EXHIBITING INTEGRITY: ARCHIVAL DIPLOMATICS TO STUDY MOVING IMAGES

by

APRIL G. MILLER

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ABSTRACT

This thesis examines the concepts of reliability, authenticity and documentary form as defined by archival diplomatics and their relation to moving image records, for the purpose of exploring the possibility of using them to develop a method for the preservation of the moving image's intellectual integrity over time. To achieve this purpose, the study establishes a correspondence between the terminology and the theories used to express these concepts in the two fields through an examination of archival diplomatics and moving images glossaries, dictionaries and literature.

Notwithstanding the different understandings of the concepts examined, the thesis finds that when moving images can be regarded as records – that is, as contextual mediated visual and aural representations compiled for the purpose of entering into communication – it is possible to use archival diplomatics methodology to analyze them successfully. On the strength of this finding, the thesis proceeds to establish a correspondence between the diplomatic elements of documentary form and the components of an ideal moving image record, demonstrating parallels and explaining and reconciling differences, in order to build a template for the analysis of all kinds of moving image records. This diplomatic instrument is to be used for the identification of the formal elements of a moving image that allow for the maintenance, verification and preservation of its reliability and authenticity over the long term. The necessity of such an instrument derives from the fact that the use of digital technologies for the making, exhibiting and storing of moving images will render the ability to prove their integrity and their preservation increasingly more difficult.

The thesis is concluded by a discussion relating the effects of the pervasive use of digital technologies in the field of moving images, and a demonstration of the substantial threat they present for the continuing reliability and authenticity of moving images. This discussion shows

the advantages of a close cooperative effort by archivists and moving image theorists in developing interdisciplinary methods for addressing such threats that are rooted in archival diplomatics and fully respect the nature of the moving image record.

TABLE OF CONTENTS

Abstract	ii
Table of Contents	iv
Acknowledgements	v
INTRODUCTION	1
CHAPTER ONE	12
CHAPTER TWO	31
CHAPTER THREE	83
CONCLUSION	102
Bibliography	113

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INTRODUCTION

Archivists have many responsibilities, the most fundamental of which is the protection of the integrity and accessibility of the records in their care. The maintenance of the integrity and accessibility of records is what Sir Hilary Jenkinson calls the archivist's moral defense of archives. The primary duty of an archivist – he believed – is the defense of the records in his or her care "against all kinds of dangers," both physical and moral. Examples of moral dangers are the deliberate falsification and the unintentional tampering of records, and examples of physical dangers are the effects of a repository's poor environmental conditions and reckless handling practices, which result in the records' physical deterioration and a "diminution in their evidential value." While the physical defense of archives relates to the preservation of the records' physical integrity, the moral defense of archives relates to the protection of the records' intellectual integrity. As this thesis is primarily concerned with the latter, hereinafter the term integrity will be used to refer to the records' intellectual integrity.

A record with integrity is one that has been created complete and according to controlled procedures, and has not been corrupted in the course of either its transmission or its maintenance and preservation. Thus, the concept of integrity has two dimensions: reliability and authenticity. A reliable record is one whose content is trustworthy, and which can stand for the facts it relates. An authentic record is one that has not been altered or falsified after its creation and so is,

¹ Luciana Duranti, "Commentary," American Archivist 57 (Winter 1994): 37.

² Hilary Jenkinson, A Manual of Archive Administration rev. 2d ed. (London: Percy Lund, Humphries & Co. Ltd., 1937; reissue, 1965), 44.

³ Ibid., 68.

therefore, the record it claims to be. While reliability relates to the genesis of the record, authenticity relates to its transmission, maintenance and preservation over time.

The quest for a rigorous methodology to ascertain the reliability and authenticity of records began in a systematic way with the philology of Renaissance humanism and culminated with Valla's method of textual criticism, which was responsible for the unmasking of the fraudulent donation of Constantine. In the seventeenth century, several disciplines were developed to analyze records for the purposes of identifying them and assessing their authority, including sigillography, paleography, and diplomatics. In her book, *Diplomatics: New Uses for an Old Science*, which translates the theories and methods used by diplomatists to study medieval records into concepts and tools for analyzing modern records and record making, Luciana Duranti defines diplomatics in the following way:

Diplomatics is the discipline which studies the genesis, forms, and transmission of archival documents, and their relationship with the facts represented in them and with their creator, in order to identify, evaluate, and communicate their true nature.⁴

Through an analysis of a record's physical and intellectual forms and process of creation, the methodology of diplomatics can allow for a determination or a presumption of the record's reliability and authenticity. In the past, the diplomatists' primary objects of study were the administrative records of large bureaucracies, the compilation of which was rigorously controlled by documentary procedures and by the specialized techniques of highly skilled record makers. Currently, diplomatists and archivists are applying diplomatics to a broader range of records, administrative and not, generated by public and private bodies and individuals of various nature

⁴ Luciana Duranti, Diplomatics: New Uses for an Old Science (Chicago, Ill.: SAA, ACA and Scarecrow Press, 1998), 45.

and size. According to Leonard Boyle, all documents in the archives can be subject to a diplomatic examination:

In spite of the range of these sources, some with fixed rules of composition, some not, the act of judgment on the content and meaning, the truth or falsity, the credibility or implausibility, of the document in question depends on exactly the same rhetorical principles in each case: Who wrote it? What does it say? How is it written? Why, when and where was it written? Who were involved in it besides the principle agent?⁵

The range of sources comprises records of all media, including moving images. This elaboration of traditional diplomatics has been termed "Archival Diplomatics" by the scholars teaching it in the Master of Archival Studies program at the University of British Columbia. Using archival diplomatics as a method of inquiry, this thesis will explore the concepts of reliability, authenticity and documentary form as defined by archival diplomatics in relation to moving image records, for the purpose of reflecting on the preservation of their integrity over time.

While a diplomatic analysis of moving images may not, at first glance, be entirely justified in light of the discipline's genesis, linked to the records of administrative and bureaucratic organizations, the archival community has embraced the possibilities diplomatics offers to the analysis of modern records. Indeed, in the "Special Section on Diplomatics and Modern Records" of the Fall 1996 issue of *American Archivist*, many contributors encourage the diplomatic analysis of all records, no matter their media. Olivier Guyotjeannin, a professor of medieval diplomatics at the École Nationale Des Chartes in Paris, France, finds promise in new

⁵ Leonard Boyle, "Diplomatics," in *Medieval Studies: An Introduction*, 2d ed., ed. James M. Powell (Syracuse, N.Y.: Syracuse University Press, 1992), 89. Although Boyle infers that all records are "written," this does not necessarily infer that a record is generated by means of putting pen to paper. Luciana Duranti explains that a written document is one that is "produced on a medium (paper, magnetic tape, disc, plate, etc.) by means of a writing instrument (pen, pencil, typing machine, printer, etc.) or of an apparatus for fixing data, images and / or voices." Luciana Duranti, *Diplomatics: New Uses for an Old Science*, 41.

applications for diplomatics arising out of its respect for the universality of all records regardless of the modern era of recordkeeping and its choice of media.

[T]he methods of diplomatics, initially founded on sovereign acts of an historical époque, are universally applicable, not only to the ensemble of acts, . . . but also to all the larger documentation within archives. . . Diplomatics has renewed itself.⁶

Bruno Delmas, a professor of contemporary diplomatics at the École Nationale Des Chartes, expresses his optimism for diplomatics as a method of inquiry into modern records by referring directly to technological developments in the evolution of media and of the intellectual construct of the "record" concept.

Any information, already at the moment when it is created or received by an organism or an individual in the course of their activity, by this act alone, is archival and a part of the archival fonds of its author or its recipient, with the same status as the oldest documents. Furthermore, it matters little that modern techniques are multiplying alongside traditional text, the production of data, images, visual and sound documents, virtual or real, on electronic or optical media. The conditions of their creation make them, *ipso facto*, archival documents, like the others with the same characteristics and the same presumption of authenticity.⁷

A diplomatic study of moving images is not only justified by their inclusion in the family of media used by creators and held in the archives, but also by the very nature of the image, moving or otherwise.

Records are created with intent, in the course of a practical activity, for the purpose of communication. Moving image records are produced for the visual and aural communication of

⁶ Olivier Guyotjeannin, "The Expansion of Diplomatics as a Discipline," American Archivist 59 (Fall 1996), 419.

a message. Diplomatics was developed to determine the authority of documents created in the course of an essentially administrative action, in order to verify "the reality of rights or truthfulness of facts represented in them."8 Later, it was extended to study other documents, the production of which was not required, and the form of which was not prescribed. Moving images fall under this latter category of records. Indeed, the creative process inherent in the making of moving images, such as those produced by the entertainment industry, is in conflict with the idea of rigorous procedures and forms, which are the primary object of a diplomatic analysis. Nevertheless, the adaptation of diplomatic concepts, terms and methods for the analysis of moving images can shed light on their nature as archival material and on methods for preserving their integrity as technology evolves and as the use of digital systems and media for their production, projection and storage increases. The latter is indeed the primary motivation for the writing of this thesis, which is concerned with beginning a process of research on the elements and attributes of moving images in electronic form and on their function in relation to the integrity of these records. The primary motivation arises from the aim to avoid the dramatic losses that have occurred in other areas of activity, where the adoption of digital technologies has occurred without the foresight needed to overcome the fragility of the media, the idiosyncrasy of applications, and the obsolescence of technology.9

The evolution of the technology affecting moving images is linked to that of photographic images, which are subject to, and come into existence by, a mechanical, chemical and technological process. Although it is habitually accepted that the first public exhibition of a

⁷ Bruno Delmas, "Manifesto for a Contemporary Diplomatics: From Institutional Documents to Organic Information," *American Archivist* 59 (Fall 1996), 440-41.

Duranti, Diplomatics: New Uses for an Old Science, 45.

moving image took place at Paris' Grand Café in December 1895, 10 Laurent Mannoni and others prefer to assert that the development of the moving image constitutes a "spiral of invention" that occurred between 1888 and 1893, because these years were "more decisive, scientifically and technologically, than the single year 1895."11 They claim that this development was characterized by industrial competition, commercial rivalry, and successive and concurrent "inventions" that were not necessarily such, because they borrowed from and were amalgamated with previous discoveries.¹² Incited by a preoccupation with the optical illusions afforded by the laws of perspective, coupled with the desire to automatically capture the images created using the camera obscura and magic lantern developed in the sixteenth and seventeenth centuries respectively, photography emerged through a number of processes in the 1800s. The moving image's underlying connection to photography arose from the development of celluloid film and techniques of instantaneous exposure in the 1890s, and also from a scientific interest in the physiology of persistent vision. The persistence of vision is an illusion that permits the human eye and brain to perceive movement from a series of photographic images that appear and disappear quickly in succession. Commonly, moving images present twenty-four images on the screen per second. The eye and brain are deficient in that they cannot register each image as a separate entity before the next appears. Thus, in the brain, the impression of each successive image is superimposed onto the next, creating the illusion of movement. Many devices were developed to illustrate the effects of persistent vision, including Faraday's wheel and the stroboscope, which present pictures of figures in various stages of motion and, when viewed in rapid succession through a small opening, create the illusion of movement. Between 1850 and

⁹ As a collateral benefit, a new visual literacy can emerge from a diplomatic examination of moving images, deriving from a shift in their study from the analysis of their content to that of their context and form of creation. ¹⁰ Laurent Mannoni, Donata Pesenti Campagnoni, and David Robinson, *Light and Movement: Incunabula of the Motion Picture* (Pordenone: Le Giornate Del Cinema Muto, 1995), 399.

1860, innovators began to examine ways of moving photographic images and developed many devices to that purpose. The year 1895 is "of major importance, yet it cannot be regarded as a 'big bang' or a miraculous era,"13 as many innovators such as Demeny, Skladanowsky, Reynaud, Edison, the Lumière brothers, Armat and Jenkins all unveiled similar yet different devices to project an illuminated moving image on a screen from a celluloid strip.

As a medium, the moving image's close connection to celluloid film dictates the manner in which it is defined. The moving image is referred to using terms such as motion picture, moving picture, movie, film, among others. Some definitions of the moving image centre on the physical characteristics of the medium itself. In 1959, Raymond Spottiswoode defined the moving image using the term film that consists of a plastic strip upon "which the images of physical objects are selected, composed and if necessary distorted, and finally recorded on celluloid."14 More recently, the National Archives of Canada in Managing Audio-visual Records in the Government of Canada defines the moving image as one of three categories of audiovisual media:

> Motion picture film, also called cinematographic film, contains visual information and sound as a sequence of photographic images on a perforated plastic strip. When projected (usually at 24 frames per second), these images appear as continuous motion. Contemporary films are usually in colour, although black-andwhite film is sometimes used for aesthetic reasons or scientific applications. Motion picture film is usually wound on reels and stored in flat circular canisters. 15

¹¹ Ibid., 14-5.

¹² Ibid., 13.

¹³ Ibid., 364.

¹⁴ Raymond Spottiswoode, A Grammar of the Film: An analysis of film technique (Berkeley, CA.: University of California Press, 1959), 42-3.

¹⁵ National Archives of Canada, Managing Audio-visual Records in the Government of Canada (Ottawa: Minister of Public Works and Government Services Canada, 1996), 2.

Other definitions of the moving image are not limited to a description of the physical characteristics of celluloid or other specified base. Writing for UNESCO, Helen Harrison defines moving images within a broader definition of audio-visual materials. According to Harrison, moving images are "visual recordings (with or without soundtrack) . . . irrespective of their physical base and the recording process used." As well, the materials prepared for the Continuing Legal Education Seminar, "The Film Industry – Practice and Procedure," held in Vancouver British Columbia in 1991, define moving images as motions pictures:

Pictures of every kind and character whatsoever, including all present and future technological developments, whether produced by means of any photographic, electrical, electronic, mechanical or other processes or devices not known or hereafter devised, and their accompanying devices and processes whereby pictures, images, visual and aural representations are recorded or otherwise preserved for projection, reproduction, exhibition, or transmission by any means or media now known or hereafter devised in such manner as to appear to be in motion or in sequence.¹⁷

These two definitions, and others like it, appear to be more accurate in that they presume that a medium-specific understanding is insufficient because the medium of the moving image will undergo transformation with the invention of new media and processes. The spiral of invention witnessed in the past is indicative of the moving image's future.

Moving image theorist Noël Carroll has developed a definition of the moving image that is also not based upon the medium's physical characteristics. Carroll's definition is not a formal explanation of the moving image. Rather, it is a set of five criteria that, if met, indicates that the

¹⁶ Helen P. Harrison, "Selection and Audiovisual Collections"

http://www.unesco.org/webworld/audiovis/reader/4 2.htm> (February 24, 2000), 1.

J. Anthony Allard, "Distribution," in Continuing Legal Education Society of British Columbia, The Film Industry

- Practice and Procedure: Materials prepared for a Continuing Legal Education Seminar held in Vancouver, B.C. on January 30, 1991 (Vancouver: Continuing Legal Education Society of British Columbia, 1991), 4.1.35 - 4.1.36.

entity being examined is indeed a moving image. The first criterion requires the entity to be a detached display, which occurs when the virtual space of the world portrayed on the screen is detached from the space in which the viewer experiences the projection of the moving image. 18 The second criterion requires the entity to belong to a class of things for which movement is technically possible (unlike paintings and sculpture, for example). 19 The third and fourth criteria are based upon the concept of performance tokens, which is a theory formed by the type / token relationship. The entity's performance - or its projection on a screen - is the token of a template (the physical object such as a film print, videotape, etc.) that is itself a token of the moving image, the type. Specifically, the third criterion establishes that an entity is a moving image only if performance tokens are generated from a template of any media. The fourth criterion requires the performance token to merely be "a function of the physical mechanisms engaging the template properly. Or, in other words, it is a matter of running the relevant devices correctly."20 The fifth and last criterion requires the images portrayed on the screen to be two-dimensional. Carroll's five criteria are indeed complex and unwieldy, however they do indicate fundamental aspects of the moving image's nature without relying on the concept of medium. In the spirit of Carroll's criteria, therefore, this thesis will elect a non-media specific definition of the moving image similar to that issued by the Continuing Legal Education Society of British Columbia: Moving images are pictures, images, visual and aural representations of every kind and character that appear to be in motion or in sequence and are recorded or preserved for projection, reproduction, exhibition, or transmission, irrespective of whether they are produced

¹⁸ Noël Carroll, *Theorizing the Moving Image*, Cambridge Studies in Film, eds. Henry Breitrose and William Rothman (Cambridge, N.Y.: Cambridge University Press, 1996), 62.

¹⁹ Ibid., 65. ²⁰ Ibid., 69.

or preserved by photographic, electrical, electronic, mechanical or other technologies, processes and devices not currently known.²¹

This thesis consists of three chapters, the first of which examines the concepts of reliability and authenticity as understood by archival diplomatists and by the moving image community. Indeed, there is a rift between these two groups as the terms reliability and authenticity appear to have different meanings and appear to be used for different purposes in the two areas of endeavour. Before archivists and those involved with the moving image industry can generate a thoughtful and practical discourse on the need and methods of ensuring the preservation of a moving image's integrity over time, the differing concepts of reliability and authenticity must be harmonized. Chapter Two attempts a diplomatic study of the documentary form of moving images on the assumption that it would provide rigour to archival research on the means to ascertain the reliability and authenticity of this type of record. However, to effectively discuss moving images within the language of archival diplomatics, terminology used in both realms must be reconciled. The discussion of the elements of documentary form involves specific diplomatic terminology, which must be reconciled with terminology used by researchers on moving images to refer to the same characteristics or attributes. Indeed, according to Luciana Duranti, the "first important contribution of diplomatics to archival work is its definitional component. . . The precision of diplomatic terminology gives communication between archivists and among the information professions a clarity which is lacking in much of the terminology currently in use."22 This discussion will result in an opportunity to investigate how the elements

²¹ This definition of the moving image is paraphrased from: Continuing Legal Education Society of British Columbia, The Film Industry – Practice and Procedure: Materials prepared for a Continuing Legal Education seminar held in Vancouver, B.C. on January 30, 1991, 4.1.35 - 4.1.36.

²² Duranti, Diplomatics: New Uses for an Old Science, 163.

of documentary form articulate themselves in moving images, and to develop a basic framework for a diplomatic analysis of moving images. Chapter Three examines the emergence of digital technologies in the production, transmission and exhibition of moving images and reflects on its rapid and unwitting occurrence. While digital technology may be characterized as a revolutionary discovery, the ill-fated effects that digital moving image technologies have on the preservation of the moving image's reliability and authenticity are substantive, especially because of technological obsolescence.

The management of digital moving images as intellectual property assets also will pose problems. Digital technology provides fast, easy and inexpensive methods for the production, manipulation, retrieval, distribution and maintenance of moving images, however these same advantages also result in a threat to their integrity and long term preservation. Heather MacNeil asserts that "it is vital to explore whether traditional mechanisms and controls are adequate to the task of verifying the authenticity and degree of reliability of [digital] records, whose most salient feature is the ease with which they can be invisibly altered and manipulated." The conclusion of this thesis reflects on the fact that such mechanisms and controls can be effective if adapted to the present reality through a clearly focused interdisciplinary effort, such as that attempted by this thesis.

²³ Luciana Duranti and Heather MacNeil, "The Protection of the Integrity of Electronic Records: An Overview of the UBC-MAS Research Project," *Archivaria* 42 (Fall 1996): 46.

²⁴ Heather MacNeil, Trusting Records: Legal, Historical, and Diplomatic Perspectives (Dordrecht: Kluwer Academic Publishers, 2000), xi.

CHAPTER ONE

In 1941, the historian C.W. Jeffreys wrote a review of three moving images, *Northwest Passage*, *North West Mounted Police and Hudson's Bay*, in the December issue of the *Canadian Historical Review*. Jeffreys commented generally on the moving image's ability to present the story of Canada's past to wider audiences than can normally be addressed "through other media than books, lectures and sermons, the long-established sources of instruction." His critique championed the historical accuracy of *Northwest Passage*, questioned the use of seemingly inauthentic costumes in *North West Mounted Police*, and grudgingly accepted the mediocre treatment of Canada's history in *Hudson's Bay*. Authentic costuming and the "realistic truth of history" should be the purpose and aim of such moving images according to Jeffreys. While this is only one example, it is nevertheless illustrative of a broad and consistent understanding of authenticity and historical truth evident in moving image criticism and moving image theory. However, a discussion relating the use of the notions of authenticity and historical truth in moving image literature, for the purposes of this thesis, should be framed in terms employed by archival diplomatics.

At its root, archival diplomatics is the study of records. The term record, or archival document, is defined as a document made or received by a physical or juridical person in the course of a practical activity.³ A juridical person can be an individual or an organization that has both the capacity and the potential to act according to the rules of a particular system, legal or

² Ibid., 46.

¹ C.W. Jeffreys, "History in Motion Pictures," in *Documents in Canadian Film* ed. Douglas Fetherling, (Peterborough, Ontario: broadview press, n.d.), 37.

otherwise. Records are created in the course of a juridical person's activities; they emerge out of a juridical person's daily business as the mandate and functions of that person dictate. The archival community understands the whole of a juridical person's records, or "fonds", as the product of its actions and transactions. The fonds of a juridical person, or "creator", has five basic characteristics: impartiality, naturalness, interrelatedness, uniqueness and authenticity. The quality of *impartiality* "establishes the archival perspective on the relationship between facts and interpretation." Impartiality of records is derived by the very fact of their creation as byproducts of actions. Physical and juridical persons create records to carry out their activities, as means to purposes. Thus, since the records' purpose is to facilitate the actions of their creator, they are inherently impartial with respect to those actions because they reveal their nature.

Impartiality can sometimes be confused with truthfulness. Records do not necessarily contain truthful statements of fact, but are mediated representations of actions that have occurred or will be occurring. Animating the records are the actions, the documentary and business processes that enact them, and the overarching functional context of the record's creator.

The second characteristic of a fonds is *naturalness*, which relates to the records' internal structure. A creator naturally makes and receives records in the course of a practical activity. As a creator conducts his business, the records accumulate spontaneously and organically: they are arranged and used "according to the needs of the matters at hand. They are natural, in the sense that they are not collected for some purpose outside the administrative needs generating them." Naturalness is closely tied with the records' characteristic of *interrelatedness*, which points to the

³ School of Library, Archival and Information Studies, "Select List of Archival Terminology," n.p. n.d., s.v.

[&]quot;archival document."

⁴ A juridical person, or records creator, is the individual or organizational person who makes or receives the records in the usual and ordinary course of its activity, and accumulates them for further action or reference.

record's dependence on the functional relationships it has with the other records of the creator. There is a link, called the "archival bond", that exists between a record and the ones that precede and proceed from it. The interrelatedness of the records not only reflects their natural accumulation, but also reveals the documentary context of each record. Within the documentary context, each record has its own unique place and this results in the records' quality of uniqueness, according to which each record is unique even if identical to other records, because of the meaning provided to it by the documentary context in which it belongs.

The final characteristic of records is *authenticity*. Authenticity, like impartiality, can sometimes be confused with truthfulness of facts. Terry Eastwood explains the quality of authenticity as understood by archival theory generally:

Authenticity is contingent on the facts of creation, maintenance, and custody. Archives are authentic only when they are created with the need to act through them in mind and when they are preserved and maintained as faithful witness of fact and act by the creator and its legitimate successors. To be authentic memorials of past activity, documents must be created, maintained, and kept in custody according to regular procedures that can be attested.⁷

In archival diplomatics, authenticity relates to the trustworthiness of the record as a record. As Luciana Duranti has argued:

... a record is authentic when it is the document that it claims to be... It only warrants that the record does not result from any manipulation, substitution, or falsification occurring after the completion of its procedure of creation, and that it is therefore what it purports to be.⁸

⁵ Terry Eastwood, "What is Archival Theory and why is it important?," Archivaria 37, 127.

⁶ Ibid., 128.

Ibid., 127.
 Luciana Duranti, "Reliability and Authenticity: The concepts and their implications," Archivaria 39, 7-8.

Duranti elaborates on the diplomatic definition of authenticity by positioning it against two other concepts of authenticity: legal authenticity and historical authenticity. While at first glance the diplomatic, legal and historical notions of authenticity may seem so closely related as to negate the need to expand on their differences, the subtlety of the differences among them is important for the study of records and especially of moving image records. According to Duranti, diplomatic authenticity diverges from legal authenticity because the latter is attributed to records only if a public authority recognized by the legal system has guaranteed it during or after the creation of the record. One example of a public authority is a notary. Historically authentic records are those that truthfully mirror events or actions that actually occurred, and whose content communicates information that is true. 10 Unlike diplomatic authenticity, which is related to the form of the record, historical authenticity is solely related to the information that the record communicates. Thus, the three different notions of authenticity are not grounded within the same assumptions and are indeed autonomous of each other. These differences are especially visible when the diplomatic concept of authenticity is placed in opposition to the historical concept of authenticity.

Leonard Boyle states that, according to the German school of diplomatics, "diplomatics is a matter of the authenticity of documents as historical witness." With the German understanding in mind, it appears as if the clear line drawn by Duranti between historical and diplomatic authenticity is blurred. What implications does the authenticity of documents as historical witnesses have as it pertains to moving image records and their ability to contain

⁹ Luciana Duranti, *Diplomatics: New Uses for an Old Science* (Lanham, Maryland and London: SAA, ACA and The Scarecrow Press, Inc., 1998), 47.

10 Ibid.

fictitious images and / or behave as propaganda? Are these moving images truly less authentic than those moving images that only contain historical images of facts that truly occurred? The concept of a record as a historical witness - as understood by German diplomatists - is perhaps slightly flawed according to Boyle. He believes that Jean Mabillon, the founder of diplomatics, never intended the search for authenticity through diplomatics to be based on the content of the records. Instead, Mabillon "is concerned only with forms and formulae and not with what [the records] convey."12 It is important to consider, however, that originally, as evinced by the German school of diplomatics, diplomatic methodology was used as a means to establish the authenticity or inauthenticity of records for the purpose of presuming the trustworthiness of the information contained in the record. Indeed, it was an assumption of eighteenth and nineteenth century diplomatists and historians that, if the form of a document could be confirmed authentic, then the genuineness and truthfulness of its content could be inferred. 13 Nevertheless, Mabillon's position is supported by the archives' focus on the creator and on the provenance of the records, which recognizes that records are mediated representations of actions and events and are generated by the will of a creator to serve its purposes.

In the twentieth and twenty-first centuries, diplomatics has evolved as a method that encompasses not only a determination of the record's trustworthiness, but also an "understanding [of] current records and records-related technologies." Heather MacNeil elaborates on the aspects of contemporary diplomatics by examining the nature of the electronic record. MacNeil asserts that a diplomatic analysis of electronic records includes an examination of the records'

¹¹ Leonard Boyle, "Diplomatics," in *Medieval Studies: An Introduction*, 2d ed., ed. James M. Powell (Syracuse, N.Y.: Syracuse University Press, 1992), 90.

¹³ Duranti, Diplomatics: New Uses for an Old Science, 53-4.

components, which are; medium, content, physical form, intellectual form, action, persons, archival bond and context.¹⁵ The physical and intellectual form of a record is what diplomatists are most concerned about when it comes to the assessment of a record's integrity. Their components are respectively termed extrinsic and intrinsic elements of documentary form.¹⁶ Documentary form is the whole of the rules of representations that convey the content of the record. It comprises "all of the elements that are required by the socio-juridical system in which the record is created for it to be able to generate consequences recognized by the system itself,"¹⁷ and as such is the component of a record that brings the context of the record's creation into the internal articulation, or content, of the record.

Early diplomatists analyzed records by isolating interrelated groups of elements, two of which were content (or fact) and context. While archival diplomatics generally approaches a record's content and context as distinct conceptual constructs revealed by a documentary form externally imposed, some moving image theorists such as André Bazin posit content in direct relationship with the form of the moving image's development as an art. For Bazin, the form of the moving image is a "well-defined [style] of photography and editing perfectly adapted to [its] subject matter." Bazin's moving image notion of form is highly problematic when affiliated with its diplomatic counterpart. In diplomatics, the form of the record is determined by the juridical system in which the record must be able to be effective and is used in a consequential manner. With Bazin's concept of form in mind, the proper artistic treatment of the moving

¹⁴ Heather MacNeil, *Trusting Records: Legal, Historical, and Diplomatic Perspectives* (Dordrecht: Kluwer Academic Publishers, 2000), 86.

A detailed description of these elements is explained in MacNeil, Trusting Records, 91-5.

¹⁶ MacNeil, Trusting Records, 91-2.

¹⁷ Duranti, "Reliability and Authenticity: The concepts and their implications," 6.

Duranti, Diplomatics: New Uses for an Old Science, 60.
 André Bazin, What is Cinema?, trans. Hugh Gray (Los Angeles: University of California Press, 1967), 29.

image's subject matter does not necessarily have any relationship with the context within which the moving image was created. Within many different socio-administrative, juridical, and cultural contexts, moving images may be created and used by corporate, individual, bureaucratic, public, and private creators. Thus, these creators may produce moving images for many different purposes generated by many different wills. But, for the purpose of determining the integrity of moving images, to refute Bazin's concept in favour of the diplomatic understanding of form is important for two reasons. First, Bazin's concept of form is problematic because it infers a certain amount of subjectivity. The artistic treatment of a certain subject may seem entirely proper to one observer and inappropriate to another. Second, we need to evaluate form in order to determine both the trustworthiness of the content of the record and the trustworthiness of the record as a record. The latter happens as the evaluation of documentary form is used by diplomatists to assess both reliability and authenticity. Bazin's understanding of form is primarily constructed as a means to evaluate the artistic and creative quality of the moving image's content, not as a means to determine the integrity of the moving image itself.

André Bazin's concept of form does not reflect every moving image theorist's understanding. Rudolf Arnheim, for example, believes that the form of the moving image record is a direct result of the record maker's intent. According to Arnheim, all images, moving or otherwise, have "aspired to a faithful rendering of the facts of reality; but in order to make their images comprehensible to the human mind they had to select and shape and organize the material taken from reality – they had to find and impose form." ²⁰ Arnheim's notion of form, unlike Bazin's, is commensurate with the diplomatic concept of documentary form: the content

²⁰ Rudolf Arnheim, "The Two Authenticities of the Photographic Media," *Leonardo* 30, no. 1 (1997), Academic Search Elite, EBSCOhost, 9704202034.

of the record is manifested according to a system of rules that shapes and organizes content and is capable of communicating that content in a comprehensible way. Arnheim's theory indicates that form can be a basis for assessing reliability and authenticity because it lends the image readability and the capacity to generate consequences, which are understandable from the record's expression.²¹ The assemblage of methods that shape and organize the content of an image, according to Arnheim, is therefore to be loosely equated with the documentary form as understood by diplomatics. However, as Noël Carroll suggests, technique and style of representation do not necessarily dictate the type of moving image being created, nor its effects, and the form of moving images is not rigorously systematized, nor rationalized by way of formal rules.²² Both the form and procedures of creation inherent in moving images are not rigorously defined and therefore are not adhered to by all moving image makers in the public and private sectors.

As mentioned earlier, archival diplomatics recognizes that records reveal the contextual framework in which they were created through documentary form, as well as a specific content. The content versus context consideration is important and applicable to all records as they have both a context of creation and an internal articulation, but it is especially relevant to moving images, as they can contain representations of actions and events that are real or imaginary, nonfictitious or fictitious. According to film theorist Siegfried Kracauer, the moving image has a tendency to gravitate towards representations of realism because it is an extension of

²¹ Ibid.

²² Noël Carroll, Theorizing the Moving Image, Cambridge Studies in Film, eds. Henry Breitrose and William Rothman (Cambridge, N.Y.: Cambridge University Press, 1996), 33, 243.

photography and as such derives from a foundation built on photographic veracity. ²³ Film theorist Noël Carroll, in contrast, claims that "fiction is surely the most visible purpose for which film is used in our culture." ²⁴ Carroll adheres to the non-media specificity camp of moving image criticism, which argues that the chosen medium of a filmmaker does not dictate the content and style of the moving image created, and relies on a non-media specific definition of the moving image itself. Those who do adhere to media specificity, such as the Russian school of montage theorists and André Bazin, claim that the film medium (i.e. the flexible strip of celluloid with photographic emulsion) dictates the proper use of that medium in terms of the content's style and artistic treatment. According to Carroll, medium specificity, not only as a tool for the critique of moving images, but also as a guiding philosophy in the creation of moving images, is problematic. Carroll argues that:

[a] medium does not ordain a single style or even a single family of styles, but generally affords the opportunities for a plethora of incompatible styles. . . The medium is open to our purposes; the medium does not use us for its own agenda.²⁵

While the mention of medium specificity may not seem entirely relevant to a diplomatic examination of the moving image record, its negation by theorists such as Carroll reveals a sympathy for the archival community's understanding of "record," which does not contain an explicit mention of physical medium. Similar to the archival concept of record, the notion of the moving image is non-media specific. Individuals and organizations use records in any medium to carry out activities. The activity of the moving image maker is a component of the moving

While Kracauer does state that the moving image asserts primarily a realistic tendency, he also claims that the moving image is apt to what he calls a formative tendency. The formative tendency rationalizes the existence of fictional images and implies that the content of the moving image is formed by the specific and intended will of the moving image maker. Furthermore, Kracauer claims that moving images include both the realistic and formative tendencies in delicate balance. Siegfried Kracauer, *Theory of Film: The Redemption of Physical Reality* (New York: Oxford University Press, 1965), 28-9.

image's context of creation. The context of creation, as evinced by the documentary form, is positioned opposite the content of the moving image (the story, events, persons, objects, etc. portrayed upon projection). Carroll neatly clarifies the context and content concern needed for an analysis of the moving image: "Films you thought were representations of castles, graveyards and forests are really about studio sets." 26

In terms of truth and historical accuracy, the concept of historical authenticity as the type of authenticity characterizing the moving image was uttered before the turn of the twentieth century. In fact, the historically authentic quality of moving images was partially the impetus for the first proposal for the creation of a moving image archive. In March 1898, Boleslaw Matuszewski, a Polish cinématographer, issued a thoughtful proposal for the creation of a film archives. Matuszewski was inspired by the potential of the moving image to act as historical evidence, to be, as the author of Keepers of the Frame: The Film Archives, Penelope Houston states, "a primary source in its own right." Houston cites Matuszewski as saying that the moving image presents what is "incontestable and absolutely true. . . It has a quality of authenticity, exactitude and precision which is unique to it. It is the honest and infallible eye witness."28 As a mediated representation that requires the intentional will of a person (indeed the moving image camera must be directed at something), the moving image's championed ability to represent truthful statements of historical fact is indeed dubious. Nevertheless, Matuszewski's proposal for a film archives was only the first of many to uphold the potential of the moving image as a historically accurate source of information. According to them, moving images are

²⁵ Ibid., 13.

²⁶ Thid 46

²⁷ Penelope Houston, Keepers of the Frame: The film archives, (London: British Film Institute Publishing, 1994), 10.

"authentic" because of the truthfulness of what they contain. This corresponds to the historical notion of authenticity defined by Duranti.

The ability for the moving image to act as a source of truth is also upheld by certain moving image theories, such as photographic representation, and by certain cinésemiologists. The historical authenticity of the moving image can also be traced to those theorists who maintain that the presentation of reality is supported by the mechanical process of moving image creation. Links are made between the photographic image and the cinématographic image and their common ability to present historical truth to the viewer. André Bazin writes that "[t]he photographic image is the object itself . . . [and therefore] the cinema is objectivity in time." Bazin, who was at the time director of cultural services at the Institut de Hautes Études

Cinématographiques in France and was associated with the influential film journal Les Cahiers du Cinéma, believed that the photographic image is a direct "transference of reality." Those moving image theorists who follow and expand on the ideas of André Bazin, or Bazinians, make a clear distinction between the presentational and the representational abilities of the moving image, and therefore claim that the photographic image has a quality of credibility naturally conferred upon it. 31

[F]ilm, like photography, is presentational, not representational, according to the Bazinians. It presents objects, persons and events again, and, in consequence, there is some kind of identity relation between the . . . cinematographic image of [the image's referent] itself.³²

²⁸ Ibid.

²⁹ Bazin, What is Cinema?, 14.

³⁰ Ibid.

³¹ Ibid., 13.

For Bazinians and other photographic realists, this distinction between presentational and representational arises wholly out of the mechanical process of moving image creation. That is, the objective ability for a mechanical device to record persons, events and objects in its field of vision directly and automatically, without the immediate and explicit intervention of a human will, is a primary inference for photographic realists. Photographic realists claim that "[f]or the first time an image of the world is formed automatically without the creative intervention of man."

Thus, moving images capture truthful information as the mechanical process of moving image creation dictates and are therefore historically authentic. This Bazinian understanding of authenticity conflicts with the diplomatic understanding of authenticity and more importantly denies the moving image as a mediated representation of what the camera sees. The Bazinian notions of photographic realism and historical authenticity postulate that behind the moving image there is neither will, nor the impetus to create the moving image as a record to fulfill the needs and purposes of a person.

In addition to the Bazinians, other scholars of the moving image adhere to this concept of the moving image's authenticity as historical accuracy. For example, scholars such as Jurij Lotman and Roland Barthes claim that the moving image is not just a mere copy of reality, but the direct emanation of past reality. That is, the images and sounds are representative of people's real experiences. Barthes claims that all photographic images, moving or otherwise, are not second-hand copies of reality but are images that are re-presented to our senses in both space and time.³⁴ The objective historically authentic quality of the photographic image has at its core the

³² Carroll, Theorizing the Moving Image, 55.

³³ Bazin, What is Cinema?, 13.
34 Carroll, Theorizing the Moving Image, 37. The concept of re-presentation is grounded in theories developed by Bazin.

term "emanation." According to realist Susan Sontag, emanation is the light waves reflected by objects, which facilitate the image's one-to-one relationship with reality. To paraphrase Bazin, we are forced to accept the object as real. 36

Jurij Lotman, a scholar in the field of semiology and the moving image, also understands an authentic moving image to be one that reflects historical accuracy and truth. Semiology is the study of language as a system of signs (the signifier) and referents (the signified) and the interplay between them as they are used by different groups, nations, societies, professions, etc. It explains the relationships between, and the system involved in, the words and the object of words. For example, the word "chair" (the sign) is related to the actual object, the chair (the referent, or signified, of the word "chair"). The semiology of moving images, also called cinésemiology, studies the moving image as a system of signifiers and their signified referents, and the moving image's ability to act as a language of the cinema. Lotman positions the moving image in a direct relationship with reality. "It is an indisputable fact that the audience has such a sense of the authenticity of cinema, a sense which is absolutely unattainable in any other art form, that it can be equaled only by experience in real life."37 Lotman believes that the "documentary" genre of moving images is the most truthful and reliable, in that it evokes "the absolute reliability of documentary authenticity."38 For Lotman, the two concepts of reliability and authenticity both refer to content and, at times, he uses them interchangeably. Interestingly, another cinésemiologist, Christian Metz, negates the argument that authentic moving images are those entirely reflecting historical truth. Metz was a filmo-linguistic pioneer who created links

³⁵ Carroll, Theorizing the Moving Image, 37.

Bazin, What is Cinema?, 13.
 Jurij Lotman, Semiotics of Cinema, translated by M.E. Suino, Michigan Slavic Contributions, no. 5., (Ann Arbor: University of Michigan, 1981), 74.

between the linguistic nature of semiology and the communication system subsumed within the art form of the moving image. Perhaps unaware that he was doing so, Metz limited his analysis of the moving image by making a distinction between content and context similar to that made by archival scholars. In terms of the language system of the moving image, it is important to note, however, that a simple reduction of the record to content and context does not suffice.

Language is an element of a record's documentary form, and it is the form that ushers the context of the record's creation into the record's content. Thus the form of the record, including its language, reflects on both "the word and the world." Some cinésemiologists such as Robert Stam, Robert Burgoyne, and Sandy Flitterman-Lewis, believe that the moving image is not a language system in the usual sense, because the arbitrary relationship between the signifier and the signified does not exist. However they do concede that the moving image does exhibit a "language-like systematicity."

Cinésemiologist Metz distinguishes between two realities extant in the cinematic sphere of 'making' moving images; the "cinematic fact" and the "filmic fact." The filmic fact refers to the localized articulation of the moving image text as an intellectual / narrative construct. The cinematic fact, on the other hand, encompasses a manifold of events surrounding the creation of a moving image: the pre-, post- and a-filmic events. The cinematic fact embraces the broadest understanding of the institutional, technological, societal, psychological, intellectual, cultural, economical and political dimensions of moving image creation. Metz introduced this distinction between the cinematic and filmic facts to narrow the scope of cinésemiology. However, in so

³⁸ Lotman, Semiotics of Cinema, 21.

³⁹ MacNeil, Trusting Records, 112.

⁴⁰ Robert Stam, Robert Burgoyne, and Sandy Flitterman-Lewis, New Vocabularies in Film Semiotics: Structuralism, post-structuralism and beyond (London: Routledge, 1992), 36.

doing, Metz also issued a consideration of the broader contextual meaning of, what he calls, 'movie making.' Metz's separation between the cinematic fact and the filmic fact reflects the archival distinction between the context in which a creator's records were made or received and set aside (the cinematic fact), and the internal articulation of the record itself (the filmic fact). Indeed the internal articulation of the record is the documentary form of the moving image in the archival sense, which unveils the cinematic facts of its creation. The concept of authenticity as understood by diplomatists does not, as Lotman would suggest, depend on the trustworthiness of the moving image's content, but instead on the trustworthiness of the record's context of creation and documentary form. The authenticity as a characteristic of the content of moving images as understood by Lotman, Sontag, Barthes, Bazin, and Matuszewski, corresponds instead to the diplomatic notion of reliability.

The diplomatic notion of records' reliability refers to the trustworthiness of the content of the record rather than to the trustworthiness of the record as a record. "While a reliable record is one whose content you can trust, an authentic record is one whose provenance you can believe." The provenance of records is embedded within their documentary form. If moving image theorists employ the term authenticity to expressly mean the historical accuracy of the record's content, can we then claim that moving image historical authenticity is parallel to diplomatic reliability? Not entirely. Historically authentic records are those that assert real events and information that is true and accurate. On the other hand, the diplomatic reliability of records pertains to content but is inferred from the form of the record and the procedure of the

⁴¹ Ibid., 34.

⁴² InterPARES Project, Authenticity Task Force, "Lineage of Elements Included in the Template for Analysis (pre-InterPARES): From Traditional Diplomatics to Contemporary Archival Diplomatics," version 1.0, (n.p.: InterPARES Project, June 2000), 30.

record's creation. Reliability, in a diplomatic sense, is further entrenched within elements outside of the record, such as the procedural context, while historical authenticity is solely embedded within the truthful quality of facts as they were experienced in the past. Reliability results from controls exercised on records creation and the completeness of the record's form. What historical authenticity and diplomatic reliability do have in common is the overall focus on the accuracy and truthfulness of the record's content. The reliable record is presumed to contain facts that are true.

Diplomatically, the term fact refers to what the record is about. In common English usage, however, the term fact is also associated with the notions of objective information and accurate evidence. For example, the New Oxford Dictionary of English defines fact as "a thing that is indisputably the case . . . a piece of information used as evidence." Also, a fact is "something that actually exists, reality, truth[;] ... truth known by actual experience of observation."44 The notion of fact as an element of moving images is a complex one in light of the relevance of truth, content, context, and the variety (and artistic or bureaucratic treatment of this variety) of information the moving image can record. As mentioned previously, according to Metz there are two separate spheres of factual truth in the realm of moving images: the filmic fact and the cinematic fact. While the former refers to the content (or intellectual / narrative construct) of the moving image, the latter refers to the context of moving image creation. Acknowledging the boundaries of and between the filmic fact and the cinematic fact can help structure any analysis, diplomatic or otherwise, of moving images. Indeed, a moving image created for propaganda purposes during the Second World War by a national government, for

New Oxford Dictionary of English (1998), s.v. "fact."
 Random House Webster's Unabridged Dictionary, 2nd ed. (1992), s.v. "fact."

example, will contain filmic facts that may not wholly reflect objective reality, but will also attest to the cinematic fact that there was the need to produce propaganda as a tool to inspire nationalistic unity. This, at its root, is the dividing line between the meaning conveyed by content and that revealed by context and documentary form.

Metz's distinction between the cinematic and filmic facts has a theoretical relation to Rudolph Arnheim's work. A theory of the moving image as representational art prepared by Arnheim characterizes the filmic fact and the cinematic fact (the word and the world, according to Heather MacNeil), as two separate views of the same concept; that is, two distinct varieties of authenticity. 45 Moving images are "authentic to the extent that they do justice to the facts of reality, and they are authentic in quite another sense by expressing the qualities of human experience by any means suitable to that purpose."⁴⁶ Interestingly, the two authenticities explained by Arnheim are conceptually similar, if not analogous, to the basic diplomatic understanding of reliability and authenticity. Authenticity of the first kind is similar to reliability as it relates to the trustworthiness of the facts contained within the record. Authenticity of the second kind is similar to diplomatic authenticity as it relates to authorial intent and the resulting mediated representation, which in essence is the form and "function of representations."⁴⁷ Moving image theory and moving image criticism does indeed absorb different conceptual understandings of authenticity, historical accuracy, and trustworthiness; however, diplomatic methodology and its focus on the documentary form of records necessitates a clear distinction between the concepts of authenticity and reliability.

46 Ibid

⁴⁵ Rudolf Arnheim, "The Two Authenticities of the Photographic Media."

By divorcing the moving image's ability to record reality objectively from the moving image's authenticity, an understanding of the author's intent can emerge. Indeed, in her article about the photographic image as the object of a diplomatic study, Nancy Bartlett cites a passage from Ritchin's *In Our Own Image*: "once the idea that the photo is only a transcription from reality is discarded, a new appreciation can emerge." "48 Bartlett goes on to say:

Even virtual reality, removed as it is from a camera-based provenance, has a legitimate home in authenticity as defined by diplomatics, since the authorized creators of simulated images are deliberately composing them, following accepted procedures, for the intent of simulation to further the activities of the parent institution. 49

The mechanical process of image creation, for both photographs and moving images, may presume that what the camera records is indeed reality. However, Bartlett and other archival scholars who have addressed images from a diplomatic perspective, such as Joan Schwartz and Elisabeth Parinet, have all claimed that diplomatics is sensitive to the nature of image creation and to the images' ability to be constructed by the will of an author. Likewise, Bruno Delmas in his "Manifesto for a Contemporary Diplomatics" has placed an emphasis on the image's intended ability to lie. "Manipulation is a term which catches our attention because one thinks of the manipulation of information in audio-visual media. . . But this does not concern archival documents. . . The falsification all depends on [the author's] will and his skill." As well, in her study of institutional photographs, Parinet claims that within the archivist's responsibilities lies the ability to understand diplomatic authenticity and its divorce from the content of the image

⁴⁷ Ibid.

⁴⁸ Nancy Bartlett, "Diplomatics for Photographic Images: Academic Exoticism?," *American Archivist* 59 (Fall 1996), 489.

⁴⁹ Ihid

⁵⁰ Bruno Delmas, "Manifesto for a Contemporary Diplomatics: From Institutional Documents to Organic Information," *American Archivist* 59 (Fall 1996), 442.

itself.⁵¹ In this way, archivists can preserve the creator's records generated as by-products of activities as they support the creator's mandate and functions, instead of considering the image autonomously with only an eye for its content.

The purpose of clearing up the differences between the diplomatic and the moving image concepts of authenticity and reliability is to present two separate propositions. The first is that diplomatic and moving image concepts and the related terminology and definitions are intuitively different but can be reconciled. The second is that archival diplomatics offers a new way to address an analysis of images (moving or otherwise) as archival documents by specifically examining documentary form; offering, if you will, a new form of visual literacy. Archivists such as Delmas, Parinet, and Bartlett are currently employing diplomatics in a contemporary way and are thereby issuing a new manner in which to "read" images and to comprehend the meanings they communicate about their internal articulation and their documentary form. The purpose of the next chapter is therefore to support the two propositions above by illustrating how a reconciliation of terminology and an adaptation of diplomatic methodology can be achieved if one focuses on the function of moving image elements, rather than on their appearance.

⁵¹ Elisabeth Parinet, "Diplomatics and Institutional Photos," American Archivist 59 (Fall 1996), 485.

CHAPTER TWO

A diplomatic approach to the analysis of moving images must be sensitive to the very nature of these records as determined by the reasons for which they were created. While moving images can be produced for bureaucratic and administrative reasons, they can also be created for a host of other purposes as well. For example, in the public sphere, moving images can be generated by government to inform or manipulate its constituency and its members by using them evocatively. In Canada, John Grierson, an agent of the Empire Marketing Board and subsequently the power behind the creation of the National Film Board of Canada, directed the making of moving images to inspire the public at large. Although issued under the guise of "documentary," many moving images created under Grierson's direction, such as *Conquest* for the Empire Marketing Board¹, were more closely allied with the notion of propaganda. During the Second World War, Grierson used moving images "as a weapon, less in front-line terms than for psychological mastery over home and foreign populations." Canadian government moving images created during the Second World War inspired the citizenry, built consensus, and elevated morale, which effectively furthered the mandate of the King government.

The public sector may produce moving images for the benefit of its own agents as well. In 1994, for example, the Information and Privacy Branch of the British Columbia Ministry of Government Services commissioned a moving image entitled "A Matter of Balance," which instructed government employees on the salient points of new freedom of information and

¹ Colin Browne, *Motion Picture Production in British Columbia: 1898-1940* (Victoria: British Columbia Provincial Museum, 1979), 125.

² Gary Evans, John Grierson and the National Film Board: The Politics of Wartime Propaganda (Toronto: University of Toronto Press, 1984), 12.

privacy legislation. The public sector also creates moving images to inform persons outside its constituency. Many government departments such as the now defunct Canadian Government Motion Picture Travel Bureau (CGMTB) and the British Columbia Government Travel Bureau (BCGTB) made or commissioned moving images for distribution to the United States and to the British Empire in hopes of creating a strong foundation for Canada's fledging tourism industry. Moving images such as *Beautiful British Columbia* produced by Shelley Films for the BCGTB³ and *Canada's Evergreen Playground* produced by the CGMPTB⁴ attempted to lure visitors with panoramic scenes of Rocky Mountain wildlife, Niagara Falls, the regalia of the Royal Northwest Mounted Police, sun-filled beaches and impressive hotels.

In the private sphere, moving images are created by individuals and organizations.

Moving images produced by private persons range from home videos of a couple's wedding anniversary to ethnographic moving images made for study by scholars such as Franz Boas. Moving images produced by private organizations include works like that made by the Bralome Mine company in the early 1930s, whose content depicts an inspection of the Bralome gold mine by the company's directors and other officials. Presently, BMW Motors, a European car manufacturer, exhibits moving images that contain fictional content on its website, apparently to advertise the quality of the vehicles it manufactures. Of course, private producers, such as the newsreel companies of the early 1900s, contemporary television networks, movie production

⁴ Ibid., 114.

³ Colin Browne, Motion Picture Production in British Columbia, 94.

⁵ Ibid., 190. Franz Boas recorded the craftwork, games, dances, and other ceremonial activities of the Kwakiutl First Nations people in British Columbia between 1930 and 1931.

⁷ The BMW Motors website that exhibits moving images of its *The Hire* Digital Film Series can be found on the Internet at www.bmwfilms.com. As of Spring 2001 three short moving images were available for web-based viewing: Ambush (directed by John Frankenheimer), Chosen (directed by Ang Lee), and The Follow (directed by Wong Kar-Wai).

studios and independent filmmakers also create moving images for release to the public or otherwise. Indeed, moving images are made in all spheres for different purposes and the potential for them to fulfill and further the functions and mandates of creators is seemingly boundless.

The use of moving images to fulfill the mandate and functions of private and public organizations and individuals makes them an appropriate subject for a diplomatic analysis. According to Duranti, the advantage of diplomatics as a method of inquiry is its ability to complement a top-down approach to the analysis of the records with a bottom-up approach. A top-down approach is one that begins with an understanding of the records' creator, of its mandate and functions and the laws, regulations and other standards under which the creator must conduct its business. A bottom-up analysis is one that begins with an understanding of the physical and intellectual form of the individual document. Heather MacNeil adds that, with diplomatic analysis, provenancial and documentary relationships are revealed by "an analysis that continually mediates between acts and the documents that result from them. These relationships can only be brought into unconcealment with the simultaneous application of a bottom-up analysis, which is most clearly typified by the diplomatic analysis of the genesis, forms and transmission of documents."

The genesis of records is embedded within the creator's need to fulfill its mandate by carrying out its activities. These activities are controlled and guided by business and documentary procedures from which the records ensue. In her book, *Trusting Records*, Heather

MacNeil highlights different approaches to the assumptions concerning the trustworthiness (i.e. reliability and authenticity) of records by examining the evolution of record making. MacNeil asserts that from the Roman era to the seventeenth century, and indeed even today, records' trustworthiness was assured by the existence of rigorously controlled documentary procedures and of skilled record makers vested with public faith and recognized as such by the administrative apparatus. Trustworthiness was also guaranteed by the use of controlled forms as outlined in formularies, and by documentary elements such as seals and signatures that were required by the legal system. 9 "The legal trustworthiness of a record and methods to guarantee public faith focused on external means of ensuring the recognition of the record by the legal system in which it was created (e.g. preservation in a public place, compilation by a notary)."10 For a record to be trustworthy, the three persons that must concur in its creation have to be explicitly identified. These three persons are the author, writer and addressee.11 The author of a record is the person with the capacity and the authority to generate a record, which can be issued by him, in his name or by his order. The writer of a record is the person competent to articulate its content. The writer can be the same as the author or an agent of the author if the latter is an abstract entity. The addressee is the person to whom the record is directed. A moving image theory of authorship, originally termed la politique des auteurs, may be discussed in relation to the diplomatic persons identified above.

Publishers, 2000), 1-31.

⁸ Heather MacNeil, "Commentary on Peter Sigmond's 'Form, Functions and Archival Value: The Use of Structure, Forms and Functions for Appraisal, Control and Reference;" quoted in Luciana Duranti, *Diplomatics: New Uses for an Old Science* (Lanham, Maryland and London: SAA, ACA and The Scarecrow Press, Inc., 1998), 176.

⁹ A full discussion relating the development of methods to ensure records' trustworthiness is contained in Chapter One: "The Evolution of Legal and Historical Methods for Assessing the Trustworthiness of Records," in Heather MacNeil. *Trusting Records: Legal, Historical, and Diplomatic Perspectives* (Dordrecht: Kluwer Academic

¹⁰ MacNeil, Trusting Records, 22.

Within the realm of moving image theories, the auteur theory of moving image authorship appears to be at odds with the diplomatic notion of authorship. François Truffaut, a French filmmaker and contributor to the film journal Les Cahiers Du Cinéma, first expressed the auteur theory of moving image authorship as "la politique des auteurs." 12 Auteurism can be qualified as a theory, a policy, an attitude or a branch of criticism that reflects the romantic notion of artist - individual and self-expressive. According to auteurism, the moving image's author is one specific person, usually the moving image's director. The moving image's "creative role [is] given to the director as auteur, whose commitment to the film [is] something more than an implementation of someone else's creation." The primary individual scholars and groups of scholars that expanded on la politique des auteurs are, but are not limited to, the contributors to Les Cahiers du Cinéma, a French film journal, and Movie, a British film journal originating from Oxford University, and Andrew Sarris, an American theorist who wrote in many journals, including Film Quarterly. La politique des auteurs, as understood by these scholars, characterized the cinema as an art of personal expression whose totem was the personality of the director. 14 In the journals Les Cahiers du Cinéma and Movie, the underlying assumption of all criticism and analysis was the romantic conception of the director as the force behind the generation of moving images. The director is the person who guides and is responsible for every aspect of the moving image and imbues its content with his or her own distinctive and individual personality.¹⁵

¹¹ Luciana Duranti, Diplomatics: New Uses for an Old Science (Lanham, Maryland and London: SAA, ACA and The Scarecrow Press, Inc., 1998), 84.

¹² François Truffaut's notion of *la politique des auteurs* arose out the article, "Une certaine tendance du cinéma français" in *Les Cahiers du Cinéma* no. 31, which attacked the quality of French films.

¹³ John Caughie ed., *Theories of Authorship: A Reader*, British Film Institute Readers in Film Studies (London: Routledge & Kegan Paul and the British Film Institute, 1981), 35.

¹⁴ Edward Buscombe, "Ideas of authorship," in *Theories of Authorship*, ed. Caughie, 25.

At its root, the auteur theory of moving image authorship is in conflict also with the very nature of moving image production. The romantic principles of individual creativity and personal expression as they are applied to the construct of the moving image author virtually ignore the reality that moving images are collective expressions that are commercial, industrial and popular in nature. It is clear that *la politique des auteurs* was only a tool used to critique and analyze a moving image's content. In 1975, contributors to the journal *Movie* explained the purpose and usefulness of analyzing moving images according to auteurism as a strategy that limits and focuses the scope of analysis: "We had to wade in somewhere, and we chose to limit ourselves, possibly to make the task simpler. It was also largely a historical thing: finding yourself in a situation in which the American cinema is not valued and having to find a strategy. The strategy was to talk about [directors] as artists."

Auteurism was merely a vehicle in which analysis of a moving image's content could be taken to further detail by discussing moving images in groups (either as attributed to certain themes, attributed to directors, or attributed to an authorial construct). The auteurist question, "who is the author of a moving image?" is not posed to elucidate the responsibility and the competence of persons involved in the making of a document as such but to facilitate and guide a deep content analysis by film critics. Auteurism "has very little to say on the place of the author within institutions (industrial, cultural, academic), or the way in which the author is constructed by and for commerce. . . At the same time, questions of the author's relation to institutional and commercial contexts are increasingly being recognized as crucial, particularly when one comes

¹⁵ Ibid., 24; and Ian Cameron, "Films, directors and critics," in *Theories of Authorship*,, ed. Caughie, 52.

Caughie, ed., Theories of Authorship, 13.
 Ian Cameron, et al., "The return of Movie: a discussion," in Theories of Authorship, ed. Caughie, 59.

to consider the problems of alternative practices or the notion of independent cinema." ¹⁸
Furthermore, in the journal *Les Cahiers du Cinéma*, moving image theorist Pierre Kast claims that "[t]he film auteur who thinks that, in the current system of production it is possible to express himself, is not only massively deluding himself but is also, however pure his intentions may be, defending and protecting the mystifications which the cinema generously distributes to its spectators." ¹⁹

In the moving image community, the roles and responsibilities that are within the purview of the director are understood as broad in terms of scope and vary greatly from production to production. Ira Konigsberg defines the director as the "guiding intelligence and vision of the film and the individual ultimately responsible for its success or failure. . . [T]he role of the director looms large: he is the technologist and artist, the creative mind who must give to all these disparate elements unity, design, and coherence." Konigsberg also indicates that for some moving images the producer emerges as the controlling authority presiding over their creation. Diplomatically, however, the producer and / or the production company of the moving image would be more often equated with the creator of the records; that is, with the individual or organizational person making or receiving and accumulating records by reason of its functions and mandate. The moving image author, according to diplomatics, may be the director if he has the capacity and the authority to decide on the making and the issuing of the moving image. If the author is bound to a high degree by the producer's decisions, then he

18 Caughie, ed., Theories of Authorship, 2.

¹⁹ Pierre Kast, "Des confitures pour un gendarme," in *Theories of Authorship*, ed. Caughie, 38.
²⁰ Ira Konigsberg, *The Complete Film Dictionary* 2d ed. (New York: Penguin Reference, 1997), 97-8.

fulfills the diplomatic role of a writer, who is acting on behalf of the organization for which he works.

The context of moving image creation is the organization for which it is generated, and the administrative, commercial and creative framework in which the organization operates. The authoring of a moving image might be seen as primarily collaborative as the responsibility for its making is shared by "such parties as the producer, the set designer, the cameraman or the hairdresser."²² Auteurism claims that one dominant personality (e.g., the director's) dictates the production of a moving image and that its lasting imprint can be found within the moving image as a final product. To ascertain who this personality may be is a subjective exercise and one that rejects the moving image as the result of a series of collaborative procedures. Indeed la politique des auteurs, in its rigidity, ignores the moving image's context of creation by glossing over the other participants. Auteurism "identified the code of the auteur; but was silent on those codes intrinsic to the cinema, as well as to those originating outside it."23 The auteur theory of moving image authorship is indeed problematic, as it does not necessarily account for other possibilities of authorship or the collaborative nature of the procedures involved, which are parallel to the documentary procedures underpinning traditional record making, from medieval times to the present. Indeed, Heather MacNeil indicates that "[t]he structure and functioning of medieval chanceries reflect, in embryonic form, five salient features of Weber's 'ideal' modern bureaucracy . . . [one of which is] . . . the specialization of labour and specification of competencies."24 In the medieval chancery, just as in the environment of moving image generation, individual employees possessing specialized knowledge and professional training are

²³ Caughie ed., Theories of Authorship, 33.

²² Ian Cameron, "Films, directors and critics," in *Theories of Authorship*, ed. John Caughie, 52.

competent for different procedural stages of the record's compilation;²⁵ the overall procedure is conceptually collaborative. Archival diplomatics has a very sophisticated understanding of authorship as a collaborative process and is useful to analyze authorship of moving images because it draws a clear line of responsibility among the persons involved in the making of a document.

As mentioned earlier, the diplomatic notion of writer may introduce a new approach to the consideration of authorship as understood by moving image theorists, which embodies the diplomatic concepts of author and writer. Their argument is that assigning authorship to a moving image is dependent on the situation of production. Paisley Livingston, for example, believes that determining the author of a non-commercial and non-industrial moving image, such as the home movie, is very easy and straightforward. However, Livingston goes on to question whether authorship can be clearly defined for industrial moving images that are produced for commercial reasons within large studio-like institutions that involve hundreds of persons in the making of one work.²⁶ The collapse of author and writer into one person can be also be seen in Berys Gaut's notion of the author as a fictionalized construct similar to "a super-intelligent octopus, whose tentacles control the myriad machines of cinema."27 According to this view, all aspects of moving image creation, all responsibilities and roles are embodied within one supernatural being. The essence of this broad concept can be evinced by a question posed directly by Gaut: "[H]ow can there be a single author if there are very many artists involved in film production? . . . [I]t is commonplace that most films are highly collaborative, and

²⁴ MacNeil, Trusting Records, 105.

²⁵ Ibid

²⁶ Paisley Livingston, "Cinematic Authorship," in *Film theory and philosophy*, eds. Richard Allan and Murray Smith (Oxford: Clarendon Press, 1997), 138.

collaborative in ways that affect their artistic properties: actors, screenwriters, producers, cinematographers, all leave their marks on the way a film looks and sounds." Indeed, here, the notions of author and writer are used interchangeably, and it is this interchangeability that has confused and created tension within theories of moving image authorship. By using diplomatic principles and concepts to separate the notions of writer and author, we can analyze in more depth the process of moving image creation, and also explain the roles of all persons who contribute to the articulation of a moving image's content.

Berys Gaut has eloquently likened the creation of moving images to a complex yet natural process of interlocking roles and responsibilities. These roles and responsibilities point to the diplomatic notion of writer: "whether they be the acting, editing, writing, or whatever – we see the results of others' actions."²⁹ The persons involved in, and the elements that make up a moving image are each only "a single strand in the intricate web of a film."³⁰ In fact, the International Federation of Film Archives identifies approximately one hundred physical and corporate persons that could possibly be involved in the production of a moving image in their *Glossary of Filmographic Terms*. These persons range from the director, the cast of actors, the executive producer, the set designer, the make-up artist, and a myriad of other individuals and organizations whose contribution to the production of the moving image is a concrete part of its final documentary form.³¹ It is important to remember, however, that the diplomatic notion of

²⁷ Berys Gaut, "Film Authorship and Collaboration," in *Film theory and philosophy*, eds. Richard Allan and Murray Smith, 161.

²⁸ Ibid., 150.

²⁹ Ibid., 156.

³⁰ Ibid.

³¹ The Glossary of Filmographic Terms is a reference that includes almost every type of credit that may be included in the moving image. Production and Cast credits are included from pages 36-40 and 48-102. Credits are arranged into the following categories: Producing; Direction; Scripts and Sources; Cinematography; Action Sequences; Special Effects; Laboratory; Art Direction; Editing; Music; Cast; Sound; Dubbing; Animation; Compilation;

writer is linked to certain responsibilities and competencies related to the form of the record, and does not include the persons who are the object of the moving image camera's gaze, such as a specific socio-cultural group featured in an ethnographic moving image or a series of persons retrieving money from an automatic teller machine in a bank's surveillance moving image. On the other hand, one might be tempted to consider actors who portray characters in fictional moving images to be writers, if they give an individual contribution to the articulation of the moving image's content; however they are not writers because such contribution is outside their formal competence. In fact, the key to a correct and useful diplomatic analysis is to avoid the examination of content, to focus instead on process and the roles active in this process on the one hand (a top-down analysis), and on form on the other hand (a bottom-up analysis).

According to diplomatics, documentary form has two components, physical form and intellectual form. These two components of documentary form consist of certain elements: extrinsic elements (e.g., medium, presentation, special signs) constitute the physical form of the record and its outward appearance; and intrinsic elements (e.g., date, address, salutation, preamble, narration) constitute the record's intellectual articulation of the content. According to moving image theorists, the form of moving images is more complex. Christian Metz identified five different components of documentary form for the moving image's communicative expression: the image track; the dialogue track; the noise track; the music track; and the written materials track. These five tracks may potentially be considered the fundamental structure of the moving image as a record, parallel to the basic structure within

Television. Jon Gartenberg, Glossary of Filmographic Terms, 2d ed. (Brussels, Belgium: Fédération Internationale des Archives du Film, 1989).

³² Luciana Duranti, Diplomatics: New Uses for an Old Science, 134, 141.

which the diplomatic extrinsic elements of form are organized, that is, protocol (i.e., the introductory part), text (i.e., the central part), and eschatocol (i.e., the conclusive part). In addition, the form of a moving image contains elements that can be equated with extrinsic elements of presentation, such as flashbacks, dissolves, and fades, and elements that can be equated with intrinsic elements of text, such as plot structure and shots.³⁴

According to André Bazin, the form of moving images as an ensemble of rules of communication should be expressed through the concept of genres. Form is a set of "well-defined styles of photography and editing perfectly adapted to their subject matter; a complete harmony of image and sound." Indeed, the link between form and content in the realm of moving image theories derives not only from the process of editing footage in the creation of the final version, but also from the overarching notion of genre. Simply stated, moving image genres are classes or types of moving images that express similar plots, characters and events in a stylistically and structurally similar manner. Moving images are classified into groups, or genres, for several purposes: for critical appraisal; to facilitate an identification of the subject matter; or to give a clue or reference as to their nature. In his book *Films by Genre*, Daniel Lopez identifies and defines seven hundred and seventy-five generic categories of moving images, fictional, factual and otherwise, produced within a host of different contexts for a host of different audiences, from commercial mass consumption to private home viewing. However, the notion of genre does more than indicate the moving image's internal articulation. Genre is also

³³ Robert Stam, Robert Burgoyne, and Sandy Flitterman-Lewis, New Vocabularies in Film Semiotics: Structuralism, post-structuralism and beyond (London: Routledge, 1992), 59-60.

Susan Hayward, Key Concepts in Cinema Studies (London and New York: Routledge, 1996), 131.
 André Bazin, What is Cinema?, trans. Hugh Gray (Los Angeles: University of California Press, 1967), 29.

Frank E. Beaver, Dictionary of Film Terms (New York: McGraw-Hill Book Company, 1983), 142.
 Daniel Lopez, Films by Genre: 775 Categories, Styles, Trends and Movements Defined with a Filmography for Each (Jefferson, North Carolina: McFarland and Company, Inc. Publishers, 1993), xxi.

indicative of a tripartite concept of production, marketing and consumption. It consists of codes and conventions that are understood by audiences and are subject to the changing social, economic, technological and cultural tides. Indeed, "genres are inflected as much by the capitalist imperatives of the film industry as they are by audience preference and the sociohistorical realities of any given period." In the measure in which specific combinations of intrinsic elements of form are indicative of the content of the record (e.g., they reveal whether we have a contract, a letter, minutes, a budget, etc.), genres can be paralleled to types of record forms, in that it indicates very generally the nature of the moving image's content.

However, one may wonder whether, in light of the fact that moving images are not necessarily required to adhere to the codes and conventions (the rules) of a particular genre as strictly as textual documents adhere to specific forms, is it accurate, or instructive, to equate the moving image notion of genre with the diplomatic notion of form? Moving images can be the result of administrative procedures as well as of a creative process. The creative process implies a certain freedom of expression and the capacity to "break the rules" – even the rules of representation. The notion of documentary form as applied to images generally has not been accepted by some archival scholars. In her article relating the usefulness of applying diplomatics to photographic images, Joan Schwartz comes to the conclusion that a rigid diplomatic notion of form "runs aground" when applied to photographic images, because they "are not produced by the same rules. Their structure is differently constituted and much less rigorously defined.

Words and images communicate in different ways and carry different burdens. They arise from

³⁸ Hayward, Key Concepts in Cinema Studies, 163.

different intentions, are directed at different audiences, and suit different purposes."³⁹ According to Schwartz, documentary form is not indicative of content as it is not related to the function of the photographic image.

However, other archival scholars do see the parallels between diplomatic form and the structure of images. Bruno Delmas asserts that the intrinsic and extrinsic elements of documentary form indicate the record's response to its function, and that this response is done "according to the rules and uses of the parent institution." More specifically, Nancy Bartlett states that the authenticity of images refers directly to the image's compliance with "a system of rules for creation agreed upon by the agency of origin." In her study of institutional photographic images, Elisabeth Parinet argues a similar point to that of Bartlett, that, in some degree, images have rules, conventions and formulae defined by the creating body. Parinet offers an example of how the content of photographic images can be conditioned by rules of representation:

...I.D. photos requested by authorities for their records must conform to certain specifications as to format, background color, and degree of contrast in order to be accepted and entered into the archives. .. We are also familiar with the facilities used since the 1880s by the services de l'Identité judiciare to take I.D. photos according to Bertillon's specifications — a swiveling armchair with headrest placed facing the camera in the garish light coming from the window above. With these stipulations, the department defined a genre, the I.D. photo, which is not just a small-sized photo. 42

⁴² Elisabeth Parinet, "Diplomatics and Institutional Photos," American Archivist 59 (Fall 1996): 483.

³⁹ Joan M. Schwartz, "'We make our tools and our tools make us': Lessons from Photographs for the Practice, Politics and Poetics of Diplomatics," *Archivaria* 40 (Fall 1995); 51.

 ⁴⁰ Bruno Delmas, "Manifesto for a Contemporary Diplomatics," American Archivist 59 (Fall 1996): 447.
 ⁴¹ Nancy Bartlett, "Diplomatics for Photographic Images: Academic Exoticism?," American Archivist 59 (Fall 1996): 489.

Although documentary form as understood by diplomatists may be too rigorous a concept to apply to images generally, by considering the notion of genre parallel to that of a typology of documentary forms, we can rely on this concept for an analysis of moving images.

Within archival discourse, a discussion of the extrinsic and intrinsic elements of documentary form involves the use of specific terminology, which, to be useful in the area of moving image theories, must be reconciled with similar terminology and concepts used for moving images. An opportunity to investigate how the extrinsic and intrinsic elements of documentary form articulate themselves in moving images will arise from this reconciliation, out of which emerges a basic framework for a diplomatic analysis of moving images in the form of a template. The terms of reference used to build this framework are the "Template for Modern Diplomatics" from *Lineage of Elements Included in the Template for Analysis (pre-InterPARES)*, *Diplomatics: New Uses for an Old Science* by Luciana Duranti, and the *Template for Analysis* currently in use by the InterPARES Project. Thus, what follows is a discussion of individual diplomatic elements of documentary form, first extrinsic and then intrinsic, as they apply to moving image records.

1. Extrinsic Elements of Form

The extrinsic elements of documentary form are those that constitute the outward appearance of the record: medium, script, language, special signs, seals, and annotations.⁴⁴

⁴³ The InterPARES Project is an international research endeavor involving the collaborative efforts of archival scholars, computer engineers, national archives and private industry associations from fourteen nations. The InterPARES Project is attempting to develop the theoretical knowledge needed to solve the problems associated with the intellectual preservation of electronic records and their quality of authenticity by using diplomatic methodology.

⁴⁴ In both the Extrinsic Elements and Intrinsic Elements portions of this template, definitions of all the listed elements will be provided within the following discussion of each element.

1.1. Medium. The medium of records is any material support upon which the record is carried. In the traditional realm of record making, the most common medium of records is paper, however, medium can encompass a host of different physical materials upon which information can be recorded, including magnetic tape, celluloid film, and digital media. Among moving image theorists and practitioners, the term medium is used to refer primarily to the flexible and transparent base of cellulose triacetate, nitrate or other plastic strip, upon which are photographic emulsions or magnetic coatings, which are sometimes perforated for play-back purposes. This definition primarily encompasses film and video recordings. The National Archives of Canada includes its understanding of medium in the definition of the moving image itself, which is media-specific in nature. The moving image is one of three categories of audio-visual materials, "also called cinematographic film, [which] contains visual information and sound as a sequence of photographic images on a perforated plastic strip."45 The Complete Film Dictionary transcends the specificity of the two definitions above and defines medium as "the material or basic elements through which an agency or artist conveys information ... [Moving images are] the basic medium for the filmmaker."⁴⁶ As well, more contemporary works define, in conjunction with the traditional notion of film, digital supports as a possible medium upon which moving images are "written." For example, the Filmmakers Dictionary defines the digital versatile disk (DVD) as one of the possible media used in moving image creation. The DVD is an optically encoded plastic disc similar in all dimensions to a compact disc. Encoded information is formed into

⁴⁵ National Archives of Canada, *Managing Audio-visual Records in the Government of Canada* (Ottawa: Minister of Public Works and Government Services Canada, 1996), 2.

microscopic pits and is then read by a laser for play-back purposes. The DVD can hold many different records of the same work, thus, there is not a one to one correspondence between one document and one carrier. Often, one carrier contains the entire "file" (archivally, a set of records all related to the same transaction or matter). For example, some DVDs offer a selection of different versions of the same general story (the director's cut, lengthened versions including outtakes not previously included in the first release of the moving image in theatres, dubbed or subtitled versions in a myriad of languages, etc.)⁴⁷ Moving images are indeed carried by a wide range of media that develop and change over time as new technologies are discovered and implemented. "[W]hen media are added to an artform they may bring with them unexpected, unprecedented possibilities." With new technological developments of moving image media in mind, the diplomatic notion of medium is necessary to the analysis of moving images because its premise is not grounded in a medium-specific understanding of the moving image.

1.2. Script. Script is a set of presentation features that can be textual, graphic, aural or visual. It includes layout, pagination, typefaces, inks, paragraphing, punctuation, abbreviations, initialisms, erasures, corrections, software, and other formatting and formulae. In filmographic glossaries and other reference works, the term script refers to a particular kind of record created as a by-product of moving image creation. The script is a set of written specifications that serves as a guide for the course of action, dialogue,

⁴⁶ Konigsberg, The Complete Film Dictionary 2d ed., 234.

⁴⁷ Ralph S. Singleton and James S. Conrad, *Filmmaker's Dictionary* 2d ed., ed. Janna Wong Healy (Hollywood, CA: Lone Eagle Publishing Company, 2000), 89-90.

setting, description of characters, the inclusion of sound effects, and stage directions, as well as much more. 49 As the creation of the moving image proceeds from a mere conceptual stage to the final steps of recording it onto a medium, the script may be reformulated several times. The final version of the script is termed the shooting script, which is a detailed written account of a moving image that includes all types of directions including directorial, set, camera, etc., and is broken down into individual scenes. 50 The script has the characteristic of continuity in that it is the even and logical flow of a moving image's intellectual articulation.⁵¹ The script and the moving image are separate records that are created as by-products of the action of producing a moving image. The diplomatic meaning of script, in moving images, is articulated in the audio track and visual track. The audio track is the optical or magnetic track photographically inscribed on the edge of the film or tape and contains aural information as a set of presentation features such as dialogue, narration, music, noise and sound effects.⁵² Aural presentation features are usually presented in a way that they are synchronized with the visual track of the moving image, although this does not necessarily occur as a formal rule in moving image post-production (during the editing stage). The lack of synchronization between the audio and visual tracks can sometimes be indicative of a thematic or emotive mood, which the makers of the moving image wish to present to our

⁴⁸ Noël Carroll, *Theorizing the Moving Image*, Cambridge Studies in Film, eds. Henry Breitrose and William Rothman, (Cambridge, N.Y.: Cambridge University Press, 1996), 53.

⁵¹ Ibid., 49.

⁴⁹ Konigsberg, The Complete Film Dictionary 2d ed., 348; and John Mercer, Glossary of Film Terms, The University Film Association Monograph, ed. Timothy J. Lyons, no. 2 (n.p.: University Film Association, 1979), 73; and Virginia Oakley, Dictionary of Film and Television Terms (New York: Barnes and Noble Books, 1983), 156; and Singleton and Conrad, Filmmaker's Dictionary 2d ed., 268.

⁵⁰ Desi K. Bognár, International Dictionary of Broadcasting and Film (Boston: Focal Press, 1995), 194.

⁵² Beaver, *Dictionary of Film Terms*, 271. The noise portion of the audio track is not included in Beaver's definition of, what he terms, the sound track. The noise portion of the audio track refers to one of Christian Metz's aural elements of the moving image. As well the noise portion of the audio track is expressed as the "recorded noises

senses. The visual track is the portion of the moving image medium that contains visual images. Presentation features of the visual track are, but are not limited to, images of persons, places, objects and events; the written articulations included in the front credits, end credits and intertitles; and optical transitions used to join shots and scenes together such as jump cuts, continuity cuts, match cuts, cross-cuts, montage cuts, compilation shots, cutaways, fade-outs, dissolves, wipes, and irises.⁵³ It is possible to analyze the written articulations included in the front credits, end credits and intertitles in the traditional manner of diplomatics. That is, to examine and determine the layout, pagination, typefaces, colour, paragraphing, punctuation, abbreviations, initialisms, and other formulae of the written articulations as their appearance is indicative not only of the thematic and / or emotive mood of the moving image, but also of the importance accorded to some of the moving image's writers. The importance and nature of the written articulations will be further explored in the Intrinsic Elements portion of the template.

1.3. Language. Leonard Boyle articulates the notion of language as a broad question: How is the record written? To address this question, he examines three components: one, the form of the record (the protocol, text, and eschatocol); two, formulae that may be "highly stylized and stereotyped;" and three, style, which reflects the approach, technique, and fashion of presenting information in a record by certain groups,

track" of Stam et. al.'s five tracks or channels of the moving image: moving photographic image, recorded phonetic sound, recorded noises, recorded musical sounds and writing (credits, intertitles, written materials in the shot).

53 Beaver, Dictionary of Film Terms, 80; and Hayward, Key Concepts in Cinema Studies, 60-2, 312-13.

organizations and individuals creating records in different time periods.⁵⁴ In keeping with Boyle's question of the manner in which a record is written, Luciana Duranti considers language as an extrinsic element of a record and expands on the usefulness of analyzing records' formulae, style, composition and vocabulary. In moving images, one should examine both the spoken language used by persons portrayed on the screen upon projection, and the written language of titles and credits also portrayed on the screen upon projection. In the moving image community, the notion of language is most often taken from semiology. Ferdinande de Saussure suggested a distinction between *langue* (system of structural relationships) and *parole* (expression of these relationships by means of language).⁵⁵ The study of parole in the realm of moving images can examine the individual moving image as an utterance that arises out of the langue (the language system). Techniques used in the creation of moving images, then, are the rhetorical and communicative elements of the moving image as a language system.⁵⁶

Diplomatically, the style of a moving image would relate to the particular manner in which a moving image is written, directed, performed, produced and / or edited.⁵⁷

The composition of a moving image would instead relate to the arrangement of scenes or shots, and of elements (such as the actors, sets, objects, lighting, etc.) within the shot itself.⁵⁸ The arrangement of scenes and shots is determined by the activity of editing. Editing literally refers to the manner in which the shots of the moving image's text are put together to make up the text as a whole. Although editing refers primarily to the

⁵⁴ Leonard Boyle, "Diplomatics," in *Medieval Studies: An Introduction*, 2d ed., ed. James M. Powell, (Syracuse, N.Y.: Syracuse University Press, 1992), 97-100.

⁵⁵ Jurij Lotman, Semiotics of Cinema, trans. M.E. Suino, Michigan Slavic Contributions, no. 5 (Ann Arbor: University of Michigan, 1981), 48.

⁵⁶ Konigsberg, The Complete Film Dictionary 2d ed., 208.

⁵⁷ Oakley, Dictionary of Film and Television Terms, 175.

⁵⁸ Ibid., 41; and Ralph S. Singleton and James S. Conrad, Filmmaker's Dictionary 2d ed., 70.

moving image's intrinsic elements, the connection of it to the element of language is important because it is associated with the notions of composition and style. In fact, some styles of editing are at times formulaic as well. Hayward delineates four fundamental categories of editing: one, chronological editing; two, cross-cutting editing; three, deep focus editing; and four, montage. Moving images may use only one or any combination of all four categories. The use of these different types of editing (called techniques) can communicate a certain style, especially when the montage technique of editing is used. Montage theory arose out the experimental Russian cinema of the 1920s and presents shots in juxtaposition to one another in order to generate meaning.⁵⁹ Hayward provides an excellent example of montage editing: "[T]he first set of shots depicts a poor woman and her undernourished child seated at a table upon which there is an empty bowl; but to the second set of shots depicting an overweight man with a golden watch and chain stretched over his fat belly; he is seated at a table groaning with food the rapid juxtaposition of these two sets of images through fast editing cause a collision that in turn creates [meaning]."60

The sequence of images not only indicates a certain style of creating moving images to communicate a message, but it also communicates information about the context of creation and about genre. Editing is the activity of creating a final product for dissemination from the work print and involves creating optical transitions such as cuts. Cuts mark the transition from one time and space to another as they are represented by different shots, in order to move the text of the moving image along efficiently. The type of cut used to make this transition carries a certain kind of meaning and determines

⁶⁰ Ibid., 79.

⁵⁹ Hayward, Key Concepts in Cinema Studies, 77-81.

the style and composition of the moving image generally. There are many different kinds of cut, such as jump cut, continuity cut, match cut, cross-cut, montage cut, compilation shot and cutaways, and all types are subject to fall in and out of favour as the trends of the time dictate. Certain genres of moving image tend to use certain types of cuts. For example, in thrillers and gangster films, cross cutting is used in order to create suspense and speed up the series of actions as they are manifested within the text of the moving image. 61 As mentioned earlier, different kinds of editing and cuts can reveal something about the context of creation. For example, editing techniques and cutting will differ for the moving images created as educational or instructional moving images and those that are created as avant-garde art house moving images for limited distribution. It is essential to keep in mind, however, that the creation of moving images is not strictly governed by authoritative and systematized rules and indeed any moving image technique can be employed for the creation of any type of moving image.⁶² Moreover, some moving image production theories claim that the cut, or the gap present between two shots, is a critical element of the moving image that communicates meaning. The gaps are similar to the holes of a spider's web – the web is full of holes (the cuts), but without them the web would not be a web. 63 It becomes apparent, therefore, that it is important to preserve the sequence of frames and shots of a moving image in order to maintain the integrity of its internal articulation and the meanings afforded by it as a language, and also to maintain the style and composition of the moving image as a whole.

⁶¹ Ibid., 60-2, 312-13.

⁶² Carroll, Theorizing the Moving Image, 243.

⁶³ Jean-Pierre Geuens, Film Production Theory, The SUNY Series: Cultural Studies in Cinema/Video, ed. Wheeler Winston Dixon (Albany, NY: State University of New York, Albany, 2000), 252-53.

1.4. Special Signs. Special signs are symbols that identify persons involved in the record's procedure of creation and in the validation of that record. Special signs are related to the act and the execution of it. In her special diplomatics examination of broadcast archives, Janice Simpson remarks that, in a television news programme, the video recording's special sign is the video-cassette's label that contains, among other information, the broadcast station's logo. 64 Indeed, the broadcast station's logo identifies one of the persons involved in the record's procedure of creation; the author. For other types of moving images the label affixed to the physical carrier of the message may contain a special sign in the form of a logo as well, although the label may not be necessarily recognized as a required element of the moving image. In moving images, however, special signs are not always articulated in extrinsic elements alone. The logos, or logotypes as they are sometimes termed, of production companies, distribution companies, broadcast organizations, and / or television networks, are also articulated on the screen upon play-back of the moving image. While the logotype is a specific graphic symbol that is used to identify persons, it may also be accompanied by signature music or sounds, that when presented in unison, may act as a person's identifying special sign (for example, the roaring lion of the Metro-Goldwyn-Mayer Studios).⁶⁵ From a strictly diplomatic stand point, the logotypes of the production, distribution, broadcast or television network organizations do not always constitute the outward appearance of the record. Instead, they may be portrayed on the screen only upon projection of the moving

⁶⁴ Janice Louise Simpson, "Broadcast Archives: A Diplomatic Examination," (M.A.S. thesis, University of British Columbia, 1994), 53.

⁶⁵ Konigsberg, The Complete Film Dictionary 2d ed., 221.

image. Although the distinction between extrinsic and intrinsic elements embodied within documentary form is clear for traditional textual records, it is less clear for moving images. For example, the special signs extrinsic element of documentary form could be subsumed under the Entitling or Attestation intrinsic element.

1.5. Seals. Seals were attached to complete records for the purpose of declaring their provenance and integrity. They were common in traditional textual records created during the medieval ages, and are still used for solemn records. Currently, seals have reappeared as a means to authenticate digital records, as evinced by the pervasiveness of digital signatures, which, being attachments, are indeed seals, not signatures. In the realm of moving images, a term or concept to express the diplomatic notion of seals does not exist. For moving images that are created for release to a mass audience in the commercial entertainment industry, a symbol, called the IATSE Seal is included within the internal articulation of the moving image in the end credits. IATSE (or the International Alliance of Theatrical Stage Employees, Moving Picture Technicians, Artists and Allied Crafts of the United States, its Territories and Canada) is a labour union that represents "behind the scenes" professionals that work in industries such as theatre, moving image, television, conference production, etc., such as camera operators, electricians, editors, costumers, grips, set painters, script supervisors, make-up artists, sound technicians, laboratory technicians, cartoonists, etc. The IATSE seal is included within the end credits of some moving images and functions as a guarantee that the moving image was created according to the regulations and procedures outlined by IATSE and by persons belonging to and accredited by IATSE while abiding by IATSE's

regulations. In this sense, the IATSE seal functions as an Attestation, an element of a record's intrinsic elements. The seal element as well as the special signs element outlined in 1.4, while traditionally belonging to the extrinsic elements of documentary form, may have a place within the intrinsic elements of a moving image.

1.6. Annotations. Annotations are additions made to the record after its completion either in the execution phase of an administrative procedure, in the handling of the business matter to which the record relates, or in the process of managing the record. In her special diplomatics study of broadcast archives, Janice Simpson discovers annotations made to a television news programme that was recorded from a live broadcast for preservation purposes. The television news programme is affixed to a magnetic videotape upon which is a label that contains handwritten information. "These handwritten details are annotations, and include the series title, the time-slot (the time the broadcast was scheduled to be aired), the broadcast date, the number of the videotape recorder on which the recording was made, the tape generation (master), and the initials of the videotape machine operator."66 These annotations were made in the process of managing the record. For moving images created for mass distribution to the commercial market, information similar to that contained in the annotations uncovered by Simpson are articulated in the Universal Leader, which allows projectionists to exhibit the moving image to an audience.⁶⁷ In these cases, however, the record is not effective and therefore not able to generate consequences without the Universal Leader, or its equivalent, because this is required for the proper exhibition of the moving image.

⁶⁶ Simpson, "Broadcast archives," 53-4.

In a way, the Universal Leader has the function of identification and authentication normally fulfilled by a seal.

Another example of annotations in the moving image realm is time code. Time code is a set of numbers that some recording devices include upon the frames of magnetic tape video recordings and are critical to the act of editing moving images efficiently.⁶⁸ There are several types of time code, one of which is SMPTE (Society of Motion Picture and Television Engineers) time code. More specifically, time code is an electronic numbering system that tags each frame with a unique identification number and can be recorded during production or can be added later during post-production. The code is written in hours, minutes, seconds and frames (there are thirty frames per second). For time code to be consistent with the diplomatic notion of annotations, however, only time codes that have been added after the moving image was initially recorded can be considered annotations. Time code is used to carry out a postproduction procedure (editing) in the overall action of making a moving image. In this sense, time code would be an annotation in the handling of the business matter to which the record relates. Time codes manifest themselves as audio signals on the second, third or fourth audio tracks, and sometimes on a dedicated time code track termed the address track. For moving images created using digital technologies, annotations can be manifested on the audio tracks and other dedicated tracks, which may contain elements of information, or metadata. Metadata is used to describe the audio / video content of

⁶⁷ The Universal Leader is a standardized leader developed by the Society of Motion Picture and Television Engineers, and is attributed to the Protocol portion of the Intrinsic elements that follow.

⁶⁸ Ken Dancyger, *The World of Film and Video Production: Aesthetics and Practice* (Forth Worth: Harcourt Brace College Publishers, 1999), 194-95.

the moving image and places it "within its documentary and administrative context." Heather MacNeil explains that metadata, if inextricably linked to the record it describes, is considered an annotation to that record. Currently, the SMPTE is working in conjunction with many interested parties such as the European Broadcasting Union and the U.S. Department of Defense to examine technologies that may address the metadata and file-wrapper concerns of digital moving images stored as computer files or stored on digital magnetic tape or disc. The *SMPTE Metadata Dictionary*, which has only been released in trial publication format, lists over 450 metadata elements that fall into eight classes: Identification; Administration; Interpretation; Parametric; Process; Relational; Spacio-Temporal; Organizationally Registered; and Experimental Use. 71

2. Intrinsic Elements of Form

Intrinsic elements of form constitute the characteristics of the record's internal composition.

They are grouped into three sections. The first section is the protocol, which includes entitling, title, date, invocation, superscription, inscription, salutation, subject, formula perpetuitatis, and appreciation. The second section is the text, which includes preamble, notification, exposition, disposition and final clauses. The third section is the eschatocol, which includes corroboration, complimentary clauses, attestation, qualification of signature and secretarial notes.

2.1. Protocol. The protocol is the section that conveys the administrative context of the action in which the record participates and may include the indication of persons (author,

⁶⁹ MacNeil, Trusting Records, 96.

⁷⁰ Ibid., 90.

⁷¹ Society of Motion Picture and Television Engineers Registry Authority, "SMPTE Metadata Dictionary Registry," July 2000, <<u>http://www.smpte-ra.org</u>> (30 June 2001).

writer, and addressee), time, place, title and / or subject and initial formulae, such as a salutation. As with all records in any media, the administrative context of the action in which the record participates will vary, as then will the existence and character of the record's protocol. For some moving images, such as feature presentations for commercial consumption or even factual films for limited distribution, the protocol is primarily contained within two elements of the moving image: the leader and the slate. A leader is a blank piece of moving image medium. For moving images whose medium is flexible triacetate, the leader is a piece of blank film attached to the head and tail of the moving image to thread the film and protect it from wear and tear. In general, leaders supply the projectionist with title, number of reels, and countdown numbers for changeover to the next reel, should the moving image as a whole be larger than one reel of film. Leaders are also pieces of film used in work prints (drafts of the moving image) in the editing process.⁷² The Academy Leader is a standardized head leader created by the Academy of Motion Picture Arts and Sciences. It includes a countdown from the number ten to the number two with a sound cue, or audio mark, occurring concurrently with the visual mark "2". The numbers presented in the countdown are evenly spaced sixteen frames apart. This sound cue signifies that the entitling (or credits) of the moving image is about to begin. The first image to be projected (no matter its contents) appears where the number one would be had it been included in the countdown.⁷³ While the Academy Leader provides standardization for the exhibition of a moving image's release prints, it is currently being displaced by the Universal Leader. 74 The Universal Leader is a standardized leader created by the Society of Motion Picture and Television

⁷² Konigsberg, *The Complete Film Dictionary* 2d ed., 210.

⁷³ Singleton and Conrad, Filmmaker's Dictionary 2d ed., 4.

Engineers (SMPTE) and includes words, numbers and symbols in addition to a countdown similar to that of the Academy Leader. 75 In the magnetic tape recording environment, the protocol sometimes includes a SMPTE videotape leader that contains information in this order: ten seconds of colour bar information (a test bar, colour chart or electronically generated colour test signal consisting of a bar each for red, green, blue, vellow, magenta, cvan, black and white); fifteen seconds of slate information; eight seconds of Academy count-down numbers; and two seconds of black. 76 Slate information is not only included in moving images that are release prints, but also in drafts of moving images that have not been edited yet: the work prints. Traditionally, a clapboard containing identification information (the slate information) is held in front of the moving image camera before each instance of recording a scene during production. Identification information includes the title of the moving image, the director's name, the cinématographer's name, the scene number being recorded, the "take" (a mention of the number of times a certain scene has been recorded on a chosen medium), and the date. After recording the slate information onto the moving image medium, the clapboard is then "clapped" in order to create an audio mark for editing purposes, which lets the editor know that the recording of the scene had begun. In the magnetic recording environment, the slate information is presented electronically and is accompanied by colour bar information, as well as a numbered count down and audio tone for marking / editing purposes.⁷⁷ Because of the information they contain, such as the mention of persons involved in the making of the moving image, the date, the count-down, and

⁷⁴ Oakley, Dictionary of Film and Television Terms, 103.

⁷⁵ Singleton and Conrad, Filmmaker's Dictionary 2d ed., 335. The SMPTE standard for leaders and cue marks, which includes frame by frame requirements, is fully detailed in "ANSI/SMPTE 55-1992: SMPTE Standard for Motion –Picture film – 35- and 16-mm Audio Release Prints – Leaders and Cue Marks."

other formulae, the leader and the slate of a moving image is consistent with the diplomatic notion of protocol in that they reveal the context in which the making of the moving image takes place.

2.1.1. Entitling. The entitling consists of the name, title, capacity and address of the physical or juridical person issuing the record, or of which the author is an agent. The entitling element is usually articulated at the beginning of textual records and takes the form of letterhead. In moving images it is possible for a mention of the name, title, and capacity of the author(s) of the record, to be at the beginning of the moving image in the front credits and at the end of it in the end credits. It is important to note, however, that not all moving images will contain credit titles at either the beginning or end of the record. Essentially, credits are a list of the names and functions of production personnel, including actors and other persons responsible for the conception and release of the moving image. The credits that articulate the names and titles of persons who have made a significant contribution to the moving image's creation are usually included at the beginning of the moving image before the text in the following order: distribution company; producer of production company presenting the moving image; the explicit mention of the name of the director (e.g. "A Stephen Spielberg film"); star actors; moving image title (a.k.a. main title); actors' names in an order either based on the importance of the role, alphabetically, or contractually negotiated; casting director; costume designer; composer; editor; cinématographer; production designer; screenwriter; producer;

⁷⁷ Ibid., 198.

⁷⁶ Bognár, International Dictionary of Broadcasting and Film, 46, 238.

director.⁷⁸ In the United States of America, the terms of the Director's Guild of America contract specifies to producers and production companies that the director's credit must be the last credit to appear before the beginning of the moving image's text (i.e. of the moving image's plot, fictional or otherwise). 79 Also, before the front credits are articulated, a scene from the text may be presented; this precredit sequence is called a teaser. 80 The list of persons who have made substantial contributions to the creation of a moving image is expanded on in the end credits of the moving image, which is most commonly a full list of the names and titles of all those persons who have taken part in the making of the moving image in even a minute way. Indeed, the International Federation of Film Archives has identified approximately one hundred credit titles that mention the names and titles of the different persons involved in the articulation and issuance of a moving image.⁸¹ Usually, even the juridical person (usually a private organization) that has been hired by the production company to design the titles and credits is included in the credit list. 82 Credit titles that articulate the names and titles of persons involved in the making of a moving image vary greatly in terms of placement, appearance, and inclusion, although there are some basic guidelines that those producing moving images follow. These guidelines are informal rules based on an unwritten industry-

⁷⁸ Singleton and Conrad, Filmmaker's Dictionary 2d ed., 132.

⁷⁹ Ibid., 177.

⁸⁰ Ibid., 231.

⁸¹ Gartenberg, Glossary of Filmographic Terms, 2d ed., 36-40, 48-102. The Glossary of Filmographic Terms is a reference that includes almost every type of credit that may be included in the moving image. Credits are arranged into the following categories: Producing; Direction; Scripts and Sources; Cinematography; Action Sequences; Special Effects; Laboratory; Art Direction; Editing; Music; Cast; Sound; Dubbing; Animation; Compilation; Television.

⁸² Bernard F. Dick, Anatomy of Film, 2d ed. (New York: St. Martin's Press, 1990), 8-10.

accepted pecking order. ⁸³ As well, credits may be negotiated contractually, decided upon solely by the producer, and / or required or suggested by various trade unions and craft guilds. Those producing a moving image are not bound by any of the trade union or craft guild regulations except if they are a signatory to that particular union or guild. Nevertheless, the regulations set forth by these groups are followed by those producing moving images, whether they are bound by them or not, as they are generally accepted as the proper way to include credits in the moving image itself. American unions and guilds that provide regulations and standards on the inclusion and appearance of credits are, but are not limited to: the Directors Guild of America; the Screen Actors Guild; the Writers Guild of America; and the Costume Designers Guild. The time allotted for screen credits may also be regulated by the television networks, which may have other requirements should the moving image have been created for the television industry. ⁸⁴

2.1.2. Title. In traditional textual records, the title of the document is included after the entitling, although it can sometimes be in place of the entitling. In moving images all the written elements are grouped together as titles. In the broadest sense, titles are any words that appear on the screen that are not a part of the text, that is of the action or scene, but are meant to convey information to the audience. Title includes: credit titles; main title; end title, which explicitly states to the audience that the text of the moving image is over ("The End"); end titles, otherwise known as closing credits; insert titles, otherwise known as intertitles, which are manifested in the text

⁸³ Eve Light Honthaner, The Complete Film Production Handbook (Los Angeles: Lone Eagle Publishing Company, 1993), 170.

of silent moving images to communicate dialogue and voice-over narration, and in the text of sound moving images to indicate the time and place of the text's action; and finally subtitles, which translate the audio dialogue and voice-over narration from one language to another. Titles can also be on a blank screen, superimposed over a scene, or moved across the screen. This broad notion of titles as understood by the moving image community requires that, for diplomatic purposes, the specific notion of main title be used as the equivalent of the diplomatic title. The main title specifically refers to the title card in the credits containing the moving image's name or designation. The elements of the title may include graphic material, lettering and / or artwork that communicates the main title and also may be accompanied by music or sounds. This type of information could be included within an examination of the moving image's extrinsic elements under the element of script.

2.1.3. Date. The date is a mention of the place (topical date), and the time (chronological date), of a record's compilation and / or of the action that the record documents. With moving images, the most common term that is equivalent to a general concept of date is that of the release date. The release date, or opening date, as it is sometimes termed, refers to the day, month and year in which a moving image is released (i.e. exhibited or projected) to the consumer market. ⁸⁷ Unlike the diplomatic notion of date, the moving image notion of release date, then, is

84 Ibid., 170-172.

⁸⁶ Bognár, International Dictionary of Broadcasting and Film, 223.

⁸⁵ Konigsberg, The Complete Film Dictionary 2d ed., 425.

⁸⁷ Singleton and Conrad, Filmmaker's Dictionary 2d ed., 253; and Mercer, Glossary of Film Terms, 69.

inherently linked to the moving image's reception by any audience and presumes that several copies (release prints) of the moving image master positive (or answer print, the first acceptable positive release print struck from the master negative) have been distributed on a wide scale. Thus, the release date corresponds to the diplomatic date of receipt whereupon an audience first receives the moving image. The date of receipt should not be confused with the date of transmission, which is linked to the day and time the moving image was distributed to the organization that projects it, such as a theatre, and not linked to its receipt by an audience. The date of compilation of a moving image would most likely correspond to the date in which the director delivers the edited moving image to the producer. As well, the International Federation of Film Archives, in its Glossary of Filmographic Terms, identifies several date elements that may or may not be present in the front or end credits of a moving image: Date(s) of production (also termed Production date, and Year of Production); Beginning of shooting; Completion of shooting; First screening (also termed Premiere); and Date and place of first public showing in the country of origin.⁸⁸ For moving images that are not intended to be distributed on a wide commercial scale, such as home movies and surveillance videos, credits and therefore a formal date element may not be present. Instead, the date may be articulated in some other manner, visual or audio. For example, the date may be manifested as a voice-over narration in home movies ("Here is the family opening presents on Christmas Day 1975 in our new house in Calgary"), or as recorded text on the visual tracks of most surveillance videos, such as those used by banks in

⁸⁸ Gartenberg, Glossary of Filmographic Terms, 2d ed., 34.

automatic teller machine areas. Even for moving images created as a by-product of the process of creating another moving image for wide-scale commercial distribution, such as work prints, slate information recorded onto the moving image medium includes the chronological date. These examples indicate that the date does not necessarily appear as one fixed element at the beginning of the record as in textual records, but can be present in any section of the moving image, and can exist aurally or visually, formally or informally. As well, in the case of moving images that continuously record the passing of time on the visual track, the date does not necessarily appear in a fixed form (e.g., 10:21am/05/06/01) but changes constantly as the moving image is recorded and subsequently played back. In this sense, the moving image's date element would comprise a range of dates (ex. 10:21 am/05/06/01 - 10:20 am/05/07/01). The date element is also expressed as a range of dates in magnetic tape recordings that use free-run time code, which is an electronic numbering system used to specifically identify each frame of the moving image. As mentioned in the Annotations element, a time code can be recorded automatically by some recording devices, or it can be added after in the postproduction process. Specifically, the numbers used in free-run time code are analogous to the time of day (chronological date expressed as hours : minutes : seconds: frames) and run continuously whether the camera is recording or not.

2.1.4.Invocation. The invocation indicates that the action being documented, or the document itself is created in the name of God, in the name of the people, in the name of a particular ruler, the government, or the law. The invocation element and all of the following elements to 2.1.10 could be articulated in the titles and / or audio

track of a moving image. A character, commentator and / or anonymous narrator could state that a particular moving image was created in the name of the people of British Columbia for example. Opening titles may also articulate textually the invocation. Opening titles are similar to credits in that they are textual titles comprised of words that appear on the screen not as a part of the action or scene, but as a means to convey information to the audience. Many functions are served by opening titles the first of which is most similar to the diplomatic notion of invocation. First, opening titles can preface or explain the basis upon which the content of the moving image, fictional or otherwise, is manifested. Second, they can be time and place designations for the content of the moving image, fictional or otherwise. Third, they can express or impose a point of view or mood onto the content of the moving image, fictional or otherwise, by using literary elements such as epigraphs or quotations. Four, they can be used as disclaimers.⁸⁹ Of course, the need for and inclusion of all of these functions and the subsequent use of opening titles are at the complete discretion of those creating the moving image.

2.1.5.Superscription. The superscription is a mention of the author of the record and / or of the action being recorded and is separate from the entitling element. In moving images, a term or concept to express the diplomatic notion of superscription does not exist. As mentioned when discussing the invocation element (2.1.4), the superscription element could be articulated in the titles and / or audio track of a moving image.

⁸⁹ Dick, Anatomy of Film, 2d ed., 12-13.

- 2.1.6.Inscription. The inscription is the mention of the addressee of the record and / or of the action being recorded. The mention of the addressee may include the name of the person or the group of people being addressed, the addressee's title or function, and the addressee's address. The inscription is typical in correspondence, contracts, and memos, but in moving images it is less common. It is generally understood that the addressee of a moving image is a general entity, either the public or whoever is given access to it. Sometimes, as a moving image is either commissioned by or made for a very specific person or organization, the addressee is expressed in the record transmitting the moving image.
- 2.1.7.Salutation. The salutation is included primarily in correspondence and other epistolary records and can appear in either or both the protocol and eschatocol. With moving images, a term or concept to express the diplomatic notion of salutation does not exist. However, an equivalent entity may sometimes be found in the titles and / or audio track.
- 2.1.8.Subject. The subject element is articulated in the protocol and indicates what the record in question is about. The subject element could be articulated in the titles and / or audio track of a moving image. Some makers of moving images may choose to include a pre-credit sequence called a teaser. The teaser is a portion of the moving image's action or scene section that has been reproduced from the central portion of the record and placed at the beginning of the protocol. This practice was

in vogue by the 1950s and is currently used at the discretion of moving image makers. The teaser is "a section of narrative or a generalized sequence indicating the film's setting or subject." Thus, in moving images, should a subject element be articulated by way of a teaser pre-credit sequence, it would most commonly occur at the beginning of the protocol, but could conceivably be included at any point before the action or scene portion of the moving image begins.

- 2.1.9.Formula Perpetuitatis. Primarily articulated in medieval records, the formula perpetuitatis element states that any rights created or accorded by the issuance of the record are to be extant forever. The formula perpetuitatis element is used only in records that confer rights or privileges onto persons, thus, it may seem irrelevant to moving images because they are not necessarily created to confer rights or privileges. However, moving images are created for a host of reasons that may include the granting of rights. For example, since the advent of the video recording, some private individuals have chosen to articulate their Last Will and Testament personally on video. This type of moving image may contain a formula perpetuitatis in the titles and / or audio track.
- **2.1.10. Appreciation.** The appreciation element is the articulation of a hopeful request or appeal for the fulfillment of the record's content. While the appreciation element commonly exists in textual records in either the protocol or the eschatocol, in

⁹⁰ Liz-Anne Bowden, ed., The Oxford Companion to Film (London: Oxford University Press, 1976), 163.

moving images it commonly exists in the eschatocol in the titles and / or audio track.

2.2. Text. The text is the central portion of the record and consists of the action or matter the record is about, including the considerations and circumstances that gave rise to it, and the conditions related to the action's accomplishment. For all moving images generally, the text reflects the act of recording onto a moving image medium the persons, places, objects and / or events placed by happenstance or intention in front of the moving image camera. As well, the text of a moving image can reflect fictional or non-fictional persons, places, objects and / or events. With moving images, the diplomatic notion of text corresponds to the structure, plot or diegesis and is the consolidation of the language, sound, settings, dress, gesture, images, shots, editing and generic conventions that are all codes that form the text itself. Structure includes narrative structure, thematic structure and filmic structure (the interaction and total effects of specific types of shots and editing techniques). 91 Text is also the characters, plot, dialogue and images and their direct and immediate denotative meaning. Text is not the subtext (or symbolism and iconography suggested by the images and sounds), nor the context of the moving image's creation. 92 The text may include printed material that appears periodically on the screen in the form of intertitles and subtitles. In the silent era, moving images depended on intertitles to communicate dialogue between characters as well as other information to the addressee. However, intertitles can also be used to attest to the accuracy of a particular setting or situation by including a mention of the time and / or

⁹² Ibid., 415-16.

⁹¹ Konigsberg, The Complete Film Dictionary 2d ed., 397.

place, to comment on the action occurring in the text, to appeal to the addressee's emotions, to explain concepts with which the addressee may not be familiar, to reveal a character's thoughts, or to characterize separate vignettes that may be present in the moving image as a whole.93 Subtitles function as a facilitator in the transmission of dialogue, usually by translating the language spoken in the moving image into another language for the purposes of world-wide distribution and generally for the benefit of the addressee (or viewer).94 In traditional textual records, the text usually is presented directly after the protocol section of the record. The text portion of a moving image commonly is presented after the moving image protocol (that is, the front credits). However, it may be possible for a portion of the text to be included before the protocol. This portion of the text is called a teaser or a pre-credit sequence and, as argued earlier, functions as the subject element of the protocol, but also as an element that will incite or intrigue the interest of the audience in the content of the text. Furthermore, the protocol front credits may be presented simultaneously with the text portion of the moving image; the credits may be superimposed on the scene, on the persons, places, objects and / or events portrayed. Thus, for a diplomatic examination of moving images it is necessary that the temporal and intellectual overlap of the protocol and text be permitted.

2.2.1. Preamble. The preamble element usually appears at the beginning of the record's text and articulates the ideal reason for which the record or the action to which the record pertains is being generated. "It consists of general considerations, which are not directly linked to the subject of the documents, but express the ideas

94 Ibid., 16.

⁹³ Dick, Anatomy of Film, 2d ed., 14-16.

which inspired its author." With moving images, a term or concept to express the diplomatic notion of preamble does not exist. However it could conceivably be possible for the preamble element to be articulated by way of certain types of titles and / or voice over third-party narration and / or character direct address.

- 2.2.2. Notification. The notification element in traditional textual records communicates to all interested parties that they should be aware of the record's existence and the nature of its content and function. With moving images, a term or concept to express the diplomatic notion of notification does not exist. However it could conceivably be possible for the notification element to be articulated by way of certain types of titles and / or voice over third-party narration and / or character direct address.
- 2.2.3. Exposition. The exposition element articulates the concrete and direct reasons that give rise to the act and / or the record. The term exposition is used by the moving image community to denote the act or process of explaining or disclosing background information to an audience through the use of dialogue or visual images. The exposition is the portion of a narrative work, which establishes for the audience the general situation of the characters and the premise for the action portrayed in the moving image's text. This could manifest itself in three ways: by the characters' discussion of past events and the present state of affairs of themselves and others not apparent in the text yet; by a series of shots that can

⁹⁵ Duranti, Diplomatics: New Uses for an Old Science, 145.

⁹⁶ Singleton and Conrad, Filmmaker's Dictionary 2d ed., 110.

explain, or set in front of the addressee the information needed to clarify the forthcoming events included in the text (these are termed establishing shots); or by means of flashbacks portrayed in the text of the moving image.⁹⁷ The latter manifestation indicates that for moving images, the exposition may be articulated at any time during the play-back of a moving image, not just at the beginning of the text. For moving images, the exposition is also a supplementary commentary spoken by a voice that is not necessarily attributed to any of the characters on the screen. In documentaries and educational moving images, narration generally is attributed to a neutral but informed third party that functions as an expert. It is a narration that is supplemental to the images and places them in a larger context for the benefit of the addressee. 98 The International Federation of Film Archive's Glossary of Filmographic Terms identifies the "Introductory Title" credit as an element that is "used either for explanatory purposes or to establish the setting for the [moving image] which follows."99 The term exposition, as the moving image community understands it, is inconsistent with the diplomatic term exposition. Thus, moving image exposition does not give reasons for the author's need to make the moving image, other than in exceptional cases. In other words, with moving images, the exposition is the narration of the reasons and circumstances that give rise to the action that progresses in the content of the moving image.

2.2.4. Disposition. The disposition is the action or matter the record is about and is at the core of the text. The disposition expresses the will of the author to carry out or

98 Ibid., 261.

⁹⁷ Konigsberg, The Complete Film Dictionary 2d ed., 124.

document the act to which the record pertains. With moving images, a term or concept to express the diplomatic notion of disposition does not exist, however its conceptual scope is similar to the definitions of the terms structure and text. As well, the *SMPTE Metadata Dictionary* expresses the concept of disposition using the term "essence." The disposition, or essence, of a moving image would therefore consist of plot structure and the arrangement of shots containing images of fictional or non-fictional persons, places, objects and / or events. Disposition would also include the dialogue, sound, music, images, editing techniques, special effects, and generic and thematic conventions, which accompany the plot structure and the arrangement of shots.

2.2.5. Final Clauses. The final clauses are usually included immediately after the disposition and vary in their nature and function. Clauses of injunction articulate the obligation of others to adhere to what the record decrees. Clauses of derogation articulate the obligation of others to respect decisions expressed in the record. Clauses of exception articulate exceptional circumstances that may exist regardless of what the record decrees. Clauses of obligation articulate the obligation of the parties to which the record pertains to respect what the record establishes. Clauses of renunciation state that a particular person has renounced a right or privilege. Clauses of warning articulate the nature of the negative consequences that will ensue should the record not be respected or improperly implemented. Promissory clauses articulate the probability of a prize being offered to those who respect the

⁹⁹ Gartenberg, Glossary of Filmographic Terms, 2d ed., 32.

record. Finally, clauses of corroboration articulate that the record is valid and authentic.

In moving images, the only equivalent element is the clause or warning related to copyright infringement. Disclaimers can also be categorized as clauses, although of a different nature from those listed above. For some moving images that portray characters and events that are fictional or quasi-fictional in nature, disclaimers are not necessarily included in the text, but instead are manifested in the protocol or eschatocol in the credits and usually accompany the copyright infringement clause. A typical disclaimer states that the moving image intends to present characters and events that are fictitious in nature. ¹⁰¹ The purpose of such a disclaimer is to discourage possible plaintiffs from instigating a law suit against the creator of the moving image. This occurs when the plaintiff claims that the characteristics of a fictional character portrayed in the moving image leads to the identification of a real person, and such characteristics are defamatory and are "of and concerning" the plaintiff. ¹⁰² It has been suggested that to fully advise viewers of the fictional nature of the moving image, a visual disclaimer alone may not be

Society of Motion Picture and Television Engineers Registry Authority, "SMPTE Metadata Dictionary Registry," July 2000 http://www.smpte-ra.org (30 June 2001).

¹⁰² Eva J. Goldenberg, "Plaintiffs in Pursuit of Privacy – Libel in Fiction," Cardozo Arts and Entertainment Law Journal 5 (1986): 545-6. And, Leslie J. Ames, Andrew S. Atkins, and Kenneth A. Dangerfield, "Production," in Continuing Legal Education Society of British Columbia, The Film Industry – Practice and Procedure: Materials

Two examples of typical disclaimers are: "The events, characters, and firms depicted in this photoplay are fictitious, any similarity to actual events or firms, is purely coincidental. Ownership of this motion picture is protected by copyright and other applicable laws, and any unauthorized duplication, distribution or exhibition of this motion picture could result in criminal prosecution as well as civil liability." And "This film is based on true events, however, some of the names in this film were changed and some events fictionalized for dramatic purposes. This motion picture is protected under the laws of the United States, Canada and other countries, and its unauthorised duplication, distribution or exhibition may result in civil liability or criminal prosecution." The former is cited from Eve Light Honthaner, The Complete Film Production Handbook, 177, and the latter is cited from Deborah S. Patz, Surviving Production: The Art of Production Management for Film and Television: The Art of Production Management for Film and Television (Studio City, CA: Michael Wiese Publications, 1997), 239.

adequate, and therefore an audio disclaimer should accompany the visual. ¹⁰³ Thus, disclaimers and clauses may manifest themselves on the audio and / or visual tracks of the moving image in the protocol, text and / or eschatocol.

2.3. Eschatocol. The eschatocol is the portion of the record that contains elements related to the context of the action's documentation, including the mention of the means by which the record is validated, the attestation of those responsible for the act and / or the record and the qualification of their signature, as well as final formulae. The eschatocol of the moving image embodies the end credits directly following the text, which are sometimes termed closing credits or the end crawl (to reflect the manner in which the end credits appear to crawl up the screen). The end credits mention those responsible for the act of creating the moving image in question, and include final formulae. In some cases, the end credits may be accompanied by outtakes of the moving image, which directly and explicitly show portions of the moving image's production. Outtakes are moving images that, although recorded during the production stage, were not included during the editing stage, which excluded them from the moving image released to the audience. Including outtakes in tandem with the end credits is at the discretion of the moving image's authors and is commonly done to elaborate on the process of making the moving image, for satirical effect, or for other thematic reasons. The end credits is a list of individuals (cast and crew) who worked on the moving image. Currently, end credits include everyone

prepared for a Continuing Legal Education seminar held in Vancouver, B.C. on January 30, 1991 (Vancouver: Continuing Legal Education Society of British Columbia, 1991), 3.2.09.

¹⁰³ Debra Meyer Glatt, "Trial by Docudrama: Fact or Fiction?," Cardozo Arts and Entertainment Law Journal 9 (1990): 230.

who worked on a moving image "from the accountants to the star's fitness trainer." 104 The extensive list provided in the end credits is indicative of the sheer complexity of moving image production and of the fact that indeed the process of making a moving image is collaborative in nature. Due to contractual arrangements made between star actors and the production company, as well as other regulations specified by various trade unions and guilds, a production company's lawyers will usually prepare the end credits in the proper order and with proper emphasis. It is important to remember however, that this normally occurs within a context where moving images, feature length or otherwise, are released on a large scale for the consumer entertainment marketplace. The end credits can also be treated creatively and can include further or repeat scenes from the text of the moving image as well as be accompanied by evocative music or other sounds. This treatment is at the discretion of those involved in the production of the moving image. The end title, which explicitly states to the addressee that the moving image is over ("The End" or "fin"), is not formally required and it may appear after the eschatocol or the text. Therefore, it is important to note that the end title (and perhaps all other written articulations) may not necessarily appear in their proper sections and may overlap into other sections within the moving image's temporal and intellectual structure. 105 End titles can also be used to provide the addressee with further information about the outcome or conclusion of the text; they extend the text in that the substance of the action could be manifested by not only sound and images, but by titles as well. 106

¹⁰⁴ Dick, Anatomy of Film, 2d ed., 10.

¹⁰⁵ Ibid., 10-12.

¹⁰⁶ Ibid., 13-14.

- 2.3.1. Corroboration. The corroboration is usually the first element extant in a record's eschatocol. It is a formulaic phrase that describes the means used to validate the record and allows for the verification of its authenticity. In the realm of moving images generally, a term for corroboration does not exist. However, some statement about the authenticity of the moving image may be articulated in the titles and / or audio track. The corroboration usually includes the topical and chronological date or refers to the date that is articulated in the protocol portion of the record. With moving images that are distributed on a wide scale for the commercial market or public exhibition, the date in the eschatocol extant in the moving image is the copyright date. The copyright date articulates the year in which the production company that produced the moving image established its rights over the moving image as its intellectual property.
- 2.3.2. Appreciation. The appreciation element of the eschatocol, which expresses gratitude or a wish, is most commonly articulated in the end credits of a moving image. The International Federation of Film Archives in their *Glossary of Filmographic Terms* has identified a credit included in some moving images termed the "cooperation" credit. The cooperation credit is a written articulation that commends "an institution or person other than production staff that provides expertise or help not obtainable within the producing company." The cooperation credit is usually indicated by the phrase "With the cooperation of . . .", or "Special Thanks to . . ." and mentions the name and title of a person or organization who has

offered any kind of support in the creation of the moving image, for example a cultural government department or granting agency such as the Canadian National Film Board or the Canadian Film or Video Production Tax Credit Program. 108

- 2.3.3. Complimentary Clause. The complimentary clause is a short phrase that articulates the author's or writer's respect (e.g. "With warmest regards, . . .") and is most common in unofficial private records. With moving images a term for complimentary clauses does not exist; however, the sentiments of the author or writer may be expressed in the titles and / or audio track of a moving image.
- 2.3.4. Attestation. The attestation element comprises the signature of the author, writer, countersigner and / or witnesses who took part in creating, issuing and validating the record. An attestation is sometimes manifested by something equivalent to a signature, but different. For example, an attestation in the form of a cross, instead of a signature, would indicate an illiterate person. With moving images created for mass distribution in the commercial market, the attestation normally comes in the form of the logotype of those organizations that took part in the making, issuing and validation of the moving image. As mentioned in element 1.4 Special Signs, the logotype of an organization is composed of a characteristic audio and visual icon that can only be attributed to that organization, in most cases, because it is protected through intellectual property laws. As pointed out in element 1.5 Seals, the seals of

Gartenberg, Glossary of Filmographic Terms, 2d ed., 40.

¹⁰⁸ The Canadian Film or Video Production Tax Credit Program is only one a several moving image related tax relief programs administered by the Canada Customs and Revenue Agency (CCRA). Specifically, the Canadian

labour unions such as IATSE are included in the end credits to guarantee that the moving image was created according to a specified set of regulations. The term signatory is used in the moving image community to refer to organizations, such as networks, studios and production companies, who sign and are bound by contracts and arrangements made with moving image production related unions and guilds, such as IATSE, according to union regulations. As well, the end credits (in addition to the front credits) include a list of all those persons who took part in the making of the moving image, and the mention of each of these persons' names could be considered manifestations of the attestation element.

2.3.5. Qualification of Signature. The qualification of signature is the mention of the signer's title. With moving images, a term for qualification of signature does not exist. However it is possible that the qualification of signature element could be articulated in the titles and / or audio track of a moving image. As a concept, however, the qualification of signature exists in moving images as a mention of whom the signers are and as an identification of their roles. For example, the end credits may include an attestation in the form of a person's name ("Leigh Miller") followed by the signer's title ("Art Director"), or the attestation and qualification of signature can be expressed in reverse order as: "Casting by Jean Quine." This reverse order is also used to express the attestation and qualification of signature of organizations involved in the moving image's making, issuance and validation: for

Film or Video Production Tax Credit Program is supported and administered jointly by the CCRA and the Canadian Audio-visual Certification Office.

example, "Distributed by [company logo insert]." However, not all attestations are accompanied by qualifications of signature, as union, guild and association logos that are manifested in the end credits – such as the IATSE logo – do not mention who these persons are, other than by mentioning the name of the union, guild or association.

2.3.6. Secretarial Notes: The secretarial notes are the last element of the eschatocol. It refers to notes such as a typist's initials, or an indication that the record includes enclosures or has been copied to another person. With moving images, a term for secretarial notes does not exist, however it is possible that the secretarial notes element could be articulated in the titles and / or audio track of a moving image.

As a result of the various uses of moving images and the purposes for which a creator can willfully employ them, the formal procedures used to make and produce moving images are less rigorously defined than is the case for bureaucratic and administrative records that are textual in nature. Moving images are mediated representations of persons, places, objects and / or events, and are the products of a series of collaborative decisions and actions generated by an author's will to reach its purposes. In this chapter an attempt has been made to find a parallel between diplomatic terminology and concepts and moving images terminology and concepts that fulfill similar functions in the moving image record. The motivation for undertaking this task is this author's basic assumption that a diplomatic analysis would support an understanding of the moving image record. Therefore, this understanding will allow those entrusted with the moving image record's maintenance and preservation to handle the threats to its integrity posed by the

increased use of digital technologies for making, exhibiting and storing moving images. The analysis of the extrinsic and intrinsic elements of documentary form has revealed two important issues for the diplomatic analysis of moving images generally. The first issue is the need to eliminate a strict distinction between the physical and the intellectual form of the moving image record as manifested in extrinsic and intrinsic elements. For example, although it is possible for the special signs and seals of the moving image to manifest themselves in the outward appearance of the record, their function may also be found in the Entitling and Attestation elements of the moving image. The second issue is that, in moving images, protocol, text and eschatocol generally overlap and can manifest themselves at any moment or in any place within the temporal play-back and intellectual structure of the moving image. Titles used in moving images tend to be the most prominent manifestation of overlap of sections.

The integrity of records can be assured by first identifying what elements determine their reliability and authenticity and then finding methods for protecting them throughout the life of the record. If one needs to verify a record's integrity, a diplomatic examination of the record's documentary form can point to internal evidence of reliability and lead to a presumption of authenticity. However, when the accessibility, readability and intelligibility of a record is threatened by media fragility, technological obsolescence and a reliance on mechanical and technological equipment that may be difficult to maintain, a rigorous methodology is needed to overcome those challenges. The primary purpose of the effort made in this chapter to identify the diplomatic elements of a moving image record, is to allow for the construction of a template that represents the abstract, ideal moving image record. Specifically the template represents all the possible elements of documentary form that may be extant in the abstract, ideal moving

image, and the expression of their function in relation to reliability and authenticity. This template could certainly be used to guide authors, directors and producers in the creation of their moving images by raising awareness of the importance of introducing certain elements into their moving images and including them in a certain form. Its most significant use, however, would be as an instrument for an analysis of moving images that are generated using digital technology, which would allow for the proper identification of the moving image's key elements according to their function rather than to their appearance. Thus, this type of analysis would also allow for the digital moving image's protection throughout the necessary movement of the record both across idiosyncratic systems and forward to new technologies. In fact, as it will be seen in the next chapter, the threat posed by the making, exhibiting and storing of moving images entirely in the digital environment is not to be underestimated.

CHAPTER THREE

The integrity of a record encompasses its reliability and authenticity. Reliability refers to the record's ability to stand for the facts it communicates and to its trustworthiness as to its content. Authenticity refers to the record's trustworthiness as a record. A record is authentic if it is what it purports to be, that is, it has not been tampered with or corrupted after its creation. To assess a record's reliability and authenticity, its documentary form must be examined. The first step in determining a record's reliability is to verify that the documentary form is complete. A complete record is one that contains all the elements of documentary form required for it to generate consequences. 1 As to authenticity, it "is best ensured by guaranteeing that a record maintains the same form through transmission, both across space and through time." Preserving the integrity of moving images as records across space and through time is becoming a pressing concern for the moving image community and for those directly involved in the preservation of the records of moving image creators, such as archivists. This concern is becoming known to the public at large, as digital moving image technologies usher in the threat of piracy via satellite and fiber optic cable as well as the threat of technological obsolescence and digital video tape deterioration.

As for textual records, an examination of the moving image's elements of documentary form can be one of the means to verify that its integrity has been preserved in the long term, but such verification implies a deep understanding of those elements and their function. This chapter

² Ibid., 56.

¹ Luciana Duranti and Heather MacNeil, "The Protection of the Integrity of Electronic Records: An Overview of the UBC-MAS Research Project," *Archivaria* 42 (Fall 1996): 54.

addresses issues related to the integrity of moving images, and comments on the need to ensure and maintain a moving image's integrity by discussing it in the context of technological developments in moving image creation, transmission and exhibition. Although the evolution of moving image technology is inevitable, the concerns of moving image makers about electronic tampering, piracy and the protection of intellectual property as an asset are coming to the forefront. The concepts and methods of diplomatics can guide creators and archivists working in cooperation to ensure that the integrity of moving images is preserved in the long term.

Technological development in the realm of moving images is not only inevitable but also beneficial, considering the dependence of the medium upon mechanical, chemical and technological apparatuses and techniques. The introduction of sound and colour were groundbreaking technological developments that are only now being eclipsed by the development of digitally made, transmitted and exhibited moving images. The relevancy and timeliness of an examination of the issues surrounding digital moving image technology is emphasized not only by the literature, but also by events such as the first commercial digital exhibition of a moving image, Star Wars: Episode I - The Phantom Menace, in September 1999 and the first satellite delivered exhibition of a moving image, Bounce, to the AMC Empire Theatre in New York City in November 2000. A literature review indicates that, except for the threat of piracy and the cost of digital exhibition, little has been written of the possible negative effects of the use of digital moving image technologies. Instead, there is excitement over the creative possibilities that digital technologies offer for the ways in which they can revolutionize the making, distribution and exhibition of moving images. The rhetoric used to characterize the development of moving image technologies into the electronic realm can be taken to imply a blind acceptance of digital

technologies by those who make moving images. An analysis of this rhetoric, and of the concepts and terminology involved in it, can be carried out from several perspectives, each related to a function or state of technology itself. These perspectives are: democratization; infancy; inevitability; indestructibility; and revolutionary.

The digital technologies used for the production, distribution and exhibition of moving images are characterized by their apparent ability to democratize the moving image industry. As will be discussed later in this chapter, the low production costs associated with the use of digital technology are the primary advantage for independent moving images makers, also known as indie filmmakers. Indie filmmakers make, distribute and promote their own moving images for commercial purposes or for film festival exhibition without the support of moving image studios that are normally associated with the making, distribution and exhibition of moving images for commercial mass consumption. The ability to promote and even exhibit digital moving images over the World Wide Web (WWW) and their relatively low production costs when compared with those associated with studio-supported moving images, open up the possibility of making moving images to more persons, thereby fostering a democratization of the moving image industry. The WWW is generally viewed as the primary vehicle that equalizes and democratizes the act of making moving images:

Creation of content will be democratized. It used to be that only big Hollywood studios could afford to film and distribute movies or [television] shows. No more. Low-cost digital movie cameras and PC video editors allow anyone with an eye to record and edit a movie for just a few thousand dollars, and distribute it through

³ David Geffner, "DV hits the big screen," *Upside* (Foster City: Upside Publishing Company, 2000), UMI, ABI/Inform, UPS-2047-49.

firms such as AtomFilms and Wilm that serve up video over the Web ⁴

In this digital reverie, any individual with a camera and an idea can make a moving image; just like any inspired individual with a pen can write a novel or poem. The French moving image theorist Alexandre Astruc was the first to conceive the moving image camera as a pen. Astruc's caméra-stylo theory, as it was termed, assumed the creative intent of one individual and was at the origin of *la politique des auteurs* of the 1950s. Over half a century later, the notion of caméra-stylo returns, not as an instrument for moving image criticism – as it was used by Astruc and his followers – but as a characteristic of digital moving image technologies that democratize the process of moving image making. According to Mark Woods, "D[igital] V[ideo] does allow more people to tell stories in a visual medium, and this fact makes for a refreshing, democratic reality."

However, one can only speculate on the availability of equipment, software and hardware products and on the costs associated with using digital technologies. Moreover, it is problematic to assume that digital technologies will be embraced by all moving image makers as *the* medium of the future. Moving image maker Atom Egoyan, for example, believes that the perfect digital stream of images does not reach the "colour saturation and emotional saturation" that traditional celluloid moving images can attain. Like him, several moving image makers are not enamoured with digital technologies because they cannot replicate the visceral qualities of celluloid that

⁴ Mark Fischetti, "The future of digital entertainment," Scientific American, November 2000, 48.

⁵ Alexandre Astruc, "The birth of a new avant-garde: la caméra-stylo," in Peter Graham, ed., *The New Wave* (London: Secker & Warburg, 1968), 17-23.

⁶ Mark Woods, "Future Shock: What images will survive the Digital Revolution's next 25 years?," n.d., http://www.cameraguild.com/technology/future shock.htm> (5 January 2001).

⁷ Atom Egoyan cited in "Digital fate of motion pictures prompts esthetics debate," Canadian Press Newswire, 25 May 2000.

inspire them and their audiences. While the lone "man-with-a-camera" image that digital technologies may inspire and the idea of an increasing availability of filmmaking to an ever expanding number of persons may be attractive, digital technologies in the moving image industry remain currently in their infancy in terms of use.

From this point of view, digital moving image technologies are relatively new developments that have not currently permeated the moving image industry as a whole. According to Peter Broderick, independent producers - those most likely to be early adopters of digital technologies - were still making moving images using the traditional celluloid as recently as the early 1990s. Broderick believes that 1998 was the year that ushered in the greatest increase of digitally made independent moving images for commercial distribution. 9 As well, according to the Motion Picture Association, only thirty cinemas worldwide are presently equipped to accept digital transmissions of commercial digital moving images and to show them. The issue of infancy is also used to characterize the lack of entirely digital moving images that do not involve, at any stage, the celluloid medium. Pure digital moving images are those that are shot using digital cameras such as Sony's 1920-by-1080, edited digitally using software such as Macintosh's AVID and Adobe's After Effects, distributed to theatres digitally via satellite using technologies currently developed by Boeing's Cinema Connexion, and exhibited digitally by means of a digital projector such as Texas Instruments', that uses prisms and an array of micromirrors to project the moving image. According to the Massachusetts Institute of Technology's Technology Review, digital moving image technologies remain in their infancy because the purely digital process is not yet the norm: "For this technology to really come into its

⁸ Chris Vognar, "Filmmakers keen on digital format: But cutting costs still no cure-all for creative poverty," *National Post*, 18 December 2000, sec. B, p. 3.

own, however, moving pictures must be produced digitally from start to finish – an industry wide change is still in its infancy." Barry Patterson of Famous Players, a Canadian theatre corporation that is conducting test screenings of digital moving images, is quoted as saying that digital cinema is "really in its infancy, a brand new technology."

One indicator of infancy is the lack of global standards that can guide the production, distribution and exhibition of digital moving images. In August 2000, the Motion Picture Association (MPA) issued its "Goals for Digital Cinema," a document that calls for the creation of standards, and identifies and describes ten desirable goals of digital technologies as they pertain to the entirety of the pure digital moving image process. The MPA goals for digital cinema are that: (1) an enhanced theatrical experience must result; (2) quality of picture and sound must represent creative intent; (3) systems must have worldwide compatibility with other systems; (4) systems must use open standards; (5) components within and without systems must be interoperable; (6) system hardware must be extensible to future upgrades; (7) a single inventory of content must be compatible with all equipment; (8) transport of moving images must be systematized; (9) content must be transported securely; and (10) adoption and operational costs of equipment and licensing rights must be reasonable. 12 The MPA "Goals for Digital Cinema" are unattainable without standards for the digital technologies themselves. Currently, the Society of Motion Picture and Television Engineers is considering standardization for digital cinema, however actual standards

⁹ Peter Broderick, "Moviemaking in Transition," Scientific American, November 2000, 62.

^{10 &}quot;Digital movie projection," *Technology Review* 104, no. 2 (March 2001): 95.
11 John McKay, "Digital technology could revolutionize film industry: George Lucas plans to shoot Star Wars preguel on chips, not film," *The Ottawa Citizen*, 26 May 2000, sec. D, p. 5.

themselves have not been formally developed or fully implemented.¹³

Another perspective used to discuss the onslaught of digital technologies into the realm of moving images is the notion of inevitability. Technology generally appears to thunder forward seemingly by its own momentum and inertia, but it is also controlled by market forces that build obsolescence into the technology itself. In his thoughtful contribution to an Association of Moving Image Archivists electronic listsery discussion on the subject "Is digital preservation of films sustainable? Oh no!," Eddy Zwaneveld of the National Film Board of Canada claims that preserving digital moving images for whatever reason

is not sustainable in the long term. It is not hampered by the unavailability of technology solutions, but is hampered by an inappropriate business model that we inherited from the industrial age with vendors competing with incompatible and short-lived products... Obsolescence of the audio, video and data playback systems is designed in. ¹⁴

Built-in technological obsolescence drives consumers and industry to adopt the most efficient and recent product digital moving image technology has to offer in terms of software, hardware and services. The rhetoric of inevitability supports this need to embrace innovations and therefore fulfills the technology's predestined future.

¹² Motion Picture Association, "Goals for Digital Cinema," 31 August 2000, http://www.mpaa.org.dcinema (29 May 2001).

The Society of Motion Picture and Television Engineers has created several Technology Committees, three of which are the Committee on Metadata and Wrapper Technology (W25), the Committee on Film Management and Networking Technology (N26), and the Committee on Digital Cinema Technology (DC28). Society of Motion Picture and Television Engineers, "SMPTE Technology Committees," 2001,

http://www.smpte.org/engineering_committees/technology_committees/> (4 June 2001).

14 Eddy Zwaneveld, <e.ha.zwaneveld@NFB.CA> "Is digital preservation of films sustainable? Oh no!," 24 May 2001 <AMIA-L@lsv.uky.edu> (30 May 2001).

The notion of inevitability is frequently coupled with a sense of blind acceptance of the technologies to come and a reliance on their role as a solution to existing technological problems. In fact, the director of the film archives at the Academy of Motion Picture Arts and Sciences, Michael Friend, is confident that the acceptance and demand for technology will inevitably result in the development of electronic storage media that will last permanently. 15 A trusting reliance, such as Friend's, on the increasing capacity and functionality of digital moving image technologies is cautiously viewed as a step towards a vacuum where digital disappearances mysteriously occur. Mark Woods, for example, states: "The amazing aspect about all of this is the huge segment of the industry that's marching blindly into the void while there's nothing wrong with the current, still workable option – film." Regardless of the cautionary words of respected professionals such as Zwaneveld and Woods, a growing number of persons active in the moving image industry are eager to follow the trend of digital technologies. David Geffner quotes Miguel Arteta, an independent moving image maker, as saying, "My sense is that absolutely no one wants to be left out of this digital revolution." Gloria Goodale quotes Ken Higgins, the vice president of the Cinemark theatre chain, as saying "[d]igital will happen, and now it's only about three to five years away." 18 Richard Doherty also issues a cry for the expedient adoption of digital moving image technologies: "Get ready; get digital." To skeptics such as Zwaneveld and Woods as well as to others concerned for the preservation of digital moving images over time, the rhetoric of inevitability brings a cloud of impending digital doom commonly supported by a perceived understanding of digital technologies as indestructible and infallible.

¹⁵ Vincent Kiernan, "Preserving Movies," Technology Review 98, no. 3 (April 1995): 14.

¹⁶ Woods, "Future Shock."

¹⁷ Geffner, "DV hits the big screen."

The perceived indestructible nature of digital moving image technologies is a perspective from which these technologies are seen as eternal, boundless, and infallible. Peter D. Lubell, a telecommunications consultant and adjunct professor at the Polytechnic University of New York, claims that, unlike celluloid moving images, digital moving images using hard drives and other storage devices "will last indefinitely." Moreover, digital moving images are characterized by superb picture quality that will never be lost: "Repeated showings of a film result in deterioration ... whereas a digital movie retains the same quality, regardless of the number of showings."21 Indeed, the physical composition of moving images affixed to a celluloid strip can deteriorate over time and result in faded colours, scratches and tears, yet it remains accessible (in part or in whole) with the proper equipment. While digital moving images appear immune to the picture quality problems and deterioration normally associated with celluloid moving images, they are nevertheless just as fallible as the technologies used to make and show them become obsolete, thereby rendering their exhibition over time an issue of pro-active preservation. Perhaps the rhetoric of indestructibility used to characterize digital moving image technologies is supported by an unspoken understanding of digital technology as a non-medium. While it is possible to see, touch and understand celluloid as a medium, it is difficult to see, touch and understand digital supports as media in their own right. One can see the deterioration of traditional moving images as a tangible and real effect of time and poor storage conditions on celluloid. However, the effects of the deterioration of a digitally stored moving image are intangible. In this sense

¹⁸ Gloria Goodale, "Is that all folks? The end...of Film as We Know It – Enter Digital," *Christian Science Monitor*, 9 April 1999, 13, Academic Search Elite, EBSCOHost, 1716545.

¹⁹ Richard Doherty, "Film? Now it's lights, camera, go to digital," *Electronic Engineering Times*, 3 May 1999, 69.

Peter D. Lubell, "Digital Cinema is for Reel," Scientific American, November 2000, 71.
 Bob Brewin, "Satellite delivery of feature films debuts," Computerworld, 27 November 2000, 12.

then, the infallibility of digital moving images is fixed within a misunderstanding of the technology as a medium and of its primary weakness, technological obsolescence.

Another rhetoric perspective used to discuss digital moving image technologies centers on the perceived revolutionary effects these technologies have on the moving image community in a broad sense. The term "revolutionary" is assigned within the literature to digital technologies on the grounds that they have not yet entered the mainstream of digital moving image making, distribution, or exhibition: "Hovering like a distant grail, digital cinema has been on the fringes of practicality for a while, promising to revolutionize the movie experience."22 Moreover, like with any revolution, the seed of transition and radical change is planted within a small minority wishing to alter the status quo. According to Peter Broderick, digital technologies are quickly embraced primarily by young independent moving image makers keen on the cost efficiencies the technology promises, and the subsequent result of fostering competition with large studio-funded moving image projects.²³ It may be thought that "this digital revolution is a little like Les Misérables, starry-eyed young students hoisting their digital cameras high into the air as they scale the barricade of studio domination."²⁴ Digital technologies are broadly considered, moreover, as the only innovation in the moving image field to date that has eclipsed the revolutionary advent of sound and colour. Furthermore, independent moving image makers are not the only ones to note the digital cinema's revolutionary nature: "The member companies of the Motion Picture Association believe that the introduction of digital cinema represents the greatest opportunity for enhancing the theatrical film experience since the introduction of sound

²² Goodale, "Is that all folks? The end...of Film as We Know It – Enter Digital."

²³ Broderick, "Moviemaking in Transition," 62.

²⁴ Geffner, "DV hits the big screen."

and the advent of color."²⁵ Peter Broderick further characterizes the advent of digital moving image technologies as not only a revolution, but also as a renaissance; as the rebirth of every stage and process inherent in the moving image industry, from production to distribution to exhibition.²⁶

It is possible that the rhetoric of democratization, infancy, inevitability, indestructibility, and revolution that is used to characterize the digital innovations of moving image technology is a harbinger that points to the increasing influence of these technologies and the building excitement over their adoption by the moving image industry as a whole. The thrill provided by the use of digital technologies is rationalized by emphasizing the advantages it affords the moving image community, but disadvantages exist as well in plain view and hidden in the distant future.

Peter Broderick, Peter Lubell and other writers on the innovations brought forward by digital cinema, list several advantages that digital moving image technologies can offer the moving image community at large. As mentioned earlier, the most prominent advantage is cost efficiency. The reduction in costs associated with the making of moving images, as well as with their distribution and exhibition, may be substantial in the long term, but not necessarily in the short term. The initial costs of converting theatre equipment from the projection of celluloid moving images to digital moving images is very high. So high in fact, that a number of Hollywood studios have proposed cost sharing programs that will financially aid theatres in the

²⁶ Broderick, "Moviemaking in Transition," 62.

²⁵ Motion Picture Association, "Goals for Digital Cinema."

Estimates of the costs deriving from the conversion of traditional projection methods to digital projection for each exhibitor may range from \$100,000 U.S.²⁸ to \$1.5 million U.S. for a theatre with ten screens.²⁹ On average, one projector for digital moving images can cost up to \$250,000 U.S.³⁰ While the exhibitors' initial conversion costs may seem so outrageous as to negate the other advantages of the use of digital moving image technologies, other dramatic cost efficiencies are apparent elsewhere in the moving image industry.

David Baker, the co-director of Cinema Connexion, a Boeing company that has developed satellite systems for the digital delivery of moving images from producer to exhibitor, estimates the costs of the traditional model of distributing celluloid films to be \$1.2 billion U.S. per year for the entire moving image industry. Conversely, Baker speculates that the costs of digital distribution per year will only amount to \$500 million U.S. Cost efficiencies in distribution are apparent primarily because there will be no need to make release prints, the cost of which can be as high as \$2000 U.S. each. According to Peter Lubell, release prints of a single moving image struck from the release negatives for distribution to the American market cost up to \$10 million U.S. without including the costs of shipping. On the other hand, the hard drives used to store a single moving image only cost approximately \$260,000 U.S. ³²

Cost efficiencies accrue to individuals and organizations making moving images as well.

Costs for making a moving image using celluloid film (including equipment, human resources,

²⁷ Goodale, "Is that all folks? The end...of Film as We Know It – Enter Digital."

²⁸ Ibid

²⁹ Lubell, "Digital Cinema is for Reel," 71.

³⁰ Ibid.

film stock, etc.) run anywhere from \$10,000 to several million dollars U.S., according to David Geffner. Conversely, the costs for making a digital moving image (including equipment, human resources, film stock etc.) are approximately \$3,500 U.S.³³ However, cost efficiencies are not the only perceived advantages of digital moving image technologies.

Other advantages deriving from the adoption of digital moving image technology are: the ease of production due to the light and self-contained digital cameras; the inherent capability for digitally created special effects, including the possibility of introducing aromas and seat movements to the exhibition experience; the affinity for WWW promotion, distribution and / or exhibition; the quality projection of the moving image (no scratches, splices, fading or reel change marks associated with celluloid); the lack of projector noise upon play-back; the increased availability of moving images to remote exhibition locations via satellite; and the use of digital sound. As mentioned, the rhetoric of digital moving image technologies originates from perceived benefits affecting almost every niche in the moving image industry, among which the most significant is the cost efficiencies that are expected to occur once conversion from the traditional methods of making, distributing and exhibiting celluloid moving images is made to digital methods.

A thoughtful analysis of the disadvantages brought about by the adoption of digital technology fails to occur in much of the popular literature relating the developments and innovations in the moving image industry. From a literature review it appears that the only perceived disadvantages of digital technologies are initial conversion costs and piracy. Piracy is

³¹ Brewin, "Satellite delivery of feature films debuts," 12.

³² Lubell, "Digital Cinema is for Reel," 71.

indeed a possibility as digital moving images transmitted to exhibitors via satellite or fiber optic cable may, even with the use of encryption or other security features, be appropriated by cyber-hackers or specialized intellectual property thieves. Gloria Goodale notes that:

most of the [moving image] industry observers predict that if the arrival of digital cinema is delayed, it will not be over money but a more complex issue that has troubled Hollywood's creative community for some time – piracy. Digital transmission raises the specter of perfect pirated copies of movies being snatched off satellites around the world.³⁴

Piracy is more than mere misappropriation. Once downloaded, digital moving images can be fraudulently used, sold, corrupted, tampered with or falsified. David Geffner speculates that piracy, coupled with the anonymous face of the WWW, will become one of the largest problems in the industry: "the potential for unauthorized use of a digital film distributed directly through the Internet is real." One example of digital piracy occurred in 1999, when a teenager from Norway created a computer program called DeCSS, that breaks the encryption codes of digital versatile discs (DVD). The codes scramble the content of a DVD and protect the moving images the DVD contains from being illegal copied. The DeCSS program can be acquired on the WWW and permits moving images on DVD to be downloaded into a personal computer and sent to others over the Internet as pirated copies. In addition, Jack Valenti, the current president and chief executive officer of the Motion Picture Association, fears that the transmission of digital moving images by satellite and through the WWW is the chink in the digital cinema's armor that, if penetrated, will result in the ruin of the moving image industry at large. Valenti is also concerned with the accuracy of pirated copies and speculates that their image quality could

³³ Geffner, "DV hits the big screen."

³⁴ Goodale, "Is that all folks? The end...of Film as We Know It – Enter Digital."

³⁵ Geffner, "DV hits the big screen."

³⁶ Michael Petrou, "Teenage DVD hacker has Hollywood shaking in its boots: Anti-encryption program allows users to unscramble codes," *Edmonton Journal*, 24 February 2000, sec. A, p. 10.

³⁷ Goodale, "Is that all folks? The end...of Film as We Know It – Enter Digital."

exactly replicate the look of the original digital moving image: "With digital copying, one fellow in his garage can send copies around the world that are as pure as the original." 38

In addition to conversion costs and piracy, however, there are other disadvantages in the adoption of digital technology for moving images. Authors such as Mark Woods, Eddy Zwaneveld and Sara Gould have issued a few small distress signals in relation to the preservation of moving images. They cite technological incompatibility and the physical fragility of digital magnetic tape as the two most powerful threats to the integrity of moving images. Sara Gould of the International Federation of Library Associations and Institutions expresses concern for the incompatibility that exists between contemporary systems that are not yet obsolete: "Today, 'back-ward compatible' software – that designed to read old versions – generally only covers one or two generations of changes, which offers little relief when the average life cycle of hardware and software is a mere 18 months." In addition, Mark Woods believes that media fragility is a powerful threat to the long-term preservation of digital moving images and that those who use digital technology for moving images are choosing to create, what he calls "disposable communication and expendable commerce":

If film is dead, then we've lost a great tool that allows us to see not only feature films of the past and present, but the old-home movies which open a window to our own personal histories. In the electronic realm, that simply isn't possible without content migration. . [Digital video] tape won't last. Content survival is of the most importance. If people persist in originating projects on this volatile medium, there has to be a systematic approach to content migration. This entails movement of the intellectual assets off the current degrading tape onto another tape; then, it must be

³⁸ Paul Farhi, "Hollywood spooked by Net: Bootleg traffic in movies seen as major threat," *The Gazette* (Montréal), 8 June 2000, sec. A, p. 1.

³⁹ Sara Gould, "Digital Disappearances," UNESCO Courier, October 2000, p. 46.

moved again to another tape before the current tape degrades – ad infinitum. 40

Woods erroneously considers migration as the key to solving the problems of media fragility. Migration more properly addresses technological obsolescence. Technological obsolescence occurs when the entire architectural software and hardware configuration used to create a digital object no longer exists, and, in order to maintain access to the object, it must be moved into an entirely new software and hardware configuration. Woods really refers to refreshment, which indicates the copying of a moving image from older magnetic tape onto newer magnetic tape as a strategy used to combat media fragility. Refreshment, unlike migration, reproduces the content and form of the record. Migration, however, does not copy records directly into the new software and hardware platform configuration unchanged; there will be a transformation of the record in terms of form and structure.

Digital moving images stored on hard drives and storage media other than tape, such as optical media, are just as susceptible to the problems caused by media fragility and incompatibility. "The hype has it that the dream of perpetual digital content preservation is attainable, because this is feasible for certain video production, post-production and transmission applications. . . Digital storage may be attainable but is not sustainable"— states Zwaneveld. 43 Indeed, any preservation of digital moving images longer than a few years requires migration. According to the findings of the UBC-MAS Research Project that addressed the protection of the integrity of electronic records, the medium to which an electronic record is affixed has a very

⁴⁰ Woods, "Future Shock."

⁴¹ Heather MacNeil, *Trusting Records: Legal, Historical, and Diplomatic Perspectives* (Dordrecht: Kluwer Academic Publishers, 2000), 104.

⁴² Ibid.

⁴³ Zwaneveld, <e.ha.zwaneveld@NFB.CA> "Is digital preservation of films sustainable? Oh no!," 24 May 2001, <AMIA-L@lsv,uky.edu> (30 May 2001).

limited life span caused by physical deterioration as well as by technological obsolescence.⁴⁴ In fact, the U.S. National Media Lab has discovered through laboratory testing that any magnetic media, digital or otherwise, can survive only twenty years under the best environmental conditions.⁴⁵ Accordingly, the long-term preservation of electronic records requires refreshment and migration to address the problems of media fragility and obsolescence. Technological obsolescence does not appear to be well understood, or uppermost in the minds of those writing on the effects of digital technologies on the moving image industry. For long term preservation, however, the problems posed by technological obsolescence are paramount because technological developments will inevitably occur and because the method for ensuring the integrity of the record, migration, results in changes to the form of the record.

A notable characteristic of almost all digital records is the ease with which content can be changed without any trace visible on the document itself. Digital photography, according to Rudolph Arnheim, "dismantles the image's shape, which can be retained or altered in any of its elements." In *The Reconfigured Eye: Visual Truth in the Post-Modern Era*, William Mitchell similarly asserts that manipulability is the one primary characteristic that distinguishes digital images from other images: "the essential characteristic of digital information is that it can be manipulated easily and very rapidly by computer. . . Digital images are, in fact, much more susceptible to alteration than photographs, drawings, paintings, or any other kinds of images." The manipulability, and therefore volatility, of digital objects as they exist in the same software

⁴⁴ Duranti and MacNeil, "The Protection of the Integrity of Electronic Records," 49.

⁴⁵ Zwaneveld, <e.ha.zwaneveld@NFB.CA> "Is digital preservation of films sustainable? Oh no!," 24 May 2001, <AMIA-L@lsv,uky.edu> (30 May 2001).

⁴⁶ MacNeil, Trusting Records, 71.

⁴⁷ Rudolf Arnheim, "The Two Authenticities of the Photographic Media," *Leonardo* 30, no. 1 (1997), Academic Search Elite, EBSCOhost, 9704202034.

and hardware configuration in which they were originally generated is further extended when they are migrated to another software and hardware configuration as technological obsolescence necessitates. Moreover, the volatility of electronic records extends past its informational content, as it also affects the documentary form that the content takes. According to Heather MacNeil, "[t]he form of an electronic record is substantially determined by hardware and software functionality. Its original integrity may be lost, therefore, when records are migrated from one system to another." As technological obsolescence dictates, migrations, as they occur, may threaten the way in which an electronic system's content looks and feels, and therefore may threaten its very meaning. The use of diplomatics to determine the digital moving image's necessary elements of documentary form can support the development of a methodology for the preservation of the moving image's integrity over time.

The rhetoric used to characterize the introduction of digital technologies into the moving image community indicates that their use is only now beginning to take root within the community at large. The future of digital technologies is assured a place as the most revolutionary development in the area of moving images since the advent of colour and sound. The perceived infallibility of digital media is mentioned as only one of the many benefits of adopting digital moving image technology. As well, the cost efficiencies that are intrinsic to the digital cinema may initiate the democratization of filmmaking and thus result in an ever expanding amount of persons and organizations creating moving images as the chosen medium of communication. Over time, the records of these persons and organizations may reside in

⁴⁸ William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era* (Cambridge, Massachusetts: The MIT Press, 1992), 7.

⁴⁹ MacNeil, Trusting Records, 73.

archives and other repositories where they must be preserved. Archivists must ensure that the accessibility, readability, intelligibility and integrity of records in their care can be maintained by overcoming the problems posed by media fragility, incompatibility and, most of all, technological obsolescence. To do so, the most effective way is to rely on that theory of the record that has guided archivists for centuries, across many generations of technologies. It has been proven that diplomatic theory and its method of analysis can be expanded and used successfully with digital records. This thesis has begun to extend them to moving images. From here, the next step of developing a diplomatics for digital moving images should not be too far removed.

CONCLUSION

The integrity of records concerned medieval diplomatists just as it concerns archivists today. The reliability and authenticity of contemporary records can be ascertained using the methodology of diplomatics, the object of which includes records of all media that are generated for any purpose, administrative or not. According to Heather MacNeil, diplomatics has evolved from a science that looked to the past for traces of the world to one that has the potential to proactively guide records' creation today, "based on its potential as a standard for ensuring the trustworthiness of modern records." An examination of the records' extrinsic and intrinsic elements of documentary form can allow for the assessment of the integrity of records and can guide records creators in establishing business and documentary procedures capable of maintaining the records' integrity from the moment of their creation. This possibility has inspired archival scholars to use archival diplomatics to help them develop management methods for records generated in the electronic environment that can control records from their creation through to their preservation for generations to come. The development of management methods attempts to obviate the problems presented by media fragility and technological obsolescence.

On the strength of the results that emerge from the application of archival diplomatics to contemporary digital records, this study has explored its concepts of reliability, authenticity and documentary form in relation to moving images. The purpose of this exploration is to investigate the possibility of using diplomatic analysis to ascertain a moving image's integrity, which is a growing concern as the moving image community adopts digital technologies. To conduct this

Heather MacNeil, Trusting Records: Legal, Historical, and Diplomatic Perspectives (Dordrecht: Kluwer Academic Publishers, 2000), 86.

exploration, it was necessary to establish a correspondence between terminology and theories used by archival scholars and moving image scholars.

The study of moving images as a discipline has evolved over time to debate and illustrate many concepts and theories of authenticity. The meaning of authenticity has also evolved in the discipline of diplomatics. In the past, documentary form was the key to the authenticity of records, the ascertainment of which would lead to a presumption of reliability of the record's content. Currently, archival diplomatists recognize that authenticity and reliability are to be regarded as separate qualities of the record: one can exist without the other. However, in diplomatics, there has been an evolution rather than a fragmentation of theory. In other words, archival diplomatists have agreed, more or less, on the progression of diplomatic theory towards a more complex view of authenticity. In contrast, the discipline of moving images accommodates many concepts of authenticity. The term authenticity sometimes includes the notions of historical accuracy, verity and realism, while other times – according to theorists such as Arnheim, Carroll and Metz – the term expresses a distinction between the content of the moving image and its context of creation.

Notwithstanding the different approaches to the concepts of reliability and authenticity, archival diplomatics, as a methodological tool, is beneficial for the analysis of moving images because it is sensitive to the nature of image creation. As mediated representations, moving images can become the object of a diplomatic simultaneous top-down and bottom-up analysis, which examines the genesis of records and their context of creation, as well as the individual elements of their documentary form. Diplomatic questions such as, "Who authored the record?"

and "Why, when, where and how was the record made?" are vital to a determination of the identity of moving image records, which is the primary component of its authenticity. In the domain of moving images, the question "who authored it?" is highly debated, especially when *la politique des auteurs* is positioned opposite the collaborative nature of moving image making. *La politique des auteurs* is at once a theory of authorship and a mechanism for criticism and analysis. Above all, the sanctity of the individual and self-expressive auteur is an affront to the idea of the moving image as a collective expression of shared responsibilities. There is tension between theories of moving image authorship because other diplomatic roles, such as those of writer and of creator, are ignored or assimilated within the larger meaning of author. Diplomatic concepts can effectively help to establish the separate documentary roles of author, writer, and creator, which will allow for a clearer understanding of the process of moving image creation and will account for the contribution of all persons who participate in and are responsible for one part or another of the moving image's content.

The documentary form, and more specifically the internal articulation of moving images (i.e., its intrinsic elements) are not strictly prescribed by rigorous business procedures and documentary rules of representation required by the juridical / cultural and social system(s) within which they are created. Nevertheless, one can hypothesize the possibility of analyzing the documentary form of moving images by trying to identify, within the records, the components corresponding to the diplomatic extrinsic and intrinsic elements. The archival community has debated for some time whether documentary form, defined as the entirety of the rules of representation that conditions the content, exists for moving images, and it has tended to take the position that documentary form may be too rigorous a concept to apply to images generally.

This study has shown that, by considering the notion of "genre" parallel to that of "type of documentary form," and by recognizing that documentary form need not be equated with strict bureaucratic rules of record making, we can use the diplomatic method of analysis for moving images. The primary purpose of using a diplomatic analysis of the moving image's documentary form is to begin identifying the elements for building a template of the abstract and ideal moving image documentary form – including extrinsic and intrinsic elements – that will be used as an instrument for ascertaining a moving image's integrity. A template would allow for an examination of any moving image by comparing it against the abstract form, and finding similarities and dissimilarities, recognizing the function of each element, and identifying those that must be preserved in order for the record to maintain its integrity over time.

Thus, this thesis has proceeded to establish a correspondence between the diplomatic extrinsic and intrinsic elements of form and the various components of a moving image, on the hypothesis that, if one could account for most elements of a moving image in diplomatic terms, the building of a template for analysis would be possible. The outward appearance of the moving image was examined in terms of the extrinsic elements of documentary form. The results have been encouraging. The medium is a required element as the message must be affixed to a physical support, and yet as technological developments indicate, the medium need not be limited to traditional supports such as paper, parchment or celluloid, thus any carrier of moving images can be assessed as a documentary medium. The script, language and special signs elements manifest themselves on both the audio and visual tracks of a moving image. Specifically, script includes presentation features such as dialogue, narration, music, noise, images of persons, places, objects, and events, written articulations, and optical transitions. The

language element comprises the spoken language used by persons portrayed on the screen upon projection, as well as the written language of titles and credits. It also encompasses style and composition and therefore relates to the manner in which the arrangement of items such as actors and objects are framed within the shot, and also to the manner in which the shots are made to correspond one to the other as prescribed by the editing process. However, the creative freedom of the author allows for a discretionary use of any technique. Similar to the seals element, special signs can manifest themselves in either the beginning or the end of the moving image, and usually consist of graphic symbols used to identify the persons involved in the making of the record's compilation and may be accompanied by signature music or sounds. A record's seal allows for a strong presumption of authenticity, however in moving image records they are not common. Seals such as that issued by IATSE function as a guarantee that the moving image was executed according to specified regulations and procedures that were carried out by skilled persons accredited by the organization issuing the seal. The annotations element indicates additions made to the record after its completion. In moving images, annotations can exist upon the outside of the record itself, as well on one of four audio tracks or the address track of a moving image where additions such as metadata specific to the moving image and time codes are manifested. For time codes to stand as annotations, however, they must be added to the moving image in post-production, not generated at the time the recording is initially made.

The internal articulation of the moving image was examined in terms of the intrinsic elements of documentary form, which are grouped into three categories. The first grouping, or protocol, conveys the administrative context in which the moving image was generated and is primarily contained within the leader and the slate information, should they exist. Indeed, the

administrative context in which a moving image is generated will vary, as then will the character of the protocol. The entitling, title and date elements manifest themselves primarily on the visual track of the moving image and are conveyed by credits and other written articulations. The date, specifically, may exist aurally as well and could be articulated as a range of dates and / or times. Similarly, the subject element may also manifest itself on the audio and visual tracks and usually is conveyed by way of a pre-credit teaser, and possibly written articulations. In the domain of moving images, terms for the invocation, superscription, inscription, salutation, formula perpetuitatis, and appreciation elements do not exist, however these elements could possibly be expressed in the written articulations and / or audio track.

The second grouping of intrinsic elements, or text, is the action or scenes resulting from the recording of visual representations, such as persons, places, objects and / or events, onto a medium and includes aural representations, such as sounds and dialogue, and written articulations, such as intertitles and subtitles. The exposition element is a visual and aural representation, and / or a written articulation termed the "introductory title." This element differs from the diplomatic element identified by the same term because it is the narration of reasons and circumstances that give rise to the action inside the moving image's content, the action of the plot, as opposed to the action of moving image making. These two concepts of exposition are both necessary for a complete template of a moving image record, therefore, the corresponding elements need to be both identified and made distinct from one another. The disposition is most commonly termed "discourse", "plot" or "essence," and consists primarily of the story or message to be conveyed to the audience. In the domain of moving images, terms to express the diplomatic notions of preamble, notification and final clauses do not exist, however it may be

possible that corresponding elements could be conveyed by written articulations, third-party narration, monologue or dialogue between persons portrayed in the internal articulation.

The final grouping of intrinsic elements is contained within the eschatocol, which reveals the context of the moving image's generation. The eschatocol exists as end credits and includes written articulations that may or may not be accompanied by music, sounds, and images, upon which the end credits are superimposed. End credits reveal the context of the making of the moving image by articulating the persons responsible for it. The attestation manifests itself as the credit names of persons and as the logotypes of those organizations that took part in the making, issuance or validation of the moving image. It is composed of images and written articulations as well as sounds. In the domain of moving images, terms to reflect the diplomatic notions of corroboration, appreciation, complimentary clauses, qualification of signature, and secretarial notes do not exist, however it is possible that corresponding elements be conveyed in the written articulations (e.g. the end credits) and / or audio track of the moving image. The International Federation of Film Archives, for example, has identified a written articulation that corresponds with the appreciation element and is an end credit termed the "cooperation credit."

The examination of the components of a moving image in terms of extrinsic and intrinsic elements of documentary form leads to three broad conclusions. First, while the audio and visual tracks of the moving image contain the critical components of such record, other tracks, such as the address track and second, third and fourth audio tracks are also critical. These tracks contain information that may not be significant for the value of the moving image as such and may not be visually or aurally apparent on the record itself or upon its projection, however they are vital

to the preservation of the accessibility and integrity of the moving image. This information, such as time code and other metadata, reflects the facts of creation and may only be readable and intelligible when used with the proper technological system. Second, a moving image's extrinsic elements are more complex than those of textual records and may need a more subtle analysis. With textual records, the extrinsic elements of documentary form are all those that comprise the outward appearance of the record. However, the outward appearance of a moving image can have two meanings: the outward appearance of the record as an object and the outward appearance of the record as it is projected onto a screen. For the moving image to generate consequences, as with any other record, its message must be communicated in a readable and intelligible manner, and without projection this is very unlikely to occur. Therefore, a diplomatic analysis of moving images must address the extrinsic elements that constitute the moving image's outward appearance as an object as well as a projected aural and visual representation. Third, a moving image is characterized by overlapping protocol, text and eschatocol, and by a repetition of some elements in both the protocol and eschatocol. Indeed, the internal articulation of the moving image's content is not necessarily linked to a specific stable structure, and the intrinsic elements may therefore be articulated in any part of the record.

The examination of the moving image record in terms of diplomatic extrinsic and intrinsic elements of form has shown that it is indeed possible to build a template for analysis of such records for the purpose of ascertaining their reliability and authenticity. This is a very positive result because a rigorous methodology of analysis independent of a specific technology is a pressing need if we wish to preserve the authenticity of any documentary heritage that is generated, communicated and stored in digital environments. According to scholars such as

MacNeil, Lynch, Arnheim and Mitchell, the integrity of records is more difficult to maintain and preserve in the digital realm than it is for traditional textual records. Lynch states:

There seems to be a sense that digital information needs to be held to a higher standard for authenticity and integrity than has printed information. In other words, many people feel that in an environment characterized by pervasive deceit, it will be necessary to provide verifiable proof for claims related to authorship and integrity that would usually be taken at face value in the physical world. . . This distrust of the immaterial world of digital information has forced us to closely and rigorously examine definitions of authenticity and integrity.²

The warnings issued by moving image experts such as Mark Woods and Eddy Zwaneveld appear to be too few to be noticed, as the onslaught of digital technologies is viewed as an inevitable revolution in the moving image industry. Even those concerned with the preservation of moving images propound the advantage of digital technologies. According to Penelope Houston:

Everyone agrees that the [preservation] technology has to be digital. The advantage of the digital signal is that it never changes, that every copy can be an exact repetition of every other copy, a true cloning. There is no colour fading, because there are no dyes to fade.³

The concerns for the effects of technological obsolescence have not appeared in a substantial way, and yet technological obsolescence will affect the integrity of the moving images that are digitally created and maintained.

Authenticity means that the identity and the wholeness and soundness of a record are extant and verifiable. The preservation of the authenticity of moving images over time not only enriches the whole of society's preserved documentary heritage but also fosters the

² Clifford Lynch, "Authenticity and Integrity in the Digital Environment: An Exploratory Analysis of the Central Role of Trust," in *Authenticity in a Digital Environment* (Washington, D.C.: Council on Library and Information Resources, May 2000), 33.

³ Penelope Houston, Keepers of the Frame: The Film Archives (London: British Film Institute, 1994), 155.

accountability of moving image makers in the eyes of their shareholders, their employees, the archives, and the public at large. Furthermore, those creators, whose mandates and functions rely on the commercial sale of the moving images they make, can benefit from the long term preservation of the integrity of their intellectual property assets "especially if they want to maintain [moving images] for future revenue streams," such as re-releases and video licensing.⁴ As well, governments have the responsibility to preserve the integrity of their records to be accountable to the persons they represent, and the moving images they create as records are no exception. Above all, a record whose integrity remains intact is the most reliable source of our past and of our identity. The moral and physical defense of records is the responsibility of archivists, and the use of archival diplomatics can allow them to establish a meaningful and effective dialogue with those involved with the making, distributing and storing of moving images, in the interest of preserving their integrity over time. The aim of this thesis has been to show that such discourse can be initiated by developing an instrument of analysis, specifically a template of a moving image, which respects concepts and terminology used by scholars of both fields.

⁴ Mark Woods, "Future Shock: What images will survive the Digital Revolution's next 25 years?," n.d., http://www.cameraguild.com/technology/future_shock.htm (5 January 2001).

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