera, which, make no mistake, was "truly American." Kodak, the word, quickly entered the popular lexicon but Eastman (and his attorneys) micro-managed the appropriation of the word for other commercial purposes, at least in the United States where the name had been fully trademarked and protected against misuse. In Canada, the name had been registered for use only with the company's photographic material; as a result of this lack of forethought, several Canadian tobacco companies appropriated the name in order to capitalize on its global popularity. The state of the state of the same in order to capitalize on its global popularity.

<sup>&</sup>lt;sup>25</sup> Montgomery Ward and Sears, Roebuck also equipped special trains to travel the United States and show off goods. See Norris 15-16.

<sup>&</sup>lt;sup>26</sup> GE to C.W. Hunt, 15 September 1888, GEC, GEH, Rochester, New York. George Eastman wanted a distinctive and recognizable name for his new camera, one that would differentiate it from the Detective Camera. The longer citation reads: "The writer agrees with you in regard to names, but there is, you know, a commercial value in having a peculiar name; it cannot be imitated or counterfeited. You are in error, however, if you think "Kodak" is a foreign word. It is truly American. That is to say it was born here in this country."

<sup>27</sup> Wyatt Brummitt, The Story of Kodak, unpublished ms., Eastman Kodak Company, Rochester, New York, 1-2.

Eastman Kodak's efforts to equalize and engineer the acceptance of image-making as a desirable leisure activity for the many were all part of a process of making-common the pursuit of image-making practices, and defining social uses. After the first decade of the twentieth century the company started to produce its own publication for amateurs, Kodakery, which it made available by mail and at dealers of Eastman Kodak products. It debuted in 1913. Kodakery supplemented the company's continued efforts to carve out an amateur public of photography consumers, and to carve them out as Eastman Kodak customers, especially. Kodakery adhered to Eastman Kodak's other organs of distribution and promotion (like the road show) which had already begun to nourish image-making as a popular pursuit, and to showcase its infinite uses.

Eastman Kodak's circumscription of families was key.

Family appropriation by far outweighed attention to individual and specialized notions of photographic consumption, although the company was careful not to alienate specialization either. Its strategy to augment the mass-popularization of image-making as a conduit to familial aggrandizement is revealing in that it draws attention to an entrepreneurial and industrial zeitgeist for defining "family" as a viable component in the consumption of amusements, goods and services. It, along with other

entrepreneurs and businesses such as the department stores, demonstrated foresight in its recognition of a rapidly growing bourgeois "class" with the potential to dispense with their disposable incomes. George Eastman was one of them, and who better to capitalize on the distribution of new wealth than someone who shared an affinity for it?

Eastman revamped image-making, an individualized practice, by turning it into a social one. The Eastman Kodak Company's advertisements always depicted groups of people (families mostly) together and using cameras. When it did depict "individuals," like the Kodak Girl, it catered not to sequestered, individualized, and even alienated notions of production, but to socially integrated ones that located shutterbugs in the world of new leisure fancies, travel, and family. These advertisements and production literature consolidated the familial and bourgeois prominence of imagemaking, especially with respect to babies and children. In the figure of the child, as both photographic subject and camera operator, lay the dual promise of the future as well as the present-oriented privilege of personalizing perceptions of history in photographic images. These personalized perceptions would always be rooted in social production and consumption.

As popular use of the camera intensified so did the discourses espousing its historical function and

indispensability as marker of time, and "impartial historian." "Kodak pictures will settle controversies as to how we did look," boasted one contributor to Kodakery, adding that with the Ciné-Kodak the records would become even more realistic. 26 Discourses of verisimilitude, the historical value of the image, and the utopian function of image-making in the family as an all-inclusive activity and "moveable feast" were grafted onto the production of moving images in the family. A longing for the future matched with the visual ownership of time past, and the willful claim to its narratives would be reinforced as the family image archive grew.

What had descended upon the North American social and cultural topography as the target of mass consumption in 1888 had soon after become, for those with the resources to do so, a familial historical imperative in which the perpetuity of the image reproduced desires to juxtapose "then" and "now" as socially-situated negotiations. Eastman Kodak's corporate and promotional strategies suggested a looking-inward to personal life as both a refuge from, and a means by which to insert expressions of personal event history into collective notions of temporality. To isolate the potential uses of cameras also meant differentiating

<sup>&</sup>lt;sup>26</sup> Madge Ellery, "An Impartial Historian-The Kodak," Kodakery 13(11): 18.

camera appropriation along several lines. Gender, and, of course, generation, were among these, the Box Brownie being a case in point.

## The Brownie Revolution

The Eastman Kodak Company recognized the value in recruiting individual scientific and technical personnel among its ranks. As early as 1890 the Massachusetts

Institute of Technology (MIT) was a stable for the recruitment of Eastman Kodak talent. This recruitment strategy identifies the supplanting of individual and ad hoc entrepreneurship by technically-trained and formally-educated personnel. Likewise, the Eastman Kodak Company recognized the necessity and commercial benefits implicit in

<sup>&</sup>lt;sup>29</sup> George Eastman's first hire from MIT was Darragh de Lancey, a mechanical engineer he plucked from the institute's graduating class in 1890. Many more would follow. Over the years Eastman donated millions of dollars to MIT as well as to other research venues such as the University of Rochester, and continued to draw from these institutions' and others' educated ranks. See Brayer 340-41.

Javid Noble closely examines how the partnering of science and technology worked in favour of the rationalization of corporate capitalism at the end of the nineteenth century. See David Noble, America by Design: Science, Technology and the Rise of Corporate Capitalism (New York: Alfred A. Knopf, 1977). Elsewhere, and in an English context, E.P. Thompson has traced the devaluation of craft labour and how its practices were subsumed by the machinery of the Industrial Revolution, and transformed. See E.P. Thompson, The Making of the English Working Class (London: Victor Gollancz Ltd, 1963).

devising exclusive contractual agreements for the production and distribution of certain goods.

Frank Brownell, who was also the early manufacturer of Eastman Kodak's cameras including the No. 1 Kodak, entered into one such agreement with the Eastman Kodak Company: "Brownell held the patent for the Brownie but Eastman convinced Brownell to sign an exclusive distribution contract with Kodak."31 For the Eastman Kodak Company this meant being able to monopolize the Brownie's success; for Frank Brownell it meant abdicating from entrepreneurial success. After the Box Brownie was introduced to the market, Brownell was approached by several companies for permission to distribute the camera. Brownell was forced to decline on the basis of being locked into the agreement with the Eastman Kodak Company. This double-edged contractual agreement, the systematization of patent controls, as well as the company's exploitation of new systems of distribution for mass consumption (drug, department and hardware stores, and camera dealers) essentially allowed the Eastman Kodak Company to out-manoeuvre its competition. 32

Photography in the 1890s, although Eastman Kodak had succeeded in disseminating it in a compact and versatile

<sup>31</sup> Frank Brownell Mehlenbacher, personal interview, 12 February 1997.

<sup>&</sup>lt;sup>32</sup> Jenkins 1975.

form, remained out of reach economically for some. Eastman Kodak's No. 1 Kodak initiated the production of more affordable apparatuses across the industry. Eastman Kodak's restrictions on the 25 dollar retail price, however, meant that popular photography remained largely inaccessible for many. Recessions of the 1890s did little to remedy these access issues, and Eastman Kodak knew this. What this suggests is that we need to rethink the meaning of "mass-popularization" in a more global sense. I would like to qualify Eastman's intention to diversify image-making for a wider amateur "public," and use the Box Brownie to signify a turning point in the process. The first series of sketches that Eastman commissioned for publicity purposes depicted "families" and alluded to the celebration of children, in particular middle- and upper-class children and families.

The mode of technological dissemination is important here. "The state of the market, or better, of society," argues Brian Winston, "is the crucial factor in enabling the development and diffusion of any communications technology or in hindering it." He continues: "That is as true of the computer chip and the Internet as it was of the telegraph and the telephone. Thus, innovations are the creatures of society in a general sense."<sup>33</sup>

<sup>33</sup> Brian Winston, Technologies of Seeing: Photography, Cinematography and Television (London: British Film

It is crucial to situate the initial diffusion of a technology, in this case the No. 1 Kodak, in relation to a process of modified accessibility. This process has been identified elsewhere with respect to television. While having achieved popular acclaim in its first stage of diffusion, the time between the introduction of television and its wider installation in North American homes, although rapid, is measurable. The No. 1 Kodak infiltrated the market and in so doing expanded the social and economic potential for image production as a "mass" amusement, with the distinction of "mass" being significant. Subsequent innovations succeeded in broadening this distinction. The Brownie, a cardboard dollar camera introduced in 1900, marked the next important phase.

The Brownie-the box, dollar camera for every person-was designed with the idea of mass production in mind since its cardboard body and highly simplified mechanisms could be efficiently and cost-effectively reproduced. To promote it, Eastman Kodak pilfered the product's name<sup>35</sup> and caricatures for its package design from contemporary and well-known,

Institute, 1996) 3.

<sup>34</sup> See, for example, Lynn Spigel, Make Room for TV: Television and the Family Ideal in Postwar America (Chicago: University of Chicago Press, 1992).

<sup>35</sup> The Brownie was not a derivative of inventor Frank Brownell's name.

children's book author Palmer Cox's popular storybook characters, "The Brownies."<sup>36</sup> Eastman explicitly appropriated the iconography from one popular cultural artifact to champion the popularization of another. "Plant the Brownie acorn and the Kodak oak will grow:" in other words, start them young and germinate many lifetime customers.

The Brownie, not surprisingly, was promoted in youthoriented publications (i.e. The Youth's Companion), and
women's and family-oriented ones (i.e. Women's Home

Companion and Ladies' Home Journal). It was not exclusively
imagined to be of the purview of youth even though this is
where the company's attentions were dominantly poised. I
distinguish this simple box camera as representing the
diversification of amateur "publics" along the lines of
generation and gender. On the eve of its market
introduction, Eastman Kodak wrote the following note to

working in the United States until his retirement and return to his birthplace, Granby, Ontario, published numerous books chronicling the adventures of his impish characters. Cox's Brownies were always involved in contemporary activities and had individualized personas, which likely contributed to making him one of the most popular writers for children in the last two decades of the nineteenth century. Aside from publishing books, Cox's illustrated narratives appeared as a standard feature in the Ladies' Home Journal, a regular carrier of Eastman Kodak advertisements. On Palmer Cox, see Charlotte Spivak, "Palmer Cox," Dictionary of Literary Biography 42: 133-138.

dealers: "Although of simple construction this is a good, honest little camera that will delight the heart of any boy or girl and will, we have no doubt, make thousands of customers for instruments which have greater capabilities." The Brownie, then, was expected to fit into both a technological lineage in the family (upgrading to, or situated alongside more complex technologies) and a generational lineage (Brownies as the starter apparatuses for boys and girls).

The Box Brownie spawned a slough of rhymes and ditties which in no uncertain terms demonstrated what can only be considered a kind of burgeoning Brownie poetry. These popular and poetic responses accompanied existing rhymes about the Kodak which, by the 1890s, had already started to fill the pages of popular magazines. To illustrate and emphasize the fit of the Brownie with family lineage, an August 1909 issue of Kodakery included the following poem, titled "The Brownie Family." The poem was published with an image of seven children and their photographic apparatuses. Eastman Kodak made this poem and others available to dealers for the asking:

Baby is the subject, and finds the posing fun. Harry is the expert with Brownie No. 1.

<sup>37</sup> Eastman Kodak Trade Circular 1(3) (February 1900): 3.

Susie is the artist of Brownie No. 2;

She says "there's really nothing, the little box can't do"!

Jane is at the shutter of Brownie No. 3;

Johnnie chose a Folding one, as all of you may see.

Mary likes her pictures in the "postal" size,

Thomas loves the "stereo"-note its eager eyes.

With our "Special Artists" always on the spot,

We're sure of knowing who is who, as well as what is what.

The prints we put in albums, each one neatly dated—
The Brownie Family History is "fully illustrated."36

To further illustrate Eastman Kodak's interest in the picture-making youth (and an interest in capital procurement), in honour of the company's 50th anniversary in 1930 it gave away 500 000 Brownie cameras in the U.S. and 50 000 Brownies in Canada to children aged 12. To push the promotion, Eastman Kodak called on contemporary "experts" in child education, representatives from the Girl and Boy Scouts, and the former First Lady of the United States, Mrs. Calvin Coolidge, to extol the virtues of image-making for

<sup>38</sup> Tudor Jenks, "The Brownie Family," Eastman Kodak Company Trade Circular 10(9) (August 1909): 7.

children.39

To coincide with the anniversary giveaway, Eastman Kodak debuted the first in a regular series of radio programs. Beginning in April of 1930 and for a short time, the company produced "The Kodak Mid-Week Hour" and "The Kodak Weekend Hour" to be aired Thursday and Friday evenings on the Columbia Broadcasting System and the National Broadcasting Company, respectively. These Kodak variety shows combined poetry and live orchestral music with discussions about Eastman Kodak products and promotions, as well as helpful hints for image-making. Herein, the company used radio in much the same way that it had previously used the railroad, for example, as a means by which to reach larger and larger numbers of potential and current customers, and at the very least to get camera users to associate the name Eastman Kodak with picture-making.

In 1946, the company announced a large-scale campaign to sell to "the customers with the longest futures," and paralleled camera appropriation with *au courant* "rages, fads, and sports" by situating the promotion of Brownie cameras among teenagers who were already entranced by

<sup>&</sup>lt;sup>39</sup> "They Say: Eminent people applaud the Anniversary Plan," The Kodak Salesman 16 (3): 11.

<sup>&</sup>quot;Kodak on the Air Twice Each Week," The Kodak Salesman 16(4)(April 1930) 4-5.

Sinatra and bobby sox. 1 Its annual highschool photography competition, instituted in 1946, promised a variety of awards and was accompanied by a series of specially-designed promotions which depicted teens at home, at the beach, and at parties snapping photos, and enjoying the self-reflexive pleasure of consuming photos among groups of friends. These campaigns framed teenagers as having the longest and most promising futures, and also drove home the promise of the future by inserting image-making into it, with images standing in as future memory artifacts for conjuring the past.

It would be short-sighted to wholly attribute the success of popular photography to one individual and the psychology behind nifty promotional campaigns.

Notwithstanding, what we must come to terms with in Eastman's contributions are more subtly the know-how to bring together in popular imaginations already-existing popular recreations and practices, family and home, sentimentality and history, the social accessibility of memory, and socially accessible technologies. George Eastman might not have independently caused the craze, but he most certainly intended to. In so doing, he was well-poised to earn a permanent nod in history books as the "father" of a

<sup>&</sup>quot;Kodak Taps Rich New Market," Kodak Salesman 32(3) (May 1946), 7.

popularized form of image-making practice.

On the eve of Eastman's introduction of the Kodak, for example, he had this to say: "Although not yet fairly on the market, the indications are that it (the Kodak) will be the most popular thing of the kind ever introduced." As we all know, it turns out that Eastman was correct in his imaginings, but such anticipatory delight in the new photography was not shared by all.

# Photographing by the Yard

Popular photography as a recreational hobby and amusement was not without social resistance. Opposed to its unbridled popularization were those who had claimed image—making as a "dignified" art and skillful practice, and who feared that the practice could only be debased by the new photographic technologies that removed social barriers to photography by accommodating "anyone" who wanted to make images. Alfred Steiglitz is perhaps the most well-known of opponents to popular photography as it had been redefined by George Eastman. Steiglitz, who intended to reclaim the pictorial aspects of photography, was not alone in his eschewing of the practice. The American Amateur Photographer voiced its concern that photography as it existed in 1889

<sup>&</sup>lt;sup>42</sup> GE to Messrs. Young & Fairchild, 23 July 1888, GEC, GEH, Rochester, New York.

was in danger of being "belittled" due to the availability of "a fairly serviceable set of apparatus" that could be "purchased for a song." For the authors of The American Amateur Photographer, a moral disposition was at work here. They wanted to shape photography beyond that of a mere leisure pastime, and to propel it toward ideas of honouring the work of God in the artful representation of all things beautiful.

We might consider the wrongheaded imaginings of photographic "professionals," "serious amateurs," and "artists," who, by situating themselves according to self-attributed expertise and social connections, harboured attitudes toward a popularized means of image-making as no more than a passing fancy. Alfred Steiglitz demeaned popular image-making the Kodak way as "a fad well-nigh on its last legs, thanks principally to the bicycle craze" at the turn of the century. This notion of the "bicycle craze" is significant. To it were attached popular and portable image-making practices, as well as a literature consolidating both as compatible amusements. I will return to this point in the

<sup>&</sup>lt;sup>43</sup> "The Present Aspect of Amateur Photography," The American Amateur Photographer 1(1) (July 1889): 5.

<sup>&</sup>quot;Alfred Steiglitz, "The Hand Camera- Its Present Importance," The American Annual of Photography and Photographic Times Almanac for 1897, A.E. Woodbury, ed. (New York: The Scovill & Adams Company, 1897) 19.

next chapter, but for now would like to focus on Steiglitz's contestation.

It is debatable as to whether or not Alfred Steiglitz seriously underestimated the mammoth social implications of Eastman's technical intervention and cunning. His attitude toward popular appropriations of the hand camera are telling. While unable to foreshadow with any inkling of accuracy the latent importance of cameras (still and moving image) as appendages to family rearing, his published dismissal of the "fad" stands as ample evidence of the way in which such a practice did soar. Although haughtily aggravated by the popular appeal of photography, Steiglitz understood well how it happened:

It was, undoubtedly, due to the hand camera that photography became so generally popular a few years ago. Every Tom, Dick and Harry could, without trouble, learn how to get something or other on a sensitive plate, and this is what the public wanted-no work and lots of fun.<sup>45</sup>

Steiglitz, although referring to the hand-camera craze as it had been capitalized upon by a variety of firms, largely directed his scorn at the Eastman Kodak Company, and even identified the company's signature slogan, "you push

<sup>45</sup> Steiglitz 20.

the button, we do the rest," as a signifier of "the beginning of the photographing-by-the-yard era."<sup>46</sup>

Precisely, Mr. Steiglitz. The irony, of course, is that several fine arts photographers started out as childhood "button pressers" with Kodak outfits, and namely the Brownie.<sup>47</sup> Ansel Adams was one who took his first photographs with a Box Brownie at the age of 14 at Yosemite National Park in 1916.<sup>48</sup>

There is another way to interpret Steiglitz's dismissive remarks. It has to do with making the distinction between professionals and amateurs. In the last two decades of the nineteenth century social distinctions between "amateurs" and "professionals" had begun to emerge from late-nineteenth century industrial capitalism. As Patricia Zimmermann puts it, amateurism "emerged between 1880 and 1920 as the cultural inversion to the development of economic professionalization." The rise of new industrial, scientific and technological professions and their respective professional associations functioned as a means

<sup>46</sup> Steiglitz 20.

<sup>&</sup>lt;sup>17</sup> Wyatt Brummitt, George Eastman at Kodak, unpublished ms., Eastman Kodak Company, Rochester, New York, 94-95.

<sup>&</sup>lt;sup>48</sup> The Redwood Empire: Exhibit of Photographs by Ansel Adams, (San Francisco: San Francisco Museum of Art, 1965) no page.

<sup>49</sup> Zimmermann 1995, 7.

by which to distinguish and legitimate knowledge claims, as well as identify insiders and outsiders to knowledge communities.

With respect to electric media, Carolyn Marvin has argued that "[its] early history is less the evolution of technical efficiencies in communication than a series of arenas for negotiating issues crucial to the conduct of social life; among them, who is inside and outside, who may speak, who may not, and who has authority and may be believed."50 By Marvin's account, different constituents rallied around electric media. Some of these constituents were organized to different degrees of proficiency, interest and proximity to the new media in the form of clubs, professional associations, and an official literature. There were others whose connections were more ad hoc, but no less significant.

Professional societies and brotherhoods, as shelters for legitimating knowledge, were also partial responses to magnanimous shifts in the organization of labour. In the arena of engineering professions, David Noble (1977) informs us that professional societies sufficed to intervene in the devaluation of craft labour brought on by the insertion of middle management into workplaces to monitor efficiency, and

<sup>50</sup> Marvin 1988, 4.

to assert more effective controls over labour.

Both Marvin and Noble raise an important issue about the organization of interests with respect to a phenomenon or movement. Their emphasis on organization is useful for negotiating how diverse formations of constituents occupied various subject positions in relation to the new practices of image-making. The "real" relations at work in the popularization of image-making practices at the close of the nineteenth century are slightly more complicated than an appreciation of them as universally-applauded would allow. To use Raymond Williams's (1977) terminology, a "structure of feeling" must accompany the renarrativization of an event in history, or otherwise be thwarted by a narrow and limited interpretation of it through ideology and its operation.

To return to the Steiglitz matter, he too emerged from the "real" relations at work in the emergence of amateurism in relation to professional cultures. Even as late as 1888 most people who used photographic equipment would have been considered "amateurs" by definition. This would arguably have been an entirely different state of affairs in contrast to the emergence of standardized and amateur film practices in the 1920s, when notions of amateurism were hardly new. By the 1890s, the foundations for defining amateur practices and their relationship to equipment and practices were well-established, roughly around the time that Steiglitz made his

famous remarks. We must not overlook, no matter how small in historical time, how during a 10 year period, from 1888 to the end of the 1890s, definitions of social status in terms of camera use were, however momentarily, in suspension. Thus, changes in apparatus meant equally the augmentation of image-making practices and the potential for growth in the number of image-making enthusiasts, as well as the technological conditions for necessitating critical reprisal.

Who were amateurs and who were professionals was not so explicit. 51 There were studio and traveling photographers who made a living from taking pictures and producing daguerrectypes. The distinction I wish to forge here, however, differentiates image-making as a means by which to earn a living, from a shift in thought toward image-making as a professional practice replete with a professional literature, guilds, associations, and, of course, discourses. Although the No. 1 Kodak was designed to make image-making accessible and affordable for the "masses," it

<sup>51</sup> For a discussion regarding the ways in which commercial photographers in the 1880s attempted to elevate the position of photography to that of a respected profession, and the professionalization of photographic practice see Sarah Greenough, "Of Charming Glens, Graceful Glades, and Frowning Cliffs," Photography in Nineteenth-Century America, Martha A. Sandweiss, ed. (Fort Worth: Amon Carter Museum, 1991; New York: Harry N. Abrams, 1991): 259-81.

is debatable as to whether or not it was inserted into an already-formed idea of amateur (and not necessarily popular) photography, or if, in fact, it propagated the need in some to express professional aggrandizement. I argue in favour of the latter.

As different social groups rallied differently around image-making practices, so too did different literatures and hierarchies of opinion begin to crystallize, and responses in the form of practices begin to develop. While it would be easy to attribute these distinctions exclusively to apparatus choice and the kinds of social groups and activities associated with them-for example, the No. 1 Kodak and Brownie and their "masses," versus more complex machinery and fine arts practices-it is prudent to crossreference these distinctions and attitudes according to method. In other words, we must look beyond individual mechanisms to processes: plates versus 100 exposures, wellstudied subject matter versus photographing by the yard. Social critics such as Steiglitz juxtaposed quality and complexity against quantity and ease, whereby it was not only hardware choices, but software ones that worked to draw dividing lines in the sand.

To illustrate just how in flux notions of amateur were before 1888, at least in North America, we might look to existing literature of the period. There was hardly a

photographic journal literature to speak of in North America at the end of the 1880s, the exception being The American Amateur Photographer (1889), and Amateur Photographer (1884) which came out of London and was available in the United States. Camera Notes (1897) was published by the Camera Club of New York, and was known formerly and briefly as The Journal of the Camera Club (1896). At first a journal devoted to club activities, it became less so under the guidance of Alfred Steiglitz, chair of its publication committee, and was rapidly transformed into a publication international in scope. 52 By this, the journal meant to establish its relationship and the club's relationship to photography in an international arts arena.

By the late 1890s, a repertoire of journals catering specifically to amateur pursuits (i.e. The Photo-American, Paines Photographic, Camera and Darkroom) had begun to appear. It was not until the early twentieth century,

identified its mandate in the first issue: "In the case of the photogravures the utmost care will be exercised to publish nothing but what is the development of an organic idea, the evolution of an inward principle; a picture rather than a photograph, though photography must be the method of graphic representation. While Camera Notes will continue the work of the former journal of recording proceedings of the Camera Club in the most faithful way, it is intended to take cognizance also of what is going on in the photographic world at large." Publication Committee, "Introduction," Camera Notes 1(1): 3.

however, that image-making journals, notwithstanding other varieties of late-nineteenth century popular magazines (i.e. Ladies Home Journal, Harper's Bazaar, Harper's Weekly, and Scribner's), began to surface. Two of these, Kodakery and Sears, Roebuck's Better Photos (both having debuted in 1913), directed their attention to family-oriented production and consumption.

The explosion of titles throughout the 1890s and into the first fifteen years of the new century differentiated "mass" interest in image-making practices among the ranks of "amateurs," from those seriously committed to exploring the technical aspects of the craft, to those whose interests did not stray far from family and leisure pursuits. As Elizabeth Eisenstein has argued with respect to a generation of book production, producers of books moved away from "fidelity to scribal conventions toward serving the convenience of the reader." We might consider the spirit of her comments in terms of the early twentieth century and consider the ways in which the producers of image-making literature conformed to very different and power-differentiated groups of users of photographic paraphernalia. In this respect, the producers of literature moved away from "artistic" and

<sup>53</sup> Elizabeth Eisenstein, The Printing Revolution in Early Modern Europe (New York: Cambridge University Press, 1983) 21.

"technically-oriented" conventions toward serving the convenience and expanding interests of image-makers to include families, children, and homemakers as meaningful constituents. This was also the familiar and familial territory upon which amateur motion picture practices in the context of the family were sown.

### Making Movies

Companies such as T.A. Edison Inc., Eastman Kodak, Bell & Howell, and Victor Animatograph were early players in the development of film technology in North America. Eastman Kodak, Bell and Howell, and Victor Animatograph worked to develop amateur equipment and, as well, maintained controlling interests in the professional technology sphere. Overseas, Pathé, who formed a partnership with Eastman Kodak in the late 1920s, were also at work to develop cinematic technology for the home. The earliest experiments in home cinema were for home projection of moving images, but not for personal production. 54 This is elaborated in Chapter Four.

Initially entrepreneurs and inventors, Thomas Edison and George Eastman had long since established themselves as

<sup>&</sup>lt;sup>54</sup> Ben Singer, "Early Home Cinema and the Edison Home Projecting Kinetoscope," Film History 2 (Winter 1988): 35-69.

captains of industry by the early twentieth-century. Thomas
Edison wanted to find a way to transform photographic images
into moving images. Around the end of the nineteenth
century, Edison used Edison Laboratories to come up with a
device for making moving images, and projecting them. 55
Eastman Kodak, alternatively, were late to enter the
business of motion picture apparatuses, but were not out of
touch with the development of moving image film stocks.
While continuing to maintain and enlarge its lion's share of
the amateur photography market, Eastman Kodak supplied film
to both Edison and Mutoscope (the company of George Dickson,
Edison's former associate), whose explorations in film
coincided with the Lumière brothers' in France. 56 Albert
Howell and Don Bell were both equipment entrepreneurs who
established Bell & Howell in 1906. 57

These men all solidified their professional stakes through membership in the Motion Picture Patents Company

<sup>55</sup> Robert Sklar, Movie-Made America: A Cultural History of American Movies (New York: Random House, 1975). In particular see Part I, "The Rise of Movie Culture," 3-65.

<sup>&</sup>lt;sup>56</sup> Brayer, 111-113.

<sup>&</sup>lt;sup>57</sup> See Patricia Zimmermann, "Entrepreneurs, Engineers, and Hobbyists: The Formation of a Definition of Amateur Film, 1897-1923," Current Research in Film: Audiences, Economics and the Law 3, Bruce A. Austin, ed. (Norwood, NJ: Ablex Publishing Company, 1987): 163-188.

(MPPC), established in 1908.58 The MPPC was a meeting place of sorts for well-healed businessmen working in the imagemaking professions. Of importance here is how 35mm film equipment, due to a roster of patents held and tied up by economically powerful film entrepreneurs and partnerships resulting from connections made through the MPPC, was leveraged as the professional exhibition standard, and left a window open for experimentation with other formats including 9, 9.5, 11, 17.5, 21, 22, and 28mm. This period of alternative format experimentation was shortlived in North America. Eastman Kodak and Bell & Howell sealed their professional relationship at this time with an agreement to work together to develop amateur equipment. Theirs, however, was not a haphazardly entrepreneurial relationship. It was grounded in the maintenance of existing monopolies and corporate dominance through research and development, a relationship that had been nurtured via their membership in the MPPC. It was also a style of corporate entrepreneurship

of course much larger. I have chosen to focus on the big names of which Kodak and Bell and Howell will endure as the primary stakeholders in the amateur market (home movie) of the postwar period. Kodak set its sights on developing camera equipment and film stocks and Bell & Howell established itself as a distributor of amateur equipment. Kodak, during the period of 1897-1923 to quote Zimmermann's historiography, commanded a sizable monopoly of film stocks due to its celluloid and emulsion patents. See Zimmermann 1987; 1995.

to which the Eastman Kodak Company was adroitly familiar.

In June, 1923 Eastman Kodak introduced the Ciné-Kodak (16mm), a format intended specifically for amateur use.

Later that same year, Bell & Howell followed with its Filmo 70. This was an important moment in the development of an idea of amateur film technology. It signifies a point at which a moving image product line was mass-produced and internationally (including Canada) sold under the auspices of its applicability for non-professional, and everyday use, not unlike the circumstances surrounding the No. 1 Kodak. Furthermore, it draws our attention to a historical moment at which a non-professional film format was standardized (in North America). Through standardization the Eastman Kodak Company continued its efforts to widen its net to attract the largest common denominator of users.

The possibilities for standardization, and massmarketing were well in place by the time 16mm film equipment
had entered the marketplace. This made the introduction of
amateur equipment to the home not such an unprecedented
transition. What this meant was that the distribution and
manufacture of amateur equipment was in the hands of a small
number of businessmen, not unlike the streamlining of the
professional film equipment monopolies.

Patricia Zimmermann (1995) distinguishes three distinct periods of amateur film development. These are: 1897-1923

during which a definition of amateur film was offset by 1) the establishment of 35mm as the professional standard, and 2) the North American standardization and introduction of 16mm equipment as strictly an amateur format in 1923; next, the interwar period in which 16mm and 8mm together were emphasized for amateur use including family appropriation<sup>59</sup>; and, finally, the postwar period in which 16mm graduated from family production and became associated almost exclusively with semi-professional practices (hobbyists, film artists), and documentary, educational, and training film production. Although 16mm came to be associated with semi-professional practice in the period following World War II, based on its appropriation for reporting from the battlefields and for domestic newsreel production, the medium had wide applications to educational and training film production prior to the post-World War II period, and

projector, splicer, and screen) sold for \$335 in the United States, a considerable amount of money. See Brian Coe, The History of Movie Photography (Westfield, NJ: Eastview Editions, 1981) 167. In 1953 the Kodak Brownie (Kodak's bottom of the line model) retailed for approximately \$43 in the United States (The Brownie, advertisement, Popular Photography March 1953: 67). In 1951 the average yearly income for a Canadian household was \$2 367. See Census of Canada, 1951, Table 1, page 1. Keeping in mind that product lines and prices varied based on gadgetry, the Brownie represented approximately one-quarter of a Canadian monthly income, more or less depending on Canadian retail prices. Needless to say, the costs of this equipment were prohibitive.

was instantly diversified beyond travel and family films.

Utopian and educational discourses immediately pervaded popular, movie-making literature. Movie Makers (nee Amateur Movie Makers, 1926), the journal of the Amateur Cinema League, is one example. Louis M. Bailey, regular columnist for Movie Makers, covered the use of film for visual education and instruction in schools, professions, and the home. 60 Bailey and others talked about both the production and consumption of films whereby films could be used to "communicate" ideas and instruct, but production would also have its virtues.

When 16mm cameras were introduced in 1923, the necessity for drumming up new image-making interests in the family was by no means contingent upon technology, and perhaps even less so was it the umbilical cord cut from professional film practice, at least not with respect to family appropriation. That is, the precedents for a "historical consciousness" vis à vis image-making and family documentation had already been anticipated. Home moviemaking practices glided alongside, and Eastman Kodak, in the same way that it had promoted accessible photographic practices, set out to ease amateur film into everyday life.

See for example, "The Movies Win for Welding," Movie Makers 4(3) (March 1929); "News of Visual Education in Schools and Homes," Movie Makers 4(5) (May 1929); "Forward with Medical Films," Movie Makers 4(10) (October 1929).

One of its educational films, A Movie Trip Through Film Land, was offered to dealers to assist them in hyping amateur film equipment sales in 1923.61 The film gave viewers who would already have been familiar with cinemagoing and popular photography a peak behind the scenes at the celluloid production process. It glorified the production of celluloid from its raw materials stages to finished product in the Eastman Kodak Rochester plant at Kodak Park. The film, initially produced in 1922, had by 1923 been screened in various theatres throughout the United States and Canada before the market introduction of 16mm. While obviously intended for movie fans and would-be novices, the film curiously depicted the production of silver nitrate stock yet described it as being like the film "you buy in the little yellow boxes for your Kodak."62 As part of Eastman Kodak's educational series, its content and doubling-up for dealer use revealed how the company envisioned easing consumers of Eastman Kodak photographic products into the consumption of moving image paraphernalia as a supplement to the production of still images.

Comparatively, the proliferation of private rental film

<sup>61 &</sup>quot;A Two-Reel Motion Picture Now Ready For Your Use," Eastman Kodak Company Trade Circular 24(9) (September 1923): 1-3.

<sup>62</sup> A Movie Trip Through Film Land, Eastman Educational Films, 1922.

libraries in the 1920s intervened at the level of distribution to bolster ideas about the all encompassing value of film. Catalogues for Eastman Kodak's Kodascope Libraries, Bell & Howell's Filmo Library, Empire Films, Home Film Libraries and Neighbourhood Film Libraries, to name a few, all included an abundance of educational, public service, and entertainment titles, and were also distributed throughout the United States and Canada. That Eastman Kodak and Bell & Howell were producers of movie-making outfits and projectors, and were film distributors points to how a handful of corporate interests spread themselves across the social dissemination of film. Eastman Kodak is especially interesting since it was simultaneously an equipment, content, safety film/celluloid, and service (developing) provider. Again, and with 1888 in hindsight, it continued to play the field between hardware and software distribution, and horizontal and vertical integration by putting its eggs in many baskets.

Although 16mm was intended for use by families, I would situate it with respect to the distinctions I made earlier with respect to the No. 1 Kodak. To reiterate, the No. 1 Kodak was an easy-to-use and relatively inexpensive camera, but the Brownie was both easy to use and infinitely more inexpensive. The introduction of 8mm to the market in 1932 represented a significant decrease in the cost of the

apparatus, and a more efficient use of film. Faithful to the same tried and true policy upon which it staked its claim to popular photography in the late nineteenth century, Eastman Kodak pitched 8mm movie cameras as technologies with democratic possibilities. Infinitely less-expensive than the Ciné-Kodak, the Ciné-Kodak 8's purchase was in its proposed and democratic capacity to place "home movies within the means of all," and its facility to double the image-making capacity of a 16mm reel of film, an innovation Eastman Kodak was careful not to associate with depression-era thinking. 63

Eight millimetre became synonymous with activities of families and less so with diversely creative and artistic pursuits. Its post-World War II popularity in family scenarios is explainable in many ways. We can assess this in terms of a giddy return to reproduction after World War II and throughout the baby boom. We can read this as an expression of renewed excitement around image-making, cultivated in large part by the producers of image-making paraphernalia who were busy reconverting their wartime production facilities to fit with a peacetime economy. And, finally, we might also understand 8mm's popularity with

<sup>63</sup> Both ideas are taken from advertising copy for the new Ciné-Kodak 8. It begins: "This has nothing to do with hard times...nothing to do with depression prices or depression thinking." "Ciné-Kodak Salesman Advertising Insert," The Ciné-Kodak Salesman 2(8) (October 1932): 3.

respect to the availability and variety of inexpensive gadgetry, and disposable incomes once again on the rise after World War II, and after the depression of the 1930s. The availability of inexpensive and accessibility gadgetry, mind you, was already at the forefront in 1932, previously in 1900, and earlier still in 1888.

Home movie-making advice and literature from the 1920s and beyond continued to bracket family events, children, holidays and travel as ripe for film production and image consumption. Movie-making literature also attempted to incite in amateur movie-makers the desire to film subject matter outside the scope of so-called social realist depictions of family life. Creatively-invested amateur/family movie-makers, not unlike photographers, could also develop into long-term producers and consumers of images, and, more importantly, consumers of accessories. Personal film libraries and film humidors functioned much like the family album: image depositories for family memorabilia, as well as collections of professionally-made films purchased through film clubs and libraries. A conservation imperative reared its head in the discourse around family film/memory conservation in much the same way as photography had. These I also elaborate in Chapter Four.

What Patricia Zimmermann (1995) has identified as a divisive move on the part of cinema professionals and

experts to corral amateur practice, had, with respect to home movie-making, already settled into routinized family practices of social realist documentation across generations and gender. This was in part due to the ways in which discourses around image-making as a photographic practice in family contexts had previously shaped such practices in terms of their verisimilitude, and as agents of sentimentality and nostalgia. It was also attributable to the ways in which decades of practice had massaged the image's institution in personal and family life.

### Toward Cultural Production and Consumption

From the brief sketch provided in this chapter we can be begin to see how numerous interests (the producers of equipment, supplies, and literature) sought to define the meaningfulness of images, and their production and consumption in day-to-day life generally, and family life specifically. As I have argued, the participation of George Eastman and the Eastman Kodak Company is indispensable to the technological and historical account I chart herein. Eastman Kodak is exemplary not only in terms of how it intentionally and strategically lead the race to mass-popularize image production and consumption with the family and its different generations in purview, but for how it marked the family as a territory for the sustenance of

commercial interests. With this said, we must also be wary of tone, and acknowledge that there is a fine line separating the renarrativization of historical events on the one hand, from the manipulation by key industrial actors and blatant industry boosterism, on the other. George Eastman, for one, was well-aware of the potential booty to be mined from people's memories and their leisure pursuits.

The successes of the No. 1 Kodak, Box Brownie, Ciné Kodak, and Ciné Kodak 8 were hardly accidents, and nor were they technologies that independently determined the shape of cultural production and consumption. Shifts in temporal experience at the turn of the century, as well as shifts in social and physical mobility, and leisure, as I will explore in the next chapter, overlapped with image-making practices, and their passage to family and domestic life. The following two chapters will draw out some of the cultural and social circumstances that coincided with first, the popularization of still image practices in their infancy, and, second, the domestication of moving image-making and consuming practices in theirs.

### Chapter Three

## The Culture of Popular Image-making, 1888-1918

In the previous chapter I discussed the ways in which George Eastman used the No. 1 Kodak to re-invent and revolutionize social and cultural relationships to the production and processing of images, as well as their consumption. Temporality, spatiality, and mobility are all concepts underpinning a set of extra-cultural circumstances in formation around the time of the initial popularization of the still image hand camera.

rom a Western perspective, personal and collective notions of temporal and spatial experience, as well as personal and collective claims to social and physical mobility shifted simultaneously with technological change over a period of approximately 40 years. This temporal distinction is not arbitrary, and follows that bracketed by Stephen Kern (1983) in his cultural analysis, The Culture of Time and Space, 1880-1918, in which he identifies the end of World War I as the last in a series of events and relations solidifying the modern bifurcation of temporal experience. Likewise does Peter Gay (1984) signify the outbreak of World War I as a significant turning point in what he refers to as "the bourgeois experience."

Of the literary, artistic, scientific, historical, technological, and media events that Stephen Kern charts over this period, photography and its implications as an amateur pursuit are given but brief mention. By contrast, it was precisely during this time that a chorus of social forces came together to negotiate and define popular and personal uses for the hand camera and roll film, especially their domestication. These uses predominantly associated this system with the representation of personal life and leisure, and less so with artistic and aesthetic specialization.

Those who snubbed the popular appeal of the hand camera and roll film process did so on the basis of the way in which it debased unwarranted claims to the purity of the photographic arts, my previous reference to Alfred Steiglitz being a case in point. The derogatory remarks lodged against those who pushed and participated in the hand camera "craze" were fueled by an apprehension toward the new social phenomenon of "button pressing," and its aesthetic implications. Although "button pressers" were held in contempt, I argue that such contempt was grounded in

<sup>&</sup>quot;The perfection of dry-plate, fixed-focus photography by Kodak in the 1880s enabled amateurs and journalists to take instantaneous candid snapshots of people anywhere outside of studios and without their consent." See Kern 187.

population concerns over the outburst of snapshooters, and less so in any inherently controversial properties of the technology. These contestations, although extremely forthright, could do little to prevent the hand camera and its descendant technological forms from taking the late nineteenth century and the next one by storm. In fact, at practically the same moment that these attempts to marginalize the new practice of image-making and its legions of followers appeared, they too were narrowly situated as biting entries in very specific and specialized photographic and photographic club journals.

This and the next chapter will continue to explore and critique the ways in which the popularization of image-making practices cut across the surface of social and family life in significantly temporal and spatial ways. They will do so by respecting the popular image-making practices that gelled around the four specific technological moments charted in Chapter Two. The aim in the present chapter, simply put, is to elaborate the distinctions of temporality, spatiality, and mobility as these related to the developing cultural practice of still image-making, its assuaging of family and personal history, and the increasingly accessible pursuit of leisure for a growing and diversifying bourgeois, or middle-class.

The intensification of bourgeois privilege toward the

end of the nineteenth century may have provided the initial social context for the expansion and solidification of the hand camera and roll film process's ubiquitous popularity, but it did not, however, become stunted as a class-specific practice. The dollar camera provides evidence of a will to spread the excitement, and colonize the market. We could no more make the claim of image-making's class specificity than we could soundly argue that the new department stores, for example, along with their mail order systems were restrictively middle-class venues for consumption. Eastman's and Eastman Kodak's appeal was to numbers, and a thriving middle-class, in this respect, provided the ticket, just as it had done with the success of other popular amusements at the time such as the bicycle.

Herein I will specify four areas in which the popularized practice of image-making as redefined and patented by the Eastman Kodak Company is situated. First, I locate the hand camera as a new or, rather, re-invented old technological form among mediated communication practices "new" to the late nineteenth century. These communication practices are wireless, telephony, and telegraphy as it had come to be integrated into national rail route expansion projects at the close of the last century. My purpose for doing so is to draw attention to this time period as a hotbed for the generation of new communication technologies

whose impacts would carry over well into the twentieth century. The hand camera process, while arguably special in its own right, grew out of this same general innovative spirit. Second, I connect the hand camera process as a leisure fancy to the expression of recreational privilege as identified in relation to the late-nineteenth century bicycle craze, and in relation to travel and tourism.

New forms of mediated communication, recreation, travel and tourism, and the hand camera all signified shifts in individual and collective relationships to physical, social and upward mobility. Certain of the new leisure and cultural practices were becoming increasingly more accessible to larger portions of the population. These trends attracted the attention of a growing bourgeoisie, who were busy with forging diverse and increasing claims to space, territory, and the material world. A notion of "bourgeois" is indispensable to the analysis, not for its imagined and coherent value systems—which I qualify in Chapter One as in formation but not yet formed—but for its sheer numbers as a growing consumer base.

Third, I assess image-making practices as channels to the expression of family and personal life. "Taking pictures, making movies, and telling time," as the dissertation title suggests, pertains to the social integration of popular image-making practices as a function

of the individual and personal representation of temporal experience. It is not coincidental that this would be the case at the close of the nineteenth century, especially when public perceptions of temporality were being redistributed along the lines of homogeneous expressions of time. Finally, but certainly not least, I examine this great shift in image-making protocol against gendered perceptions of image-making, and image-making as a gendered practice.

### New Technologies

At least in so far as late nineteenth century technological utopians were concerned, technology, especially machine power, held in store great social and economic promise.<sup>2</sup> By the end of the nineteenth century, however, the machine revolution in the New World (United States) was already a well-rehearsed sermon, if not for a few bruises. At the close of the eighteenth century, Thomas Jefferson and a handful of virtuous men had already bought into the machine's purchase as a "token of that liberation of the human spirit to be realized by the young American

<sup>&</sup>lt;sup>2</sup> See Howard P. Segal, "The Technological Utopians," Imagining Tomorrow: History, Technology, and the American Future, Joseph Corn, ed. (Cambridge, MA: MIT Press, 1986): 119-136.

Republic."3

This is a complex and multi-faceted history which involved various interests in the direction of policies concerning industrialization and the management of the frontier landscape in the United States. This history has also been acutely documented by Leo Marx (1964). To sum up, what we learn from Marx is that those who ballyhooed technological progress banked on machine power to harness the wilds of nature, but also envisioned a new world in which the simultaneous taming of machines and the landscape would not repeat the European industrial experience of pillaged countryside, urban blight, and social casualties. This was not exactly the case. In fact quite the opposite was true of the American landscape of the late nineteenth century. Regardless, manifest destiny remained the order of the day to industrialists, and Eastman's attitudes toward expansion were comparable to those of his industrialist cousins. The manifest destiny of the Eastman Kodak Company, according to Eastman, was "to be the largest manufacturer of

<sup>&</sup>lt;sup>3</sup> Leo Marx, The Machine in the Garden (New York: Oxford University Press, 1964) 150.

<sup>&#</sup>x27;James Carey and Leo Marx both draw attention to these contradictions. See Carey, especially Chapter 5, "The Mythos of the Electronic Revolution;" and Marx, also Chapter 5, "Two Kingdoms of Force."

photographic materials in the world, or else go to pot."5

Eastman's hand camera entered mass popularization amidst a current of communication technologies and their social uses in flux along with the extra-social and cultural relations of which they became part. The telegraph, telephone, and wireless were all attached to new economic and social ventures. These ventures generated hierarchies based on individual and collective access to these new technological forms, and a capacity to forge knowledge claims about them.

carolyn Marvin (1988) and Susan Douglas (1987) have each, respectively, dealt with the ways in which telephone and wireless communication teetered on the cusp of a new century whose emissaries continued to champion the marriage of technology, a mechanical bride, with social progress, as had their post-revolutionary ancestors, such as Jefferson. The telegraph, although not per se a new technology in the 1880s, was re-invented as such with its integration into late-nineteenth-century national rail route expansion projects (Canada and the United States). James Carey (1988) has effectively pointed out that this partnership dramatized social, cultural, and economic relations as national and international relations, his example of the leveling of

<sup>&</sup>lt;sup>5</sup> GE to Henry Alvah Strong, 20 December 1894, GEC, GEH, Rochester, New York.

markets being a case in point.

There is much that was "new" about the economic and social changes precipitated by late nineteenth century technological innovation, and there was much that was "old" about them too. Social patterns formerly entrenched and established lingered in the social reorientation to the new technologies. Carolyn Marvin (1988), for example, has concluded that the association of gender with telephony proceeded to assert existing perceptions of women as lesstechnically inclined. This kind of social "aping" was not uncommon with respect to attitudes about women in imagemaking circles. The conflation of image-making and women in the family circle was a demonstrative ploy to cleanse women's associations with these revamped photographic apparatuses, and the sorts of potentially licentious and invasive behaviour their portability and accessibility by large numbers of people suggested. Women photographers who aspired to look beyond the family enclave to exercise their image-making interests defined themselves in opposition to this status quo and familial representation. Still, we cannot help but to acknowledge the magnitude and diversity of change as it impacted upon a world in technological transition, regardless of how such changes dug deeper into existing prejudices and subordination.

The late nineteenth century was not more significant

than any other historical juncture which had previously met with the dissemination of technological innovation (the printing press comes to mind). The kinds of technological changes in process at century's close are compelling mostly because they spilled over into the twentieth, and so informed the organization and reorganization of media institutions (film, radio, television, and the press for example), the social relations among persons and institutions, and between persons and institutions as these all absorbed technological change. Over a relatively brief span of time, telegraphy, wireless, telephony, the hand camera, and motion pictures all descended upon the social and cultural landscape, and all endured.

To say that this was a world in chaos, however, would be to misjudge the day to day rhythm by which people go on with their jobs, lives, families, and so on amidst recurring changes. Likewise, to assert that the social and cultural impacts of technological implementation went unnoticed immediately, or that these impacts snailed their way into society would also not suffice. Here was a congregation of scenarios in which change factored into the social fabric exponentially. There were controversies. There were those who were directly invested in technological innovation either as its devotees or its skeptics. And then there were those positioned differently with respect to the fallout for

whom such a variety of technological shifts may not even have been readily apparent. Attitudes toward progress, societal perfection, and democratization of media access were indeed topical for those whose interests (social, economic, cultural) readily converged on the dissemination of the new technologies, especially the hand camera.

The dominant perspective that informed many of these new ventures was one characterized by control, ownership, and entitlement, especially bourgeois entitlement. There was the idea of control over the speed and frequency of communication. There was the idea of control over the material world and nature by machines. And there was also the idea of control over space/mobility, and time. The hand camera's biases were tied to control over space/mobility and time, it having been elevated as a technique for the photorealist and factual documentation of events. What I refer to, then, as "bourgeois entitlement" is examined herein in terms of traces of activity and territorial mobility, and less so in terms of direct statements about such entitlement.

#### On the Move

The event of image-making's popularization and the various "systems" dispatched to carry this out drew from new facilities of mobility and new possibilities for, and

attitudes about leisure. Leisure was a new phenomenon among those socially categorized as belonging to a visible bourgeois and middle-class, and mainly because shifts in income levels (the rise of middle management for example) and hours of work accommodated it. The momentum of the hand camera's popularization gathered together image-making practices, leisure, and mobility under a banner of social necessity in such a way that these became synonymous. That is, image-making the hand camera way was intimated as a leisure pursuit on its own, and it was also "naturalized" as a leisure pursuit to accompany other pastimes, especially where mobility was involved. Leisure, mobility, and a growing population with disposable incomes, then, were supervening social necessities that mediated the success of the new technology of the hand camera.

New modes of recreation offered fertile terrain upon which to sow the pleasures of image production and consumption. We might, for example, see popular image-making's relationship to the bicycle, another form of "new recreation" at the close of the nineteenth century, as offering up some clues as to how the popular phenomenon of image-making literally began to circulate among other social phenomena: transportation and visual communication. The photographic mount which could be integrated into bicycle frames illustrates nicely the fusion between leisurely (and

upward) mobility and image-making. Combined cycling and photographic interest and a popular literature to go along with it emerged in the United States and England at century's close. In London, the journal Cycle and Camera, addressed these two popular recreations together by providing touring and photographing advice, news from amateur cyclist/photographers around the world, as well as information about products that would be of interest to a growing middle-class for whom leisure, and these two new popular recreations were newly accessible. George Eastman was himself an avid cyclist.

George Eastman was perfectly poised to comprehend the relationship of a growing North American bourgeoisie to new leisure practices, and mainly because he was one of them. His outstanding wealth would not accrue until the 1890s, but at the time of the introduction of the No. 1 Kodak he had only been devoting his time fully to the image-making business for a few years. His employment as a bank clerk, along with some income that rolled in from his dry plate and roll film ventures secured his financial status as decidedly

<sup>&</sup>lt;sup>6</sup> Cycle and Camera. London: Robert L. Jefferson and Walter D. Welford. First edition, May 22, 1897. See also Jay Ruby, "The Wheelman and the Snapshooter or, the Industrialization of the Picturesque," Shadow and Substance: Essays on the History of Photography, Kathleen Collins, ed. (Bloomfield Hills, MI: The Amorphous Institute Press, 1990).

middle-class. Up until the turn of the century, when he upgraded to motoring. Eastman had traveled to and from work on his bicycle. Bicycle apparel, "baggy knickerbockers and sweaters," was reportedly a common sight around Eastman Kodak for members of its management ranks who would often show up at Kodak Office and Kodak Park with their bicycles.7 To William Walker, Eastman's partner in London, he wrote, "they are getting bicycles down in this country to marvelously low weights...Crouch has a bicycle which he intends to use for regular road work that weighs only 17 lbs. You can take it up in one hand and swing it over your head."6 The manageability of bicycles and the increasing manageability of image-making apparatuses and practices advanced simultaneously. Although an avid cyclist, Eastman, to some surprise, never embarked on involving Eastman Kodak in the design of photographic mounts for bicycles.

Cycling and photography for turn of the century middleto upper-class women were indeed fashionable in which it was not uncommon for aristocratic ladies "to seat themselves on a bicycle or stand by it when they are having their pictures taken." This example directs our attention to how the

<sup>&</sup>lt;sup>7</sup> Brayer 152-153.

<sup>&</sup>lt;sup>8</sup> GE to William H. Walker, 25 February 1895, GEC, GEH, Rochester, New York.

<sup>&</sup>lt;sup>9</sup> Cycle and Camera 1(13) (14 August 1897): 393.

fashionable accessory of the bicycle functioned as a status symbol, as did the hand camera. Both the bicycle and hand camera catered to physical mobility, and at the same time were signifiers of social and upward mobility.

Bicycle touring as a new leisure fancy opened up the countryside by affording the exploration of territory off the beaten track of public transportation like train travel. Bicycle travel also personalized the route. Cameras carried along for the ride or mounted directly on the bicycle personalized the touring experience to another degree. In terms of "touring," it is important to remember that early bicycle designs from the 1870s, 80s, and 90s were not, per se, road-tooled as we may think of bicycles after the turn of the century. Still, people became acquainted immediately with the privilege these carriers afforded their users for traversing paths less-traveled, and the privilege the camera afforded for realizing the representation of the route and its environs, as well as its travelers. As The Photo-American put it, travelers "are enabled to extend their explorations over miles of country that could be reached in hardly any other way, and with a compact camera slung on the machine many a gem has been brought home as a memento of the excursion."10 The new fad of cycling, much like the

<sup>&</sup>quot;Notes of the Month," The Photo-American 5(6) (April 1894): 190.

popularization of image-making practices, also invited controversy, namely concerns about safety, and the contested social and gender appropriateness of bicycles. 11 Controversy aside, as possessions the bicycle and hand camera demonstrated both access to extra material consumption, and access to territory, of which the camera and its lightweight roll film would provide "evidence."

Mobility and hand camera use fit with travel in the wider sense of tourism (trips abroad, domestic train travel, and so on). Eastman Kodak's publications for its customers, as well as other popular magazines endlessly featured images from readers who had taken their "Kodaks" on tour, either abroad or domestically. It was one thing to own a hand camera (whose prices consistently dropped), but it was certainly another to be able to show that one had traveled abroad, up north, down south, out west, and east with it.

On the eve of Eastman's introduction of the No. 1 Kodak to the market, he gave one of the apparatuses to Henry Strong to test on a trip out west to Tacoma, Washington.

Eastman describes his business partner Strong's enthusiasm

<sup>11</sup> See for example Trevor J. Pinch and Wiebe E. Bijker, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other," The Social Construction of Technological Systems, Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds. (Cambridge, MA: MIT Press, 1987): 17-50.

in the following extract from a letter: "It was the first time he had ever carried a camera, and he was tickled with it as a boy over a new top. I never saw anybody so pleased over a lot of pictures before. He apparently had never realized that it was a possible thing to take pictures himself." 12

In the previous chapter I referred to the letter

Eastman received from a one Mrs. Collis who had packed her

Kodak for an Alaskan voyage. "Kodaks," not unlike other hand

cameras following in their wake, traveled well. People

marveled over the freedom from the tripod that hand camera

use availed. One woman traveler returning from a visit to

California remarked about such freedom from the tripod, and

her reliance upon nature as a suitable stand-in: "If the

light was poor, a gate-post, a bench, a rock, or failing

those, the ground itself took the place of the tripod.

Though the camera went everywhere, the tripod only went

along for the drive." It should be recognized that as long

as the light was good an exposure could be made bracing the

hand camera against one's chest. If the light was poor

(cloudy days), however, a tripod would be necessary to hold

<sup>12</sup> GE to W. J. Stillman, 6 July 1888, GEC, GEH, Rochester, New York.

<sup>&</sup>lt;sup>13</sup> Ethel Birch, letter, "Our Women Friends," The Photo-American 3(10) (July 1892): 292.

steady the camera for slower shutter speeds.

"Cartes de visite," pre-fabricated images for tourist consumption, were a popular nineteenth-century souvenir phenomenon. "Cartes de visite" could not quite compare to the thrill implicit in producing one's own souvenirs, and nor could they demonstrate that one had access to the means by which to do so. The zeal of Henry Strong and Mrs. Collis suggests this. For those who "kodaked" their travels, there was as much of an appeal for personally producing images as there was for returning home with them. It was not uncommon for people to send their travel images to popular and photography magazines for publishing. The occasional image of travelers on the decks of steamers with cameras in hand was also common.

There was something oddly reflexive about images chronicling people in the midst of producing images. This obviously illustrated one's status in owning and possessing a camera, as much as, if not more than, one's status in being able to travel abroad. Eastman, an avid traveler and adventurer himself, understood these thrills and emphasized the availability of Eastman Kodak developing facilities around the globe for voyagers anxious to have their images while en route. Of course, images produced throughout one's travels would be brought home to eventually make their way into albums for the renarrativization of travel and

exploration, and incorporation into personal history narratives, and, in some cases, for publication in popular magazines.

Whether travel abroad by steamer, travel domestically by train, or travel in the sense of bicycle jaunts, the way in which hand cameras were "naturalized" as traveling companions in all of these instances suggested something more than innocent leisure folly. In the case of travel abroad and to exotic places, the pleasure use of cameras followed through on a kind of quasi-personal imperialism whereby travel images would provide evidence of the traveler's mobility (physical and upward) and traversing of territory, as well as provide evidence of their photographic subjects' lack thereof in terms of such tourist- and Western-defined privilege. Again, that one could be mobile was as important as having shots of the scenery.

I would like to pause here and elaborate upon the kind of physical, social and upward mobility associated with the rise of a North American bourgeoisie, a phenomenon I have mentioned but have, as yet, dealt with only briefly. As far as historical work goes, it is virtually impossible to establish finite dates in terms of shifts between social movements. This is particularly relevant in terms of talking about the popularization of hand camera appropriation as being prodded by the desires and aspirations of late-

nineteenth century bourgeois classes. Raymond Williams's (1977) notion of "structure of feeling" helps to conceptualize the tensions at work in the emergence of popular image-making and new leisure practices.

A bourgeois "culture" did not suddenly appear at the close of the nineteenth century, but was in fact already in formation. The terms of reference outlined in Chapter One disclosed that the use of the term "bourgeois" is meant in the dissertation as a covering term. I would like to stress that its use is meant in the most general of terms, and does not attempt to suggest that a notion of a bourgeois "class" was without diversity. On the contrary, and this is where "structure of feeling" is so important, what it might have meant to hold such "class" membership in terms of social and cultural factors was as diverse as the identities of the historical agents who statistically comprised it.

I am likewise hesitant to rely on the term "bourgeois nuclear family" without comparative attention to diversity. The social identity of "nuclear family" in this regard was equally in flux and formation. It is likewise prudent to consider high rates of infant and youth mortality when forging claims about nuclear family "ideologies" and imagemaking at the end of the nineteenth century. The novelty of producing images of children at play might not necessarily have been wholly a function of "nuclear family ideology" at

work, but as a tribute to living wherein, as Madelyn Moeller has suggested, "for many parents the only picture they had of their child or children was taken after burial preparations."14

Peter Gay (1984) in his multi-volume study, The Bourgeois Experience, Victoria to Freud, traces the transformation of bourgeois and middle-class values in Western culture. He situates the development of this "experience" between 1820, two decades before Victoria ascended the throne in 1837, and 1914, the outbreak of World War I, which, he argues, marked a turning point in the decline and loss of bourgeois innocence. In terms of a Western context, the impact of bourgeois cultural values had already begun to filter through European and North American social landscapes prior to 1888, and so too had the indicators of bourgeois privilege-social positions that were economically-defined by independent means as opposed to aristocratic and titled inheritance. Gay defines his bourgeois historical subjects according to occupation and social position and includes among them "physicians, merchants, teachers, housewives, novelists, painters,

<sup>14</sup> Madelyn Moeller, "Ladies of Leisure: Domestic Photography in the Nineteenth Century," Hard at Play: Leisure in America, 1840-1940, Kathryn Grover, ed. (1992; Amherst, MA: University of Massachusetts Press; Rochester, NY: The Strong Museum): 147.

politicians, the occasional prosperous artisan who has secured a measure of economic independence and social respectability, and the rare aristocrat whose credentials are dubious and whose very posture is supremely bourgeois."15

The kinds of morals and values in formation under the heading "bourgeois" were as variable as the agents who campaigned for and against them. In this way, so too were the many uses and appropriations of hand cameras which fit with the developing tastes of bourgeois populations. While the dissertation uses the term "bourgeois" in a general sense to understand how the institution of family collided with newly accessible image-making practices, Gay's attention to diversity is crucial. The notion of a bourgeois culture in formation at the end of the nineteenth century, then, is meant specifically to draw attention to the persistence of increasingly widespread capital accumulation in concert with new venues for the dispensation of income, as well as the consumption of novelties, of which the hand camera was one.

From the vantage point of the United States during the last three decades of the nineteenth century, population flows from rural areas to cities (centralized zones of

Freud, vol. 1 (Oxford: Oxford University Press, 1984) 4.

economic production, and the rise of the company town), and the shift from independent entrepreneurship to large scale bureaucracies redefined and intensified the category of a bourgeois and middle-class. 16 The situation in Canada was markedly different. Although industrial expansion was not a stranger to the Canadian landscape and economy, including its feasting upon by the American branch plant phenomenon, 17 aggregate rural population still outnumbered its urban aggregate. In terms of the Unites States context, the mobility of populations to urban centres also kept stride with the kind of industrial expansion and bureaucratic formations identified by David Noble (1977).

George Eastman personified such class and economic shifts, both in terms of the waning of individual entrepreneurship and the establishment of corporate culture. As I have argued, Eastman was a nouveau bourgeois whose wealth and status were established toward the end of the nineteenth century. When he scooped the market with the No. 1 Kodak, it is difficult to determine whether or not he actually had a sixth sense about the leisure desires of a

<sup>16</sup> See Robert H. Wiebe, The Search for Order, 1877-1920 (New York: Hill and Wang, 1967). See also David Noble, America by Design.

<sup>17</sup> See Randall White, Fur Trade to Free Trade: Putting the Canada-U.S. Trade Agreement in Historical Perspective (Toronto: Dundurn Press, 1988).

bourgeoisie in formation, or if he simply projected his own desires onto a "mass" of potential shutterbugs imagined to mesh with his invention. I am inclined to think that it was a combination of both, if only because of Eastman's push to get the No. 1 Kodak on the market in advance of any competitors.

## Time and the Hand Camera

Stephen Kern claims that two contrasting cultural views about time (public and private) were under consideration during the period 1880-1918. An artistic and intellectual Zeitgeist "affirmed the reality of private time" and juxtaposed itself against the "massive, collective force of uniform public time." Durkheim, for example, insisted upon the social relativity of time; Freud used therapy and the case studies to enable and interpret the individual's search for a personal past; and Joyce endeavored to represent the fusion of time and space, a social and cultural by-product of telegraphy, by merging past, present, and future time together on the page. In 1905 Einstein published his special theory of relativity. It tendered the notion of "a

<sup>18</sup> Kern 33.

<sup>19</sup> Kern 64.

<sup>20</sup> See Kern, Chapter One, "The Nature of Time."

local time associated with each observer, "21 a proposition which destabilized the notion of absolute time as it had appeared in the universal and objective principles championed by Newtonian science. Although, for example, electronic communication (telegraphy and wireless) produced social and cultural illusions of simultaneity, Einstein's propositions clung to the particularity of time, and its interrelatedness with social and collective experiences of time. His physics, therefore, presupposed "an observer situated within the observed world."22

As a new technology, the hand camera and its intended uses represented the technological manifestation of temporal particularity, at least the possibility for temporal particularity. Its popularized and intended uses affirmed the reality of private time first by putting it at the centre of everyday life, and, second, by circumscribing its purpose (to use to make images) as a marker of history, genteel and virtuous. The social accessibility and dissemination of photographic image-making practices extended to those who could afford them the possibility for representing personal time in juxtaposition with collective time. These practices furthered the personalization of

<sup>&</sup>lt;sup>21</sup> Ilya Prigogine and Isabelle Stengers, Order out of Chaos (New York: Bantam Books, 1984) 17.

<sup>&</sup>lt;sup>22</sup> Prigogine and Stengers 218.

photographic representation in that they could bypass formal photographic studio practices, and laborious image production and processing procedures.

Important also is how the hand camera took production out of the studio and into the country, the city, the home, and so on. Prior to 1888, cameras were never so big and cumbersome that they couldn't be moved around, but realistically speaking this was not a feat for the average shutterbug. I give the examples of how cameras were taken to the battlefields during the American Civil War and the Crimean War, and also the Detective camera, on which Eastman based his design for the No. 1 Kodak. Mobility, however, was an involved process, especially with plates. Once again, it is not the distinction of "first" that I wish to petition in this instance, but rather the potential magnitude of social uses which defied limitations of mobility, and re-defined what it meant to be able to produce images for personal use, any time (sufficient light a proviso) and any where (social and moral sanctions also provisos).

The representation of personal temporal experience from a familial perspective begs evaluation. Hand camera use intervened to redefine the representation of family and personal history, and largely so because the discourses which situated its uses oscillated between the camera's status as both a messenger of "truth," and an indispensable

and quintessential "historian," two mutually supporting concepts. The initial wave of commentary and promotion that sustained the No. 1 Kodak and Box Brownie immediately colonized the family. Accompanying this social colonization were ideas about accuracy, precision, evidence, and fact. Eastman Kodak's promotion of these cameras and successive models reshaped the scientific discourses of "truth" for their own purposes in order to promote "truth" and "material evidence" as novelties for sale and for pleasure. The Box Brownie-the camera for a buck-was the prototypical novelty, in a way different from the No. 1 Kodak. As argued in the previous chapter, it marked the difference between hand camera use as a first, and hand camera use as an even more widely accessible practice. For sale, discovery, leisure, pleasure, and historical necessity, hand cameras cast a farreaching net over a wide world of potential snapshooters. The depth and breadth of this "casting" suggested a belief in both the democratization of image-making practices, as well as the idea that image-making was a democratizing and democratic practice. Regardless, it was a project that was ultimately good for business, especially in the Eastman Kodak case.

Recognition and representation of personal history as bourgeois fulfilment, however, were not inventions of photography, for one could easily evoke the example of diary

writing to dispute such a claim. What is unique about imagemaking is precisely its representational capacity to
accelerate the process of reproducing events of everyday
life and to represent those things which escape the eye and
memory, to paraphrase Walter Benjamin.<sup>23</sup> In other words,
speed is the thing.

To debate the ontological ramifications of imagemaking, however, is beyond the scope of the present inquiry. Nonetheless, to suggest that such practices massaged the ways in which people would have appreciated already meaningful personal historical events (marriage, birth, and even death if we consider postmortem photography in the nineteenth century) is a viable claim. In other words, already memorable events would eventually succumb to being played out and remembered differently, first at the level of the discourses which situated image-making practices as family history practices; and, second, at the level of the internal and partial family histories already depicted in existing images to serve as nostalgic links to past, present, and future generations.

History and owning the "story" are key here, especially when we begin to think about family. Lineage is highly

<sup>&</sup>lt;sup>23</sup> Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," Video Culture: A Critical Investigation, John G. Hanhardt, ed. (Rochester: Visual Studies Workshop Press, 1986): 27-52.

charged at the best of times, as is its representation in images. As written in the previous chapter, the Box Brownie fit the family lineage based on the idea of a model for each child. These cameras were also intended to intervene in the representation of lineage. Emphasis on family-oriented production ad nauseam in popular and popular photographic magazines demonstrates this.

Eastman Kodak, in particular, was from the beginning very specific about how they expected its apparatuses to fit with everyday life. When it came to the family, cameras were considered less as apparatuses for artistry, and were equated more with the photo-realist documentation of personal and family life. This is not to say that representational and aesthetic practices beyond the family were severed from ideas regarding personal appropriation.

Rather, it is to suggest that when it came to the promotion of Eastman Kodak's low-end apparatuses, such as the Box Brownie, the matters of memory, history, and their relationship to family took precedent, and an insidious one at that.

The photo album and photo calendar are examples of the integration of image-making practices into family living and personal expressions of temporality. These recommended arts and crafts projects attempted to fuse personal and particular (local) time with the collective and homogeneous

experience of public (global) time. Eastman Kodak's Kodakery, and Sears, Roebuck's Better Photos, among others, diligently promoted the production of photo albums and photo calendars, but especially photo albums. I choose these journals as examples because both had wide North American circulations, and were written to appeal to the largest common denominator of camera operators, which usually meant those who used cost-effective and low-end equipment. Producers of this literature, another branch of the photographic materials industry, reiterated over and over again the possible uses for cameras in the family and home, and while out and about. The production of calendars and photo greeting cards, and especially albums would be featured often. Of course, Eastman Kodak and others promoted their own photo album paraphernalia along with the idea of the album.

The art and craft of calendar-making enlivened the incorporation of personal images and representations of private time into the yearly march of time. The motif of the personalized photo calendar gestured to time's particularity by gathering narratives about personal pasts, as represented in images, with public and ritualized time as represented in the succession of days, months, and years. Vacation picture books, albums, and picture diaries could and should be shared with friends and relatives: the repetition of shared

experiences; the solidification of family history. Impromptu home pictures of the children would yield variety in such chronicles. Variety and diversity were virtues all album keepers should strive for.

The juxtaposition of different times in the calendar, and the layering of personal times in terms of a bound album are interesting. With the calendar there is on one level the synthesis of personal and collective representations of time. At another level is the superimposition of images (past) on different pages of the calendar whose function is to represent and materialize past, present, and future in terms of a grid of days, months and years. We need to be careful about the global relevance of calendar production since we can never be sure if such arts and crafts projects were ever actually taken up. With this said, regardless of whether or not calendar production made its way into homes, the idea of the album, predominantly organized temporally as opposed to by subject matter, reinforces the point.

The calendar and photo album offer food for thought in terms of bracketing artifacts and practices to off-set the way in which a significant portion of the world's population was being integrated into standard and uniform representations of time (i.e. time zones, Greenwich mean time) at the end of the nineteenth, and turn of the twentieth centuries. Multiply this personalization of time

across many families and social situations and we meet with the elasticity of time, its undeniable particularity. What makes this particularity of time so special is precisely the institutionalization of homogeneous world time, a project of temporal colonization. It was only in light of this temporal colonization and leveling that the reconfiguration of time as particular and special could have meaning. This is not, however, to argue that the representation of personal time in images is in any way insulated from representations put forth in publicity and other discourses, and sustained across families and generations. We must understand this in terms of a constant relay between the particular and the collective experiences and representations of time, and not as segregated, private, and personal family events. Nowhere is this evidence more profound than in an exploration of how popular image-making practices collided with the collectively and personally experienced grief of world history and, to be specific, the outbreak of a world war.

No one could have foreshadowed the tumultuous incision of World War I in the first 30 years of image-making's popularization. If any world event rallied sentimentality, patriotism, horror, and disillusionment, it was this one. Journalistic practice had long since been acquainted with the camera's interface with war reporting, but the carrying of cameras by soldiers into the field for personal use was a

different story.

Eastman Kodak's publicity at the time focused on the event of soldiers leaving home, and the unreliability of memory in terms of remembering what loved ones looked like. The company's Autographic camera and Autographic film, short-lived experiments in image-making introduced in 1914<sup>24</sup>, were especially tied to the establishment of dates, times, and places. With the Autographic camera and film, notes could be written directly on the film at the time an exposure was made. The Autographic and other cameras bridged the divide between home and barracks, and home and battlefield.

Eastman Kodak's publicity was predictable in its mistrust of memory and the forgetting of dates, faces, and so on. Its publicity, however, was not just about forgetting and remembering faces and dates, but also asserted the significance of image-making for keeping the war story at home, the only site of stability. In this way, the camera personalized the war experience differently than images generated by the presses in this, and previous wars could have. Image-making practices which had previously been geared toward mediating pleasure and innocent adventure now mediated tragedy, and on an intensely personal yet,

<sup>&</sup>lt;sup>24</sup> Jim and Joan McKeown, Collector's Guide to Kodak Cameras (Grantsburg, WI: Centennial Photo Service, 1981) 53.

paradoxically, global scale.

The personal production of images situated a world in crisis and turmoil in terms of the family experience. It fused the representation of personal history with the representation of collective history as told and revealed in the daily news. Image-making had succumbed to a different social purpose. Suddenly, and not surprisingly, the figure of the soldier had begun to appear in publicity representations of families with their image-making apparatuses, only this time representations of leisure folly and activity retreated from the page of magazines, and scenes of nuclear families (one member a soldier) sitting back, wistfully looking at pictures dominated. Fathers and brothers now appeared in uniform and always in transit, either at home on leave, or writing from the "field." These publicity representations depicted soldiers diligently writing to loved ones and enclosing images of their experiences from points elsewhere, and vice versa for civilian family members writing to family soldiers abroad. These forms of publicity served as reminders and evidence of life, living, and remembering. At the same time, they gestured to life's evanescence and opposed it to the image's facility to endure beyond human existence.

These advertisements gave the impression of the camera's and the image's capacity to tell the war story in

up to the minute fashion, regardless of the incongruity and impossibility of such a claim. The image mediated war stories, the family home story, and the stories of sibling, offspring, and parental soldiers abroad. "John in his first khaki," and "John, tanned and hardened, as he looked when home on leave," suggested the personal representations of temporal distance between induction, action, and perhaps even the ill prospect of missing in action. What they left unspoken was the fact that the image might be all that would stay behind as Johnny went marching off, and all that might come back. The claims that underpinned the image's longevity and facticity amidst the throes of combat and casualty were the same as those which had continually shaped photographic practice as a familial imperative from the beginning.

The discourses of order and control which dominated the social landscape prior to the War had taken a different turn. World War I punctuated the fugitive and fleeting nature of time, the control of which was beyond the grasp of the individual. It wasn't time that had changed, but the relationship of subjectivity to it, particularly bourgeois subjectivity. The post-1870s search for widespread social and economic order nourished itself on periods of boom, and hungered over periods of bust, in particular the economic

<sup>&</sup>lt;sup>25</sup> Eastman Kodak Company, advertisement, *Kodakery* April 1918: 91.

recessions of the 1890s. By 1900 and for the first decade and a half of the new century, the "innocence" with which we have come to characterize the bourgeois experience of the "age" flourished. The outbreak of World War I, and the events following, abruptly interfered with the sense of stability and control that had come to represent bourgeois entitlement, and that had come to be basked in by bourgeois subjects. A sense of control which certain social groups may have imagined to have had over their own lives, their place in the world, and over technology dissipated. The only technological constant that could be relied upon was the camera, and the only social constant was the family. In the end, social life and bourgeois innocence as they had existed prior to 1914 took a dramatic turn post-facto, yet the industry of photographic equipment suppliers and the producers of publications relentlessly continued to insinuate truth claims about photographic practice and images as they had always done.

Camera companies and especially Eastman Kodak, as it had always done, used image-making to fill the void hollowed out by the ravages of World War I. They juxtaposed the camera, image, and family against a global loss of control, only they emphasized the loss of control over memory. The fact that image-making had been posited as a memory aid was not a new concept, especially in the case of Eastman Kodak

who had always leveraged its products against the vulnerability and fecklessness of people's capacities to remember, and the overall unreliability of memory itself. It was not just the potential unreliability of memory which held in question a loss of control and a social propensity toward amnesia. We may read Eastman Kodak's emphatic notation of a loss of control over memory as a substitute for the much larger inability felt by many to control their destinies. The image-making materials industry and its organs italicized camera use as a means by which to control and maintain personal history even when world events suggested otherwise. It should come as little surprise, then, that the scope of image-making publicity drew from the War and related themes for the sale of merchandise. It was an event, and while a serious one, the documentation of soldiers off to battle were easy substitutes for civilians on vacation and/or at play. Once again, the versatility and mobility of the hand camera could be adapted to the social and emotional needs of the people who used them.

The very personal practice of chronicling familial soldiers also suggested a temporary departure from family ties. The salad days of bourgeois play took a backseat to publicity stunts that re-invented the moral turpitude of image production as a conduit to the personal experience of world tragedy. The private chronicles of "John" off to

service and at home on leave suggested a rupture in the family compact that had previously enjoyed the production and consumption of images as a total family activity. Images of the family soldier marked a break with the coherent pleasure of family leisure. "John" was not just a family member "snapped" at a particular time, place, and event. He was a soldier on temporary loan to his family, one whose duties and responsibilities were elsewhere, a very different turn of events than had been depicted in the bucolic representations of boating, traveling, cycling, parties, childhood discovery, and family affairs.

Eastman Kodak was notorious for taking people's personal experiences, that is in a conceptual sense, and transforming them into a series of events not only worthy of documentation, but events that would ring synonymously with image-making. The first pen sketches for the No. 1 Kodak's 1888 promotional campaign illustrate this, as do the much later departures and arrivals of soldiers off to two world wars. It might have been a family tradition to celebrate certain events and rituals in specific ways (marriage is a good example), but having a camera along to document events became its own tradition in the domestication of image-making practices.

Eric Hobsbawm has defined invented tradition as "a set of practices, normally governed by overtly or tacitly

accepted rules and of a ritual or symbolic nature, which seek to inculcate certain values and norms of behaviour by repetition, which automatically implies continuity with the past."26 It should be of interest to note that Hobsbawm's historical reference point for the invention of tradition is the nineteenth century, specifically the invention of certain Royal Family traditions. A similar claim can be made with respect to image-making practices and the invention of tradition. The personal archival practices associated with the production and consumption of images implies both a symbolic function of image-making practices, as well as a sense of continuity (literally) with the past in terms of the past of family lineage.

I would like to depart momentarily from this historical renarrativization of image-making practices and personal expressions of temporality to pause for a theoretical reinterpretation. Images are the material traces of partial and personal experiences of time sandwiched between birth and death, present, past, and future generations. The sentimentality of image-making as a familial pursuit reproduces a desire for more images. Images beget images. The repetition of certain events, postures, and scenes in

<sup>26</sup> Eric Hobsbawm, "Introduction: Inventing Traditions,"
The Invention of Tradition, Eric Hobsbawm and Terence
Ranger, eds. (Cambridge: Cambridge University Press, 1983)
1.

individual family images points to a kind of personalization of invented tradition. Richard Chalfen (1987) alludes to this idea, but develops image-making quite differently as a symbolic and ritualized form of personal history representation. He specifies family and individual celebrations and rituals as the motivating factors in image production, and ignores the impact that various industries have had on shaping the appropriation of image-making in family contexts. As feminist critics such as Annette Kuhn (1995), Marianne Hirsch (1997), and Jo Spence and Joan Solomon (1995) have insisted, the authenticity of the narratives which are supposedly frozen in family images is hugely debatable and contestable. Images are almost immediately tied to the ongoing play and representation of lineage, whether we talk about the practice of image-making in a historical context, or in a contemporary one.

In a historical context, hand camera use integrated personal and quasi-present representations of events into the duration of generational time, and into the duration of collective time, as the example of World War I reveals. Whether or not familial appropriation differed from family to family and in image content (which we know is hardly the case), is of little or no consequence to this aspect of the discussion. Pertinent here is how the possibility for such personal practices of documentation privileged and

legitimated private lives and relations as sites where history happens and repeats itself, in both micro and macro senses.

The popularization of image-making practices has bequeathed to the twentieth century a compendia of individual family image histories and their intersection with collective history. As the practice of image-making spread across generations, social groups, and territories, so too did the individual and partial family image histories documented and catalogued (or not) in photograph albums, and/or haphazardly stockpiled in shoeboxes, envelopes and the like.

The relationship I would like to forge here is a dialectical one which requires specification on a couple of levels. First, and put simply, technological and industrial discourses infiltrate and facilitate the ways in which people acquire the skills for representing personal life and family life in images (Patricia Zimmermann's argument). In other words, image-making is never innocent, and representation is never uniquely creative and individual (the opposite of Chalfen's argument). On a different level, and related to Hobsbawm's notion of invented tradition, popular image-making emphasizes the expression and representation of generational (and traditional) time as simultaneously personal and shared. The discursive

representation of image-making in terms of publicity and promotion, and the personal production of images, in this sense, are bound in a constant dialogue with each other.

As an aside, it is necessary to note that in terms of the kind of occasional correspondence George Eastman received from happy "kodakers," these correspondences often detailed the kinds of uses to which letter writers put their "Kodaks." It is not a chicken and egg problem I want to develop here, but it is worth considering that Eastman, being particularly socially savvy himself, could very likely have taken cues from this personal correspondence and incorporated aspects of it into promotional schemes. At the very least they would have given him a sense of what was going on out there in the world of "kodaking," and how these personal uses may have related to the projections about "kodaking" from the Kodak City (Rochester) headquarters. As we know, he fully intended to popularize image-making practices, so too might he have taken a personal cue or two from certain of his correspondents who divulged to him their personal image-making practices and experiences.

It is not by accident that the representation of personal experience in terms of image production coincided with the kinds of temporal distinctions which experiments in art, literature, science, and social science were proposing between the end of the nineteenth century and the first

couple of decades of the twentieth. The use of hand cameras intervened in the personal experience of events to produce images of those events which could then be savoured repeatedly after the fact, and for years to come. Of course, the possibility for photographic production in general had already confirmed this, but on such a small scale that its global impacts would not settle in until the end of the nineteenth century and beyond. As a technology whose form catered to widespread and diverse notions of image-making practice, the hand camera and its popular use fit with concurrent cultural negotiations of time. These negotiations were multiply invested in claiming a sense of the personal and experiential that was not severed from the world, but, on the contrary, very much in it.

## Camera Culture and Gender

Photographing one's family, friends and home, and unintrusive social escapades were all considered affable for virtuous ladies of leisure. 27 As long as image-making was

<sup>27</sup> See for example, D.J. Tapley. The New Recreation,
Amateur Photography: A Practical Instructor. (New York:
Husrt & Co., 1884); Diane Galusha with Karen Marshall,
Through a Woman's Eye: Pioneering Photographers in Rural
Upstate (Hensonville, NY: Black Dome Press Corp, 1994); Jane
C. Gover, The Positive Image: Women Photographers in Turn of
the Century America (Albany: State University of New York
Press, 1988); Madelyn Moeller, "Ladies of Leisure: Domestic
Photography in the Nineteenth Century," Hard at Play:

practiced in personal situations and, even better, for domestic and family purposes, the controversial aspects of women's appropriation of photographic apparatuses were marginalized. There was, however, dissension among the ranks as to whether or not it was, in fact, ladylike to "kodak" under any circumstances. To the other extreme, there was also dissension as to whether or not women's uses of photographic apparatuses should be dominated by the practices of family rearing at all.

Even before the hand camera craze made image-making more accessible and, well, more popular, women had to find and form their own networks for the exchange of photographic knowledge. Such networks were most commonly found in popular magazines, and in popular photographic literature. Although the number of people who used cameras had increased after 1888, women's access to knowledge networks and established photography clubs was limited except in terms of the outlets provided by popular magazines. Adelaide Skeel attempted to bring women into the practice of image-making by establishing a forum for dialogue in a popular photographic journal. Skeel edited a regular column in The Photo-American called "Our Women Friends." "Our Women Friends" debuted in

Leisure in America 1840-1940, Kathryn Grover, ed. (1992; Amherst, MA: The University of Massachusetts Press; Rochester, NY: The Strong Museum): 139-160.

1891 and was directed at female consumers of photographic equipment and producers of photographic images who sought and shared image-making advice.

The correspondence featured in her column factored into a sophisticated and technical discourse which evidently dominated the voice of "Our Women Friends." The sample of published inquiries covered a wide range of issues including technical inquiries and the mixing of chemicals for development procedures, the solicitation of arts and crafts advice, as well as the occasional inquiry regarding how to take family photos. The letters selected by *The Photo-American* for publication under "Our Women Friends" also all came from women, even though in reality most of those who wrote to Skeel were men.<sup>28</sup>

Skeel's dialogue with her correspondents hinted at a personal bias toward a particular kind of image-making practice. When asked about how to "take the baby," for example, Skeel replied, "I wouldn't," and provided no further explanation of this dismissive comment.<sup>29</sup> Skeel could have been expressing disdain for the syphoning-off of women's camera appropriation to the genteel terrain of the

<sup>&</sup>lt;sup>28</sup> Adelaide Skeel, "Our Friends," The Photo-American 5(1) (November 1893): 27.

<sup>&</sup>lt;sup>29</sup> Adelaide Skeel, "Our Women Friends," The Photo-American 3(8)(June 1892): 234.

family circle. Like Alfred Steiglitz, she could also have been taking a personal stand with respect to the unbridled aspects of image-making's popularization, a point of view shared among serious proponents of photographic practice.

Take, for example, this extract from a letter written to "Our Women Friends:"

Dear Women Friends, I am so glad you are all coming together to help us make something more than a tiddledy-winks pastime out of photography. I do despise "button-pressers" in anything, and that is because I have been to Vassar. 30

Skeel's column was quite possibly set up in competition with Catherine Weed Barnes's monthly column, "Woman's Work," published in The American Amateur Photographer. The column was published a few years before Skeel introduced "Our Women Friends." Catherine Weed Barnes, an "unspoken champion of women in photography," eventually became editor of The American Amateur Photographer in the early 1890s. Among the aspects of women's work and image-making she emphasized were women's claims to the domestic space in terms of photographing the interiors of their own homes. We should

<sup>30</sup> Daisy Dare, letter, The Photo-American 3(1) (November 1891): 23.

<sup>&</sup>lt;sup>31</sup> Peter Palmquist, ed., Camera Fiends and Kodak Girls II (New York: Midmarch Arts Press, 1995): 41.

not interpret her attention to women and interiors to be at all demeaning or lightweight in terms of technical prowess; photographing interiors, after all, was a highly skilled pursuit, especially with the use of flash powders and the mixing of chemicals in order to avert the challenges involved in working under conditions of limited interior light.

These solicitations also drew attention to lacunae in women's access to alternative social networks, particularly camera clubs of the day which had a habit of blackballing women as members. It was more the exception than the rule that women were welcomed into camera clubs. The Camera Club of New York and the London Camera Club, for example, had strict membership guidelines which also meant they could officially reject women's entry (and undoubtedly "others"). Catherine Weed Barnes, especially, admonished the exclusion of women from photographic societies and clubs, a matter that was slowly changing around the 1890s but had not at the time been fully reconciled. 32

It could be argued that Skeel's and Weed Barnes's interventions in the resolution of a women's forum for image-making knowledge and skill engaged a kind of proto-

<sup>32</sup> See Catherine Weed Barnes, "Why Ladies Should be Admitted to Photographic Societies," The American Amateur Photographer 1(6) (December 1889): 223-224.

feminist discourse around the appropriation of technology by women, technical instruction by women for women, and the legitimation of women in photographic societies and clubs. Perhaps the short-lived segregation of "Our Women Friends" as a women-only forum is testimony to a change in perspective toward women and camera "machines." In 1893, Skeel announced that her column's name would change to "Our Friends," adding that "we venture to widen our boundaries to include in this department, hitherto sacred to women, all who are interested in photography irrespective of age, sex or color." As the 1890s progressed, women increasingly made and had met their demands for their inclusion in camera clubs across the United States, but not, of course, without resistance.

"Our Women Friends," then, and at least for its first two years of publication, was intended as a special women's enclave, so be it tucked away toward the last pages of each issue of *The Photo-American*. For all intents and purposes it

<sup>&</sup>lt;sup>33</sup> Adelaide Skeel, "Our Friends," The Photo-American 5(1) (November 1893): 27.

<sup>&</sup>lt;sup>34</sup> Catherine Weed Barnes in a commentary on the exclusion of women from clubs and in indirect response to a letter written to *The American Amateur Photographer* under the pseudonym, "Perplexed," wrote that "in his club, several members have threatened to resign if ladies are admitted." It was felt by male club members that they might have to censor their behaviour if women were allowed. See Catherine Weed Barnes, "Why Ladies Should be Admitted to Photographic Societies."

served as an editorial space in which "women" specifically—at least the names printed with the letters were women's names—were invited to submit image—making and processing queries, and, as well, share knowledge about the craft. Adelaide Skeel was their mediator, and in the case of "the baby," one who also passed judgement. Even if it was a small number of women who actually contacted Skeel, we might heed from this example, and the limits to club activity some clues as to how and where women might have become acquainted with the newly accessible practices of image—making.

Elsewhere, Skeel sardonically mused about camera use being for "modern girls," but still somewhat offensive for "ladies" for whom such handling of "machines" was hardly considered to be feminine. In a fictional story about a single woman traveling with the sister of a male friend and her son, Adelaide Skeel provided evidence and commentary regarding the social and moral panic toward the association of women and these "machines" anywhere beyond the domestic scene. When asked to leave the camera behind, Skeel's protagonist had it explained to her that "sister is a little more sensitive to lady-like appearances than you—you are a modern young woman and have been trained in a different

<sup>35</sup> Adelaide Skeel, "Sunflower," Photo-American 5(4) (February 1894): 99.

school."<sup>36</sup> What we may glean from this fictional account is that the gentility of such a hobby for women was most assured when focused on family and kept private, at least at the turn of the century.

On the contrary, Eastman Kodak's poster Kodak Girl stood in opposition (literally as a cover model, standing with a Kodak) to such conservatism. It would, however, be dangerously premature, and indeed erroneous, to read Eastman Kodak's peddling of "the Kodak Girl" as an act of feministoriented resistance. Most certainly after the Brownie had put image-making within reach of the many, attitudes toward women and image-making "machines" cooled. By the late 1920s and early 1930s, Kodak Petite cameras and their art deco line of Vanity Cameras were designed especially for women. They came colour-coordinated in a variety of shades for "modern girls," and were not necessarily intended for being with the family, but perhaps for circulating in work and social worlds as the built-in compact for lipstick might suggest. Popular literature, however, still continued to predominantly direct camera consumption and image production toward women with respect to very particular social roles and social institutions: brides, mothers, wives. Hers was not a hobby but a responsibility, a consuming and producing

<sup>36</sup> Skeel, "Sunflower," 99.

labour.

"Modern women" was a term used at the end of the nineteenth century and well into the twentieth to signify young women who separated themselves from conservative values. "Modern women" avidly engaged in the practice of photography right from the early years of its popularization with the No. 1 Kodak, and even before. Ladylike or not, the appropriation of a camera for many women was not a taboo, as much as social commentary attempted to censor women's association with these apparatuses. What presented the controversy was not the camera itself so much as what it meant. A moral distaste for the kind of social intrusion which the portability and accessibility of hand cameras afforded to any who used them was directly proportionate to the growing legions of snapshooters. These moral pronouncements indicated more so a population controversy, as opposed to a uniquely technological one. Put differently, it was not necessarily the new technologies that were "bad," but the fact that more and more people were taking cameras into public places and using them. This point strikes a chord with similar panics about the infiltration of cyclists and cycling as a popular phenomena.

I would like to return to my earlier allusion as to where women may have become acquainted with the "witchery" of image-making, and put forth the hypothesis that the

majority of individual women's associations and contacts with the practices of image-making was initiated in personal and domestic contexts. Due to club restrictions, women's image-making practices also had to thrive there. Most certainly in the case of women, the idea of "do-it-yourself" was not simply a choice, but a necessity. Personal life and the family, as we learn from the ventures of Eastman Kodak, were important and strategic targets for the popular dissemination of image-making practices. There is another way we can read this attention to the family and the domestic as other than the twinning of nuclear family ideologies with the popularized practices of image-making.

The outspoken apprehension toward "button pressers" suggests that if Eastman Kodak or any supplier of photographic apparatuses wanted to make a success out of the hand camera it would most certainly not have been attained by focusing attention on photographic organizations and clubs. Members of clubs and formal organizations framed their relationships to image-making practices as sophisticated and superior in comparison to the kind of mediocre production that low-end hand cameras (such as the No. 1 Kodak and Brownie) implied. Ostensibly, this is why Eastman developed a hand camera model in the first place: to popularize photography among the masses.

Domestic life, including family and leisure, while

targets for the appropriation of hand cameras, were indispensable for hand camera access and success, and not just because through them image-making was sealed as an ideological and nuclear family practice, but because for many it was the only means by which to develop relationships with these new technologies. Mass-popularization in this context, paradoxically, meant alternative use in terms of locating the potential for photographic practice outside of established photography and club circles.

## Going Home

I have argued that temporality, mobility and spatiality all underpinned the integration of the hand camera as a new and re-invented technology into social life. Changes in perceptions of temporality, mobility and spatiality characterized a mutating social landscape in which new technologies (wireless, telegraphy, telephony) converged on the late nineteenth century and endured well into the twentieth. In so doing, I hope to have intervened in an artifact-centred analysis of the hand camera and imagemaking practices, and relocated the artifact, the hand camera, among other leisure practices and technologies also in their infancy, and in vogue at the close of the nineteenth century and turn of the twentieth, when the popularization of image-making practices and their

widespread dissemination were in their early stages.

Personal life and, in particular, the family were developed at the outset as important sites for the reception of image-making practices. These sites were (and are) significant in part because the accessibility (cost-wise) and portability of Eastman's re-invented process catered to new forms of social and upward mobility and leisure, and in part due to an overall cultural impulse for locating personal temporal experience amidst the standardization of uniform and homogeneous expressions of temporality in process at the close of the nineteenth century. The production of images for incorporation into family albums suggested a particular kind of image consumption whose meaningfulness resided in the personalization of history, and the reconciliation of the personal with collectively-experienced historical events.

Producers of image-making apparatuses and related paraphernalia, most notably Eastman Kodak, recognized these transformations in social life and set out to capitalize on them. Their attention to personal life coincided with the ways in which other new leisure practices, such as bicycling and travel and tourism, had become accessible to a bourgeoisie in formation throughout the nineteenth century, and in accelerated formation at that century's close. In this way, the hand camera affected change in the expression

and experience of daily life in collusion with other popular amusements.

The next chapter looks more closely at the engagement of spatial experience with the familial and personal production and consumption of images. It focuses on the moving image. The attitudes toward popular image-making and leisure precedents that were set up at the close of the nineteenth century and in the early twentieth century fed directly into the entry of moving image practices into the family circle and the domestic place in the early 1920s, when 16mm film descended upon the market, and in the early 1930s, when 8mm made its debut.

#### Chapter Four

# Domestic Space/Place and the Production and Consumption of Moving Images

From the introduction of the No. 1 Kodak to the introduction of the Box Brownie, a sliding scale in merchandise designed with recreational and family uses in mind continually moved toward the diversification of imagemaking practices. Diversification did not simply connote popularized practices for the "masses." It meant the popularization of practices for entry at various, and overlapping generational points in the family lineage. It has been argued in the dissertation that this attention to generation pitched image-making as a life-long pursuit, and functioned to secure pecuniary commitment for the coffers of the photographic materials industry. The concern over generation had both market impacts (this was, after all, one of Eastman Kodak's signature strategies), and personal ones in that it meant the infusion of mixed temporal and spatial representations in the family image collection.

To describe these movements as a progressive expression of "do-it-yourself" trends emergent in new forms of consumption at century's turn would be to undermine the specific and particular effects that image-making and the

consumption of images held in store for the transformation and reconciliation of domestic and family living. Yes, these practices suggested "do-it-yourself" trends, and they initiated the trend of "we'll-do-if-for-you" in terms of innovations in roll film, and the availability of centralized developing laboratories, an Eastman Kodak coup.

The introduction of standardized moving image apparatuses and safety film stocks in 1923 connected both those interested in incorporating film into the production of family history, as well as "serious amateurs" and budding cinephiles to the production of moving images. The spreading-out of film production and consumption discussions across the pages of sundry popular literatures—family-oriented literature and image—making—oriented literature—implied a sense of rejuvenation around the possibilities for image—making as a personal novelty. This sense of excitement and rejuvenation had gone unprecedented since the introduction of the Box Brownie in 1900.

Different from the popularization of still image-making practices, the popularization of moving image production drew upon the social phenomenon of image consumption in the public cinemas to bolster the appeal of these practices. The personal production of moving images reinforced economic distinctions between who could access the means of self-

production and the consumption of moving images in the comforts of their own homes, and who could only access such consumption in the public picture houses. In so doing, these access issues reinstated the cultural and popular practice of image-making as a bourgeois phenomenon. While overall patterns of movie-going in the 1920s were not class specific, the personal appropriation of these practices was a decidedly bourgeois pleasure, and one that demanded profound capital investment. In other words, if cinema-going "rose to the surface of cultural consciousness from the bottom up," appropriating the means by which to make moving images and screen them in the home expanded from the top and middle. This expansion parroted that of still image practices.

The analysis in the previous chapter privileged time and temporal experience as premiere categories of exploration, onto which were grafted mobility and gender. Although still image-making practices and image consumption enhanced the expression of personal temporal experience, the infiltration of such images into the domestic space also lead to a reconceptualization of that space. Attention to domestic spatial transformation is the focus of the present

Robert Sklar, Movie-Made America: A Cultural History of American Movies (New York: Random House, 1975) 3.

chapter.

In the case of the moving image, film equipment served the dual purpose of making production, consumption, and the conservation of moving images practical. As well, film equipment catered to the more decorative aspects involved in installing such practices in the home setting. The establishment of home screens and the domestication of spectatorship vis à vis the moving image erupted the potential for an alternative means of production and alternative forms of consumption, exhibition, and even distribution when we consider the proliferation of film libraries in the 1920s. What is most revelatory about these phenomena is that they beg us to consider the simultaneous convergence of 1) personally-produced images for home use and family history purposes; 2) commercially-produced images for rental and purchase for home use (although not exclusively); and 3) the public cinema-going experience. It was through the representation of personal history and public cinema-going practices that the term "home theatre" entered the popular lexicon as a realizable and practical curiosity.

This chapter chronicles the progression of productive and consumptive moving image practices into the domestic space/place, and their intervention as mediators of family

relations. This progression was neither insular nor narrow, and should, therefore, not be treated in terms of a segregated interpretation of domestic relations and the moving image. On the contrary, it drew its motivation from both private and public circumstances. First, it looked to previous encounters with still image practices in leisure and family life (based on the discussion in Chapter Three). Second, it hinged on earlier experiments with non-standardized forms of domestic projection at the turn of the century and throughout the teens as forged by companies such as Pathé, Edison, and Eastman Kodak. Finally, it drew from a growing public interest around the practices of cinema-going and moving image consumption in the public picture houses.

I will begin by addressing a constellation of image practices. This includes, among the popularization of still image practices, attention to other non-standardized forms of moving image projection that preceded the standardization of 16mm film equipment. Next, the chapter explores incidents and innovations that facilitated the progression of image-making and consuming practices into the home. For example, it weighs innovations in lighting and flash capabilities, and improvements to film stocks against the viability of domestic spectatorship and moving image production in interiors. Third, it analyzes the relationship of home

screening practices to the public fascination with cinemagoing. With respect to cinema-going, the chapter inquires into how suppliers and manufacturers of equipment, as well as those who managed film libraries (Eastman Kodak's Kodascope Libraries, for example) capitalized on the silent cinema-going craze in order to promote and invent the idea of privatized spectatorship. Finally, the chapter considers how the availability of furniture for home movie-making, and the consumption of images (projector consoles and archival/storage units) once more redefined the popularization of image practices for home and family uses in the coining of the term, "home theatre." Of particular bearing is how producers of equipment such as Bell & Howell and Eastman Kodak continued to work the family into their scope of salesmanship. They lingered over sentimentality and personal history in order to set precedents for the appropriation of moving image production and consumption practices, including the conservation of images.

## Experimenting with Projection

At the turn of the century, when Eastman Kodak was preparing to introduce the Box Brownie, Thomas Edison was already thinking about home projection. As we will recall from the discussion in the second chapter, George Eastman

paid little attention to moving image production at that point, except in the case of supplying Eastman Kodak's non-flammable film (1909) to Edison and Mutoscope. Instead, it chose to concentrate its efforts on photographic practice, a significant corporate decision on its part. Despite Edison's cut to the quick of moving image home consumption, it would, ironically, be Eastman Kodak who would give North America a standardized and amateur format in 1923. Bell & Howell followed Eastman Kodak's introductory leap within a matter of months. 16mm was a technological effort that both companies had worked on together through their acquaintance in the MPPC.

Eastman Kodak, however, was not unaware of the potential purchase involved in home production and projection of moving images. Rather, we might consider

Eastman Kodak's late entrance to the moving image scene as strategic. The sketch of its corporate profile in Chapter

Two provides ample evidence of its calculated efforts to survey the ripeness of markets, as well as to monitor social conditions in order to minimize the risks involved in introducing new technologies. Besides, its membership in the MPPC would have made it privy to insider information regarding the state of competition and the potential of the market for the absorption of innovations.

As early as the late 1890s a variety of moving image projection devices were realized for personal use. Several of these units were inexpensive and included the American Parlor Kinetoscope (1897) which retailed for six dollars; the Vitak (1902/1903) which was available through mail order catalogues for two dollars, just slightly more expensive than the Box Brownie; and the Iconograph (1904-1906) which was more expensive than the two former models.2 The low prices of these projecting devices could have been a ploy to draw from the success and proliferation of nickelodeons, and to inculcate those who frequented them into home projection and consumption, the only problem being that the clientele of the nickelodeons were not necessarily those who could afford the privilege of moving image consumption in the home. In addition, these early devices left much to be desired in terms of image quality, their scarcity today being a possible indicator of their lack-lustre performance on the market.3

Quality is one issue. The absence of a viable distribution system for the home consumption of images is another. At the turn of the century a widely-disseminated

<sup>&</sup>lt;sup>2</sup> Ben Singer, "The Early Home Cinema and the Edison Home Projecting Kinetoscope," Film History 2 (winter 1988): 35-69.

<sup>&</sup>lt;sup>3</sup> Singer 38.

technological form for personal moving image production was not in circulation, and nor were safety film stocks. These factors would have impeded the success and longevity of early projecting devices. Nickelodeons, vaudeville houses and penny arcades—the places where "pictures" were screened in public—were predominantly the haunts of working classes. We might, then, consider the mitigating circumstances of the absence of a flush and middle—class consumer, as well as movie—going base for whom moving image consumption at home would have been practically realizable. The point here is one of familiarity, and compares to how photographic practice was made practical in its connection with other social (and middle—to upper-class) phenomena.

Ben Singer (1988) claims that the turning point in home projection possibilities came in 1912 when T. A. Edison Inc. introduced its Edison Projecting Kinetoscope (22mm), and Pathé started to market a 28mm projecting device in Europe, the Pathé K-O-K. Pathé introduced the Pathescope in the United States in 1913 which was incidentally the same as the Pathé K-O-K except with a different name. The intended applications of these early devices were for both home entertainment consumption, and, relatedly, image consumption for educational purposes. Within a few years, Victor

<sup>&#</sup>x27; Sklar 1975, 3-5.

introduced a 28mm projector (1918), as well as other devices for nitrate film projection—the Atlas (1914), the Animatograph (1914) the De Vry (1916/1917), the Victor (1915 and 1917)—and took their place in the market. The market success of these models was marginal and short-lived, due in large part to safety concerns over nitrate's volatility, and an unwillingness on the part of commercial producers of images to commit to the use of acetate stock since its image quality was poor.<sup>5</sup>

Popular discourses of the period invested considerably in what were believed to be the utopian and socially cohesive values of the moving image as an educational tool. The same discourses had already been circulating freely with respect to claims regarding photography's educational value. Directives similar to those used to trumpet the virtuosity of still images as proxies for family togetherness, past, present and future were applied to the moving image. Likewise, the suppliers of moving image paraphernalia continued to leverage the imperative of an image conservation ethic, a personal conservation ethic which had been well rehearsed with respect to the cataloguing of still images in photo albums. This educational discourse is not, however, singularly traceable to the photographic materials

<sup>&</sup>lt;sup>5</sup> Singer 44-46.

industry. It was also nourished by late-nineteenth century and turn-of-the century Progressives who rallied around the image and helped to shape its educational import.

George Eastman, not surprisingly, shared these
Progressive attitudes when it came to the educational
properties of image production and consumption. The Box
Brownie, especially earmarked for children's discovery, is
testimony to this. The company's own efforts to bring to its
customers the traveling Kodak Show in the second decade of
the twentieth century was a venture with potential
commercial pay-offs (the extension of its products out to
the frontier), and educational ones. The Kodak Show provided
evidence of the company's interests in educating its
customers about image-making, and at the same time
emphasized the dual educational and recreational value of
image-making and consuming practices.

In 1921, Frederick H. Elliot of the National
Association of the Motion Picture Industry wrote to George
Eastman with suggestions about how the Eastman Kodak Company
might become more involved in the educational opportunities
afforded to children who attended summer camps, and
specifically education in photography. "I understand there
are hundreds of these camps conducted each summer," wrote
Elliot, "and it occurred to me that possibly you might be

agreeable to consider some plan to assist in the development of this work through possibly having visits made to Kodak Park by the instructors and directors in charge of camp activities." Eastman Kodak immediately jumped on the suggestion made by Elliot, no doubt with plans to promote standardized amateur film-making practices and its Kodascope Libraries already in the works. It is also interesting to that Elliot was neither an educator, nor a child welfare spokesperson. He worked in the motion picture business and likely saw, as did Eastman, the lucrative possibilities involving children.

Although personal moving image projection was realized in the teens, there was a schism between the provisional means by which to project moving images (hardware), and the availability of images to screen (software). Edison operated a mail order film distribution house, but it went out of business in 1914; Pathé also provided distribution of 28mm films for its customers. With the inflated price of projection units and the expenses incurred in renting films—not to mention, in the case of Pathé, obvious attempts to lock its customers into screening only Pathé productions

<sup>&</sup>lt;sup>6</sup> Frederick H. Elliot to GE, 28 August 1921, GEC, GEH, Rochester, New York.

<sup>&</sup>lt;sup>7</sup> Singer 44-46.

based on a specifically patented gauge<sup>8</sup>—early home projection was even more of a luxury than 16mm standardization suggested in the 1920s.<sup>9</sup> The problem here was one of standardization in terms of a widely-accepted safety gauge (16mm and 16mm stock) for both consumption and production.

In the mid-teens, Eastman Kodak distributed the Kodiopticon, a projection device which could be used to show lantern slides produced from Kodak negatives. It is noteworthy that at the time Eastman Kodak remained prudent with respect to integrating moving image projection into its technological repertoire. Its promotion of the Kodiopticon promised to offer users the option of living "Kodak days in the open with Kodiopticon evenings in the home." The Kodiopticon carried through on Eastman Kodak's promise of the image's ability to allow for both the reliving of cherished family moments, as well as the educational value assumed to be a natural by-product of images. Different from the projection of moving images, the personal production of

<sup>&</sup>lt;sup>8</sup> Singer 44.

<sup>&</sup>lt;sup>9</sup> See Moya Luckett, "Filming the Family: Home Movie Systems and the Domestication of Spectatorship," The Velvet Light Trap 36 (Fall 1995): 21-32.

Eastman Kodak Company, advertisement, Kodakery, January 1914: 20.

which would not be fully realized until the 1920s, the Kodiopticon, more akin to slide projection than moving image projection, fused together personal production with personal projection: sitting in the dark and basking in the light of one's own images.

Here we witness again Eastman Kodak's very calculated efforts to avoid unnecessary risks, and to concentrate its energies on what it knew best. Recall that George Eastman introduced the No. 1 Kodak after a process for roll film production and development was already in place and sustainable. It is quite possible, then, that the Eastman Kodak Company would not have been interested in committing itself in a full market sense to the business of moving images (equipment and materials for production and consumption, as well as film distribution) until it could be assured of a certain sense of market stability.

Standardization lent itself to market stability. In this sense, Edison, Pathé, Mutoscope, Victor and the like tested the market, but Eastman Kodak and Bell & Howell claimed it. Since customer satisfaction was a staple for Eastman Kodak success, I argue that it would have been out of corporate character to innovate for innovation's sake unless innovation could be sustained. This in part required equipment standardization, and in part mapping an existing

and potential client base for the familial transition to the production and consumption of moving images.

#### Links to Still Image Practices

The home movie, not unlike the photo album, marshaled a familial historical imperative wherein reels everlasting could represent for friends and family the select aspects of family history in movement, and, not surprisingly, the more edited versions of family history: weddings, parties, high holidays, birthdays, vacations, and children. Countless advertisements for home movie-making equipment from the 1920s and well into the 1950s, when 8mm movie cameras were in their widest popular use in North American families, vaunted claims regarding the necessity for marking time, for capturing family members in moving action before such precious moments and family members passed away. Any moment could and would be history, that is moving picture history. The image, still and moving, if not a means by which to beat the clock, might certainly have been able to compensate for its cruel lashes. Such a desire for history, personal history, and a deed to individualizing the past created an excitement around the home movie more so than any dreamworld of ersatz Hollywood production ever could.

Eastman Kodak, the company that practically patented

the matter of making image-making easy, extended to its customers the same ease for producing moving images and developing motion picture film as it had originally done with the No. 1 Kodak process. Initially, Kodak Park in Rochester was the company's only finishing plant for motion picture film. By the late 1920s, the company extended this service to its plants throughout the globe just as it had done with photographic finishing. Its worldwide service facilitated the use of Eastman Kodak products and services for individuals living in those centres, but more importantly rendered the company indispensable to traveling "kodakers" who would not only seek convenience in developing their vacation films in tourist centres abroad, but also in screening them at the same Eastman Kodak stores. 11 This service gestures to the alignment of image-making and consumption with travel, uses Eastman Kodak willingly

<sup>11</sup> This, however, was not a free service as the following letter written by L.B. Jones, Eastman Kodak's chief marketing man. "It is perfectly clear that it is advisable for us to establish a policy now which will prevent us from getting into trouble with our customers when the business has developed further and their demands along these lines become so great that we can not meet them except by charging for the service or otherwise suffering from a heavy expense in running their films." L.B. Jones to Mr. A. Wunderlich, 21 June 1927, GEC, GEH, Rochester, New York. Screening charges per 100 foot reel of film were negotiated at the outset as well as a policy to schedule screening appointments. A policy was necessary since the business had become so large, and because in-store screening booths should not be frivolously occupied in the event of demonstrations for prospective customers.

instigated by facilitating finishing services around the globe after the introduction of the No. 1 Kodak.

It is not completely unfounded, then, that the imagined and practical uses of photographic cameras would reproduce themselves in literature and practice with respect to moving image cameras. It would appear that Eastman Kodak was well aware of this when it commanded the popularity of the Box Brownie to spin-off the Brownie 8mm camera in 1951. One year before it introduced the Brownie movie outfit, Eastman Kodak had begun to statistically track amateur sales and reported that this kind of consumption accounted for one-quarter of its overall sales. 12 Family movie-making carried on with the social and cultural practices of recording, representing and re-interpreting family history in still images, as well as illustrating the travel diary. We could think of this "will to history" in terms of the relentless interpellation of the family as producer and consumer by the photographic and film materials industry; however, this would award far too much credit to the suppliers and manufacturers of this equipment. The image-making industry did not invent a personal historical imperative; however, it did insinuate itself on the complex process of the bourgeois family's desires for

Eastman Kodak Company, 48th Annual Report of the Eastman Kodak Company (Rochester: Eastman Kodak Company, 1950) 8.

one.

The family in this slice of image-making history has been conceived of as a precious constant. This gestures more to how technologies have been disseminated to families and the domestic scene than to the nature of families themselves. There is little change in the representation of family in image-making publicity from the late nineteenth century up to the middle of the twentieth, and what changes are noticeable are perhaps more attributable to finely developed marketing tools and advertising strategies, than to deviations in practices of image-making in family and personal contexts themselves. Charles Musser, in an essay on the origins of screen practice, urged film historians in the 1980s to consider a sense of continuity in screen practices by looking to preceding experiments with projection, lantern slides for example, as a means by which to rethink what it means to make definitive claims about the origins of cinema. 13 I would like to make the claim for considering continuity with respect to the reconciliation of the cultural shaping of the production and consumption of moving images and practices in family contexts with that of still image practices in the same.

<sup>13</sup> Charles Musser, "Toward a History of Screen Practice," Quarterly Review of Film Studies 9(1) (Winter 1984): 59-69.

Discourses around image-making in the family, ironically, shaped it into a timeless practice, but one with overtly temporal concerns. While wrongheaded to argue that film is the linear extension of photography, the quality of this statement changes with respect to the appropriation of these practices, their production and consumption in the family, and in history. It is such consistency which is most interesting and neither wholly nor independently explainable in terms of either symbolic behaviour, or industry influence. From this perspective, home movie-making represented less the failed emulation of film-making professionalism, and more a desire for memory and a longing for family history in images. Moving images functioned doubly: first to trace the personalization of temporal experience in movement, and, second, to hasten transformations in the privatization of spectatorship.

However creatively and aesthetically crafted, home movies are, more poignantly, relics of family history. Ideas about professionalism in film-making quite possibly influenced the production of moving images in some families, but no more so than professionalism in photography had its impacts on popular practices, and even this was by no means the norm. As discussed in the previous two chapters, certain photography clubs and specialized photography journals were

careful to distance themselves from renegade "kodakers" (Steiglitz) and family photo buffs (Adelaide Skeel). The point I am getting at here concerns the flow of popular culture. More specifically, it requires thinking differently about that flow in terms of shifting directions much like the wind, and not as uni-directional in the form of corporate and professional discourses' influence on amateur practices. It should be elucidated, however, that professional discourses are not neutral either.

What is at stake here is not to dispute that there is a relationship between the discursive ideals and values laid out in the promotion of image-making and materials and their appropriation, but to consider this relationship prismatically. The more challenging matter, as I have attempted to chip away at throughout the dissertation, has not been to ascertain how professional practices and discourse attempted to inform personal ones-which, in the case of film, may after all have been just a promotional ploy-but to understand how a distinct visual culture established itself in the home and family, and how families have realized, represented, and edited their own histories in terms of the image.

The codes for family movie production, and this is the crux of the matter, preceded the popularization of film in

the family. They were anticipated, as I have argued, by the popularization of photographic practices in the family vis à vis their entrenchment as technologies which could be used to document and, in fact, to reconfigure the representation of family history. The home in this narrative, while not uniquely the site of production, most certainly became an important site for image consumption, an archival nerve centre for family past-looking.

### Image-making and Domestic Transformations

Image-making in the home prior to high speed film and electric lights was not an impossibility. The use of flash sheets, powders and flashlights (lights that when ignited would produce a flash for picture making) were not uncommon to indoor photography; however, these procedures were not without an element of danger. These were highly flammable procedures but nonetheless still made image-making a viable pursuit when engaged in away from direct sources of light, namely windows. Although flashlights were available, the natural light provided by windows and doors was preferable to artificial and chemical methods. Note that this preference was not highlighted for safety reasons, but for aesthetic ones as flash-lit interiors could easily produce

harsh images if not handled by an expert.14

Throughout the teens and into the early twenties, Kodakery and Sears, Roebuck's Better Photos promoted the use of cameras for image-making in the home, especially for photographing decor. Home furnishings and curios, a homemaker's booty secured from shopping trips to the new department stores and the trappings of domestic and consumptive success were deemed praiseworthy for inclusion in the complete family photo album. As early as 1889, just one year after the No. 1 Kodak made its market debut, Catherine Weed Barnes was encouraging women to explore image-making by photographing their domestic interiors. 15 Recall from the discussion in Chapter Three that producing images of domestic interiors was certified by moral critics to be one of the most acceptable image-making practices for women, second only to the widely socially acceptable practice of producing images of the children. While photographing the home was a skillful pursuit, the domestic scene and domestic relations were two of the only training and experimenting grounds (with the exception knowledge exchange in women's magazines and the columns of Skeel and

<sup>14</sup> C.H. Claudy, "Interior Photography," Better Photos 13(10) (October 1915): 255-259.

<sup>15</sup> Catherine Weed Barnes, "The Study of Interiors,"

American Amateur Photographer 1(3) (September 1989): 91-93.

Weed Barnes) for women to pursue image practices.

By the twenties, electric lights could provide suitable illumination for image-making at night and indoors; however, it is arguable that nothing could have done more for the realization of image-making in interiors and at night than improvements made to film stocks, the real cash cow for company's like the Eastman Kodak Company. Film production in the home also could not have been realized without the innovation of safety film, a project the Kodak laboratories were hard at work on well ahead of the introduction of standardized amateur film-making equipment.

Verichrome film for still image cameras and

Panchromatic film for motion picture cameras descended upon
the market in the early thirties. As image-making software
advanced and expanded the temporal possibilities for imagemaking, so too did the diversification of technologies for
image production expand the possibilities for image-making
and home consumption in terms of making these practices more
widely accessible. Around the same time that Verichrome and
Panchromatic film were introduced, so too was 8mm film, the
apparatus for movie-making economy. In the news release for
Kodak Verichrome, the revolutionary high speed, double
coated, greater colour sensitivity film, Eastman Kodak
crowed that "the number of hours of the day in which

pictures can be made successfully will be increased by 20 per cent and amateur photographers will be satisfied a larger percentage of the time." Furthermore, the company boasted that its Panchromatic film required only ordinary electric light, two 100-watt bulbs to be precise, for moviemaking indoors. Customer satisfaction was, as it had always been, a prime motivating factor.

Behold the interior splendors of home movie magic:
"Baby's evening bath in the bathroom—father's daily dozen in
the bedroom—your best bridge four in the room where you play
bridge...the countless evening events that happen in your
home."17 This advertising copy, emphasis in the original
text, lets on about the possibilities for the production of
moving images throughout the seasons, well into the night,
and deep into the recesses of domestic interiors, a practice
which was earlier singled out as a potential women's
practice by Catherine Weed Barnes. Other Panchromatic film
promotions bid good bye to lost memories of parties, "gone
with the smoke of your guests' cigarettes...unrecorded," and
marveled at the film "that puts every movie camera on 24—

<sup>16 &</sup>quot;Amateurs Welcome Kodak Verichrome Film," news release, Eastman Kodak Company, 10 April 1931.

<sup>17</sup> Ciné-Kodak Super-Sensitive Panchromatic Film, advertisement, *Kodakery* August 1931: 25. Emphasis is in the original copy.

hour duty."<sup>18</sup> We have evidence here of the domestication of image production across different temporal representations—the calendar year, the seasons, the 24 hour clock—and across different spatial representations—outdoors, interiors, interiors without natural light sources. Home was the pivot upon which these innovations in part turned, particularly with respect to taking image—making practices easily indoors. We need, however, to be careful not to be trumped—up into reproducing static and hermetic disclosures about image practices and the domestic space. I will elaborate.

Historians of housing and suburban development in America, Gwendolyn Wright (1981), Delores Hayden (1981), Clifford Edward Clark, Jr. (1986) and Margaret Marsh (1990) have all documented shifts in housing design and suburban development from the Victorian era (the better part of the nineteenth century) through the baby boom. As Delores Hayden has observed, "because domestic space was as much an economic and social product as public, urban space, the farmhouse, with its capacious storage and work spaces, gave way to urban and suburban dwellings with less space and more areas devoted to the consumption and display of manufactured

<sup>&</sup>lt;sup>18</sup> Ciné-Kodak Super-Sensitive Panchromatic Film, advertisement, *Movie Makers* February 1932: 66-67.

goods."<sup>19</sup> Wright identifies a change in housing design in the 1920s in which "heating manufacturers promoted the conversion of the basement into a family recreation room,"<sup>20</sup> no doubt a plug that was beneficial to image-making equipment manufacturers as well. Clark, comparatively, sums up the Progressive shift in attitude toward the home at the turn of the century:

The Victorians had seen the house as an end in and of itself—a symbolic statement of the outlook and priorities of its owner—but the Progressives valued the house more as a means for enjoying and improving life. The house in their view, was a staging ground for family activities. It was to be a source of enjoyment rather than a monument to personal success, a place for recreation and relaxation as well as a training ground for self-improvement and moral uplift.<sup>21</sup>

Moya Luckett (1995), in a short piece on home movie systems and the domestication of spectatorship, situates transformations in attitude toward the home in relation to domestic spectatorship. In part, she filters her

<sup>19</sup> Delores Hayden, The Grand Domestic Revolution (Cambridge, MA: MIT Press, 1981) 12.

<sup>&</sup>lt;sup>20</sup> Wright 210.

<sup>21</sup> Clark 168. Emphasis mine.

interpretation through ideas put forth by Lynn Spigel (1992) with respect to the installation of television in the domestic space. Luckett concurs with the likes of Wright, Marsh, Hayden, and Spigel and reiterates that this transformation was underscored by ideological shifts between early-Victorian attitudes toward the "home" as a space to be sheltered from public life, and the late-Victorians and Progressives who "felt the home should incorporate secular pleasures and physical comforts."<sup>22</sup> Luckett also describes how these shifts impacted upon bourgeois gender relations: "Middle-class men started to become increasingly involved in domestic affairs and family life, becoming playmates for their children and companions for their wives."<sup>23</sup>

A dearth in domestic help at the turn of the century, attributable in part to the draw of young, second-generation immigrant, working women to the new employment opportunities of the city, as well as the new phenomenon of scientific management of the household meant that middle-class homemakers were doing more, if not all, domestic duties, and charged with performing them more efficiently with the help

Lynn Spigel, Make Room for TV: Television and the Family Ideal in Postwar America (Chicago: University of Chicago Press, 1992): 18.

<sup>23</sup> Luckett 23.

of new domestic technologies.<sup>24</sup> Middle-class domestic dwellers, especially women, became increasingly more acquainted with technological wizardry, and "labour enslaving" technologies, to use Ruth Schwartz Cowan's (1983) terminology. As Luckett phrases it, "the new environment was particularly suited to the new home movie systems and their immediate predecessors, the combination photograph, postcard, and slide projectors," which was predominantly the case because Progressive homes had larger open spaces that were "ideal for the operation of these machines."<sup>25</sup>

First of all, I do not disagree with Luckett's claims in terms of what the design and layout of domestic spaces availed to potential consumers of home movie apparatuses; however, I will intervene in the direction in which her argument leads us, which has to do with determination. Why limit an analysis of the home movie, its production and consumption, to very static representations of domestic space? While I have argued that innovations in lighting and film stocks lent themselves to interior and domestic production—precisely what the promotional discourses

<sup>&</sup>lt;sup>24</sup> Roger Miller, "The Hoover® in the garden: middle-class women and suburbanization, 1850-1920," Environment and Planning D: Society and Space 1 (1983). Dolores Hayden (1981) and Gwendolyn Wright (1981) have also made similar arguments.

<sup>25</sup> Luckett 23.

pushed-too much attention to domestic design limits the analysis of the onslaught of home movie practices to an interpretation of them as immediate effects of design, and likewise shelters the appropriation of these practices from other mitigating factors. Put differently, we are steered in the direction of understanding home movie production and consumption, and technological innovation only in terms of domestic spatial transformation. As I argued in the previous chapter, the popularization of image-making practices, although directed at the family for purposes of domestic fulfilment, also overtly latched onto mobility and fluidity between spaces. Cycling and travel (production as well as the processing of film abroad for consumption while en voyage), and the constant relay between home and away from home are examples the dissertation has drawn from in order to explore various production and consumption possibilities.

The home is immensely important, but it is not the only category of analysis in terms of generating conclusions as to why and how, at the juncture of the 1920s, the personal production of images and their consumption in the home (the "home theatre") would become popular novelties, at least for the limited numbers who could afford these privileges. The manufacturers and suppliers of home movie "furniture," for example, endeavoured to cut across a whole host of possible

"spaces" for the integration of screens and did not discriminate between suburban home movie consumers and urban ones, nor did they necessarily differentiate between home and the integration of screening and production possibilities in clubs, associations, schools, churches, and the like. Obviously, the more decorative of these apparatuses were directed at the home, but there were many different varieties of apparatus.

Any "space," for that matter, would have been considered amenable to the consumption of moving images, and the producers of equipment readily recognized, and even hoped for this. Domestic spatial transformation did not determine the integration of moving image production and consumption into the domestic arena any more so than any other factor. Especially with respect to home movie production and consumption, these practices took their lead in part from what popular photographic practices suggested for the home and family, and social life, as well as the important connection between the image and personal history (i.e. the display of images in home "picture galleries," albums, and the like). They were also wedged between domestic living and the very public event of movie-going. It was in this fluid passage between the porous membranes of the domestic space, textured with the images of layered

family histories and personal travels and explorations, and the public cinemas, also textured with a diversity of images, that the domestication of the "home theatre" was realized.

The Manufacture of Space: Movie-going and Movies at Home

Doreen Massey (1994) has taken issue with what she sees as a theoretical tendency toward the opposition between time and space. Massey's complaint is in the theoretical opposition of time, the messenger of meaning, to space, the subordinate, static, and unproblematic terrain upon which time exercises its mark to make space meaningful. Space and time, she maintains, must be evaluated in relation to one another as a dimension of space-time, whereby neither the spatiality nor temporality of an event or happening are mutually exclusive. Massey is contesting a disregard for the identities of spaces and places, not as personifications, but as meaningful and dynamic in their own right, and precisely because they are comprised of social relations.

Massey distinguishes between space, the "interlocking and articulating nets of social relations," and place as "formed out of the particular set of social relations which

interact at a particular location."<sup>26</sup> It would follow, then, that because we all experience social relations and, in effect, power relations differently, individual experiences of space and place are indeed differentiated. Some of the most judicious examples in this regard have come from feminist and other work concerning how differently domestic space is experienced by its inhabitants.<sup>27</sup> Massey goes on to specify:

"The singularity of any individual place is formed in part out of the specificity of the interactions which occur at that location (nowhere else does this precise mixture occur) and in part out of the fact that the meeting of those social relations at that location (their partly happenstance juxtaposition) will in turn produce new social effects."<sup>28</sup>

Finally, she adheres that "the identity of a place does not

Doreen Massey, Space, Place and Gender (Minneapolis: University of Minnesota Press, 1994) 168.

Mother: the ironies of household technology from the open hearth to the microwave (New York: Basic Books, 1983); Meg Luxton, More than a Labour of Love: three generations of women's work in the home (Toronto: Women's Press, 1980); Lynn Spigel, Make Room for TV: television and the family ideal in postwar America (Chicago: University of Chicago Press, 1992); Keir Keightley, "'Turn it Down!'she shrieked: gender, domestic space, and high fidelity, 1948-59," Popular Music 15(2) (1996): 149-175.

<sup>&</sup>lt;sup>28</sup> Massey 1994, 168.

derive from some internalized history. It derives, in large part, precisely from the specificity of its interactions with 'the outside'."<sup>29</sup> In Massey's terms, space and place are constantly in flux, in flux precisely because of social relations.

I would like to consider Massey's comments in terms of making and consuming images, the spatial referent being domestic space, and place. In particular, I would like to bracket the notion of an "identity of place" as revealing itself in "interactions" with the outside, an outside of nets of social relations of which the micro social relations of place are part. Understanding this is crucial to articulating the crossover of image production and consumption to domestic contexts, the most excitable relations of which, I argue, descend upon the moving image.

While the claim can be made that the photographic image was integrated into domestic interiors by occupying space on existing shelves, tables, desks, and walls, for example, the same could hardly be said for the moving image. Its installation in the domestic space coincided and overlapped with the popularity of cinema-going, as well as the design transformation of domestic space. The domestic integration of the moving image also acted on the domestic space to

<sup>&</sup>lt;sup>29</sup> Massey 1994, 169.

transform it and the social relations comprising it (the privatization of spectatorship and the diversification of production). It was in this "agency" of the moving image, or, more accurately, the "agency" of moving image practices, both within the home and in venues beyond it, that the concept of a "home theatre" took flight.

The construction of grand exhibition venues boomed toward the end of the silent era. The visual experience of moving images was buttressed by both the visual splendor of these cinematic pleasure palaces, and their geographical locations at the urban core of consumption, as well as the locality of neighbourhoods. The fervor around the public consumption of images in the 1920s lurked at the margins of the domestic space, but with one very important provision. The expense of home movie production and projection equipment marginalized movie-making practices for anyone other than affluent upper- and middle-class consumers. Sixteen millimetre equipment, although intended as a popularized means of moving image production and consumption, was most certainly out of reach for those whose income status would be defined in opposition to upper- and middle-class distinctions.

The personal appropriation of moving image apparatuses was definitely askew from patterns of cinema-going. In other

words, working classes may have reveled in the public consumption of moving images, but the privilege of personal appropriation was a reserved privilege. Nowhere was this more pronounced than in the spiriting of the moving image into the domestic space, a phenomenon that precipitated from both the public consumption of images in the movie houses, and the previously entrenched social and cultural practices of photographic image production, consumption, and conservation.

Of historical accounts of the silent era, Richard Koszarski's (1990) stands out as a map of movie-going and exhibition, production, and the institutional structure of the industry. "The experience of viewing a film was far different from what it would be at any time before or since," writes Koszarski, "exhibitors considered themselves showmen, not film programmers."<sup>30</sup> He begins by situating a public fascination with movie-going in relation to the event of movie-going, and includes here the various architectural styles and capacities of movie houses, and their locations; exhibition techniques and "putting on the show;" as well as films and film genres and their popular appeal, although

<sup>&</sup>lt;sup>30</sup> Richard Koszarski, An Evening's Entertainment: The Age of the Silent Feature Picture 1915-1928, Volume 3, History of the American Cinema, Charles Harpole, general editor (New York: Charles Scribner's Sons, 1990) 9.

content was not the primary organizing principle for moviegoing during the period.

Percolating at the surface of Koszarski's analysis is a remark about the zealous consumption of images, any and all images, among diverse publics of moviegoers. Diversity is the lynchpin here. By the 1920s cinema audiences (at least by "class" definition) were varied, and the "places" where one could see a film also varied in terms of grandeur and location. Once again, I refer to Moya Luckett who argues that movie outfits were directed at upper- and middle-class consumers who could afford them. This is not a point of contention as after all these apparatuses were expensive. She adds, however, that this "demographic" was also the one "most likely to shun movies exhibited in public."31 On the contrary, Koszarski paints a very different picture of movie-going diversity by providing us with a historical sketch of the wide variety of picture palaces and their locations, from the neighbourhoods to the urban core, from understated cinemas to lavish theatrical palaces.

Rather than shun the public exhibition of movies, the tendency toward panic was perhaps more akin to concerns over content coupled with a series of public scandals at the centre of which were several prominent silent screen

<sup>31</sup> Luckett 22-23.

stars.<sup>32</sup> Even then, the kinds of titles that would have been available for home consumption by way of library rentals doubled-up on what could and would have been screened in public. This suggests that the production of home titles was neither a separate, nor independent industry. In fact, libraries would provide 16mm prints of productions regularly screened in the picture houses. It is not without sacrificing something that one can make the argument that movies in the home meant shunning public exhibition. That "something" is a more fluid representation of the connection between domestic "place" and the cinema, as well as an appreciation of the social and cultural appetite for images.

The difference Koszarski portrays in this historical account is indispensable to the present project for it urges us to consider the total event of movie-going, including the experience of pleasure palaces, and not exclusively to a critical relationship to images. Movie-going was as much about being at the theatre as it was about consuming images. This is not to say that audiences were not discriminating, but that all kinds of images struck people's fancies.

The consumption of these images in the home, as in the

<sup>&</sup>lt;sup>32</sup> On issues regarding film content see for example I.C. Jarvie, G. Jowett and K. Fuller, eds, *Children and the movies: media influence and the Payne Fund controversy* (Cambridge: Cambridge University Press, 1996). See also Koszarski, especially Chapter 7, "Watching the Screen."

public picture houses, would also have been equally diverse. Given the ways in which the home consumption of moving images was aligned with the variety offered in the repertoire of films screened in the public cinemas, home cinéphiles and home movie-makers would also have created a collage of moving image expressions in the personal project of "putting on the show" for friends and family in their respective "home theatres." For the home show, commercial rentals would be screened along with personally-produced moving images and family "records." Home screens and makeshift domestic theatres served simultaneously as gateways to family moving image history, individual creative endeavours, representations of world events, travelogues, feature films, and so on. Home movie buffs could begin to locate, compare and contrast their personal forays into moving image production (including family films) with other productions, which denotes the consolidation of different representations of time and space together on the same screen. At the brink of domestic consumption, then, was a social ground swell unleashed in part by public movie-going, a practice with which the middle- and upper-classes were becoming increasingly more familiar.

The conversion of domestic spaces and places for image consumption and, indeed, production situated itself in the

meeting of social relations both within the domestic and without. In terms of production, as I have already pointed out, innovations in film stocks and electric lighting raised the potential for diversifying image production (indoors, outdoors, night, darker seasons). However, to sway the analysis toward only thinking about how domestic design made way for moving image production and consumption is, however, only one piece of the pie. Widely circulating ideas about the extension of production to home interiors, at night, and during the darker seasons, as well as attempts to recreate in home consumption and the "home theatre" some of the grandeur of the public movie-going experience all painted a very complex picture of home movie production and consumption as it was offered for sale at the beginning of the 1920s. "Home theatres" and their design accouterments, in this respect, played to the idea of domestic comfort, space, and decor. They also hinged on relating the public theatrical experience to the home, and, in the process, redefining that experience as one of a distinct and domestic "place."

Furnishing Memory and the "Home Theatre"

A standardized technology for motion picture consumption and production became officially available for

home use, as well as alternative exhibition in 1923 when Eastman Kodak and Bell & Howell announced their respective 16mm, amateur outfits. These standardized cameras and projectors were both designed and marketed as decorative and practical accessories. Consoles and cabinets conceived of for exhibition and storage of production and projection equipment-the furniture of memory-and mock-ups for home theatres all fed into discourses about the moving image's place in family and domestic relations. Furniture linked these relations to public movie-going, not to replace moviegoing, but rather to augment it. Lynn Spigel (1992) has used the term "home theatre" to refer to television's installation in the domestic space during the post-World War II period. Although more widespread than the integration of film into domestic interiors, the term "home theatre," as she has used it, was already in use in popular movie-making literature of the 1920s, and in anticipation prior to the 1920s if we stop to consider non-standardized projection practices.

Eastman Kodak was well aware of the public obsession with movie-going, and used it to support its own horizontal integration. The Eastman Theatre in Rochester, which opened in 1921, was sponsored by George Eastman.<sup>33</sup> Eastman Kodak

<sup>33</sup> Koszarski 53.

was also a big supplier of raw film stock to commercial movie producers. After his official retirement as CEO in the early 1920s, Eastman turned his attentions to film by keeping in constant contact with point men in Hollywood who informed him about possible ventures, as well as news of the east and west coast movie businesses.<sup>34</sup>

Eastman Kodak inserted its movie outfits amidst the buzz of the social excitement around movie-going and anticipated that people would want to produce their own films. It also anticipated that people would want to show their own screen "gems" at home along with "the whole gamut of films that they now see in the theatres," and as proof of this had already established The Kodascope Libraries, which in 1923 had projector-ready "many hundred thousand feet of film suitable for Kodascope projection in the home." 35

Other film libraries and distributors began to pop-up throughout the 1920s. Among these were Bell & Howell's Filmo Library, Empire Films, Home Film Libraries, and Neighbourhood Motion Picture Service, many of which also

<sup>&</sup>lt;sup>34</sup> One of the figures Eastman kept in close contact with was a fellow by the name of Jules Brulatour, a speculator of sorts, who scoured the east and west coasts for potential business ventures of interest to Eastman and Eastman Kodak. George Eastman's personal correspondence is littered with letters from Brulatour who consistently reported back to him.

<sup>35 &</sup>quot;Announcing the Ciné-Kodak," Eastman Kodak Company Trade Circular 24(6) (June 1923): 3.

distributed in Canada. As I have mentioned, these services did not exclusively produce titles for home consumption, but instead borrowed from, and arranged for making prints of, what was already being screened in the picture houses.

The emergence of film libraries along with new and standardized amateur film technology signified a turning point in the sustenance of the "home theatre" as both a concept, and an actuality. Accessible and standardized technologies were instrumental to this process, and so too was the distribution of software, both in terms of the availability of affordable and adequate raw film stocks for personal production purposes, and the availability of readymade film titles vis à vis a far-reaching network of home distributors. "Putting on the show" in the context of the "home theatre" meant bringing the practices of movie production together with those of showmanship and movie programming, as well as instilling in home spectators a sense of viewing decorum.

Family amusement, as can well be imagined, had continued to occupy Eastman Kodak's bird's eye view of the home movie business. It pushed its outfits by following in the wake of the excitement it had roused around popular photographic practices 35 years previously. It has been said that the first (and literal) home movie was taken by Marion

Gleason, the wife of George Eastman's organist, Harold. The movie was made at her son Charles's birthday party, the experimental 16mm prototype having been loaned to Gleason by Eastman undoubtedly for a test run just prior to the camera's market release.<sup>36</sup>

The first Ciné-Kodak was a spring-driven, hand cranked camera to which, not surprisingly, Eastman Kodak attached the promotional slogan, "You turn the crank, we do the rest." The company littered its publicity for Ciné-Kodaks with such copy as "snap the switch and the screen's alive with action;" "the thrill of seeing yourself, your family and your friends on your screen;" "family movies—a pleasure to make and priceless in years to come;" keep your vacation alive forever in home movies; don't let adventure and romance slip away; and for the Kodatoy, the children's movie projector, "what fun there'll be in the playroom now!" The company also employed faux testimonials like "the high spots of my life are in those reels," and "there was grandma...every little gesture and expression...so much

<sup>&</sup>lt;sup>36</sup> Frank Brownell Mehlenbacher, personal interview, 12 February 1997.

<sup>37 &</sup>quot;Announcing the Ciné-Kodak," 3.

<sup>38</sup> Ciné-Kodak, advertisement, Kodakery, January 1931, 25; August 1929, 33; July 1931, 25; February 1931, 25.

herself...so REAL."39 Business as usual, these testimonials all gave a nod to the memoria technica of photography already practiced ad nauseam in publicity.

Aside from assuming the reality "capital" of motion picture artifacts, the producers of movie equipment and supplies, and the distributors of home titles folded consumers into the discourse of image conservation. As a result, a conservation ethic akin to that revolving around the photographic image wedged itself between the domestic places and home screens. The possibility for photographic production aroused an imperative for materializing memory in images; the photo album, like Eastman Kodak's brand of Kodak Library Albums, aroused a conservation imperative.

Motion pictures evoked a comparable materialization of memory. Motion picture consoles and home library units, the furniture of memory, drove further the imperative for the conservation of moving images into the home, especially the material of family and personal memory. In both of these cases, the discourses around images in the home situated them in relation to the library or archive, as those artifacts not only needful of saving, but needful of saving in terms of the ways in which their historical value would

<sup>&</sup>lt;sup>39</sup> Ciné-Kodak, advertisement, *Kodakery*, September 1928, 25; October 1928, 33.

appreciate over time, and across generations.

The home was already an image archive of sorts having been filled with photographic images. The moving image took up its residence accordingly. The biggest problem for the industry-including the producers of popular film-making and consuming literature as well as the producers and suppliers of equipment—was in how to make films, their canisters and cabinets, look attractive. With respect to the film cannister, the real contest was in how to make them look like images and not just containers. If the photo album could be decoratively and aesthetically pleasurable, why not the home film library?

An article in a 1927 issue of Amateur Movie Makers predicted that it was "only a matter of time before film libraries will be a part of every modern home." The author, W. Sterling Sutfin, singled out the bookshelf as an appropriate place for the storage of one's films alongside one's books, giving over to film a certain literary quality, at least in terms of its conservation. Note Sutfin's precision:

The standard tin humidor cans are not particularly attractive, but it is a simple matter to make them so

<sup>40</sup> W. Sterling Sutfin, "Creating a film library," Amateur Movie Makers 2(3) (March 1927): 9.

by merely applying a coat or two of the new quick-drying lacquers to the covers of the cans, using any color [sic] you care to select. The film cans may then be labeled (as books are labeled), in any original decorative manner you choose. If you want to go to the trouble, an index of scenes pasted on the inside of each cover will often be a convenience in locating some particular "shot."<sup>41</sup>

Standard tin humidor cans were certainly not attractive and neither were projectors. Manufacturers of film accessories drew attention to this unsightliness in order to create a market of solutions for integrating film decoratively into the home, a problem which had escaped the photograph and photography. Photographic apparatuses were less intrusive machines and didn't need to be plugged into an electric outlet like projectors; likewise, photographs were immediately identifiable as images, unlike film reels whose negative form required projection for the attainment of visual pleasure. As the following discussion reveals, the means by which to store, project, and effect the home theatrical experience revolved around interior design as well as the integration of decorative accessories.

The larger version of Eastman Kodak's opulently

<sup>41</sup> Sutfin, "Creating a film library," 9.

decorative Library Kodascopes, a cabinet of walnut with ebony trim, was spacious enough to contain a built-in projector and collapsible screen, storage space for film canisters, a drawer for film-making accessories, as well as a shelf hinged to the inside of the accessory drawer for use when splicing and editing one's films. 42 Bell & Howell's motion picture console cabinets, to which it staked the claim as the "first home movie furniture," were also in walnut and also decoratively fine. 43 They came in two sizes, the more compact of two designed with apartments and smaller homes in mind. Bell & Howell compared its line of "motion picture console cabinets," to "the finer radio and phonograph consoles" available at the time. 4 The grandeur of these units melded with home decor and other entertainment technologies newly introduced to the home. They also mimicked on a small scale an elegance that was customary to some of the more opulent theatres of the period, theatres which, interestingly, also incorporated upscale living room arrangements into their lobbies where

<sup>&</sup>lt;sup>42</sup> The Library Kodascope, advertisement, *Movie Makers*, September 1929, 570.

<sup>&</sup>lt;sup>43</sup> Filmo Desk and Console Cabinets, advertisement, *Movie Makers* August 1928, 596-597.

<sup>&</sup>quot;News of the Industry," Movie Makers 3(8) (August 1928): 536.

patrons could relax before and after screenings. Curiously, the "home theatre" concept drew from the opulent picture houses, yet these picture houses also drew from the comforts of home.

For the beauty and refinement of the living room, pseudo, leather-bound book units efficiently disquised film files, and at the same time hinted at the potential textuality of moving images. This was not unlike the photo album's textual consolidation of photographic images into leather-bound books of days, months, and years. Screens concealed in wall panels and disguised as works of art, dual-purpose bridge tables/folding screens, faux, leather book spines whose empty cavities served as a film cache, these gimmicks were all plentiful in popular literature and publicity of the 1920s and 1930s, but hardly endured much past the 1950s, when the phenomena of home movie-making and consumption entered its twilight time as a popular amusement. In fact, in the post-World War II period furniture and storage units like Bell & Howell's decorative humidors and consoles, and Eastman Kodak's Library Kodascope virtually disappeared from the promotional literature, a vanishing act which had already begun to take shape as early as the 1940s.

These furniture relics of the "home theatre"

represented materially both a shrinking of the library and archive into easily camouflaged furniture consoles and cabinets, and the miniaturization, domestication, and personal sophistication of the home theatrical experience. Conceptually, they signified a heightened awareness of the image in home environments and the special treatment these images deserved to ensure their preservation, as well as appreciation. The motion picture in the home was not just about screening, it was also about saving for future generations. The home, it follows, was not just a site for social amusement but an image archive, and a hopefully growing one at that.

Eastman Kodak had long since been one of the biggest purveyors of family image maintenance and conservation.

Family memory was a part of it, but let's not be naive in thinking that there was no revenue to be gained from peddling accessories for both photographs and films. Eastman Kodak's conservation ethic, if one can call it that, insinuated itself on people's private lives by insisting that home snapshooters and movie-makers keep duplicates, and, in the case of screening, store originals and project copies. True to corporate form, Eastman Kodak knew that people who kept images continued to make images, which meant it could continue to sell more film, the cornerstone of the

Eastman Kodak empire. Ironically, when approached in 1922 by the editor of *Photoplay*, James Quirk, to finance a photography museum for the purposes of saving early pictures on the basis of their historical value, George Eastman declined.<sup>45</sup>

For the first time, popular literature in the 1920s talked practically about the installation of film in the domestic space. Film was not just an appendage to social activity. Like personal photographic practices, it also became an event in and of itself, especially when traced through the projection and consumption of images. Film suggested an overall shift in the enjoyment of domestic amusements. The suppliers and producers of equipment, and their publication organs hedged their bets on the public recognition and appropriation of the concept of the "home theatre" by accentuating the pleasure and leisure benefits to be garnered from visual pleasure in the home, and by promoting "state-of-the-art" and "quality" merchandise. Producers of projection equipment prior to 1923 used the same sales techniques; but without a network for standardized hardware and software (at least in North America) distribution to feign the public picture-going experience and feed-off of it, their testimonials did not

<sup>45</sup> Brayer 330.

have the support to bolster market success.

Popular photographic literature prior to the introduction of standardized amateur motion picture outfits most certainly referred to the home as a site for the display of images, and even the subject of images. By contrast, however, this literature did not campaign for the partitioning-off of household spaces as permanent screening spaces for sitting in the dark and watching projections of light, nor did household furnishings mediate the incorporation of still images into the home place. It is a finely tuned point, but indeed a critical one.

Spatially, home movie-making discourses continued to set up the home as a viable production venue, and as a venue for the consumption of images, something that photographic discourses had already shaped with the idea of the home as both site and content of production, its walls and furniture surfaces the sites of consumption and display. The home movie took this one step further by anticipating the home as a moving image (and eventually sound and moving image) entertainment centre.

Beginning in the 1920s, Ciné-Kodak Salesman advised retailers to design in-store projection rooms/mock living rooms for silent screenings in order to lure prospective customers. It can also be argued that it imitated the living

room in order to demonstrate how film could easily be integrated into the home as a domestic amusement and not mess with the decor, but, rather, enhance it. These suggested screening space designs included easy chairs, floor lamps and ash tray stands arranged "to produce an informal, conversational atmosphere."46 If the home movie experience could be portrayed as that which could combine all the best of the comforts of home with the novelty of screening practices otherwise associated with public moviegoing and consumption, then companies like Eastman Kodak could also succeed in positioning themselves as arbiters of privatized spectatorship. The "home theatre" concept was both new and not new in this respect in that it garnered steam from already-entrenched private and public practices: reclining in the bourgeois comforts of home, and consuming moving images.

One retailer in Madison, Wisconsin transformed their on-site screening room to create a den-like atmosphere by incorporating a fireplace with the screen mounted on the wall above it, and augmented the movie salon with the addition of paintings and wood paneling to effect that athome feeling in the shop, and the ever-ready, at-home

<sup>&#</sup>x27;16 "Let Movies Sell Themselves," Cine-Kodak Salesman 32
(4) (June 1946): 8.

reality of movie viewing, and, to be sure, home movie-making. 47 Popular Photography inserted themselves as interior designers in the installation of the "home theatre" by devising nifty strategies for the camouflage and integration of screens in the den, livingroom, and even diningroom. In formation here was a running commentary on the undesirability of wasted space. Thus, household spatial transformation for film consumption coincided with both the appropriation of technologies for making household labour more efficient, and for the staking of commercial claims to domestic space in terms of the sale of products and services. 48

The Journal Movie Makers also invested its efforts in instructing new home movie consumers about a sense of decorum for consuming movies in the home, and for how to behave in the "home theatre." From necessitating the use of "snappy ushers" drawn from the family ranks and the thoughtful layout of screening rooms, to well-balanced programs, the writers featured in Movie Makers took stock in preparing domestic life for the moving image and its spectacle.

<sup>47 &</sup>quot;Dealer Doings," Cine-Kodak Salesman 1(9) (November 1931): 4.

<sup>48</sup> See Keightley.

"Do not make the mistake of showing too many films," commanded one arbiter of home theatre taste, whose diatribe continued:

Although people are quite willing to sit through several hours at a theatre, the home atmosphere is quite different and pictures lasting more than half an hour are likely to become boring to at least a few members of your audience.

"Putting on the home show," at least as it would appear from these instructions, was to be differentiated from the public theatrical experience of the silent cinema's moving image smorgasbord. While projectionists in the public cinemas were considered "showmen" and not "film programmers," critics like this one demanded that home projectionists become programmers of a certain sort. Different constituents who occupied a variety of subject positions in relation to moving images (producers and suppliers of equipment, operators of film libraries, critics and arbiters of home movie taste, home movie makers and home consumers of moving images) all negotiated differently the meaning of moving images in the domestic arena and the meaning of the "home theatre." This tells us that the "home theatre" experience, or rather a discussion of it, was not necessarily an

<sup>49</sup> Sutfin, "Creating a film library," 9.

uncomplicated simulation of the public cinematic experience. Instead, it suggests that the "home theatre" was a potential site of conflict and contestation. In particular, it leads us to interpret the "home theatre" as a "place" for playing—out the potential for refinement in the character of moving image consumption in the home (for which opulent accessories are an example), as well as for refining taste in terms of a certain sophistication and critical alignment with respect to moving images in a more general sense.

We cannot overlook gender here. A pivotal element in all domestic spatial relations is without a doubt gender relations. Gender relations and responsibilities were more pronounced with the production and consumption of moving images in comparison to photography by virtue of the sheer labour intensity of this pursuit. In terms of the "home theatre" and the construction and decor of screening spaces, women figured prominently. This was especially so when the theatre of consumption doubled as the dining room and living room, and was not partitioned-off as a feat of construction in the recreation room, wherein the masculine activity of pounding nails and building a theatre from scratch would be realized.

The attention given to the more decorative aspects of home theatre installation undoubtedly interpellated women as

the bottom line in decisions involving decorative taste. An anonymous cartoon in a 1929 issue of *Movie Makers* depicted a horrified and dubious homemaker from home ciné society scrutinizing the drawing room furniture rearrangement of her cartoon-figure husband, who cowers in fear behind the curtains awaiting her chiding. 50 Although couched in satire, the cartoon suggests a division of affiliation and control, his with the projector and technology, and hers with decor. Regardless, the message implied a sense of decorum not only in terms of the practices of screening and consuming images, but also in terms of film and film technology's seamless fusion with home decor and its "naturalization" as a home entertainment technology.

The "home theatre," then, was not supposed to be readily identifiable as a technologized and alienating place. Rather, in keeping with the magic and grandeur of the public cinematic experience, technology should reside in relief of image splendor. Technology was quintessential to the "home theatre," yet, more importantly, should be its silent and unobtrusive motor. Cabinets and furniture, in this regard, dually sufficed to camouflage mechanisms,

<sup>&</sup>lt;sup>50</sup> "In Cine Society," Movie Makers 4(12) (December 1929), 799. The caption reads, "Mrs. Peyster De Peyster discovers Mr. De Peyster has slightly rearranged the drawing room furniture for the first screen party with his new Christmas projector."

cranks, and springs, as well as add a certain charm and magnificence to the not-so-attractive nuts and bolts of the projector, and the rather perfunctory and out-of-sight practice (at least in the picture houses) of threading reels.

It would be an oversight not to recognize the dual function of home screens as gateways to both the consumption of personal and family moments as captured on film and relived on the screen, and the consumption of other film fare. I argue that it was wishfully assumed by equipment distributors and manufacturers that people would be as willing, if not more, to produce their own screen gems for personal consumption, as they would be to rent and/or purchase films. These firms believed in the democratizing impact of these technologies, and with them furthered the popular claim that the personal appropriation of film gadgetry would put the ownership of media and images within the reach of all, a point of view that the popular dissemination of photographic apparatuses in the late 1880s helped to secure. Making one's own moving images, just as one would produce snapshots, was vital for selling the necessity of motion pictures and equipment in the home and family. The continued consumption of software (film), at least in the Kodak case, was key.

In terms of what people consumed vis à vis home screens, securing a definitive tally of films, either by rental or purchase, escapes the statistics. We do know that library catalogues contained a wide range of subject matter from features (16mm prints), to traveloques, to educational films, and, as mentioned in the case of Kodascope Libraries, aimed to offer to home screens a selection that was comparable to what might have been screened in the silent picture houses. People also made their own films. The discourses of conservation and preservation gathered together those amateur movie-makers who saw in film a lucrative hobby, as well as those whose desires directed movie-making toward the representation of family and personal event history. In the age before television, we can assume that those who could afford and fancied this equipment for their homes served up a wide variety of images, personal memories nestled among commercial productions, all in a night's entertainment.

Travelogues were a standard feature in commercial library and rental catalogues, and are interesting to make note of since travel production was also considered to be an ideal application for home movie production, just as it had been singled out with the popularization of still image practices. These commercial features promised to bring the

splendor of faraway lands to the home screens of those who had never visited them, and perhaps even sought to entice potential travelers to these destinations. With respect to the personally-produced travelogue, however, home spectators might be inspired to compare and locate their productions in relation to commercial productions, but with one big difference. It was expected that the "best" of scenic representations would be personalized by the presence in the frame of the travelers who made the films and the journey. 51 This was an important distinguishing factor between commercial productions and homespun ones.

If, as I have argued in Chapter Three, the popularization of image-making practices at the end of the nineteenth century put into people's hands a means by which to personalize temporal experience in images, and to locate those personal expressions in relation to collective, uniform and standardized expressions of temporality (and travel is an ideal example), the accessibility of standardized moving image practices for domestic consumption continued to massage the juxtaposition between the personal and the collective.

With the moving image, however, this juxtaposition

<sup>&</sup>lt;sup>51</sup> Vera Standing, "Homemade Travelogues," Amateur Movie Makers 2(11) (November 1927): 28-29.

resided in the difference between homemade productions, and the consumption of commercial productions. The promotion of moving image production and consumption for family history purposes pushed the idea that moving images were living and "real" records of personal events, an approach that was replicated in the solicitation of traveloque and so-called historical event "records." 52 Home screens would therefore serve the multiple purpose of screening personal and collective "history" and "real" events and travel-both tenuous claims that never referred to the highly representational aspects of production—as well as other entertainment productions (comedies, dramas, westerns, and so on). Home screens, or rather the "home theatre," it follows, would trump family and personal photographic practices by blurring the boundaries between privatized spectatorship and consumption, and the very public practice of movie-going. Motion pictures and the "home theatre" also re-inserted economic hierarchies into the popular discourse around the combined personal production and consumption of images. No matter how the various industries promoted moving

<sup>52</sup> Eastman Kodak raved about how the World War I footage it had compiled revealed war events "just as they happened," and even talked about them as being priceless heirlooms to be passed on in the family, no doubt along with other family "heirloom" movies. See Kodak Cinegraphs, advertisement, Amateur Movie Makers November 1927, back cover.

images for home consumption and personal production as widely accessible phenomena, the concept of the "home theatre" as a function of private ownership enforced the distinction between those who could afford it, and those who could not.

Motion pictures, their consumption and production in home instances privileged a more monied and, therefore, specific demographic by virtue of their expense. Although histories of movie-going during the period, Koszarski's for example, paint a picture of image consumption in the neighborhood movie houses and turn-of-the century nickelodeons, penny arcades and vaudeville houses as working their way into the popular culture overwhelmingly through the working classes, the appropriation of moving images and movie-making and consuming apparatuses in the home worked their way into the popular culture through the bourgeois and flush classes, as did television. This pattern parallels the discussion in Chapter Two with respect to the relationship between the No. 1 Kodak and Box Brownie.

In all three of these respects (photography, home movie-making, television) the qualification of bourgeois nuclear family, and moral education are paramount, an argument Lynn Spigel (1992) also makes in terms of the post-World War II domestic installation of television. While

cameras and television may have been worked into the popular culture through bourgeois classes, cameras especially were always promoted as being within the reach of all, as if to erase class from this leisure pursuit, even when the cost of these items was particularly restrictive, and covertly class-specific.

## Putting Home Movies Within the Reach of All?

When 8mm production and projection equipment became available in 1932, the cost of motion picture units proceeded to drop considerably, and, as it were, became increasingly more accessible in much the same way that one could say the Box Brownie made popular photography more accessible. While these units became more accessible, we need to assess this accessibility on qualified terms. Although far less costly than 16mm, 8mm cameras and projectors were still not within reach of all, and remained an upper- and middle-class phenomenon. The 8mm units, as Patricia Zimmermann (1995) has well documented, were specifically geared toward family production, and quantity over quality production since 8mm cameras doubled the moviemaking capacity of regular 16mm reels for which its gauge was designed. 8mm meant economy, and once again Eastman Kodak was its pioneer.

Brian Winston has argued that the innovation of sound in moving pictures, and the expensive, complicated, and purposely devised procedures which made sound viable only for the commercial standard of 35mm, seriously impacted on, and suppressed the potential commercial success of 16mm.<sup>53</sup> This matter of quality and taste would have also impacted on home production and consumption. It would appear that as long as sound was not an issue, namely during the silent period, it was possible for motion pictures in the home to successfully, especially in terms of quality, juxtapose commercial productions and personal productions without much effort. It should come as no surprise, then, that companies such as Keystone in the 1960s would begin to compare its home units to television, and why, maybe unknowingly, Bell & Howell, in the late 1920s, would compare its to radio and phonograph consoles, both setting up their respective goods in competition with other popular technologies of amusement.

There was scarcely (and bordering on never) a possibility for any format other than 35mm to be considered for professional application, except in the instances of documentary and ethnographic film-making, a claim both Patricia Zimmermann and Brian Winston have substantiated in considerable detail. Zimmermann and Winston confirm what

<sup>53</sup> Winston 69-74.

could be described as the "dumbing down" of amateur production and, in terms of the domestic scene, the more or less restricted use of 8mm for personal, family, home movie production, 54 at which point women were called upon more and more frequently in the popular literature, and movie-making advice columns and journals to absorb the labour of filming daily the children, and regularly their husbands enjoying their hobbies.55

Between 1923 and 1950 the technical possibilities for amateur production came to be increasingly more streamlined.

8mm equipment would be associated more with families, less serious amateurs, and teens, the new market for post-World War II image-making materials consumption; 16mm, having been suppressed in the professional arena, gained prominence for semi-professional film production and, eventually, for use

There were, however, exceptions, namely art and avant garde cinema practices. See Jonas Mekas, Movie Journal: The Rise of the New American Cinema, 1959-71 (New York: Collier Books, 1972). See in particular his essays "On Law, Morality, and Censorship," "Brakhage Buys 8mm Camera," "Kuchar 8mm Manifesto," and "8mm Cinema as Folk Art."

<sup>&</sup>lt;sup>55</sup> Popular Photography contributor, Helen Ainsworth, advised that homemakers could keep themselves busy at home by filming the children at play, or their husbands on the golf course. See Helen Ainsworth, "For Women Only," Popular Photography 40 (3) (March 1957): 96+. Roy Pinney of Parents magazine, who wrote a regular movie-making advice column for the magazine, endlessly reported about narrative opportunities involving the children, and directed his advice to mothers.

in television production. <sup>56</sup> Amateur production had taken a different turn, yet so had the overall consumption of moving images in the home.

The "home theatre," a burgeoning possibility in the silent era and the 1930s, soon after receded into dormancy as public exhibition took a different and spectacular turn into living colour and sound, and television technology began to compete (although hardly with much effort) with film as a home entertainment fascination. The prices of 8mm moving image equipment and film stocks would never be as low as still image-making apparatuses. With 8mm being a family-use format, and 8mm film libraries and distributors being marginal to consumption in the post-World War II period in comparison to 16mm in the 1920s and 1930s, the choice between moving images or stills (including slide projection) for personal documentation and representation would consistently err on the side of the least expensive, especially if economy was a mitigating factor.

To breathe life into the waning family activity of 8mm production in the 1960s, the Keystone Camera Company attempted to sell consumers on the instantaneity of home movie viewing by promising that with its self-threading projector and table-top monitor, movie viewing would be as

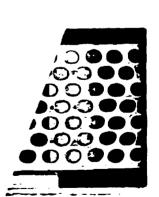
<sup>56</sup> See Zimmermann 1995.

- wolsey 8 was the world's smallest movie camera only as size of equipment—one journalist boasted that big as a Pack of cigarettes to home movie projectors, a decidedly old technology, were no match for the new post-World War II technology of television, or perhaps even the quality, especially sound quality, of 35mm movie technology in the cinema. We can recognize a Pattern here which suggests that as technologies are improved and refined, so do consumers of those technologies adapt to the quality of that technological change, and hold out for expectations of  $quality.\ In\ this\ case\ 8mm\ movies\ could\ be\ good\ for\ family$ memorabilia, but hardly comparable for other forms of

entertainment, that is, forms of entertainment that could not otherwise be availed by other means. Popular magazines of the 1950s and 1960s continued to Push the idea of the "home theatre," the incorporation of

permanent and/or easily transformable screening spaces in he home, but it became increasingly more apparent that such aces would be used to screen personal productions, that

Keystone Private Eye Projectors, advertisement, Photography, April 1964: 47. Arthur Goldsmith, "Exclusive! The Bolsey 8: World's Movie Camera, "Exclusive! The Bolsey 8: 1958):166-67. Popular Photography, 42(12)



other legacy of the "home movie" as family relic. There are all kinds of factors, many of which point to technical changes and associated expenses, that could have contributed to the dissipation of the "home theatre" into a screening gallery for family reel heritage. 16mm technologies, obviously yielding larger and more refined images, were also more expensive apparatuses. This is undoubtedly why the introduction of 8mm in 1932 was so meaningful; it diversified the accessibility of movie-making. If a person wanted to screen 16mm productions one would either have to own the projector or rent it. People did use 16mm equipment for personal use but the overwhelming majority of family and personal production in the post-World War II period was directed toward the appropriation of 8mm and, in 1965, Super 8 apparatuses. 16mm productions could be reduced to 8mm prints but with image quality and the addition of sound (before magnetic tape) as important considerations, not to mention the dispensation of leisure time among other household media (the hi-fi, the "tube"), these glitches quite likely impeded the commercial success of 8mm rentals and purchases. 59

By the 1950s, the concept of the "home theatre," as it

<sup>&</sup>lt;sup>59</sup> A popular outlet for 8mm commercial productions was in the case of world's fairs and theme parks where one could purchase souvenir reels to screen along with personally-produced vacation reels. Expo '67 is an example.

had been introduced into the popular lexicon by the producers of film paraphernalia and popular literature in the 1920s, was rapidly appropriated by the producers of television content, as well as the producers of television sets. The post-World War II war monied and middle-classes, those who would have kept "home movies" in their various forms alive, would eventually send their entertainment dollars and attentions in different directions. The dearth of sustainable film libraries for 8mm, and, specifically, home and family distribution provides evidence. Home movies, while a term variously defined in the 1920s, would have meaning only as family and personal history movies by the late 1940s and beyond, when an offer to screen "home movies" for guests was also a guest's unintentioned cue to flee.

Conclusion: Reconciling Image Practices

Image production, what had entered the popular imagination as a novelty at the end of the nineteenth century, had developed into an imperative to record family and personal history not long after the beginning of this one: from novelty to necessity. By the 1920s, this necessity

<sup>60</sup> The underground distribution of 8mm for home and private pornographic consumption is obviously the exception.

reinvigorated its claims to family and personal life by promising to bring these personal lives to "life" in the moving image by projecting them onto the screen. These moving image artifacts of personal history would also have been sandwiched between a whole host of other productions.

The "home theatre" may not have lived on in its 1920s' context of putting on home shows, or even home film programming, but the ideas in germ at that historical moment held important consequences for how we would later relate to the consumption of other apparatuses for image consumption and production, and to home spectatorship. The video camera and VCR, and the older technology of television are some examples we might consider, not to mention the most recent entry to home entertainment, the Sony "home theatre."

The popularization of moving image practices in the home and family in part took its cues from still image practices and their incorporation into personal expressions of temporality, and spatial and upward mobility, although it would take a few years for movie cameras to graduate from the tripod, and indeed quite a few more before they would be within wider financial reach. The popularization of moving image practices also latched onto the public fascination around movie-going. Whereas movie-going was a diversely accessible class phenomenon, having movies in the home was a

very different kind of privilege in terms of both the expensive nature of projectors and cameras, and then the added expense of materials.

Regardless, moving images did make their way into certain domestic spaces, and in myriad ways reaching from personally produced images to those rented and/or purchased from film libraries and other distributors. In both the cases of popularized still image practices and moving image practices one thing is sure: the home and family were pivotal staging grounds for their commercial and social success, as well as their institution as a cultural and historical imperative.

# Postscript

The issues raised by popular image-making and consuming practices are many and diverse. This dissertation has attempted to reckon historically with but a slice of these which pertains to the popular momentum stirred-up by a handful of very simple, Eastman Kodak slogans; their related technological and cultural forms; and the connection of both to other social and cultural phenomena. In this brief postscript, I want to stake-out a couple of domains eclipsed in the assembling of the dissertation's arguments. I also want to make a modest suggestion or two for how to link the present project to current and future research.

In the introductory chapter I stated that a study of popular image-making practically cries out for experience to nourish it. While the dissertation has been very clear to specify its research terrain in this regard in terms of North America, and a burgeoning middle-class, the "whiteness" implicit in most, if not all of its primary and secondary archival research materials has been, to say the least, blinding. This "whiteness" has inevitably filtered its way into the analysis.

Deborah Willis's (1994) edited anthology, as mentioned in the literature review, is one example of work on issues

of representation which puts race at the centre. It juxtaposes work by Angela Davis about personal memory and FBI "wanted" posters of herself, with work by bell hooks concerning black representations of black life in terms of personal history and personal memory. How we may begin to negotiate issues of race in terms of the promotion and distribution of image-making materials, as well as technological criteria is another matter. Brian Winston (1996) has partly tackled this question with respect to how assumptions of "whiteness" were factored into the development of film stocks because "the research agenda for colour film (and more latterly colour television) was dominated by the need to produce Caucasian skin tones" (39).

We might along these lines want to consider Eastman Kodak's global expansion—distribution networks and corporation—in conjunction with racial issues and/or the erasure of race. Eastman Kodak and other companies linked image—making to travel and tourism in their promotional strategies. It was a flow, however, that focused predominantly on exploration of Western origins, and under the scrutiny of Western eyes. It could be argued, especially in the case of Eastman Kodak, that its branch offices and retail outlets in certain parts of the globe served the quasi-imperial intervention of Western travelers and ex-

patriots, more so than local citizenry.

Representations of "otherness" in the form of travel and tourist images were common to American popular photographic literature dating from the late-nineteenth century. The combination of mobile populations, image-making and race is not out of place with the idea of conquest. An investigation of these in connection with Eastman Kodak, for example, might take its cues from Ann McClintock's (1995)

Imperial Leather in which she explores, vis à vis soap, the connections between race, gender, sexuality, and imperialism.

From yet another and, indeed, very different angle of inquiry, we might consider exploring alternative and organized ventures in image production. I refer specifically to the emergence of numerous amateur film clubs in both Canada and the United States following in the wake of the North American standardization of amateur film formats. Many of these clubs in Canada were affiliated with the Amateur Cinema League in the United States. Together, these amateur clubs made up a network for the production of films, their consumption and exhibition, as well as a forum for cross-border dialogue and critique.

These are just two possible research tributaries. I situate the dissertation, in this regard, as a node in a

much larger research network. While its composition requires that it arrive at informed conclusions, and, in effect, an end, the implications of the dissertation's debates are suggestive of many openings. Perhaps like George Eastman's word, "kodak," the dissertation has got in its work. In this vein and on the topic of words uttered by Eastman, my work here is done.

#### Bibliography

### Books, Book Chapters and Scholarly Publications:

- Ackerman, Carl. George Eastman. Boston and New York:
  Houghton Mifflin, 1930.
- Althusser, Louis. "Ideology and Ideological State

  Apparatuses: Notes Towards an Investigation." Video

  Culture: A Critical Investigation. Ed. John G.

  Hanhardt. Rochester, NY: Visual Studies Workshop Press,

  1986. 56-95.
- Baudrillard, Jean. Simulations. NY: Semiotext(e), 1983.
- Beecher, Catherine and Harriet Beecher Stowe. The American Woman's Home. New York, 1869.
- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." Video Culture: A Critical Investigation.

  Ed. John G. Hanhardt. Rochester, NY: Visual Studies

  Workshop Press, 1986. 27-55.
- Bourdieu, Pierre. Photography: A Middle-brow Art. Trans.

  Shaun Whiteside. Stanford, CA: Stanford University

  Press, 1990.
- Brayer Elizabeth. George Eastman: A Biography. Baltimore:
  Johns Hopkins University Press, 1997.
- Brummitt, Wyatt. The Story of Kodak. Unpublished ms. Eastman Kodak Company, Rochester, New York.

- --- George Eastman at Kodak. Unpublished ms. Eastman Kodak
  Company, Rochester, New York,
- Buck-Morss, Susan. The Dialectics of Seeing: Walter Benjamin and the Arcades Project. Cambridge, MA: MIT Press, 1991.
- Burke, Peter. Varieties of Cultural History. Ithaca, NY:
  Cornell University Press, 1997.
- Burnett, Ron. Cultures of Vision: Images Media and the

  Imaginary. Bloomington: University of Indiana Press,

  1995.
- Carey, James. Culture and Communication: Essays on Media and Society. Boston: Unwin Hyman, 1988.
- Cartwright, Lisa. Screening the Body: Tracing Medicine's

  Visual Culture. Minneapolis: University of Minnesota

  Press, 1995.
- Chalfen, Richard. Snapshot Versions of Life. Bowling Green,
  OH: Bowling Green State University Popular Press, 1987.
- ---. "The Home Movie in a World of Reports: An
  Anthropological Appreciation." Journal of the
  University Film and Video Association 38(3/4) (1986):
  102-110.
- ---. "Home Movies as Cultural Documents." Film/Culture:

  Explorations of Cinema in its Social Context. Ed. Sari

  Thomas. Metuchen, NJ: The Scarecrow Press, Inc., 1982.

126-138.

- Clark, Clifford Edward, Jr. The American Family Home, 1800-1960. Chapel Hill, NC: The University of North Carolina Press, 1986.
- Clifford, James. Introduction: Partial Truths. Writing

  Culture: The Poetics and Politics of Ethnography. Eds.

  James Clifford and George E. Marcus. Berkeley:

  University of California Press, 1986. 1-26.
- Coe, Brian. The History of Movie Photography. Westfield, NJ: Eastview Editions, 1981.
- Coe, Brian and Paul Gates. The Snapshot Photograph: The Rise of Popular Photography, 1888-1939. London: Ash and Grant Ltd., 1977.
- Cowan, Ruth Schwartz. A Social History of American

  Technology. New York: Oxford University Press, 1997.
- ---. More Work For Mother: The Ironies of Household

  Technology from the Open Hearth to the Microwave. New

  York: Basic Books, 1983.
- Crary, Jonathan. Techniques of the Observer: On Vision and

  Modernity in the Nineteenth Century. Cambridge, MA: MIT

  Press, 1990.
- Daston, Lorraine, and Peter Galison. "The Image of Objectivity." Representations 40 (Fall 1992): 81-128.
- Davis, Natalie Zemon. Fiction in the Archives. Stanford, CA:

- Stanford University Press, 1987.
- Douglas, Susan J. Inventing American Broadcasting, 18991922. Baltimore, MD: Johns Hopkins University Press,
  1987.
- Eisenstein, Elizabeth. The Printing Revolution in Early

  Modern Europe. New York: Cambridge University Press,

  1983.
- Enzensberger, Hans Magnus. The Consciousness Industry.

  Trans. Michael Roloff. New York: Seabury, 1974.
- Foucault, Michel. The Archaeology of Knowledge and the

  Discourse on Language. Trans. A.M. Sheridan. New York:

  Pantheon Books, 1972.
- Galusha, Diane with Karen Marshall. Through a Woman's Eye:

  Pioneering Photographers in Rural Upstate. Hensonville,

  NY: Black Dome Press Corp, 1994.
- Gay, Peter. The Bourgeois Experience, Victoria to Freud.
  5 Volumes. Oxford: Oxford University Press, 1984.
- Ginzburg, Carlo. The Cheese and the Worms. Trans. John and
  Anne Tedeschi. New York: Penguin Books, 1982.
- Gover, Jane C. The Positive Image: Women Photographers in

  Turn of the Century America. Albany: State University

  of New York Press, 1988.
- Gray, Ann. Video Playtime: The gendering of a leisure technology. London: Routledge, 1992.

- Green-Lewis, Jennifer. Framing the Victorians: Photography and the Culture of Realism. Ithaca: Cornell University Press, 1996.
- Greenough, Sarah. "Of Charming Glens, Graceful Glades, and Frowning Cliffs." Photography in Nineteenth-Century America. Ed. Martha A. Sandweiss. Fort Worth: Amon Carter Museum, 1991; New York: Harry N. Abrams, 1991. 259-81.
- Habermas, Jürgen. The Structural Transformation of the

  Public Sphere. Trans. Thomas Burger. Cambridge, MA: MIT

  Press, 1991.
- Hale, Grace Elizabeth and Beth Loffreda. "Clocks for Seeing:

  Technologies of Memory, Popular Aesthetics, and the

  Home Movie." Radical History Review (Fall 1996): 163
  71.
- Hall, Stuart et al, eds. Culture, Media, Language. London:
  Hutchinson and The Centre for Contemporary Cultural
  Studies, University of Birmingham, 1980.
- Haraway, Donna. "Situated Knowledges: the Science Question in Feminism and the Privilege of Partial Perspective."

  Feminist Studies 1(3) (1988): 575-99.
- Harding, Sandra. Whose Science? Whose Knowledge? Thinking from Women's Lives. Ithaca: Cornell University Press, 1991.

- Hardt, Hanno and Bonnie Brennen. "Introduction:

  Communication and the Question of History."

  Communication Theory 3(2) (May 1993): 130-35.
- Harvey, Brett. The Fifties: A Women's Oral History. New York: HarperCollins, 1993.
- Hayden, Delores. The Grand Domestic Revolution. Cambridge,
  MA: MIT Press, 1981.
- Hirsch, Julia. Family Photographs: content, meaning and effect. London: Oxford University Press, 1981.
- Hirsch, Marianne. Family Frames: photography, narrative and postmemory. Cambridge, MA: Harvard University Press, 1997.
- Hobsbawm, Eric. Introduction: Inventing Traditions. The

  Invention of Tradition. Eds. Eric Hobsbawm and Terence

  Ranger. Cambridge: Cambridge University Press, 1983. 1
  14.
- Jarvie, I.C., G. Jowett and K. Fuller, eds. Children and the movies: media influence and the Payne Fund controversy. Cambridge: Cambridge University Press, 1996.
- Jenkins, Reese. Images and Enterprise: Technology and the

  American Photographic Industry 1839-1925. Baltimore,

  MD: Johns Hopkins University Press, 1975.
- Johnson, Lesley. The Unseen Voice: A Cultural Study of Early

- Australian Radio. London: Routledge, 1988.
- Johnson, Stacey. "Are We in the Movies Now?" Cinémas 8(3) (Spring 1998): 135-58.
- Kaplan, Alice. French Lessons. Chicago: University of Chicago Press, 1993.
- Keightley, Keir. "'Turn it Down!'she shrieked: gender, domestic space, and high fidelity, 1948-59." Popular Music 15(2) (1996): 149-175.
- Keller, Evelyn Fox. Reflections on Gender and Science. New Haven, CT: Yale University Press, 1985.
- --- A Feeling for the Organism: The Life and Work of
  Barbara McClintock. New York: Freeman, 1983.
- Kern, Stephen. The Culture of Time and Space, 1880-1918.

  Cambridge, MA: Harvard University Press, 1983.
- Kostelanetz, Richard. "Home Movies Reconsidered: An

  Experiment in Autobiography." North American Review

  274(4) (December 1989): 46-53.
- Koszarski, Richard. An Evening's Entertainment: The Age of
  the Silent Feature Picture, 1915-1928. Volume 3.
  History of the American Cinema. General Editor, Charles
  Harpole. New York: Charles Scribner's Sons, 1990;

- Toronto: Collier Macmillan Canada, 1990; New York: Maxwell Macmillan International, 1990.
- Kuhn, Annette. Family Secrets: Acts of Memory and Imagination. London: Verso, 1995.
- Kuhn, Thomas. The Structure of Scientific Revolutions.
  Chicago: University of Chicago Press, 1970.
- Lears, Jackson. Fables of Abundance: A Cultural History of Advertising in America. New York: Basic Books, 1994.
- Lesy, Michael. Time Frames: The Meaning of Family

  Photographs. New York: Pantheon Books, 1980.
- Luckett, Moya. "Filming the Family: Home Movie Systems and the Domestication of Spectatorship." The Velvet Light Trap 36 (Fall 1995): 21-32.
- Lupton, Ellen. Mechanical Brides: Women and Machines from

  Home to Office. New York: Cooper-Hewitt National Museum

  of Design, Smithsonian Institution and Princeton

  Architectural Press, 1993.
- Lury, Celia. Prosthetic Culture: photography, memory and identity. London: Routledge, 1998.
- Luxton, Meg. More than a Labour of Love: three generations of women's work in the home. Toronto: Women's Press, 1980.
- Marchand, Roland. Advertising the American Dream: Making Way for Modernity, 1920-1940. Berkeley, CA: University of

California Press, 1985.

- Marsh, Margaret. Suburban Lives. New Brunswick, NJ: Rutgers
  University Press, 1990.
- Marvin, Carolyn. "Experts, Black Boxes, and Artifacts: New Allegories for the History of Electric Media."

  Rethinking Communication, Volume 2: Paradigm Exemplars.

  Eds. Brenda Dervin et al. London: Sage Publications,

  1989. 188-198.
- ---. When Old Technologies Were New: Thinking About Electric

  Communication in the Late Nineteenth Century. New York:

  Oxford University Press, 1988.
- ---. "Dazzling the Multitude: Imagining the Electric Light as a Communications Medium." Imagining Tomorrow:

  History, Technology and the American Future. Ed. Joseph
  J. Corn. Cambridge, MA: MIT Press, 1986.
- Marx, Leo and Merritt Roe Smith. Introduction. Does

  Technology Drive History: The Dilemma of Technological

  Determinism. Eds. Leo Marx and Merritt Roe Smith.

  Cambridge, MA: MIT Press, 1994. ix-xv.
- Marx, Leo. The Machine in the Garden: Technology and the

  Pastoral Ideal in America. New York: Oxford University

  Press, 1964.
- Massey, Doreen. Space, Place and Gender. Minneapolis, MN:
  University of Minnesota Press, 1994.

- ---. "Power-geometry and a progressive sense of place."

  Mapping the futures: local cultures, global change.

  Eds. Jon Bird et al. London: Routledge, 1993. 59-69.
- May, Elaine Tyler. Homeward Bound: American Families in the Cold War Era. New York: Basic Books, 1988.
- McClintock, Ann. Imperial Leather: Race, Gender and

  Sexuality in the Colonial Contest. New York and London:

  Routledge, 1995.
- McKeown, Jim and Joan McKeown. Collector's Guide to Kodak

  Cameras. Grantsburg, WI: Centennial Photo Service,

  1981.
- Mehlenbacher, Frank Brownell. "Frank A. Brownell: Mr. Eastman's Camera Maker." Image 26(2) (June 1983): 1-9.
- Meinwald, Don. "Picture Perfect: The Selling of the Kodak Image." Framework 1(2): 15-25.
- Mekas, Jonas. Movie Journal: The Rise of the New American
  Cinema, 1959-71. New York: Collier Books, 1972.
- Miller, Roger. "The Hoover® in the garden: middle-class women and suburbanization, 1850-1920." Environment and Planning D: Society and Space 1 (1983): 73-87.
- Moeller, Madelyn. "Ladies of Leisure: Domestic Photography in the Nineteenth Century." Hard at Play: Leisure in America 1840-1940. Ed. Kathryn Grover. Amherst, MA and Rochester, NY: The University of Massachusetts Press

- and The Strong Museum, 1992. 139-160.
- Morley, David. Family Television: Cultural Power and

  Domestic Leisure. London: Comedia, 1986.
- Musser, Charles. "Toward a History of Screen Practice."

  Quarterly Review of Film Studies 9(1) (Winter 1984):
  59-69.
- Nerone, John. "Theory and History." Communication Theory 3(2)(May 1993): 148-57.
- Newhall, Beaumont. The History of Photography. New York:

  Museum of Modern Art, 1964.
- Nicholson, Heather Norris. "In Amateur Hands: Framing Time and Space in Home Movies." History Workshop Journal 43 (Spring 1997): 199-212.
- Noble, David. America by Design: Science, Technology and the Rise of Corporate Capitalism. New York: Alfred A. Knopf, 1977.
- Norris, James D. Advertising and the Transformation of

  American Society, 1865-1920. New York: Greenwood Press,

  1990.
- Palmquist, Peter, ed. Camera Fiends and Kodak Girls II. New York: Midmarch Arts Press, 1995.
- ---. Camera Fiends and Kodak Girls I. New York: Midmarch Arts Press, 1989.
- Pickering, Michael. History, Experience and Cultural

Studies. New York: St. Martin's Press, 1997.

- Pinch, Trevor J. and Wiebe E. Bijker. "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other." The Social Construction of Technological Systems. Eds. Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch. Cambridge, MA: MIT Press, 1987. 17-50.
- Poster, Mark. Cultural History and Postmodernism:

  Disciplinary Readings and Challenges. New York:

  Columbia University Press, 1997.
- Prigogine, Ilya and Isabelle Stengers. Order out of Chaos.

  New York: Bantam Books, 1984.
- The Redwood Empire: Exhibit of Photographs by Ansel Adams.

  San Francisco: San Francisco Museum of Art, 1965.
- Ruby, Jay. "The Wheelman and the Snapshooter or, the Industrialization of the Picturesque." Shadow and Substance: Essays on the History of Photography. Ed. Kathleen Collins. Bloomfield Hills, MI: The Amorphous Institute Press, 1990.
- Segal, Howard P. "The Technological Utopians." Imagining

  Tomorrow: History, Technology, and the American Future.

  Ed. Joseph Corn. Cambridge, MA: MIT Press, 1986. 119
  136.

- Sekula, Allan. "On the Invention of Photographic Meaning."

  Artforum 13(5) (January 1975): 36-45.
- Silverstone, Roger and Eric Hirsch, eds. Consuming

  technologies: Media and Information in Domestic Spaces.

  London: Routledge, 1994.
- Singer, Ben. "Early Home Cinema and the Edison Home

  Projecting Kinetoscope." Film History 2 (Winter 1988):

  35-69.
- Sklar, Robert. "Oh! Althusser!: Historiography and the Rise of Cinema Studies." Resisting Images: Essays on Cinema and History. Eds. Robert Sklar and Charles Musser.

  Philadelphia: Temple University Press, 1990. 12-35.
- ---. Movie-Made America: A Cultural History of American Movies. New York: Random House, 1975.
- Spence, Jo and Joan Solomon, eds. What can a woman do with a camera? London: Scarlett Press, 1995.
- Spence, Jo, and Patricia Holland, eds. Family Snaps: The

  Meanings of Domestic Photography. London: Virago Press,

  1991.
- Spigel, Lynn. Make Room for TV: Television and the Family

  Ideal in Postwar America. Chicago: University of

  Chicago Press, 1992.
- Spivak, Charlotte. "Palmer Cox." Dictionary of Literary
  Biography 42: 133-138.

- Steedman, Carolyn. Landscape for a Good Woman: A Story of
  Two Lives. Rutgers, NJ: Rutgers University Press, 1987.
- Steiglitz, Alfred. "The Hand Camera- Its Present

  Importance." The American Annual of Photography and

  Photographic Times Almanac for 1897. Ed. A.E. Woodbury.

  New York: The Scovill & Adams Company, 1897. 19-27.
- Suleri, Sara. Meatless Days. Chicago: University of Chicago
  Press, 1989.
- Tapley, D.J. The New Recreation, Amateur Photography: A Practical Instructor. New York, 1884.
- Thompson, E.P. The Making of the English Working Class.

  London: Victor Gollancz Ltd, 1963.
- Trachtenberg, Alan. Reading American Photographs: Images as

  History, Matthew Brady to Walker Evans. New York: Hill

  and Wang, 1989.
- Veblen, Thorstein. The Theory of the Leisure Class: An

  Economic Study of Institutions. Introd. C. Wright

  Mills. New York: The New American Library, 1953.
- Walkerdine, Valerie. School Girl Fictions. London: Verso, 1990.
- ---. "Video Replay: families, films and fantasy." Formations of Fantasy. Eds. Victor Burgin et al. New York:

  Routledge, 1986. 167-199.
- West, Rebecca. 1900. London: Weidenfeld and Nicholson, 1992.

- White, Randall. Fur Trade to Free Trade: Putting the Canada-U.S. Trade Agreement in Historical Perspective.

  Toronto: Dundurn Press, 1988.
- Wiebe, Robert H. The Search for Order, 1877-1920. New York:
  Hill and Wang, 1967.
- Raymond Williams. Marxism and Literature. Oxford: Oxford
  University Press, 1977.
- ---. Television: Technology and Cultural Form. London: Fontana, 1974.
- ---. Communications. Great Britain: Penguin Books, 1962.
- Willis, Deborah, ed. Picturing Us: African American Identity
  in Photography. New York: The New Press, 1994.
- Winston, Brian. Technologies of Seeing: Photography,

  Cinematography and Television. London: British Film
  Institute, 1996.
- Wollheim, Peter. "Towards a critical history of the 35mm still photographic camera in North America, 1896-1980.

  Diss. McGill University, 1990.
- Worth, Sol and John Adair. Through Navajo Eyes: An

  Exploration in Film Communication and Anthropology.

  Bloomington: University of Indiana Press, 1975.
- Wright, Gwendolyn. Building the Dream: A Social History of
  Housing in America. New York: Pantheon Books, 1981.
- Zimmermann, Patricia R. Reel Families: A Social History of

- Amateur Film. Bloomington: University of Indiana Press, 1995.
- ---. "Trading Down: Amateur Film Technology in Fifties
  America." Screen 29(2) (Spring 1988a): 40-51.
- ---. "Hollywood, Home Movies, and Common Sense: Amateur Film as Aesthetic Dissemination and Social Control, 19501962." Cinema Journal 27(4) (Summer 1988b): 23-44.
- ---. "Entrepreneurs, Engineers, and Hobbyists: The Formation of a Definition of Amateur Film, 1897-1923." Current Research in Film: Audiences, Economics, and Law, Volume 3. Ed. Bruce A. Austin. Norwood, NJ: Ablex Publishing Co., 1987. 163-188.
- ---. "Reel Families: A Social History of the Discourse on Amateur Film, 1897-1962." Diss. University of Wisconsin-Madison, 1984.

#### Government and Corporate Documents:

- Canada. Third Census of Canada, 1890. Ottawa: S.C. Dawson, 1893.
- ---. Fourth Census of Canada, 1901. Ottawa: S.C. Dawson, 1905.
- ---. Sixth Census of Canada, 1921. Ottawa: F.A. Acland, 1927.
- ---- Twelfth Census of Canada, 1951. Ottawa: Queen's

Printers, 1955.

Eastman Kodak Company. 48th Annual Report of the Eastman

Kodak Company. Rochester, NY: Eastman Kodak Company,

1950.

# Popular and Trade Magazines, and Periodicals:

Amateur Movie Makers The American Amateur Photographer American Photography Better Homes and Gardens Better Photos (Sears, Roebuck & Co.) Camera and Darkroom Camera Notes Canadian Kodak Company Ltd. Trade Circular Ciné-Kodak News Ciné-Kodak Salesman Cycle and Camera Eastman Kodak Trade Circular Filmo Topics (Bell & Howell) Good Housekeeping Harper's Bazaar Harper's Weekly Home Movies Journal of the Camera Club (New York) Journal of the Camera Club (London) Kodakery Kodak Salesman Ladies' Home Journal Movie Makers Paines Photographic Parents Magazine The Photo-American Photoplay Popular Photography (Chicago) Popular Photography (Boston) Scribner's The Women's Home Companion The Youth's Companion

# Films:

A Movie Trip Through Film Land. Eastman Educational Films, 1922. George Eastman House, International Museum of Photography and Film, Rochester, New York.

#### Archives and Collections:

- George Eastman Correspondence, George Eastman House
  International Museum of Photography and Film,
  Rochester, New York.
- Eastman Kodak Company Archives, Business Information Center,
  Eastman Kodak Company, Rochester, New York.

### Appendix I

Frank Brownell Mehlenbacher, Personal Interview, 12 February 1997

Stacey Johnson (SJ): The original Kodak's were still very expensive — an amount of \$25 dollars was perhaps more than average income

Frank Mehlenbacher (FM): The use of that [the Kodak] camera by the individual was very limited.

SJ: How did the Kodak come off with such considerable appeal for people if it was not first instantly affordable and was not within the grasp of the average person, yet was made to be popular. I.E. why buy a new technology if it is not easily affordable?

FM: I think that they had been exposed to the daguerreotype and the wet plate process, and they were intrigued by the ability to be able to capture various types of images. But for the average person that ability didn't exist. The costs were prohibitive and the cameras were too technical for them. The Kodak camera provided them [The Eastman Dry Plate and Film Company] with an opportunity to capture a wider interest. However, at a \$25 charge for the camera plus your film it still was very expensive. 1895 Kodak came out with the pocket Kodak which was a box camera that cost \$5 and that was very popular. \$5 was a price that the average person could afford. They really needed a camera that could be afforded by everyone, and that became the Brownie."

- Frank Brownell was Canadian (came from Vienna, Ontario, not far from Hamilton), Palmer Cox was Canadian Brownie was not named after Brownell, was named after the popular children's book characters
- SJ: The Brownie was made so that it was even simple enough for kids to use...

FM: "And I think the feeling was that if these children became accustomed to taking pictures that they would keep on taking pictures later on in life."

SJ: It seemed to me that photography would have been a pretty big craze and that everybody would have had cameras, perhaps more so than today.

FM: It was a bit of a novelty. It was something that in the early days capturing those happy moments was a bit of a thing. They had the studio but to be able to do it on your own was very unique.

SJ: Was 1900 an arbitrary year for the introduction of the Brownie or was it specifically planned to be at the very beginning of the century?

FM: "It was an out-growth of the pocket Kodak. I don't think they really tied in the turn of the century. This [pocket Kodak] was a very popular \$5 camera but it was only affordable by certain groups of people and if they could come out with a camera which was fairly sturdy and at a low price it would be more available to the general public."

SJ: A lot of people say that their first cameras were Brownies

FM: They took nice pictures and there was enough latitude in the film that you really didn't have to be too concerned about having very accurate focus.

SJ: Where could you use them? Could you only use them outside?

FM: Yes. Well, you could use them inside if you had a flash powder.

SJ: Would you use them with attachments?

FM: I think that was for the more professional types or the advanced amateur.

SJ: Could you still use your Brownie if you wanted to?

FM: If you find the film for the different size Brownies. There is a man who works for a photographic store [near Rochester] and he rolls the spools for a Brownie camera and he's got a mail order business.

SJ Your grandfather produced the Kodak and the other cameras for Kodak?

FM: Yes. My grandfather made the Eastman-Walker roll holder and that led into the Kodak camera. He manufactured all of the cameras until he left the business in 1903.

SJ: Did your grandfather design the Kodak?

FM: He designed the Brownie. Brownell manufactured all of the cameras and photographic equipment for Kodak, but the patent rights were usually held by Kodak. Brownell held the patent for the Brownie but Eastman convinced Brownell to sign an exclusive distribution contract with Kodak.

SJ: Was Eastman taking advantage of Brownell?

FM: [Eastman] was, because he could. A good example is the pocket Kodak. It cost my grandfather 82.5 cents to make. He sold it to Eastman for 87 cents. Eastman put it in the box and the instruction booklet and retailed it for \$5.

SJ: How much do you think it cost to put in an instruction book?

FM: Less than a buck, much less than a buck.

SJ: He might have made 300 or 400 % profit?

FM: Oh easily. If he paid 87 cents for the camera and I would be surprised if the other costs were more than \$1 or \$1.10. A dealer would not have had a 100% mark up. In other words, if it retailed for \$5 the dealer would not have paid \$2.50 for it; they would have paid much higher for the camera. The retailer's profit might have been 50 cents a camera and Eastman's costs were \$1 or \$1.10 for a camera. Eastman probably sold it to the retailers for \$4.50.

SJ: You seem to know a lot of details. Were they told to you growing up?

FM: George Eastman's organist was George Fisher and George Fisher was the organist for the (Lake? something) Baptist Church. George Fisher and my grandfather and grandmother were very close friends. [Fisher's daughter] is now living in California but she still has a cottage down on Lake Ontario. Several years ago she was talking about her father and I said, "where are his diaries?" And they were very helpful. So my wife and I went down and went through the diaries and I copied quite a few things.

SJ: Was there anything about your grandfather?

FM: Oh yes. "Mr. Brownell and Mrs. Brownell stopped by and we went for a ride," or "we were at the Brownells' for

dinner," so on and so forth. But [Fisher] talked about having received the first call from George Eastman when the house was under construction and he asked George Fisher if he would be interested in helping design the organ for his home....He wrote about the fact that "I met with Mr. Eastman tonight and he signed the contract for the organ to be manufactured by an organ company in New York for \$25, 000. He took The 9:00/9:30 train for NY, the overnight train, to meet with the organ people and present the contract to them. And then he talked about going down to NY to see about getting [the organ] all set up. So when the house was completed, the organ was installed and his mother moved in. George Fisher felt that it might be nice to play the organ as they came down for breakfast the first morning after they had moved in. So he did. And Mr. Eastman was so enthused by that he asked him to play the organ each morning.

SJ: And the next organist was a Gleason. Was that any relation to the Gleason Works family?

FM: No.

But I was thinking about what you were talking about earlier. Umm, Harold Gleason's son, Charles M. Gleason, his mother had a birthday party for him when he was a young child. His father was Mr. Eastman's organist at that time. Mr. Eastman had given him one of the first movie cameras to try out. And it was really the first home movie of a birthday party, CM's birthday. His mother made a movie out of that party for him.

SJ: And Eastman just gave the camera to Gleason to see what he thought of it, to give it a whirl?

FM: Yes. CM's wife is my cousin.

# Appendix II

# Abbreviations

GE	George	Eastman				
GEC	George	Eastman	Corresp	ondence		
GEH	George	Eastman	House,	International	Museum	of
	Photography and Film					
MPPC	Motion	Picture	Patents	Company		