CHAPTER 1

INTRODUCTION

1.1 BACKGROUND TO THE RESEARCH PROBLEM

In order to find and use information resources, bibliographic control is necessary. Bibliographic control applies tools, the best known of which is the library catalog, to lead patrons to information. When libraries and other information services form a network, the available information sources are recorded in bibliographic databases. Bibliographic control on the local and national levels provides systems allowing searchers to identify and locate information sources in a particular library or information service within a specific country's borders.

Bibliographic control, however, does not exist only on local and national levels. The Universal Bibliographic Control (UBC) programme accepted by the International Federation of Library Associations and Institutions (IFLA) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) aims to develop a system to control and exchange bibliographic information on a universal level. To achieve this goal, responsibility for the application of the principles of bibliographic control was assigned to IFLA member nations. Each country that took part in the program was required to have a national bibliographic agency that controlled its national bibliography (Beaudiquez, 2000).

Identifying and locating desired information on local, national, or international level depends on high quality bibliographic records and standardized access points that provide access to bibliographic records. Access points may include names (personal and corporate), titles (including uniform titles and series titles), and subjects.

Regarding names, the UBC program assigned each national bibliographic agency the responsibility of creating the authoritative form of the country's authors' names according to international standards. In addition, these standardized forms should be made available on national and international level for use by other countries (Beaudiquez, 2000).

North American Indians and their names are part of the publication environment. American popular culture (e.g., movies, television, and novels) is filled with references to North American Indians. North American Indians produce scholarly articles and books and must be included in bibliographic databases such as national bibliographies. Cataloging rules for the standardization of names must make provisions for North American Indian names. And should such rules exist, national libraries should follow them as they standardize these names.

North American Indians have unique naming practices, however, which result in unexpected, but characteristic, name forms. For example, Sitting Bull was a Lakota war chief whose name changed throughout his life (from Jumping Badger to Slow to Sitting Bull) (Utley, 1993). The story of Black Pipe's names is told in Clark (1982:266). He was a Cheyenne scout for the U. S. Army and had a series of names (from Boy Baby to Little Bird to Long Horn to Black Pipe), each of which was the man's official name at its time. At the same time that the Cheyenne called him Long Horn,

White traders with whom he did business called him Tall-White-Man. He had different real names among different groups at the

same time. The special characteristics of North American Indian names, which were discussed in detail in Chapter 2, have an impact on name authority control.

1.2 RESEARCH PROBLEM

"The research problem is essentially the [formal] topic to be investigated, or what needs to be known" (Powell, 1997:19).

Based on the background information provided in Section 1.1 the main research problem for this thesis is: What is the impact of North American Indian naming practices on the national and international practice of bibliographic control? Understanding this impact requires knowledge of names and naming patterns, a study of the presence (or absence) of these names in the publications environment, an examination of the role of personal name standardization in bibliographic control, a study of the rules that guide bibliographic control, and a determination of bibliographic control practices in national bibliographic agencies worldwide.

Powell (1997:22) stated, "Virtually all problems are comprised of components and sub-problems which should be appropriate for study, if not solution. Sub-problems can facilitate resolving a large problem piecemeal, as they are often more manageable or researchable than the general problem and can be investigated separately" (Powell, 1997:22). For this thesis the main research problem was divided into the following sub-problems:

- 1. What are the current naming practices among North American Indians?
- 2. Are North American Indian names a significant part of the publication environment in the United States of America (USA), Canada, and throughout the world?
- 3. Why is it necessary to control and standardize names, especially North American Indian names, in the bibliographic environment?
- 4. How do current authority control rules control North American Indian names?
- 5. How are North American Indian names presented in national bibliographies?

1.3 MOTIVATION FOR STUDY

The motivation for this study is based on the lack of previous research on the impact of North American Indian naming practices on name authority control. A preliminary literature search indicated that little research has been conducted on this topic directly.

The nature of North American Indian names and naming has been studied from the point of view of anthropology (e.g., Alford, 1988), onomastics (e.g., Nuessel, 1992), and North American Indian sources (e.g., Clark, 1982).

There were no studies of the presence of North American Indian names in the publications environment, although several bibliographies, which had been created for different purposes, were available for analysis in this thesis.

Studies of the need for name form standardization in bibliographic control were common (e.g., Bland, 1986) but did not address the particular issues presented by North American Indian personal names. Nor did most of the current bibliographic control authorities (e.g., Anglo-American cataloguing rules: second edition, 1998 revision (AACR2R) (1998) contend with these issues. The Native Language subentry of the national entry for Canada in Names of persons: national usages for entry in catalogues (fourth revised and enlarged edition) (IFLA, 1996a) addresses some of these issues, but not those of names in sequence or multiple names at the same time.

No studies of the control of North American Indian names were found. UBC is based on the activities of national bibliographic agencies, however, so a study of the manner of controlling those names was necessary.

In summary, this study was motivated by the need to integrate the information known about North American Indian personal names into the resources and processes of local, national, and international bibliographic control.

1.4 RESEARCH APPROACH AND METHODOLOGY

This research primarily followed a qualitative approach. In qualitative research numerous kinds of data are collected and examined from various angles, allowing the construction of a meaningful picture of a multifaceted situation. Qualitative research focuses on phenomena that occur in natural settings and involves studying those phenomena in all their complexity (Leedy & Ormrod, 2000:147).

According to Peshkin, cited in Leedy and Ormrod (2000:148) qualitative research studies typically serve one or more of the following purposes:

- They can reveal the nature of situations, settings, processes, relationships, systems, and people.
- They enable the researcher to (a) gain insights about the nature of a particular phenomenon, (b) develop new concepts or theoretical perspectives about the phenomenon and (c) discover the problems that exist within the phenomenon.
- They allow a researcher to test the validity of certain assumptions, theories, or generalizations within real-world contexts.
- They provide a means through which a researcher can judge the effectiveness of particular practices or innovations.

Both non-empirical and empirical research designs were used in this thesis. The non-empirical component consists of literature surveys of:

- Naming and naming practices among North American Indians
- The nature of authority control and the necessity for authority control

These literature surveys are supplemented by an empirical study of:

- The presence of North American Indians in the publication environment
- The forms of North American Indian names as presented in the publication environment

- Current rules and guidelines for the standardization of North American Indian names
- The representation of North American Indians in national bibliographies

The empirical part of the study is exploratory, rather than experimental. According to Powell (1997:58), an exploratory survey helps the researcher to become familiar with the phenomenon in question. The purpose of an exploratory study is to discover and explore significant variables in a field situation and to discover the relationships among these variables (Babbie, 1982:36-38).

Purposive sampling, based on the belief that the researcher knows enough about the population and its characteristics to handpick the sample (Leedy & Ormrond, 2000:219), was used in the following ways for the empirical study:

- The presence and form of North American Indian names in the publication environment was determined by a survey of four bibliographic databases that serve North American Indians. Since North American Indian names form a very small portion of personal names in North America, bibliographies were chosen that would concentrate their presence and that would show as much variety of form as possible. A detailed description of the methodology applied to each bibliography is included in 3.2.
- During the study of the current rules and guidelines for the standardization of North American Indian names, only documents that provide a basis for authority work with North American Indian names were selected. These include Names of persons: national usages for entries in catalogues (1996a) and AACR2R (1998).

• In order to determine how North American Indian names are presented in national bibliographies a survey of the authority files of a group of national bibliographic agencies was done. A detailed description of the selection of the names test set and the national bibliographies test set is included Section 7.4.

Information obtained from the literature survey and the empirical study was analyzed using the following methods of analysis:

Content analysis

"Content analysis is a systematic analysis of the occurrence of words, phrases, concepts, etc. in books, films, and other kinds of materials". (Powell, 1997:50).

In order to resolve sub-problems one, two, three, and four, content analysis was applied. To solve sub-problem one, relevant literature from anthropology (e.g., Alford, 1988), onomastics (e.g., Andersen, 1977; Dunkling, 1991; Eckler, 1986; Hook, 1982; Ingraham, 1997; Kaplan & Bernays, 1997; Nuessel, 1992; Pearce, 1962), and North American Indian sources (e.g., Alexie, 2000; Ambler, 2003; Brave, 2000; Clark, 1982; Fortunate Eagle; 1992; Lame Deer & Erdoes, 1984; Strom, 1998) was studied and analyzed.

Sub-problem two was resolved by means of a study and an analysis of the content of four bibliographies comprising publications by and for North American Indians (Giese, 1996; Kaupp, Burnett, Malloy, and Wilson, 2000; Memmott, Campbell, Jannia, Mon, Sampsom and Soul, 2000; Mitten, 1999).

Content analysis was applied during the study of the necessity for the control and standardization of names, specifically North American Indian names (sub-problem three).

In order to resolve sub-problem four (studied in Chapter six), an in depth study and content analysis of AACR2R (1998) and Names of persons: national usages for entry in catalogues (IFLA, 1996a) was conducted.

Chronological Analysis

Chronology is "the setting down of events in the order of their occurrence. Chronology is important as it represents the first step in the process of historical research and provides material or data for the [efforts] to follow" (Powell, 1997:166).

Chronological analysis was applied in Chapter four to trace the chronology of authority control (see Section 4.3).

Statistical Analysis

"Statistical analysis, or 'statistics,' is concerned with the development and application of methods and techniques for organizing and analyzing data (usually quantitative) so that the reliability of the conclusions based on the data may be evaluated objectively in terms of probability" (Powell, 1997:179).

Sub-problem five was resolved by a statistical analysis of the presence of North American Indian names in selected national

library authority files. After developing test lists of author names and national libraries and after applying the first to the second, descriptive statistics were used to analyze the results.

1.5 ASSUMPTIONS

Leedy and Ormrod (1993:15) note, "[C]areful researchers ... set forth a statement of assumptions as the bedrock upon which [their] study must rest." The assumptions underlying this research are:

- The names selected to reflect North American Indian personal naming patterns are adequate.
- The test sets developed in Chapter seven adequately represent both North American Indian personal naming patterns and National Library authority files.
- The proposed rule set created to control the test North American Indian names will be adequate for all North American Indian names.
- No position need be taken about the current controversy regarding main entry for this thesis to be valid.

The subject of this thesis, personal naming among North American Indian tribes, is approached as if the needs of all Indian tribes were identical. North American Indian tribes, however, represent many different cultures. It is possible, therefore, that the results of this study may be incomplete (e.g., an unexpected name structure may be in use) or even invalid. In order for this research to be conducted, however, it is necessary to assume that the results can be generalized

to all North American Indian tribes but not necessarily to other aboriginal cultures.

This researcher believes that a rule set that works for authors will also work for other personal names that need authority records. Burger (1985) notes that a full personal name authority control system includes authors, characters, and all other names that might become access points. To develop the test sets used in this research, however, author names were selected as representative of all North American Indian personal names.

The reliability of the research described in Chapters Seven and Eight is increased if the national bibliographic agencies that fit the requirements specified in Chapter seven represent national bibliographic agencies throughout the world regarding North American Indian personal names. As discussed in Chapter nine, this assumption should be tested in the future.

If the set of authors created from selected reading lists (see Chapter seven) adequately represent all North American Indian personal names, the reliability of the enclosed conclusion is increased.

Finally, this research assumes that no position need be taken on the current main entry controversy. Though the choice between main entry and access points is discussed in Chapter six, the modified rule set proposed in this thesis can be implemented in any authority control system.

1.6 DEFINITIONS OF KEY TERMS AND ABBREVIATIONS

The following definitions and abbreviations are provided to ease the reading of research that crosses the academic boundaries of, among others, Native American Studies, Anthropology, and Bibliographic Control.

Anglo-American Authority File (AAAF) - AAAF is a name authority file that combined the Library of Congress Name Authority File (LCNAF) and the British Library Name Authority List (BLNAL).

Bibliographic Record Cooperative Program (BIBCO) - BIBCO, one of four PCC programs, is a program producing authoritative bibliographic records cooperatively (Maxwell, 2002).

British Library (BL) - "Located mainly in London, The British Library is the national library of the United Kingdom, created in 1973 by an act of Parliament which merged the British Museum Library, the National Central Library, the National Lending Library for Science and Technology, and the British National Bibliography." (Reitz, 2002:online)

British Library Name Authority List (BLNAL) - BLNAL is the national personal name authority file of the United Kingdom compiled and made available by the Library of Congress.

COBRA+ - "COBRA+ [was] a concerted action involving national libraries in Europe" (COBRA+ Telematics for Libraries, 2002a) including six projects developing aspects of bibliographic control.

Conference of European National Libraries (CENL) - "The Conference of European National Librarians (CENL) is a foundation under Dutch law with the aim of increasing and reinforcing the role of national libraries in Europe, in particular in respect of their responsibilities for maintaining the national cultural heritage and ensuring the accessibility of knowledge in that field. Members of CENL are the national librarians of all Member States of the Council of Europe." (Gabriel, 2002:online)

Cooperative Online Serials Program (CONSER) - CONSER, one of four PCC programs, is a program producing authoritative serials records cooperatively (Maxwell, 2002).

Cutter's Objects of the Catalog - These are Charles A.

Cutter's statement of the purposes that should be served by the library catalogue.

DIALOG - DIALOG is a large set of databases created by many producers and gathered by Thompson Information under a single interface.

DRA Web - DRA Web is a WWW site of the Digital Research Associates, Inc. that includes access to Library of Congress Name Authority File (LCNAF).

Educational Resources Information Clearinghouse (ERIC) - ERIC is an American bibliographic database of educational, library, and information science related documents available on the DIALOG information system as FILE 1.

European Commission (EC) - The EC is the executive body of the EU (EUROPA, 2003).

European Union (EU) - The EU is an international group of European countries working together for common ends, which includes legislative, executive, judicial, auditing, and intergovernmental oversight bodies (EUROPA, 2003).

Finding Functions - The objectives defined by C. A. Cutter that require a catalog to identify what is in a library's collection and guide a patron to the resource.

Functional Requirements and Numbering of Authority Records

(FRANAR) - "[An IFLA] Working Group created in June 1999 under
the auspices of the Division of Bibliographic Control and the
IFLA UBCIM Programme. The Working Group was to define
functional requirements of authority records, to study the
feasibility of an International Standard Authority Data Number
(ISADN), [and] to serve as the official IFLA liaison to other
interested groups concerning authority files." (IFLA,
2000a:online)

Gathering Functions - The objectives defined by C. A. Cutter that require a catalog to locate material about a common subject together.

Guidelines for Authority and Reference Entries (GARE) - The GARE Project defined a set of "specifications [that] satisfy the bibliographic needs of libraries" (Plassard, 2003:2) and documenting them as standardized authority record elements.

Information Science Abstracts (ISA) - ISA is a bibliographic database of library and information science related documents available on the DIALOG information system as FILE 202.

International Organization for Standardization (ISO) - ISO is an international organization which "promote[s] development of standards in the world with a view to facilitating international exchange of goods and services" through the coordination of "over 100 national standards bodies" (Harrod, 1990:328).

International Federation of Library and Information Agencies
(IFLA) - IFLA is an international body of library and
information services whose committees and research are the
primary supports of international bibliographic efforts.

International Standard Author Data Number (ISADN) - "[An] International Standard Authority Data Number (ISADN) will identify each author uniquely. Supporting author searches in virtual union catalogs will be much easier if ISADN can be used for bringing the different name forms together." (CASLIN, 2001:online)

Internet Public Library (IPL) - IPL is a World Wide Web site
operated by the School of Information at the University of
Michigan that acts as a public library of and for the Internet
community.

Library and Information Science Abstracts (LISA) - LISA is a British bibliographic database of library and information science related documents available on the DIALOG information system as FILE 61.

Library of Congress (LOC or LC) - "Established by Congress in 1800 to function as a research library for the legislative branch of the federal government, the Library of Congress eventually became the unofficial national library of the United States." (Reitz, 2002:online)

Library of Congress Name Authority File (LCNAF) - LCNAF is the US national personal name authority file compiled and made available by the Library of Congress.

Machine Readable Cataloging (MARC) - "The MARC formats are standards for the representation and communication of bibliographic and related information in machine-readable form" (Library of Congress, 2003:online). There are MARC formats for bibliographic, authority, holdings, classification, and community data.

Minimum Level Authority Records (MLAR) - MLAR represents one set of results from the IFLA Working Group on MLAR and ISADN which considered the creation of an international authority control system. Their work implemented the GARE elements (IFLA, 1996b).

Name Authority Cooperative Program (NACO) - NACO, one of four PCC programs, is a program that produces name authority records cooperatively (Maxwell, 2002).

Name Authority File (NAF) - A NAF is "a collection of name authority records" (Chan, 1994:487).

Name sequence - A group of personal names, given at different times, where only one of the names is active at a specified time.

Name set - A group of personal names where two or more of the names are active at the same time.

Name structure - A name structure is the pattern of name elements and the ways that these elements are connected.

National Bibliographic Agency - A country's official organization responsible for "[a]n ongoing list of the books and other printed materials published or distributed in a specific country, especially works written about the country and its inhabitants, or in its national language" (Reitz, 2002:online).

National Library of Canada/Bibliotheque Nationale du Canada - The national library of Canada.

North American Indians - Members of any of the aboriginal peoples, tribes, and nations of the United States of America or Canada.

Online Computer Library Centre (OCLC) - OCLC is an international bibliographic utility with over "8000 members" and a "database [that] consists of [bibliographic] records created by member libraries" (Harrod, 1990:442).

Onomastics - Onomastics is the scholarly study of names, including personal names, place names, acronyms, and brand names (Nuessel, 1992).

Open Archive Initiative Protocol for Metadata Harvesting (OAI-PMH) - "The Open Archives Initiative Protocol for Metadata Harvesting provides an application-independent interoperability framework [for] metadata harvesting" (OAI-PMH, 2003).

Paris Principles - The Paris Principles are the set of cataloging principles that form the basis of AACR2 (Chan, 1994).

Program for Cooperative Cataloguing (PCC) - PCC is a group of four programs (NACO, SACO, BIBCO, and CONSER) producing authoritative records cooperatively (Maxwell, 2002).

Project AUTHOR - Project AUTHOR was a CoBRA+ project which examined the feasibility of exchanging national name authority files (CoBRA+ Telematics for Libraries, 2002b).

Project Linking and Exploring Authority Files (LEAF) - The LEAF project proposed a distributed search mechanism for name authority files (LEAF, 2003). Its purposes were to allow public users to retrieve data directly and to grant users throughout the world access to an international authority file.

Subject Authority Cooperative Program (SACO) - SACO, one of four PCC programs, is a program that produces subject authority records cooperatively (Maxwell, 2002).

United Nations Educational, Scientific, and Cultural
Organization (UNESCO) - UNESCO is the United Nations agency
responsible for libraries.

Universal Bibliographic Control Program (UBC) - UBC is part of a recently closed IFLA core activity (UBCIM) responsible for developing international bibliography and the needed tools.

Virtual International Authority Project (VIAF) - A joint project between Die Deutsche Bibliothek, LC, and OCLC who "are jointly conducting a project to match and link the authority records for personal names in the retrospective personal name authority files of Die Deutsche Bibliothek and the Library of Congress" (OCLC, 2004).

World Wide Web (WWW) - "A global network of Internet servers providing access to documents written in a script called Hyper Text Markup Language (HTML) that allows content to be interlinked, locally and remotely" (Reitz, 2002:online)

1.7 STRUCTURE OF THE THESIS

This thesis is subdivided into nine chapters. Besides Chapter one, the report includes the following:

Chapter two will report on naming, focusing on North American Indian cultures and creating an understanding of the naming practices and kinds of names found among these cultures. First there is an examination of the significance of personal names in general, the characteristics of names, and the uses and possible problems of personal names. An examination follows of

the same questions with special focus on North American Indian names. This chapter gathers the background information necessary to answer sub-problem one and discern any special bibliographic control required by North American Indian personal names.

The focus of Chapter three will be on the place of North American Indians in the publications environment. Since bibliographic control is practiced solely within the publications environment, the presence of North American Indians (which is the focus of sup-problem two) is necessary for the research reported in this thesis to be significant. Four extensive bibliographies that focus on publications by and about North American Indians will be identified in the chapter. Finally, a list of author names that can be used in the exploratory research reported in Chapters seven and eight will be developed.

Chapter four will examine the history, purposes, principles, and environment of authority control, laying the grounds for the research reported in Chapters five, six, seven, and eight. Sections will survey the purpose, principles of authority control, and the determination of access points. This information will support the research that resolves subproblems three, four, and five.

Research sub-problem three, the need to standardize names (especially North American Indian names) in the authority control environment, provides the focus of Chapter five. The ways that standardized personal names support bibliographic functions on a local, national, and international level will

be discussed. A discussion of various efforts to implement international authority control programs will follow. Finally, the effects of specific characteristics of North American Indian names and naming on the need for standardization in authority control will be documented.

The bibliographic control literature that influences or controls personal name authority control will be examined in Chapter six. This chapter will focus on the special needs of North American Indian names and will resolve sub-problem four. The rules in AACR2R (1998) and patterns in Names of persons: national usages for entry in catalogues (IFLA, 1996a) will be examined with special reference to the requirements defined in Chapter five of this thesis. Where weaknesses are found, added text that strengthens these rules and patterns is proposed. For example, neither name sequences nor name sets are currently controlled. Changes will be suggested to AACR2R (1998) rules 22.1, 22.2, 22.17 through 22.20, and 26A3. Additional changes will be suggested for the Canadian and American entries in Names of persons: national usages for entry in catalogues (IFLA, 1996a).

The purpose of Chapter seven will be to set up the exploratory research sub-problem (sub-problem five). It will also describe the sub-problem, the three hypotheses, and the proposed exploratory methodologies in detail. It will develop the necessary test forms. The potential effects of reliability and validity on the reported research will also be discussed. At the end, preparations for data collection will have been completed.

Chapter eight will report on the data developed by the application of the methodology described in Chapter seven, resolving research sub-problem five. First, the data collected will be described. The hypotheses, then, will be tested using the collected data and a general summary of the results of the experiment will be given.

And finally, Chapter nine will examine the conclusions of this research and suggest future lines of research that will enrich and extend the research reported here.

CHAPTER 2

PERSONAL NAMES AND NAMING PRACTICES

2.1 INTRODUCTION

Chapter two resolves research sub-problem one by examining personal names and naming practices among world cultures and then focusing on the names and naming of North American Indians. It also covers the philosophy behind personal names and naming processes and the problems presented by names in general and by North American Indian names in particular.

The four major sections in this chapter include:

- Personal names and their structures in general (Section 2.2)
- Personal names and naming among North American Indians (Section 2.3)
- The effects of colonization on personal names, including those of North American Indians (Section 2.4)
- Summary of those aspects of North American Indian names that affect authority control (Section 2.5).

2.2 PERSONAL NAMES AND THEIR STRUCTURES IN GENERAL

In The fisher king and the handless maiden, Johnson (1993:6) discusses, in terms of Jungian analysis, the idea of emotional wounding. He makes very clear the relationship of words and the objects they symbolize when he says, "Where there is no terminology, there is no consciousness". In Johnson's view, then, where there is no name there is no identity. Johnson is right and names are ubiquitous. People, places, things, companies, products, and government agencies are among the many kinds of named objects.

Pearce (1962:161) says "Names are so familiar to us that they take on the aura of the commonplace. Everything and everyone is named."

Despite Johnson and Pearce's assertion the question remains: what is a name?

2.2.1 Names and Naming

A name is, at a minimum, a label which identifies a person, place, or thing (Nuessel, 1992:1; Trask, 1999:196-97).

According to the most common definition of name, it is a noun phrase that has no connotative meaning (Nuessel, 1992:2) but is limited to its denotative meaning. For example, this author is married to a woman whose maiden name is Rosenquist, which is Swedish for rose twig. The author feels that her name is an accurate description, but, as a name, this descriptive power (connotation) is irrelevant. The identifying power (denotation) of the name is the only generally accepted significance.

Nuessel (1992:ix-x) mentions the following kinds of names:

- Anthroponyms names of people
- Toponyms names of places
- Acronyms and initialisms names of other words or concepts
- Brand names and trademarks names used in commerce
- *Miscellaneous names* including fictional names, professional names, and college names

For the purposes of this thesis, the word "name" will refer to anthroponyms (personal names).

Ingraham (1997:xv-xvi) lists six additional aspects of personal
names:

- Eke-names an additional or replacement name
- Family names a name that is passed on from generation to generation
- Surnames an "after name." Often an eke-name or a family name
- Patronymics a "father-name" that changes from one generation to the next
- Christian names a given name that connects the recipient to his or her Christian religion
- Name-titles a name that follows the line of holders of a position

At first thought, it would seem that naming is simply the act of giving a name. While this is true as far as it goes, the act of naming is not simple. Namers often use naming as an indication of their power, even using names to define ethnic groups (Nuessel, 1992:3). For example, Kaplan and Bernays (1997:81) note that Ralph Ellison (the great African-American writer) wrote, in the essay Hidden Name and Complex Fate, "We must first come into possession of our own names. For it is through our names that we first place ourselves in the world. Our names, being the gift of others, must be made our own." Alford (1988:Chapter two) examines the following aspects of naming:

- Social meaning of giving names
- Time first name is given
- The identity of name givers
- Technique of name choice
- Kinds of naming ceremonies

Naming can indicate either membership in a social group or who the parents are. Depending on the society, the name can be given anytime from birth to age four or even later. Name givers can be mothers, fathers, both parents acting together, grandparents, an aunt, an uncle, a religious figure, or a respected elder. The name can be chosen on the basis of a dream, divination, a set of rules, or free choice by either the naming or the named individual. Finally, again depending on the society, naming ceremonies ranging from no ceremony to extensive formal rituals may occur.

Names are chosen for many reasons. In some cases parents choose first names based on their perceptions of the name's image and influence (Reed, 1991). Hook (1982:13) noted that most surnames based in English and other European cultures came from four sources: place names, patronyms, occupational names, and descriptive names. Kaplan and Bernays (1997) note that first names often honor someone in the namers past. First names shift in popularity from decade to decade (Nuessel, 1992) indicating that fashion may be a factor in naming. And finally, as indicated by Shel Silverstein's (1969) A boy named Sue, names may be cruel. (When Rodney Scurlock, a friend of the author, was considering possible names for his expected second son, people suggested Sherlock. His response, as reported to the author was, "Sherlock Scurlock! That's like saying, 'I hate you, my son.'").

2.2.2 Significance of Names

Parents often choose names that represent their hopes and desires for their children (Reed, 1991). Since a parent's

attitudes and way of treating children also follow these hopes and desires and a parent's attitudes and way of treating children significantly affect a child's life, that child's name may be a clue to her or his future.

Throughout the world, names can signify many things (Alford, 1988). A person's name may tell the day of his or her birth. It may indicate clan membership or the passage of an important event. Other significant elements that affect a person's name include physical or psychological character, a birth event, place of birth, animal spirit guide, or a warning to the named person or others.

First impressions can be very powerful. Names often provide this impression about a person's character (Pearce, 1962). A positive name impression will make life easier as the person with the name moves through society. On this basis Andersen (1977) even suggests changing one's own name to assure a positive first impression.

Naming affects the name giver as well as the named person. For example, people who rename themselves (Andersen, 1977) have accepted personal power that can spread through their lives. When someone receives a nickname (happily or not) she or he has the values or observations of an outsider imposed (Nuessel, 1992). Within families, the power of naming allows parents to pass traditions and expectations from one generation to the next (Reed, 1991). What is true of individuals or families is also true of groups (Kaplan and Bernays, 1997); one of the actions of minority groups struggling to restore their dignity is to name people in new ways.

If name giving is an expression of power, a culture's traditional name giver wields tremendous social power (Alford, 1988). In different societies this traditional name giver may be:

- One or more grandparents
- One or more aunts or uncles
- An elder
- A religious leader

Most people in North America are named according to a European-based system and have a family name and a given name. Both are given at birth or soon after, so the name's significance to the name giver is probably more important than it's significance to the name bearer. Nicknames, however, can be given at anytime in life (Morgan, O'Neill, and Harre, 1979), so that the name's significance is a negotiated result of the name giver, the name bearer, and the people around them.

Some cultures (Alford, 1988), primarily among North American Indians, Africans, Pacific Islanders, and some Asians, change personal names in response to important life events. This seems analogous to the giving of nicknames but is significantly different. First, the new name replaces the old name rather than supplementing it. Second, the new name is recognized by the whole society of which the named person is a member. Third, the level of ceremony for new names is almost always the same or more extensive as that for earlier names.

2.2.3 Characteristics of Names and Naming

The most widespread name form, the European name form, is found throughout the world (IFLA, 1996a; Ingraham, 1997) because of colonialism, immigration, population change, and war. This name form consists of one or more given names (the first sometimes called a Christian name and the second called a middle name), followed by a family name (often called a surname) and a final modifier such as Jr. or IV (Nuessel, 1992; Kaplan and Bernays, 1997).

Two European countries that use variants of this basic name form are Hungary and Spain. In Hungary, the family name is the first name, coming before the given names (e.g., a woman whose surname is 'Ferenc' and whose forename is 'Magda' is entered in a Hungarian catalog as 'Ferenc Magda') (IFLA, 1996a:88). In Spain a child's family name may be a combination of the father's family name followed by a space and the mother's family name (e.g., a man whose forename is 'Juan,' whose father's surname is 'Rodriguez,' and whose mother's surname is 'Marin' is entered in a Spanish catalog as 'Juan Rodriguez Marin') (IFLA, 1996a:211).

Other name patterns, however, are found throughout the world. Alford (1988) notes cultures as geographically diverse as the Bemba of Central Africa, the Chuckchee of Northeastern Siberia, and the Hopi of the Southwestern United States have no surnames. Cultures as geographically diverse as the Ganda of Central Africa, the Yakut of North Central Siberia, and the Aranda of Central Australia give children Great or Sacred names (page 57) as their only names or in addition to other names.

Finally, seven types of semantic meaningfulness, a name characteristic missing from the European model, are defined (page 184):

- Names describing the named person's character
- Names describing an event from the named person's birth
- Names as a message to people other than the named person
- Names describing a physical trait of the named person
- Names connecting a place name to the named person
- Names connecting an animal or spirit guide to the named person
- Names as derogatory to or protective of the named person

Additional name structures (Dunkling, 1991:65-74; Ingraham, 1997) include:

- Chinese family name is first followed by given names
- Japanese given name often refers to the children's birth order
- Hindu given name (or its first syllable) is often chosen with an astrologer
- Sikh given names are androgynous. Males follow given name with Singh; females follow given name with Kaur
- North American Indian names have meaning (often a characteristic, life event, or spirit guide) and change through life

The European pattern is the primary name form found in the United States of America. The Library of Congress (IFLA, 1996a:252) refers to the United Kingdom's English entry for most names, allowing for minor variations such as surname prefixes (Van in Van Buren, De in De Voto, and La in La Farge). No other naming patterns that might be found in the United States are recognized or analyzed (see IFLA, 1996a:252-253).

Because of the country's history, however, everyone who lives in the United States, except full-blooded American Indians, is either an immigrant or is descended from one or more immigrants (Hook, 1982). Therefore every name form in the world can be found somewhere in the United States. These name forms need to be managed with understanding and sensitivity.

2.2.4 Uses of Names

In addition to identification, personal names have many other purposes (Nuessel, 1992). A person's name can express his or her self-concept (Alford, 1988; Reed, 1991; Wong, 1986). For example, take the life story of the fictional Robert Jameson Smith. As a happy-go-lucky child he called himself Bobby Smith; in high school and college he called himself Bob Smith; in law school he called himself Robert J. Smith; and as a practicing lawyer he called himself R. Jameson Smith. As Mr. Smith's self-concept became more serious, it was reflected in his name form.

Personal names can indicate cultural inclusion (Alford, 1988; Hook, 1982:13; Reed, 1991; Wong, 1986) on many levels. An English man's name indicates the father's surname and offers the basic information that, with significant effort, can lead to a family genealogy. A Chinese woman's name indicates her membership in a large extended family.

Many nations have a homogenous population so a name identifies a person's family and national culture. A country like the United States, though, has many subcultures, most based on the place from which ancestors' lived. Hook (1982) details the

names brought to the United States from all over the world and how they have changed over time, allowing names to identify family history. Kaplan and Bernays (1997:81) discuss the relationship between personal names and subculture membership allowing people to declare their social place by changing their names.

Many societies are divided into formal clans; there, names often indicate membership (Alford, 1988; Patterson and Snodgrass, 1994). For example, each Iroquois League (a confederation of American Indian nations) clan is descended from the same woman. Each clan has specific names and a person's clan membership is identified by her or his name.

The expectations of others are often indicated by a formal name or nickname (Alford, 1988). Reed (1991) says that parents often choose names for their children based on their dreams and expectations mixed with name stereotypes. Later in life the expectations of others are made clear (sometimes painfully clear) by the nicknames given a person (Morgan, O'Neill, and Harre, 1979).

In some cultures people receive avoidance names (Alford, 1988) as a way to ward off evil demons. When an individual becomes well known and may be attacked by spirits, the use of their avoidance name makes them impossible to find.

Finally, a personal name can also be a professional name (Nuessel, 1992; Kaplan and Bernays, 1997). His parents named him Marion Morrison but he found more acting work as John Wayne. Her parents named her Norma Jean Baker but she found

more acting work as Marilyn Monroe. Mick Foley (1999:373), a professional wrestler who worked under the names Cactus Jack, Dude Love, and Mankind, says, "I don't think you can overestimate the importance of your name in pro wrestling. A good name won't make you, but a bad name sure as hell can break you." The career of Dwayne Johnson, a professional wrestler who is currently one of the hottest stars in World Wrestling Entertainment, is a clear example (The Rock, 2000). He has wrestled under four names: Dwayne Johnson, Flex Kavana, Rocky Mavia, and The Rock. He was loudly boo-ed by audiences in his first three personae, but, the night he first became The Rock, the same fans loved him.

2.2.5 Problems with Names

Weeds are "plants growing where they are not wanted" (Spelce, 1998). In an analogous way most problems with personal names are a result of their inappropriate use. For example, the name that identifies an individual will, if mispronounced, lose all identification value. This problem is an example of spoken language misrepresenting written language.

An individual's name may not permit an expression of his or her self-concept (discussed in Alford, 1988; Reed, 1991; Wong, 1986). The fictional Robert Jameson Smith (discussed in Section 2.2.4) may become a clown rather than a lawyer. No variant of his birth name will express this self-concept (although Bobby Smith may come close); any attempt to force one will meet with failure. This problem is an example of a lack of potential within Mr. Smith's name.

Personal names can indicate cultural inclusion (as discussed in Alford, 1988; Hook, 1982:13; Reed, 1991; Wong, 1986) on many levels from nuclear family to national identity. As people immigrated to the United States and passed through Ellis Island (one of the official entry points), their names were often mangled loosing all cultural significance. This problem is an example of lack of cultural awareness (or concern) by people with the power to create an official name.

In Sweden, a nation with a very homogenous population, too many people share identical surnames, eliminating their ability to indicate family relationships. The national government, in response, created a commission to develop and publish a list of culturally appropriate surnames that people with one of the too-common names may select.

As mentioned in Section 2.2.4, many societies, which are divided into formal clans, used names to indicate membership. Each Iroquois League clan has specific names and a person's clan membership is identified by her or his name. As these traditional societies mix with European-style societies (which do not have a formal system of clans), individual personal names express new influences and clan membership becomes harder to identify. This problem is a result of cultural loss.

Reed (1991) says that parents often choose names for their children based on their dreams and expectations mixed with name stereotypes. Later in life, however, individuals often have very different dreams and expectations from those of their parents. For some of these people, their names are inappropriate and a problem. Nicknames, given by others, are

often derogatory and result in great pain. This problem is an example of elements of self-concept being created by outsiders.

2.3 PERSONAL NAMES AND STRUCTURES AMONG NORTH AMERICAN INDIANS

As detailed in Section 1.3, the research problem for this thesis is: What is the impact of naming practices among North American Indians on name authority control? And for this chapter, the sub-problem is: What are the current naming practices among North American Indians?

This section includes the illustrative story of Black Pipe's names, a discussion of the characteristics of North American Indian names, the ways North American Indian names are used, and an examination of the problems presented by North American Indian names.

2.3.1 Black Pipe's Story

The Indian sign language (Clark, 1982:266) is a reprint of a nineteenth century U. S. Army training manual for officers working with the Plains tribes in the 1870s and 1880s. He quoted the story of an old Cheyenne warrior about personal names and naming:

When a child is first born, whether a boy or girl, it is called a baby,—a girl baby or boy baby,—afterwards by any childish name until, if a boy, he goes to war; then, if he "counts a coup," he is named for something that has happened on that journey, from some accident, some animal killed, or some bird that helped them to success.

Or, after returning, some one of the older men may give the young man his name. When I was small I was called "Little Bird." When I first went to war and returned to camp, the name of "Long Horn" was given me by an old man of the camp. Then the traders gave me the name Tall-White-Man, and now, since I have become old, they (the Indians) call me Black Pipe. This name was given me from a pipe I used to carry when I went to war. I used to blacken the stem and bowl just as I did my face after these trips, and was especially careful to do so when I had been successful.

Black Pipe's story demonstrates unique characteristics of North American Indian personal names that will be discussed next.

2.3.2 Specific Characteristics of North American Indian Names

North American Indians in the United States and Canada today have three name forms: those derived from a European model, traditional forms, and names that mix the two (IFLA, 1996a; Ingraham, 1977). These name forms are demonstrated and explained below.

The name of Sherman Alexie (2000), a contemporary Spokane/Coeur d' Alene poet and novelist born in October 1966, follows the English or European model (IFLA, 1996a; Ingraham, 1997). His father's family name, Alexie, was taken by the author's mother at marriage and passed to all of their children. Sherman is the writer's given name. The name Sherman Alexie identifies a specific individual (has denotation) but contains no additional descriptive information (has no connotation) (Nuessel, 1992:2).

Sitting Bull (Utley, 1993), who received his name before the first census of the Lakota people, is a traditional name form

(actually the translation from Lakota of a traditional name form). Tamaque (Ingraham, 1997:347), the Lenni Lenape man's name that means *Beaver*, is both traditional in form and is expressed in the tribe's own language.

Traditional North American Indian names defy Nuessel's definition (see Section 2.2.1) since they can both denote (identify) and connote (describe) a individual. Traditional North American Indian names describe at least three aspects of an individual:

- They tell a person's story
- They may be autobiographical
- They may identify clan membership

Traditional names connect an individual with some aspect of the natural world.

The form of Tony Brave's name (Brave, 2000) is a mixture of the traditional and European name forms. Brave is a descriptive term in North American Indian societies, thus his second name is a traditional one. At the same time Brave, was his father's name and passed on to him and all of his siblings. His second name follows the European model. Tony, his first name, clearly follows the European model.

A more complex mixed name is that of Dr. Janine Pease-Pretty on Top, the founding President of Little Big Horn College in Montana, USA. Pease was her father's name and passed on to her and all of her siblings, thus the first half of her hyphenated second name (hyphenated family names are becoming more common

in the United States) follows the European model. Pretty on Top is descriptive, thus the second half of her second name is a traditional one. Janine, her first name, clearly follows the European model.

An example of another mixed name form is John "Blackfeather"
Jeffries. John Jeffries is currently Tribal Chair of the
Occaneechi Band of the Saponi Nation, and his name, when
written this way, is of the European form. Blackfeather is his
tribal name; his name, when written this way, is of traditional
form. As a result, with his tribal name within his European
name, John "Blackfeather" Jeffries is a mixed form.

Traditional North American Indian names often changed over time (Clark, 1982; Utley, 1993). The war chief, commonly called Sitting Bull, was originally given the name of Jumping Badger. As a child he was called Slow because of his deliberate manner. He received the name Sitting Bull after his first battle. Because of his heroism, the young man was honored with his father's name, Sitting Bull. The older chief took the name Jumping Bull.

In many North American Indian tribes, naming traditions allow a person to have more than one name at a time. For example, Tony Brave (2000), the Lakota Sioux Indian and systems administrator at Oglala Lakota College, has the tribal name Wambli Ho Waste (which means *Pretty Voice Eagle* in English). Severt Young Bear (Young Bear and Thiesz, 1994), another Lakota Sioux Indian with a mixed form name, also has a tribal name, Hehaka Luzahan (*Swift Elk* in English).

A final characteristic of North American Indian names is the effects of language changes (Utley, 1993; Ingraham, 1997). A Lenni Lanape man named Beaver would probably have been called Tamaque if he had lived in the fifteenth century. Campbell (1997) notes the effect on naming language of the removal of the Creek Confederation from Georgia to Oklahoma. In 1832, 6.5% of Creek names were in English and 93.5% were in Indian languages. In 1858-1859 22% of Creek names were in English and 78% were in Indian languages.

2.3.3 Specific Uses of Names Among North American Indians

Because individuals can change names throughout life, Wong (1986) notes that traditional form North American Indian names can tell an autobiographical story. Because individuals can have more than one name at the same time, Young Bear and Thiesz (1994) note that use of these names can form a social control.

The story of Sitting Bull's early life (see Section 2.3.2) is an example of a sequence of changing traditional names that tell an autobiographical story. The future chief's name was changed to Slow when his deliberate manner asserted itself so that his name reflected the most important aspect of his character. But his heroism in battle showed that he could think and act quickly when speed was needed. As a result, the young man was honored with his father's name, Sitting Bull, which contains both fierce and deliberate aspects.

As noted above, North American Indians may have more than one name at the same time. Young Bear (Young Bear and Thiesz, 1994) says that these different names often carry different

social expectations. When making an ordinary social request his common name (Severt Young Bear) is used. When making an extraordinary social request his tribal name (Hehaka Luzahan or Swift Elk) is used because its use both honors him and carries important duties. For example, if Severt Young Bear (his common name) is asked to sing at a Pow-Wow, there is no social pressure on him and he can do as he wishes. On the other hand, if Hehaka Luzahan or Swift Elk (his tribal name) is asked to sing at a Pow-Wow, he feels obliged to comply.

2.3.4 Specific Problems with Names Among North American Indians

There are three possible problems specific to North American Indian names. First is the use of a personal name in an inappropriate way. Second is the use of the wrong name for an individual who has different names at different times of life. Third is the use of the wrong name for a person who has two or more names at once.

As an example of inappropriate name use Young Bear and Thiesz (1994) note that the names of deceased Lakota people are rarely mentioned. Alford (1988) notes the same prohibition among the Klamath, Ojibwa, and Pawnee tribes. However, the prohibition does not exist among the Blackfoot, Copper Eskimo, Hopi, Iroquois, and Tlingit peoples. There are hundreds of distinct North American Indian societies, each of which has determined its prohibitions. Clearly, understanding the rules of personal name use requires knowledge of each culture.

The other two problems specific to North American Indian personal names derive from the fact that North American Indians

often have more than one name. Sitting Bull (Utley, 1993) had at least three names by the time he was in middle adolescence: Jumping Badger, Slow, and Sitting Bull. Depending on the circumstances, different names should be used.

Young Bear (Young Bear and Thiesz, 1994), who has at least two names at the same time (Severt Young Bear and Swift Elk), says that name selection is a normal problem among the Lakota people. As discussed above, the name used in a situation determines the significance of the material around it.

2.4 EFFECTS OF COLONIZATION

Prior to contact with Europeans, North American Indians lived in oral cultures. Colonization brought both spoken and written European languages along with the institutions (e.g., schools and governments) of the colonizers. Over time, then, the oral cultures adopted new languages (partially or fully) and writing (some individuals more fluently than others).

The personal names of North American Indians may represent a pre-contact culture, a mixed state (some fully traditional oral people, some people fully integrated into the European-based culture, and many people between these extremes).

North American Indians do not necessarily have one name only. Clark (1982:266) (Section 2.3.1) described the name sequence of one of his scouts:

- Little Bird
- Long Horn
- Black Pipe

During the period that his tribe used the names *Long Horn* and Black Pipe, traders called him *Tall-White-Man*.

Certainly the name *Little Bird*, when it was first bestowed, was not spoken in English. Since the scout's tribe is unknown, his language and the pronunciation of his first name are also unknown. Little Bird, Long Horn, and Black Pipe could reasonably appear in an army biography or history that named scouts in English or in a tribal history written by anthropologists writing in several languages (Waldman, 1985).

Since Tall-White-Man was a name given to the scout by traders, it probably would only appear in English. Thus, this single scout might well be known by three names in two languages. This does not include names that might have been given by other tribes with whom Black Pipe interacted. A complete authority analysis of the personal names of Clark's scout, then, would require working knowledge of several languages describing two cultures within multiple contexts.

North American Indians often use hyphens to connect the separate words in a naming concept (e.g., Tall-White-Man [Clark, 1982:266]) or concatenate the words into an unbroken string (e.g., the author Martin Brokenleg [Mitten, 1999]) to force the proper treatment of their names in English listings. Names like these can be treated as a European name form;

equivalent mixed form names would appear as Tall White Man and Martin Broken Leg.

Some individuals indicate the possibility of a name set by their recorded name. For example, Robert (Gray-Wolf) Hofsinde, the author of *Indian Costumes*, has two names (*Robert Hofsinde* and *Gray-Wolf*) that could be used interchangeably since neither is more right than the other.

Another example is the name 'Eastman, Charles Alexander (Ohiyesa)'. Dr. Alexander, a Wahpeton Dakota Indian who lived from 1858 to 1939, became the first American Indian to receive an M.D. degree. He received the name Ohiyesa as a youth when he was raised traditionally and the name Charles Alexander Eastman when he went to school in Wisconsin. He served in both the American Indian and White American worlds; 'Ohiyesa' and 'Charles Alexander Eastman' were a name set (Giese, 1996).

2.5 SUMMARY

Chapter two examined the sub-problem: What are the current naming practices among North American Indians?

The first step was to examine the significance, characteristics, uses, and problems presented by personal names in general, because all of these considerations affect North American Indian cultures too.

North American Indian personal names have additional significance, characteristics, uses, and problems because of

their cultural and historical background. The three most important issues affecting authority control are:

- The three name forms (European, traditional, and mixed) analysed in Section 2.3.2.
- Name changes that create a name sequence (two or more names at different times) and a name set (two or more names at the same time) as analysed in Section 2.3.3.
- The effects of colonization on North American Indian personal names also analyzed in Section 2.4.

Having described North American Indian name-forms and naming patterns, resolving research sub-problem one in this chapter, Chapter three will examine North American Indian personal names as they appear in the publications environment, resolving research sub-problem two.

CHAPTER 3

NORTH AMERICAN INDIAN NAMES IN THE PUBLICATION ENVIRONMENT

3.1 INTRODUCTION

The significance, characteristics, uses, and problems presented by North American Indian personal names were examined in Chapter two, resolving research sub-problem one. The three most important characteristics of North American Indian personal names are:

- The European, traditional, and mixed name forms
- The name changes that create name sequences and name sets
- The effects of colonization on oral cultures (whose traditional naming practices express semantic meaning) by writing cultures (whose naming practices delineate ancestry).

Chapter three determines the presence and extent of North American Indian names in the publication environment of the United States of America, Canada, and the rest of the world, determining whether they might have an impact on name authority control. This addresses sub-problem two: How do North American Indian names appear in the information environment? In the process it demonstrates that Chapter two's conclusions can be found in the real world.

3.2 PUBLICATION ENVIRONMENT

As detailed in Chapter one, the research problem for this thesis is: What is the impact of naming practices among North American Indians on name authority control. Sub-problem two, the subject of this chapter, is: How do North American Indian names appear in the publication environment?

The study of personal names and the study of authority control intersect in the publication environment when information objects are acquired as parts of library (or other information agency) collections (Clack, 1990). The purpose of this chapter is to look for the presence (or absence) of North American Indian names in the publications environment. The presence and forms of North American Indian names can be determined by a survey of significant databases.

For this thesis, four bibliographic databases serving North American Indians and those interested in them are examined. The bibliographies chosen were listed on the homepage of the American Indian Library Association (AILA) (2000) that had national coverage and focused on published literature. The selected bibliographies were:

- The Internet Public Library (IPL) Native American Bibliography http://www.ipl.org/ref/native/
- All Native Books (Index by subject, age-level, tribe, and title) http://www.kstrom.net/isk/books/all_idx.html
- A Critical Bibliography of North American Indians for K 12 (Anthropology Outreach Office of the Smithsonian Institution) http://nmnhwww.si.edu/anthro/outreach/Indbibl/bibliogr.html
- New Indian Books (Univ. of Pittsburgh Monthly acquisitions from 3/94-4/99) http://www.nativeculture.com/lisamitten/indbks.html

The following methodology was applied to each bibliography:

- Count the books
- Determine the publishers
- Count authors' names

- Determine how many of the authors' names are of Europeanform, traditional-form, and mixed-form
- Describe the results in terms of publication type, publisher, and name type

The following interpretations have been applied in this section:

- Books in Print (DIALOG File 470) is used to fill in missing data if author, publisher, publication date, or edition are not indicated by the selected bibliography
- When more than one edition of a work is listed in Books in Print (DIALOG File 470), the most recent edition is chosen
- When a work was published by more than one publisher, the publisher of the most recent edition is chosen
- In cases of multiple authorship, a complete count (Diodato, 1994) is used. Complete count is a bibliometric technique where each of a document's authors is given full authorial credit.

Sections 3.2.1 and 3.2.2 detail the bibliographies, offering an analysis of North American Indian personal names in the part of the publication environment on which this thesis focuses. Section 3.2.1 describes each of the selected bibliographies to understand its place in the publication environment, its primary users, its authors and publishers, and its bibliometric structure. Section 3.2.2 analyses the names of the authors represented in the selected bibliographies. The three kinds of name forms (European, traditional, and mixed) and their distribution within the lists are examined.

3.2.1 Analysis of Selected Bibliographies

3.2.1.1 The Internet Public Library Native American Bibliography

Bibliography number one is the Internet Public Library's (IPL's) Native American Bibliography (Memmott et. al., 2000) as it was on 31 May 2000. Originated as a class project at the University of Michigan's School of Information, the bibliography had 1209 titles published by 500 publishers. These titles were created by 458 authors, two of whose names indicated possible name sets. The Native American Bibliography "was envisioned as a way to help people around the world learn about and celebrate the achievements, lives and works of these important authors" (Memmott et. al., 2000). Intended for a general audience, the IPL's Native American Bibliography emphasizes contemporary North American Indian authors.

3.2.1.2 Paula Giese's All Native Books

Bibliography number two is Paula Giese's All Native Books (Giese, 1996) according to her last update on 27 December 1996. (Ms. Giest died in 1997.) At her death, the bibliography had 251 titles published by 112 publishers. These titles were created by 216 authors, four of whose names indicated possible name sets. Giese (1996: online), describing her purpose, said, "A major objective here is to educate readers ... to learn more about native history, culture, values (and facts) and become able to make good book selections with limited book budget funds." This indicates that she intended a general audience

with some focus on public and school librarians. To accomplish this, *All Native Books* is divided into the following 15 subject categories:

- Biographies
- History
- Science and Math
- Culture
- Legends and Myths
- Art and Crafts
- Current Issues
- Nonfiction
- Education
- Poetry and Songs
- Plants and the Environment
- Reference
- Fiction
- Women
- Miscellaneous

3.2.1.3 Critical Bibliography of North American Indians for K-

Bibliography number three is the Smithsonian Institution's A Critical Bibliography on North American Indians for K-12 (Kaupp, Burnett, Malloy and Wilson, 2000). Originated in response to requests from parents, teachers, librarians, and the quincentennial of Christopher Columbus' landfall in the Western Hemisphere, the bibliography has 686 titles published by 253 publishers. These titles were created by 591 authors, two of whose names indicated name sets. A Critical Bibliography on North American Indians for K-12 "focus[es] primarily on materials for elementary and secondary schools, although it has grown to include publications of interest to

the general public." (Kaupp, Burnett, Malloy and Wilson, 2000). Intended primarily for an audience within the education community, the Smithsonian Institution's A Critical Bibliography on North American Indians for K-12 includes short evaluative reviews guiding users toward positive portrayals.

3.2.1.4 Lisa Mitten's New Indian Books

Bibliography number four, Lisa Mitten's New Indian Books (Mitten, 1999), is a resource for academic libraries. The bibliography has 1326 titles published by 518 publishers and was created by 1103 authors (one of whose names indicated a possible name set). It "contains month-by-month lists of new books on Native Peoples received by the University of Pittsburgh's Hillman Library" between 1994 and 1999 (Mitten, 1999). New Indian Books represents a snapshot of the developing academic publication environment for books about North American Indians.

Appendix A includes all four bibliographic lists, the publishers represented in each, and the number of titles each publisher contributed. There were 1022 separate publishers in at least one of the four lists. Seven hundred ninety-three publishers (77.59%) appear in only one list; 155 publishers (15.17%) appear in two lists (see Appendix C); 46 publishers (4.50%) appear in three lists (see Appendix B); and only 28 publishers (2.74%) appear in all four lists (see Table 3-1).

Appendix B lists the 46 publishers that placed titles in three of the bibliographic lists, and Appendix C lists the 155

publishers that placed titles in two of the bibliographic lists.

Table 3-1: Publishers appearing in all four lists

PUBLISHERS	UBLISHERS NO. IN NO. IN NO. IN LISA					
10001011110	IPL	IN	SMITHSONIAN	MITTEN		
		GIESE				
Ballantine Group	4	1	3	1		
Chronicle Books	3	2	1	4		
Clear Light Pubs	10	2	5	10		
Doubleday	19	3	5	2		
Fulcrum Publishing	5	6	1	6		
Harcourt Brace	1	2	6	8		
HarperCollins	8	4	7	6		
Henry Holt	6	1	4	1		
Houghton Mifflin	4	3	16	2		
Lerner Publications	7	4	7	1		
Little, Brown & Co	2	4	9	2		
MN History Soc Press	4	9	3	3		
Naturegraph	8	2	17	1		
Northland Pubs	11	5	9	2		
Penguin Books	4	13	2	3		
Putnam Publications	1	1	1	1		
Red Crane Brooks	5	2	2	2		
Scribner's	2	1	2	2		
Simon and Schuster	5	1	2	4		
Smithsonian Inst	2	2	2	17		
Smithsonian Inst	2	2	2	17		

PUBLISHERS	NO. IN IPL	NO. IN GIESE	NO. IN SMITHSONIAN	NO. IN LISA MITTEN
U ¹ of Arizona	39	4	5	26
Press				
U of Minnesota Press	11	2	1	2
U of Nebraska Press	44	8	13	57
U of New Mexico Press	16	6	5	28
U of Oklahoma Press	41	5	8	55
U of Texas Press	4	1	1	21
U of Washington Press	8	3	1	12
Viking	1	3	7	2

One inescapable conclusion from the previous analysis is that the environment for North American Indian publications is remarkably broad. Among the publishers that appear in all four lists are those specialising in North American Indians (e.g., Red Crane Books and Clear Light Publishers), those specialising in a geographic region (e.g., Minnesota Historical Press), academic publishers (e.g., University of Nebraska Press), and mass-market publishers (e.g., Doubleday). Clearly, if authorial names in this environment exhibit mixed or traditional name forms, or if they exhibit evidence of name sets, authority control rules are needed. According to Humes (2003), the policy of the Library of Congress (as set by the Cataloging Policy and Support Office) is to "follow AACR 2 when establishing heading (sic) for person (sic) Native American

 $^{^{\}rm 1}$ Within the tables in Chapter 3 the letter U in publishers names stands for 'University'.

names. We have no special rules or directives." Chapter six (especially Sections 6.2, 6.3, and 6.4) analyses suggests rule changes.

3.2.2 Analysis of Author's Names from Select Bibliographies

An important aspect of the publications environment for North American Indian personal names is the treatment of author's names. The first part of this section examines those authors' names that appear two or more times in the four bibliographies. The second part of this section examines the forms (European, mixed, or traditional) of the authors' names in the four bibliographies.

Appendix D is a list of all of the authors whose names appear in more than one bibliography. The list includes 234 authors, 201 appear in two lists, 30 appear in three lists, and three appear in four lists. In addition, 1,787 authors appear in only one list (for a total of 2,021 authors).

The names of 175 authors (75%) are presented identically in all of the bibliographies in which they appear. The names of 59 authors (25%) are different in different lists. These differences are discussed below.

Tillett (1989:10-11) lists the following variations, among others, in the presentation of personal names:

- Fullness variations
- Spelling variations
- Punctuation variations

- Capitalization variations
- Alternative names
- Inversion variations
- Name with title

Forty instances of fullness variation, including 18 cases of name pairs or triplets², where one or more names include a middle initial and one or more do not (e.g., "Jack D. Forbes" versus "Jack Forbes") were found. There are 12 instances of name pairs or triplets where one or more names include a middle name and one or more do not (e.g., "Kristiana Carol Gregory" versus "Kristiana Gregory"). There were four instances of name pairs or triplets where one or more names include a middle name and one or more include a middle initial (e.g., "Jay Courtney Fikes" versus "Jay C. Fikes"). There were four instances of name pairs or triplets where one or more names include a full first name and one or more include a nickname (e.g., "Joseph McLellan" versus "Joe McLellan"). There was one instance of a pair where one name includes Jr. and one doesn't (e.g., "Thomas Vennum, Jr." versus "Thomas Vennum"). Finally, there was one instance of a name quartet where three names include a first name initial and one spells out the first name ("N. Scott Momaday" versus "Natachee Scott Momaday").

In addition to the fullness variations, 17 name pairs, one name triplet, and one name quartet display other variations. There are seven cases of spelling variations (e.g., "Lynne Reid Banks" versus "Lynn Reid Banks"); there are three cases of punctuation variations (e.g., "Archie [Fire] Lame Deer" versus

"Archie Fire Lame Deer"); there are three cases of capitalization variations (e.g., "Ingri D'Aulaire" versus "Ingri d'Aulaire"); there are three cases of alternative-name variations (e.g., "Gabriel Horn" versus "White Deer of Autumn"); there are two cases of inversion variations (e.g., "E. Barrie Kavasch" versus "Barrie E. Kavasch"); and finally, there is one case of a title variation ("Chief Luther Standing Bear" versus "Luther Standing Bear"). A final variation, tribal identification (e.g., Bruchac, Joseph [Abenaki]), reflects the nature of North American Indian cultures. Of the 234 authors represented in Appendix D, 39 (16.7%) have had their tribe noted by the bibliographer. Though this information does not appear in the Library of Congress Name Authority File (LCNAF), it is central to many native nations (which is why the bibliographers added it).

Table 3-2 summarizes the authors that appear on any of the bibliographic lists with the name forms tabulated. It includes the total number of authors in each bibliographic list and the numbers of each name form.

Table 3-2: Authors and their name forms on selected lists

BIBLIOGRAPHY	NUMBER OF	EUROPEAN	TRADITIONAL	MIXED FORM
	AUTHORS	FORM NAMES	FORM NAMES	NAMES
IPL	458	410	26	22
Giese	216	209	4	3
Smithsonian	591	569	7	15
Lisa Mitten	1103	1087	8	8

² A name pair is the name of an author that appears in two of the lists examined in this thesis. A name triplet is the name of an author that appears in three of the lists examined in this thesis. A name quartet is the name of an author that appears in four of the lists examined in this thesis.

Table 3-3 summarizes the number of authors with name sets that appear on any of the bibliographic lists.

Table 3-3: Number of authors with name sets on selected lists

Bibliography	Name Sets
IPL	2
Giese	4
Smithsonian	2
Lisa Mitten	1

European-form names are in the vast majority in all four bibliographic lists (89.5% in the IPL list, 96.8% in Paula Giese's list, 96.3% in the Smithsonian Institution's list, and 98.5% in Lisa Mitten's list). The remaining names were divided between mixed-form and traditional. The name form division was approximately equal for three of the four lists; the Smithsonian Institution's list has twice as many mixed form names as traditional form names.

In addition, a few names in each bibliographic list indicate the presence of an author's name set. Robert Hofsinde (Gray-Wolf) and Hitakonanulaxk (Tree Beard) are two examples. Gray Wolf is Robert Hofsinde's tribal name. Either or both might be used in any circumstance (a name set) and libraries need a record controlling these bibliographic facts.

In Hitakonanulaxk's (Tree Beard's) case, 'Tree Beard' is a direct translation of his name into English. Hitakonanulaxk is a romanization from his native language. Again, either or both

might be used in any circumstance (a name set) and libraries need a record to control the bibliographic events.

Clearly, some North American Indian names require authority control rules different than those for American and Canadian names of European origin. And since these names and forms are scattered throughout the publication environment, these authority control rules may be needed in any kind of library or information agency.

3.3 SUMMARY

Chapter three examined the presence and ways that North American Indian personal names appear in the publication environment (research sub-problem two) and verified the presence of all of the forms discussed in Chapter two.

Personal names and authority control intersect in the publication environment (Clack, 1990), where the presence and form of North American Indian names can be determined by a survey of significant databases.

Four bibliographies were selected for this thesis and a standard methodology was applied to each. The result indicated a very broad publication environment.

A total of 234 authors appear in more than one list; 1,787 authors appear in only one list. The names of 175 authors are identical in all of the bibliographies in which they appear. The names of 59 authors are different in different lists. These differences include:

- Fullness variations
- Spelling variations
- Punctuation variations
- Capitalization variations
- Alternative names
- Inversion variations
- Name with title

Of 234 authors, 39 have their tribes listed in one or more bibliography. Though this information does not appear in the Library of Congress Name Authority Files, it is central to many native nations.

European-form names are in the vast majority in all four bibliographic lists, while the remaining names are divided between mixed-form and traditional. A few names in each bibliographic list indicate the presence of an author's name set. Any or all names might be used and libraries need a way of controlling these bibliographic efforts.

Clearly some North American Indian names require authority control rules different than those for American and Canadian names of European origin. Chapter four will examine the nature, principles, and reasons for authority control and Chapter five will examine the need for standardization in the online environment. Together these two chapters will present the necessary background to resolve research sub-problems three and four.

CHAPTER 4

AUTHORITY CONTROL: NATURE, PURPOSE, AND PRINCIPLES

4.1 INTRODUCTION

Chapters two and three focused on personal names, especially
North American Indian names, and their presence in the
publication environment. Chapter two began with a discussion
of the significance, characteristics, uses, and problems of
personal names in general. Then, North American Indian
personal names, which have their own significance,
characteristics, uses, and problems, were discussed. The three
most important issues for organizing North American Indian
personal names were found to be:

- The three name forms (European, traditional, and mixed)
- Name changes that create a name sequence (two or more names at different times) or a name set (two or more names at the same time)
- The effects of colonization on naming practices that represent biography rather than genealogy

Chapter three examined the ways that North American Indian personal names appear in the publication environment. These names often reflect their oral cultures, may change throughout a person's life, and may come in sets and sequences. They are written as romanized versions of oral names as well as translations of oral names (sometimes adjusted to European ordering and sometimes not) in a colonizing language. And they are found throughout the publication environment.

In order to gather and collocate North American Indian personal names and optimize patron searches for them, authority work is necessary. In general, Chapter four will examine the nature,

purpose, and principles of authority control in the library environment. Specifically, the topics discussed will be:

- Basic Concepts of Authority Control (Section 4.2). This section describes the difference between authority control and authority work, and discusses authority work, authority records, and authority files.
- Chronology of Authority Control (Section 4.3) which traces the story of authority control from the Bodleian Library to today.
- Purpose of Authority Control (Section 4.4) which discusses the purpose of authority control in many environments.
- Principles of Authority Control (Section 4.5) which describes the three principles of authority control: uniqueness of authorized entry, standardization of entries, and the nature and structure of references.
- Environment of Authority Control (Section 4.6) which describes the role of bibliographic databases in libraries and the collection and formation of access points.
- Importance of Names to Bibliographic Databases (Section 4.7) which focuses on personal names, and authority control processes that support bibliographic databases.

4.2 BASIC CONCEPTS OF AUTHORITY CONTROL

The basic concepts that provide structure to authority work are:

- Authority control
- Authority work
- Authority record
- Authority file

All of these terms have the word authority and a special meaning in common; here authority is analogous to authorized form.

Oddly, however, even a professional dictionary like *ODLIS:*Online Dictionary of Library and Information Science (Reitz, 2002:online) does not include that special meaning in its definition of the word authority. ODLIS defines authority as:

The knowledge and experience qualifying a person to write or speak as an expert on a given subject. In the academic community, authority is based on credentials, previously published works on the subject, institutional affiliation, awards, imprint, reviews, patterns of citation, etc.

While this is a significant meaning for information science, it should be expanded with a second definition. One possible added definition would be:

The form of a personal name, geographic name, uniform title, or subject heading selected for use as an access point. This chosen form is cross-referenced with all other forms that a patron might choose as access points and is notated with source information supporting all decisions. Synonymous with authorized form.

The following paragraphs define and relate authority control, authority work, authority record and authority file. These terms move from abstract to concrete since authority control is the ontological structure that is implemented by the tasks of authority work. These tasks, as they are performed on a single work, result in an authority record, and all of the authority records supporting a library's catalog are concatenated into an authority file.

4.2.1 Authority Control

Reitz (2002:online) defines authority control as "[t]he procedures by which consistency of form is maintained in the headings (names, uniform titles, series titles, and subjects) used in a library catalog or file of bibliographic records, through the application of an authoritative list called an authority file to new items as they are added to the collection."

Distinguishing between authority control and authority work can be difficult. As mentioned above, Reitz (2002:online) defines authority control as "[t]he procedures by which consistency of form is maintained ..." which is remarkably close to her definition of authority work in Section 4.2.2 "[t]he process of deciding which form of a name, title, series title, or subject will be used as the authorized heading ...".

Burger (1985:3) says that authority control is "directed at access points, and serves two purposes for the catalog, the finding function and the gathering function." Authority work "refer[s] to several processes relating to the cataloging of library material." In other words, Burger suggests that authority control is about developing access points, but authority work is about creating the tools used by catalogers and patrons. The distinction is so subtle that the locators for "Authority work" in the indexes to general cataloging texts (e.g., Cataloging and classification [Chan, 1994] and Introduction to cataloging and classification [Taylor, 1992]) is a see cross-reference to "Authority control".

This same very subtle distinction is made in Maxwell (2002:3) where he says, "Authority work consists of more than formation of uniform access points." And on page seven he says, "Without authority control the burden is placed on the user to think of all the possible choices a cataloger might have used to give access in the catalog to a given author or subject."

Clack (1990:1) defines authority control as "a technical process executed on a library catalog to provide structure. Uniqueness, standardization, and linkages are the foundations of authority control." On page two Clack (1990:2) notes, "Hagler and Simmons define authority control as 'the name given to the function of discovering all available evidence relative to the naming of a person, body, topic, etc. and then establishing an access point and references according to some rule'". On pages 31 and 32 Clack says, "[E]nsuring effective linkages in a catalog is the principal function of authority control. Unless authority work is done on all headings, it is difficult to establish the need for linkages between some headings." This differentiation concurs with that made in Burger (1985) and Maxwell (2002).

A clearer distinction can be made if authority is considered from the point of view of designing a system to serve in a bibliographic environment. In this analogy, authority control is equivalent to the system design phase and authority work is equivalent to the system implementation phase. In this view, authority control provides a conceptual structure that is made real through the practice of authority work. In Authority control: principles, applications, and instructions, Clack (1990:30) lists the following kinds of authority work:

- Names (including both personal names and geographic names)
- Series
- Subjects

This thesis is only concerned with personal name authority control.

4.2.2 Authority Work

Reitz (2002:online) defines authority work as "[t]he process of deciding which form of a name, title, series title, or subject will be used as the authorized heading in a library catalog or file of bibliographic records, including the establishment of appropriate references to the heading, and its relationship to other headings in the authority file."

Burger (1985:3) says, "[W]e may infer that [authority work] consists of at least five complex processes:

- 1. the creation of authority records (which are used in turn to create authoritative bibliographic records)
- 2. the gathering of records into an authority file
- 3. the linking of that system to a bibliographic file; together these form an authority system
- 4. the maintenance of the authority file and system
- 5. the evaluation of the file and system"

Burger (1985), Clack (1990), and Maxwell (2002) discuss these processes in detail. Clack (1990:107) describes the following steps in authority work regarding the personal names in a work:

- 1. Examine the chief source of information, introduction, text, and accompanying materials for possible name variants.
- 2. Examine reference material and authority files for names variants and usage.
- 3. Apply the rules in AACR2R (1998) to the name.

Step one, the examination of the document's chief source of information, introduction, text, and accompanying materials for possible name variants, allows the cataloger to discover the context in which an individual's name is used and the possible variations involved. In addition to all of the ways that name variants can occur in European names, North American Indian personal names may exhibit variations that result from name changes within or outside of the context of the document (name sequences). Variation may also result from author or character name sets. In either case, the individual responsible for the authority work must become aware of name sequences and name sets as well as problems like fullness.

Clack's step two, the examination of reference material and authority files for names, variants, and use, provides an opportunity to assess the response of current practices to name sequences and name sets. It also provides an opportunity to discover more name variations that should be considered in the creation of the final authority record.

Svenonius (2000:89) describes the following three steps of authority work:

- 1. Choosing an authoritative form of the name being considered.
- 2. Disambiguate the name from others that may appear identical.
- 3. Map the authoritative name to variant names of the same person.

North American Indian personal names can present problems in step one because name sets and name sequences make AACR2R's (1998) concept of a real name less precise than with other cultures. North American Indian personal names can also present problems in both steps two and three because an individual can have many names relating to different aspects of his or her life. This makes disambiguation among individuals and the mapping of variants difficult.

4.2.3 Authority Record

Reitz (2002:online) defines an authority record as "[a] printed or machine-readable record of the decision made concerning the authoritative form of a name, uniform title, series title, or subject used in a library catalog. An authority record may also contain See from and See also from records, as well as notes concerning the use of the authorized form."

The three major parts of an authority record are according to Burger (1985), Clack (1990), and Maxwell (2002):

- 1. The selected heading
- 2. Cross-references
- 3. Notes

Selecting the authorized heading is usually a matter of applying the appropriate cataloging code. For example, English-speaking countries base their cataloging practice (and, therefore, their authority control practice) on the Anglo-American cataloguing rules (1998). Even though AACR2R (1998) does provide rules for two of the three elements of an authority record, it does not direct authority control or authority work. Maxwell (2002:10) notes:

"It ... seems odd that authority work and authority control are not specifically referred to anywhere in the code. However authority work is unquestionably implicit in AACR2R. Most of part II concerns the rules for the form of name and uniform—title headings. These rules are formulated as though the heading needed for a given item is always being formed for the first time, not acknowledging the universe of headings already in use, but certain requirements of part II mandate authority work without saying so, particularly the requirements to make references."

Chapters 21 through 25 of part II ("Headings, uniform-titles, and references") of AACR2R (1998), however, do contain the rules for selecting the various kinds of authorized headings required by modern authority control:

Chapter 21 - "Choice of access points"

Chapter 22 - "Headings for persons"

Chapter 23 - "Geographic names"

Chapter 24 - "Headings for corporate bodies"

Chapter 25 - "Uniform titles"

Chapter 26 ("References"), the last chapter of AACR2R part II, discusses the rules for authority record cross-references in libraries controlled by AACR2R.

The third element of an authority record, notes, tells future users of the record what sources were used to establish the authoritative heading. The notes can also record sources that did not contain useful information that they could reasonably expect to have (Maxwell, 2002).

4.2.4 Authority Files

Reitz (2002:online) defines an authority file as "[a] list of the [authority records] used in a library catalog, maintained to ensure that the headings are applied consistently as new items are added to the collection. Separate authority files are generally maintained for names, uniform titles, series titles, and subjects."

Concatenating sets of authority records into an authority file requires that all of the records have the same format. In a networked environment these formats, which may need to be common to many libraries or other information agencies, can become national (and international) standards.

4.3 CHRONOLOGY OF AUTHORITY CONTROL

Authority control is a way of assuring a catalog's maximum usefulness to both library staff and patrons. It is affected by such factors as the nature of communication in a culture and the consequent need for standardization. Throughout the

history of librarianship, the needs addressed by the modern concept of authority control have been resolved differently. This section offers a chronology of these different solutions.

The chronology of authority control can be divided into two major periods separated by the work of Charles Cutter. Prior to the publication of the fourth edition of Rules for a dictionary catalog (Cutter, 1904) authority control was implicit in Europe's catalog codes; Cutter made the act of controlling names an explicit part of librarianship.

Pettee (1936) notes that catalogs before 1674 were finding lists based on titles. The significance of authorship and works (as opposed to documents) developed slowly, beginning with Oxford University. Frost (1976) notes that the Bodleian Library's catalog first opened to students in 1602. Manuscript catalogs were prepared in 1602 and 1603-1604 with the printed catalog published in 1605. This catalog was organized first by faculty (Arts, Theology, Medicine, and Law), then by document size, and finally by author's name (if known). An index gathered all keywords into an alphabetic list. The next printed catalog, issued in 1620, was organized alphabetically by author name. Creating cross-references from authorial name forms to their preferred forms provided some authority-control-like bibliographic control.

The next two editions of the Bodleian Library catalog were issued in 1674 and 1738 (Frost, 1976). Within them, author's name and document title were paired to uniquely identify each document and new devices were included which supported both the finding and gathering (or collocating) functions (as defined by

Cutter). Authors' names were individuated, so that, with the title, the completed entry was unique.

Each author's name was entered in direct order with the surname in capital letters (e.g., Claude FRANCIS [page 252]). In cross-references the entry term is printed in italics. Frost notes on page 252, "The vogue of latinizing names, the use of pseudonyms, and the lack of orthographical standardization all contributed to problems of identifying an author's name."

Authors with identical names (e.g., John SMITH [page 253]) were individuated by adding descriptive titles (e.g., John SMITH, M.D. formerly of Brazen-Nose Coll. Oxon. [page 253]). Titles, on the other hand, were "transcribed with considerable paraphrasing and abbreviation; description, rather than transcription, [was] very often the case" (page 253).

The next development in authority-control-like structures came in 1838 when Sir Anthony Panizzi published his Rules for the compilation of the catalogue (Panizzi, 1841). According to Carpenter (1985:1), "all modern codes descend from them". For this reason, an examination of his 91 rules is needed. Twenty-six rules (Panizzi's rules are designated by Roman numerals) refer to issues now considered part of authority control, 15 refer to the selection of an authorized name, another 15 refer to name control by cross-reference, one, Rule XI, refers to both, and one refers to the notation of source information. The 16 rules (including Rule XI) that refer to the selection of what would currently be called an authorized name are:

- RULE II Names are to be entered under the author's surname in the English alphabet only (whatever the order of the alphabet in its original language)
- RULES III through XVII Define the rules for forming names that do not fit Rule II easily (e.g., titles of nobility or Ecclesiastical titles).

The 16 rules (including Rule XI) that define cross-references and the manner of their formation are:

- RULE LV Sets the basic framework for the three kinds of cross-references:
 - Name to name cross-references "contain merely the name, title, or office of the person referred to as entered" (Panizzi, 1841:9).
 - Name to work cross-references contain "so much of the title referred to besides, as, together with the size and date, may give the means of at once identifying, under its heading, the book referred to" (Panizzi, 1841:9).
 - Work to work cross-references containing "so much of the title referred from, as may be necessary to ascertain the object of the reference" (Panizzi, 1841:9)
- RULES LVI through LXVIII Specify instances where cross-references are needed (e.g., from titles of nobility and the sees of bishops and archbishops).
- RULE LXIX Prescribes the order in which cross-references should appear.
- RULE XI Adds four more conditions under which crossreferences (or cross-reference like structures) might be added e.g., authors whose name changes).

The next statement of principles that advanced authority control was the publication of the fourth edition of Rules for a dictionary catalog (Cutter, 1904). This represented the

moment that authority control moved from ideas implicit in catalog codes to explicit directions separate from an associated catalog code.

According to Cutter (1904), a dictionary catalog should be ordered alphabetically by authors' name written in full form with a notation of the sources consulted and of the variations found. Although the reason given for this organization was to minimize the effort required from the cataloger, "there is an implicit need for authority control if the collocation function expressed in [Cutter's] second object [was] to be fulfilled" (Auld, 1982:320).

Changes in authority control during the first three-quarters of the Twentieth Century were documented in Auld (1982), breaking the material into authority control in catalog codes, authority control in catalog handbooks and manuals, and authority control and automation.

Auld (1982) said that the important twentieth century cataloguing codes were:

- Rules for a dictionary catalog by Charles A. Cutter (fourth edition, 1904)
- Catalog rules: author and title entries (1908)
- A.L.A. catalog rules (1941)
- A.L.A. cataloging rules for author and title entries (1949)
- Anglo-American cataloging rules (AACR) (1967)
- Anglo-American cataloging rules, Second edition (AACR2) (1978)

Catalog rules: author and title entries, published in 1908, was "strongly influenced by Cutter" (Auld, 1982:320). Cross-

references, though no method of recording them, were recommended. A.L.A. catalog rules, published in 1941, on the other hand, "offered a three-page appendix on the use and construction of authority cards representing personal and corporate names and uniform titles" (Auld, 1982:320).

A.L.A. cataloging rules for author and title entries, published in 1949, and Anglo-American cataloging rules (AACR), published in 1967, returned to the cross-reference structure defined in Catalog rules: author and title entries (Auld, 1982).

In 1961, the International Federation of Library Associations and Institutions (IFLA) developed the Statement of Principles (often called the Paris Principles) at the International Conference on Catalog Principles held in Paris, France (Taylor, 1992). In Introduction to cataloging and classification, Taylor (1992:7) includes a description of the purpose of an author/title catalog according to the Paris Principles. On the next page, she notes, "they, as well as Cutter's rules, bring out the three functions already mentioned of identifying, collocating, and evaluating" (Taylor, 1992:8). An examination of Cutter's objects and this part of the Paris Principles shows that they are very similar.

Anglo-American cataloging rules, Second edition (AACR2), published in 1978, and its following revisions were much more detailed about selecting authoritative names and forming cross-references. Complete chapters discuss personal names (Chapter 22), geographic names (Chapter 23), corporate names (Chapter 24), and uniform titles (Chapter 25) (1998).

As indicated by the previous paragraphs, authority control is a tool supporting the professional objective of cataloging rather than a professional objective itself. In a military analogy, cataloging is a strategic issue and authority control is a tactical issue. Therefore it is reasonable that much of the literature on authority control is in handbooks and manuals that detail the use of national codes by particular libraries.

Auld (1982) lists the following books as examples of handbooks and manuals:

- Introduction to cataloging and the classification of books by Margaret Mann (second edition, 1943)
- Cooperative cataloging manual for the use of contributing libraries by LOC Descriptive Cataloging Division (1944)
- Simple library cataloging by Susan Grey Akers (1954)
- Technical services in libraries by Maurice F. Tauber and associates (1954)
- Descriptive cataloging by Andrew D. Osborn (second preliminary edition, 1965)
- Commonsense cataloging by Esther J. Piercy (second edition, 1974
- Introduction to cataloging and classification by Bohdan S. Wynar (fifth edition, 1976)
- Managing the catalog department by Donald L. Foster (1982)

Auld (1982) notes that two of the most important results of the automation of authority control were the new capability of networking among libraries and the Machine Readable Cataloging (MARC) formats. MARC records can be created in any language

and then adapted to the need of any national bibliographic agency, making them effective content-management tools for international authority control management. Computer networks, connected into internets, provide the links that pass and translate MARC records as they move among libraries and nations.

Since 1982, much has been done to take advantage of computerization and make authority control a truly international effort. Two of the most influential agents in this international authority work are the International Federation of Library Associations and Institutions (IFLA) (including the international MARC program and the Functional Requirements And Numbering of Authority Records [FRANAR] Working Group) and the European Commission (through its Computerized Bibliographic Record Actions [CoBRA and CoBRA+] projects).

IFLA was founded in 1927 in Edinburgh, Scotland. One of its most important publications on personal name authority Control is Names of persons: national usages for entry in catalogues, fourth edition (IFLA, 1996a). This resource is discussed in Section 5.4.14.

In 1998, at an IFLA seminar in Vilnius, Lithuania, the demand for a functional International Standardized Author Data Number (ISADN) became a primary IFLA goal. In April 1999, an IFLA Working Group on authority data was created under the acronym FRANAR. The work and results of the Working Group on FRANAR is discussed in Section 5.4.6.

Another major effort to internationalize authority control was the CoBRA+ set of projects funded by the European Commission. "CoBRA+ is a concerted action involving national libraries in Europe" (CoBRA+ Telematics for Libraries, 2002a), including the following projects:

- FLEX File labeling
- CHASE Character set standardization
- AUTHOR National name authority file networking feasibility study
- UNIMARC Tested UNIMARC for use as the format for a multinational database
- METRIC Determined the feasibility of using bibliometric data to create new library services
- BUBLINK Established links among national libraries
- NEDLIB Developed a networked infrastructure among CoBRA+ libraries

A description of Project AUTHOR, which examined the feasibility of networking national name authority files (CoBRA+ Telematics for Libraries, 2002b), can be found in Section 5.4.8.

4.4 PURPOSE OF AUTHORITY CONTROL

Cutter (1904:67) suggests the following objectives (he called them objects) for a library catalog:

- 1. To enable a person to find a book of which either
 - (A) the author (is known)
 - (B) the title (is known)
 - (C) the subject (is known)
- 2. To show what a library has
 - (D) by a given author

- (E) on a given subject
- (F) in a given kind of literature
- 3. To assist in the choice of a book
 - (G) as to its edition (bibliographically).
 - (H) as to its character (literary or topical).

Burger (1985:4), Clack, (1990:3-4), and others, when listing Cutter's objects, mention only objects A through F, summarizing the first three as finding objectives and the second three as gathering objectives.

To achieve these objects, Cutter (1904:67) proposed the following means:

- 1. Author-entry with the necessary references (for A and D)
- 2. Title-entry or title-reference (for B).
- 3. Subject-entry, cross-references, and classed subject-table (for C and E).
- 4. Form-entry and language-entry (for F).
- 5. Giving edition and imprint, with notes when necessary (for G).
- 6. Notes (for H).

Modern authority control provides the mechanisms to achieve all but one of Cutter's means, since the bibliographic elements that can be controlled include names (means one), titles (means two), subjects (means three), genre-form (means four), and language (means four). Notes (means six) are a standard part of a full authority record. The only means not achieved through modern authority control is edition and imprint (means five). These are, however, standard elements of the bibliographic records supported by the authority file, so all of Cutter's means are available to patrons.

The functions of the catalog, as described in the Paris Principles, are (IFLA, 1961:179):

The catalog should be an efficient instrument for ascertaining

- 2.1 whether the library contains a particular book specified by
 - (a) its author or title, or
 - (b) if the author is not named in the book, its title alone, or
 - (c) if the author and title are inappropriate or insufficient for identification, a suitable substitute for the title, and
- 2.2 (a) which works by a particular author and
- (b) which editions of a particular work are in the

library.

Authority control that fulfills Cutter's objects also meets the authority control needs of the Paris Principles.

4.5 PRINCIPLES OF AUTHORITY CONTROL

Clack's (1990) three principles of authority control, uniqueness, standardization, and references are discussed below. Selected authoritative names must be unique or patrons' searches will be incomplete or even unsuccessful. Standardization in file structure makes possible cooperative authority file sharing among libraries. And references make it possible to trace the various names (and their order) used by a bibliographic entity.

4.5.1 Uniqueness

Uniqueness is the individualization of a name, title, or subject in order to differentiate it from similar names, titles, or subjects in a bibliographic record. Burger (1985:4) says, "Without both uniqueness and consistency, retrieval from the catalog will not be optimal and in some cases may even be impossible." If the selected term is not unique, a search either will not find all of the relevant entries without using multiple headings or it may find extraneous information if the same (non-unique) heading refers to more than one name.

For example, the Library of Congress Name Authority File (LC NAF searched on 17 October 2002) contains 39 different *Smith*, *James*. Clearly a patron looking for a title by *James Smith* (whichever *James Smith* is of interest) will receive a great deal of unnecessary information.

Other examples of potential problems from non-unique headings (Maxwell, 2002) include:

- Madonna Is this a heading for the mother of Jesus or the popular singer
- Mary Is this a heading for the mother of Jesus, Mary Magdalene, or mother of the apostle Mark
- The Historical Society This is the name of many organizations including Schenectady (NY) and Vinton County (OH). In Thailand there is an institution named The Historical Society. Should the heading be in English (using an extension parallel to The Historical Society in Schenectady NY) or in Thai?

Methods to distinguish otherwise identical headings have been developed and many are described in AACR2R (1998). For personal names, these include adding:

- Birth and/or death dates Rule 22.17
- Fuller forms of names Rule 22.18
- Professional or other distinguishing terms Rule 22.19

4.5.2 Standardization

At the lowest level, the authority file represents one library (or a multi-branch system) alone. In this case, the file can afford to be idiosyncratic. Higher levels of organizational complexity, from small multi-library systems to international organizations, require standardized authority files that meet the needs of (potentially) many diverse systems.

Standardization is the main purpose of authority control. Several large bibliographic organizations offer authority services and authority files to their customers assuring standardization among them. Taylor (1992) notes that North American organizations of this type include:

- WLN Western Library Network
- RLIN Research Libraries Information Network
- Utlas International University of Toronto Library Automation System
- OCLC Online Computer Library Center

In the United States of America, the national authority file for personal names (the standard for all American libraries) is controlled by the Library of Congress and is called the LCNAF

(Library of Congress Name Authority File). This authority file was created in MARC Authority Record format¹. Internationally, IFLA created a version of MARC records called UNIMARC (Universal MARC) (IFLA, 2000b), further increasing standardization.

In 2001 the United States of America Library of Congress, in combination with the National Library of Canada and the British National Library, conflated their national MARC formats into MARC21 (Library of Congress, 2001). Other countries, such as the Republic of South Africa, have also adopted MARC21 as their national format.

4.5.3 Cross-references

A unique heading is only one part of an authority record that is to achieve a catalog's gathering and collocating functions. Authority work must connect all of the forms of a name, a uniform title, or a subject to the authoritative heading and to each other.

Authority control textbooks (e.g., Burger, 1985; Clack, 1990; Maxwell, 2002) describe two kinds of cross-references: see references and see also references. See references are direct pointers leading from one version of a heading to the preferred version. See also references associate two headings suggesting that a searcher interested in one might also be interested in the other.

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¹ The Library of Congress first released a bibliographic MARC format, called USMARC, in the 1960s (Maxwell, 2002).

Chan (1994) notes that see references are made from:

- Names that are not used in the heading (e.g., pseudonyms, phrases used as names, religious names, earlier names, and later names)
- Name forms that are not used in the heading (e.g., fuller name, differing language, differing romanization)
- Potential additional entry elements (e.g., compound names, prefixes, byname, epithets, saints' names)

In the same book, she (Chan, 1994:148) notes that see also references are made "between different headings for the same person when the person's works have been entered under more than one heading."

4.6 AUTHORITY CONTROL ENVIRONMENT

To understand the research problem behind this thesis, it is necessary to examine some aspects of the authority control of personal names. This section examines the following basic elements:

- The role of bibliographic databases in libraries
- The collection and formation of name access points

4.6.1 Bibliographic Databases in Libraries

Reitz (2002:online) defines a library as "[a] collection or group of collections of books and/or other materials organized and maintained for use (reading, consultation, study, research,

etc.)." This definition divides library practices into those related to the collections and those related to organization.

Library collections include books, journals, audio sources, video sources, and multimedia sources. Each of these is given an individual identification that reflects both the content of the information-bearing object and the structure of the organizing system.

A library's system of organization is represented by its catalog and that catalog, if automated, is called a bibliographic database (Chan, 1994). Reitz (2002:online) defines a bibliographic database as "[a] computer file consisting of electronic entries called records, each containing a uniform description of a specific document or bibliographic item, usually retrievable by author, title, subject heading (descriptor), or keyword(s)."

One characteristic of a database is that it can be searched on any field; information is input once but can be output in any format. Dictionary catalogs and card catalogs, common before the creation of online public access catalogs (OPACs), were analogous to computerized flat files. Therefore, information had to be input once for each output format. Reitz (2002:online) notes that "[i]n most modern libraries, the card catalog has been converted to machine-readable bibliographic records and is available online."

In short, a bibliographic database is a surrogate for a collection, a surrogate that eases searching and optimizes results. Within the bibliographic database each record represents an object in the collection.

It is a curious fact that one significant information object in a library is not given individual catalog identification: the catalog itself.

4.6.2 Determining Access Points

Reitz (2002:online) defines an access point as "[a] unit of information in a bibliographic record under which a person may search for and identify items listed in a library catalog or bibliographic database. Access points have traditionally included the main entry, added entries, subject headings, classification or call number, and codes such as the standard number."

Remarkably, even though they agree with this definition in the opening paragraphs of their respective chapters on the choice of access points, Taylor (1992), Chan (1994), and Chapter 21 of Anglo-American Cataloguing Rules, second edition, 1998 revision (1998) describe only the choice of access points related to a work's creator and its title.

As described in Chapter 21 of Anglo-American Cataloguing Rules, second edition, 1998 revision (1998), the following issues regarding a work's creator must be considered and responded to:

- Kind of creator
- Changes in creator
- Works whose creator is uncertain
- Works with shared responsibility
- Collections of works by different creators
- Works that are modifications of other works

In addition to authors, other kinds of creators include compilers, editors, illustrators, and translators. A cataloger is expected to determine the specific combination of creators for each document (and the work it represents) and to represent the combination as access points.

The chronology of Introduction to cataloging and classification (Taylor, 1992) illustrates the authority issues of author change. Through the fourth edition, the author credit is given to Bohdan H. Wynar, the originator of the text. The fifth edition lists Wynar and John Phillip Immroth as joint authors. The sixth and seventh editions list Wynar and Arlene Taylor as joint authors. The eighth edition, which is in the bibliography of this thesis, is listed in its CIP with Arlene Taylor as author. This work, in editions five, six, and seven, also exemplifies a work with shared authorial responsibility.

Hard-boiled (Pronzini & Adrian, 1995), subtitled "an anthology of American crime stories," is an example of a collection of works by different creators. It includes 36 stories, by 36 separate authors, published between May 1925 and 1992. Each story is its author's work, but the collection (which includes the results of the editors' intellectual effort to show the

development of the American crime story over time) is a separate work of Pronzini and Adrian.

Illiad by Homer is an example of a work whose creator is uncertain. Was Homer a single individual, a group of individuals who knew each other, or a group of individuals who did not know each other? This has been a matter of scholarly dispute for centuries, but libraries must settle on a common author access point to assist patrons and organize collections.

The films, musicals, and pop-up book of *The wonderful wizard* of Oz are examples of works that are modifications of another work (L. Frank Baum's original novel). Each derivative work begins with the novel that documented Baum's work and adds new intellectual effort (e.g., music and racial content for *The wiz* and paper engineering for the pop-up book). The cataloger must consider whose work each document represents as it passes through the technical services department.

4.7 THE IMPORTANCE OF NAMES TO BIBLIOGRAPHIC DATABASES

In The development of authorship entry and the formulation of authorship rules as found in the Anglo-American Code, Pettee wrote, "The attribution of authorship is a first principle of the American catalogers" (1936:75). This section examines the purposes that names fill in bibliographic databases and the ways that these purposes are fulfilled.

4.7.1 Purposes of Names in Bibliographic Databases

Cutter's objects (Cutter, 1904) and the catalog functions of the Paris Principles (IFLA, 1961) are described in Section 4.4 of this thesis. For Cutter, personal names comprise the content of four objects, which are (Cutter, 1904:67):

- 1-A: To enable a person to find a book of which the author is known
- 1-C: To enable a person to find a book of which the subject is known (if the subject is a person)
- 2-D: To show what a library has by a given author
- 2-E: To show what a library has on a given subject (if the subject is a person)

In the Paris Principles, personal names comprise the content of two objects, which are (IFLA, 1961:179):

- 2.1-A: whether the library contains a particular book specified by its author or title
- 2.2-A: which works by a particular author are in the library

4.7.2 Achieving these Purposes

To achieve these objectives, personal names are essential access points. Without the names of authors as access points in the catalog, a library patron will be unable to retrieve an information source when the author is known (Cutter's object

1-A) or to determine which information sources by a specific author exist in the library (Cutter's object 2-D).

Authority control is the primary tool to define these access points. In "Authority control: what and for whom," Svenonius (1987:2) says

What is the purpose of authority control? Questions about the design of a bibliographic tool ... must ultimately be referred to the users of the tool. The reason for establishing unique names of authors ... and for making cross-references from variant names is to improve the chances that the user of the catalog will be able to find what he wants.

Authority control, then, is a form of terminological control. It is needed because the language in which users formulate search request is unruly.

In Principles of cataloging. Final report. Phase I: descriptive cataloging, Lubetzky (2001:293-297) describes the following ways to identify an author and maximize the effectiveness of the bibliographic database:

- Choice of name and name form
- Qualification of name
- Entry of name

These are also characteristics of personal name authority control as described in Section 4.5 of this thesis.

In the Introduction to cataloging and classification Taylor wrote, "In systems without authority control, it is up to the

user to try to think of all possible ways that a name ... could be verbally represented, while at the same time eliminating all possible representations that will not satisfy the need" (1992:475). It is clear that authority control is necessary for names to be effective central elements for bibliographic databases.

4.8 SUMMARY

Chapter four began by discussing the concepts of authority control, authority work, authority records, and authority files and describing the relationships among them.

Authority control has been an implicit or explicit part of librarianship at least since early in the history of the Bodlian Library in 1674 and Sir Anthony Panizzi's Rules for the compilation of the catalogue (Panizzi, 1841). Before that time cataloging codes were document finding lists based on titles.

The purpose of authority control was the creation of individualized entries allowing Cutter's Objects of the Catalog (Cutter, 1904) to be fulfilled. Cutter's Means (Cutter, 1904:67), though not called authority control, state all of its principles.

The practice of authority control involves three principles: uniqueness, standardization, and references. Personal names must be unique in a given authority file. This means that a library patron or database searcher must be able to distinguish between people with the same name. The principle of standardization requires that the same mechanisms be applied to

every personal name in an authority file. Finally, the principle of using references requires that a searcher be able to distinguish between the various names of the same person.

Authority files are primarily used in libraries, so the role of bibliographic databases in libraries and collecting and forming access points for these databases was examined. A bibliographic database, which is a surrogate for a collection, supports user searching and improves results. Records founded on a document's basic aspects represent each object in the collection.

The basic aspects of a document (or the work of which it is an instance) are its title and author. These are like a person's name (equivalent to a work's title) and its parents' names (equivalent to the work's author). Like a person who has a common name or a name that has changed over time, works whose titles and authors are the same (analogous to the person with a common personal name), can have a name (called a series title) added by a cataloger to uniquely identify each document. Works whose titles (and possibly creators) are different but which represent the same work (e.g., The wizard of Oz by L. Frank Baum and the movie The Wiz) (analogous to people with a changing name) can have a name (called a uniform title) added by a cataloger to indicate the relationship.

Chapter four examined the nature, purpose, and principles of authority control. Chapter five will examine the necessity for personal name standardization in the authority control environment.

CHAPTER 5

THE NECESSITY OF PERSONAL NAME STANDARDIZATION

5.1 INTRODUCTION

This chapter addresses research sub-problem three: "Why is it necessary to control and standardize names, especially North American Indian names?" In order to answer this question, the following issues will be addressed in this chapter:

- Automation and the need to standardize personal names (Section 5.2).
- The functions of name authority control and the need to standardize personal names (Section 5.3).
- Efforts to standardize personal names made by leading bibliographic agencies (indicating the importance of the standardization of names) (Section 5.4).
- Particular problems with the presentation of North American Indian names in information sources that reflect possible authority control problems (Section 5.5).

5.2 AUTOMATION AND THE NECESSITY OF NAME STANDARDIZATION

As discussed in Chapter four, the standardization of access points is a primary result of authority control. The necessity for standardization of names in an online environment, however, has been questioned. Tillet (cited in Taylor, 1989:47) stated, "There is a misconception that careful attention to the integrity of bibliographic records is not necessary in an online catalog". She continued, "It is believed that with the computer a catalog can be produced that would be flexible and that could retrieve any information in machine-readable form".

This belief, however, was short-lived and is now almost entirely discredited. Although the computer provides flexibility in the online catalog, "flexibility without the integrity achieved by authority control, produces a very insufficient file" (Tillett, cited in Taylor, 1989:47). Johnston (1990:43) noted that

authority control offers full linking and guiding functions that cannot be replaced by computer capabilities such as "Boolean logic, text word searching, truncation, and other methods [that] enhance searching in an online catalog. Only through true authority control can pseudonyms be identified, name changes be traced, and related subjects be brought together, to name but a few functions".

Jamieson, Dolan and Declerck (cited in Taylor, 1989:40-41) came to the conclusion that keyword searching, while being a powerful retrieval technique, cannot compensate for a lack of authority reference structure. Dickson and Zadner (1989:69) were of the opinion that truncation, Boolean operators and keyword searches "will not ensure collocation of all headings that serve as surrogates for same or related authors, subjects, etc." Oddy (1986:3) stated, "The computer cannot create associations in the same way the human can".

Authority control will always require thought and judgment. Decisions about the form of a name for a person must be determined by human effort and intellect. Knowledge of name variations, the order of name elements, and references that link all variations is human work. What the computer does is to manipulate data provided by its human operator. In this context Brunt (1992) stated, "The advent of the electronic catalog has not fundamentally altered the role of the catalog but merely enhanced it."

It is clear that authority control can never be (or, at least, has never been) fully automated. Tillett (1989:2) said, "For the most part, computers cannot recognize matches unless they are programmed to make the match" Apparently, with the arrival of the computer catalog the need for the standardization of names is greater than ever.

5.3 NECESSITY FOR NAME STANDARDIZATION CONSIDERING AUTHORITY CONTROL FUNCTIONS

In a journal article, Snyman (2000:270-272) identified the following four functions for name authority control:

- Supporting the catalog's finding and collocation functions
- Promoting effective cooperation between libraries and information services
- Supporting national and universal bibliographic control
- Ensuring quality interaction between the user and information.

For this thesis, the focus will be on the first three functions identified by Snyman. The fourth function is, to a great extent, covered by the three functions under discussion.

5.3.1 Supporting the Catalog's Finding and Gathering Functions

Cutter's objectives of the library catalog and the Paris Principles identify two functions for the library catalog: one, assist users to find a specific item by a specific author or authors (the finding function) and two, indicate which information by a specific author are available in a collection (the gathering function) (see Section 4.4). Both functions are supported by personal name standardization.

According to Tillet (cited in Page, 1991:9), "[The finding and gathering] functions are best accomplished when a catalog's access points are consistent. Without authority control, records are scattered throughout the catalog under various headings". As we can see "the user would need to know every name or form of name used by the author, in order to find an item. The user will also have to think of all the possible ways in which the name can be expressed verbally. In addition the user will also have to eliminate all the possibilities that will

not satisfy his/her needs. Many library users do not have any of this information or expertise. It cannot be expected of library users to know the rules regarding the selection and form of names that lend form and structure to the catalog. It is therefore necessary that the structure of the catalog is consequent and clear to support those who are not familiar with the rules regarding the selection and form of names" (Tillet cited in Page, 1991:9).

Without the standardization of names, the finding and collocation functions of the library catalog cannot succeed.

5.3.2 Promoting Effective Cooperation Between Libraries and Information Services

Another reason for standardizing personal names in the bibliographic environment is the promotion of cooperation among large numbers of libraries. The two major categories of interlibrary cooperation are resource sharing and shared cataloging. Resource sharing is the sharing of publications by interlibrary loan so that libraries that do not have a document in their own collection can still supply it to patrons. Other examples of resource sharing include collection development departments that serve all of the libraries in a consortium or periodicals shared among several nearby academic libraries. Shared cataloging is the use of a common catalog from which different libraries can draw the items needed to support their own bibliographic needs. The Library of Congress catalog is an example of a shared catalog. Non-standard entries entered into a shared catalog or requested through ILL will almost certainly lead to a patron not finding a desired document.

The use of computer technology facilitates the transfer of information among libraries; so shared cataloging and resource

sharing are common among libraries. Johnston (1990:44) stated, "Whereas library catalogs were previously constructed and maintained in virtual isolation, the trend is now toward shared resources, merged databases, and regional networks."

The automation of the library catalog makes the activities and mistakes of individual libraries more visible to a broader group of people, as was the case before with the card catalog. Boll (1990:17) stated, "In a paper file each library could develop its own standards for its own authority files. Online catalogs do not permit this variety or luxury but demand far greater comprehensiveness and standardization of name authority work".

There are additional economic reasons for promoting effective cooperation between libraries and information services. Snyman (2000:272) notes that these reasons can include:

- Lack of funds often there is too little money available to purchase information sources.
- Increase in information sources so much information is published in all formats that no single library can maintain it all in its collection.
- Limited staff two or more institutions can increase their efficiency if each does part of the work and they share the results.

5.3.3 Supporting National and Universal Bibliographic Control

Standardizing names also supports national and universal bibliographic control. Each is basically an effort to create a single catalog or authority file (or what appears to be a single catalog or authority file) from multiple sources. Such a bibliographic file is, in effect, a national or international union catalog. It requires that standardized files be matched

to a common standard (standardizing already standardized files). At the national level, this is one of the functions of each country's national bibliographic file (often a part of the national library). At the international level, IFLA has taken on this function through its UBC program. Clearly the standardization that is necessary to support a local catalog is also necessary to support a national or international catalog.

Name authority control results from the application of agreed upon standards. Zaher and Bettencourt (2001:online) stated, "Standards are essential if the goal is to expand its use outside of national boundaries, as well as to cooperate in international networks that can mutually benefit all libraries involved in cataloging resource sharing." In other words, standardization allows differing technical and bibliographic systems to efficiently use the same data. For many access points, name authority control provides that standardization.

5.4 EFFORTS TO STANDARDIZE PERSONAL NAMES

Various initiatives have been taken by bibliographic agencies to standardize names, indicating its importance. Since the 1969 International Meeting of Cataloging Experts in Copenhagen, Denmark, these efforts fall under the idea of Universal Bibliographic Control (UBC) (Harrod, 1990:644). Therefore this section will begin with a discussion of the principles of UBC and follow with discussions of:

- International MARC Authorities Formats
- Guidelines for Authority and Reference Entries (GARE)
- Minimum Level Authority Records (MLAR)
- International Standard Author Data Number (ISADN)
- FRANAR

- Cobra+
- Project AUTHOR
- Anglo-American Authority File (AAAF)
- Project Linking and Exploring Authority Files (LEAF)
- NACO
- Virtual International Authority File (VIAF) Project
- International Organization for Standardization (ISO)
- Names of Persons: National Usages for Entry in Catalogs
- AACR2R

5.4.1 Principles of Universal Bibliographic Control

Willer (1996) traces the idea of international bibliographic sharing to the 1961 International Conference on Cataloging Principles in Paris, France that produced the Paris Principles. "The principles were concerned with the choice and form of headings in the main and added entries and cross-references in catalog" (Willer, 1996:online).

Two sections of the Paris Principles (Section seven and Section twelve) described the form of uniform headings. Section seven said, "The uniform heading should normally be the most frequently used name (or form of name) ... appearing in editions of the works catalog or in references to them by accepted authorities" (IFLA, 1961:181). Section twelve said, "When the name of a personal author consists of several words, the choice of entry word is determined as far as possible by agreed usage in the country of which the author is a citizen, or, if this is not possible, by agreed usage in the language which he generally uses" (IFLA, 1961:184). Clearly, then, the Paris Principles

assumed an authority control system with a common form of author identification.

Willer (1996) described the International Meeting of Cataloging Experts that was held in Copenhagen, Denmark, in 1969. After discussing different interpretations, a decision was made to annotate the Paris Principles with regard to international choice of uniform headings. Additional problems regarding the choice of name entries were discussed, including authors with more than one bibliographic identity and authors whose names change. Indeed the meeting "envisaged a system for the international exchange of information by which the standard bibliographic description of each published item would be determined and distributed by a national agency in the country of origin" (Harrod, 1990).

The principles of UBC were proposed at the 1973 IFLA conference in Grenoble, France (Harrod, 1990). The principles were:

- "The National Bibliographic Agency (NBA) is responsible for its national authors
- National Bibliographic Agencies should establish the reference authority data for their national authors
- The National Bibliographic Agency must distribute the reference data established for its national authors
- Each authority heading will be identified by a unique number, the International Standard Authority Data Number (ISADN)" (Danskin, 1996).

Tillett (1995:online) summarizes the UBC principles, "The first principle of Universal Bibliographic Control is that each nation assumes responsibility for establishing authoritative headings for its national authors. The second principle of UBC is that all other countries are expected to accept such headings in

their authoritative form as established by the country of origin ."

She continued, "[Other nations] are to forego their own national conventions and their own users' conventions in order to facilitate the exchange of authority records at the international level. This is, of course, very difficult to accomplish due to concerns about serving the needs of local users."

In 1977 the International Conference on National Bibliographies was held in Paris, France. Its thirteenth recommendation was that a country's national bibliographic agency "should maintain an authority control system for national names ... in accordance with international guidelines" (International Conference on National Bibliographies, 1978 quoted in Willer, 1996). This recommendation was strong evidence that the principles of UBC had become a part of the international authority control agenda. These principles inform all of the international authority control efforts reported below.

5.4.2 International MARC Authorities Formats

As variants of MARC records spread across the world, there was a concurrent movement to create a worldwide MARC coding system. Two major results of this movement have been UNIMARC followed by the newer MARC 21. IFLA created UNIMARC in 1994 (IFLA, 2000b) and the Library of Congress created MARC 21 in 1999 (Library of Congress, 2002). Currently UNIMARC is the central format for switching among European National MARC Systems Partners in the European Union (European Communities Directorate General XIII, 1996). MARC 21, which combined USMARC and CAN/MARC is being accepted in other countries (Gabriel, 2001).

In addition to MARC systems for bibliographic data, both UNIMARC and MARC 21 had formats for authorities data. The UNIMARC/Authorities format (IFLA, 1997) became part of the UBCIM's ongoing international authority data program (IFLA, 1996b). The authorities format in the MARC 21 system (Library of Congress, 2003) was also implemented and may be used by any national library accepting MARC 21 as the standard for their automated bibliographic records.

International MARC standards, whether they are UNIMARC, MARC 21, or a future standard, require name standardization in order to be effective.

5.4.3 Guidelines for Authority and Reference Entries (GARE)

In 1978 IFLA decided to develop an international authority control system. One of its original goals was "to discuss and formulate the specifications ... to satisfy the bibliographic needs of libraries" (Plassard, 2003:2). These specifications would be, effectively, standardized authority record elements. The publication of Guidelines for authority and reference entries (GARE) in 1984, with a second edition (called Guidelines for authority records and references [GARR]) in 2001, described those standard elements (IFLA, 2001).

The GARR elements are divided among seven areas:

Area 1 - Authorized heading area

Area 2 - Information note area

Area 3 - See reference tracking area

Area 4 - See also reference tracking area

Area 5 - Cataloger's note area

Area 6 - Source area

Area 7 - International Standard Author Data Number (ISADN) area

The GARR elements became part of the charge of the IFLA Working Group on Minimum Level Authority Records (MLAR) and ISADN.

Thus, they became a significant aspect of international name authority control standardization.

5.4.4 Minimum Level Authority Records (MLAR)

In 1996, IFLA established the Working Group on MLAR and ISADN to consider the creation of an international authority control system and to design a functional ISADN. Their work started with the GARE elements (as noted in Section 5.4.3), implementing them in the format that was the output of their effort (IFLA, 1996b).

In addition to record-keeping elements (e.g., type of record or entity category), the standard authority elements established by the Working Group on MLAR and ISADN included the standard elements of an authority record:

- Authorized heading (GARE Area 1)
- See cross-references (GARE Area 3)
- See also cross-references (GARE Area 4)
- Source citation note (GARE Area 6)

Additional required elements that might assist with the integration of a newly created authority record into the proposed international authority control system include:

- Entity category
- Record control number
- Version identifier
- Language of cataloging
- Script of cataloging

Finally, the IFLA Working Group on MLAR and ISADN highly recommended the following elements:

- Source information about the entry
- Source data not found
- General notes

5.4.5 International Standard Author Data Number (ISADN)

In addition to specifying the minimum level authority record, the IFLA Working Group on MLAR and ISADN was given the task of developing an international standard author data number modeled on the International Standard Book Number (ISBN) (See Section 6.5). An ISADN was expected to be a number that uniquely identifies an author throughout the world and that would point to a record including all possible name forms for an author.

Several IFLA projects, including *Guidelines for Authorities and Reference Entries (GARE)* and UNIMARC Format for Authorities (see Sections 5.4.2 and 5.4.3), referred to an ISADN but neither its form nor structure was specified (IFLA, 2001).

There was also a field (in the 015 block) for an ISADN in the UNIMARC format for authorities published in 1991 and a field in the 0XX block for a number that can identify either the authority record or the authority heading. The ambiguity between the elements that should be entered in these blocks, however, is not resolved.

ISADNs, if implemented, offer a possible solution to the problem of name standardization in international authority control. They allow all of an author's possible name variations to be grouped under a single number that has the same meaning in every language.

5.4.6 FRANAR

In 1998 at an IFLA seminar in Vilnius, Lithuania, the demand for a functional ISADN became a primary IFLA goal. A Working Group on Functional Requirements and Numbering Authority Records (FRANAR) was formed as an outgrowth of the Working Group on MLAR and was charged, among other tasks, with developing an ISADN for implementation.

The Working Group on FRANAR was created in April 1999 and met that year in Bangkok, Thailand at IFLA's annual meeting. The group also met at the 2000 annual meeting in Jerusalem, Israel and the 2001 annual meeting in Boston, Massachusetts, U.S.A. FRANAR's basic principle was to adopt a number that was already in use by another group.

Unfortunately, the possible numbers that the Working Group considered were not designed to be used for authority control, and, therefore, did not meet FRANAR's needs. For that reason, the Working Group on FRANAR set a goal to coordinate its efforts with groups creating numbers that might also be used by FRANAR. Among these groups (Bourdon, 2001) were:

- The InterParty project derived from the Interoperability of Data in E-Commerce Systems (INDECS) project, it planned to create the ONIX *Data Dictionary* of book publication information in e-commerce.
- Linking and Exploring Authority Files (LEAF) (See Section 5.4.10) derived from the Manuscripts and Letters Via Integrated Networks in Europe (MALVINE) project, it proposed a distributed search mechanism based on authority files for persons and corporate bodies (See Section 5.4.9).
- The Consortium of European Research Laboratories (CERL) thesaurus allowing the management of variant forms of imprint places, author names, and printers' names, though without standardized authority format.

- The Multilingual Access to Subjects (MACS) project under the auspices of the Conference of European National Libraries (CENL) showing that it was possible to rely on control numbers assigned by local information systems to identify a single concept in different databases (Bourdon, 2001). But these numbers, which were oriented to subjects, could not be used directly for name authority.
- The Encoded Archival Context Project deriving an XML DTD for archivists.

The goal of defining the functional requirements of authority records eventually resulted in a model for name and title authority developed by Tom Delsey. This model was proposed and discussed at the 2002 annual IFLA conference in Boston (Plassard, 2002). That model and the revisions made to it are discussed in FRANAR: a conceptual model for authority data (Patton, 2003).

FRANAR's efforts produced a useful ISADN format that, if implemented, would go a long way toward allowing the exchange of standardized authority data internationally.

5.4.7 CoBRA+

"CoBRA+ [was] a concerted action involving national libraries in Europe" (CoBRA+ Telematics for Libraries, 2002a). The European commission funded and nine European national libraries were partners in the following CoBRA+ projects:

- FLEX developed standards for labelling bibliographic files
- CHASE tested the feasibility of bibliographic file migration to UNICODE
- AUTHOR studied the feasibility of networking national name authority files
- METRIC studied the feasibility of using bibliometric data to create new library services

- BUBLINK studied the establishment of links between national libraries and the publishers of electronic material
- NEDLIB studied the development of a networked infrastructure for a European deposit library

Project AUTHOR (See Section 5.4.8) is the effort most directly connected with authority control. But all CoBRA+ projects have some significance to the organization of personal names in an international context. Standardized names would be more available if files had a common label (Project FLEX); the new services studied in Project METRIC would be more effective if patrons in different countries searched on the same standardized name; name standardization by publishers of electronic material is necessary for national libraries to control their authority files (the subject of Project BUBLINK); and the standardization of personal names would increase the effectiveness of Project NEDLIB's depository library. And Project CHASE, a study using UNICODE as a switching language between national bibliographic files, required standardized headings for optimum effectiveness.

5.4.8 Project AUTHOR

Project AUTHOR examined the feasibility of networking national name authority files (CoBRA+ Telematics for Libraries, 2002b). Its objectives were to:

- Investigate the feasibility of the international exchange of national name authority files.
- Investigate the problems caused by format conversion to UNIMARC.
- Test and evaluate possible procedures for the exchange of national name authority files.
- Increase bibliographic resource sharing among European libraries.

According to the final report for Project AUTHOR (Zillhardt and Bourdon, 1998:6), when the national formats to be conflated were examined the following conditions were found:

- Five cataloging languages English, Spanish, French, Dutch, and Portuguese
- Five cataloging codes AACR2 for the UK and separate Spanish, French, Belgian, and Portuguese national codes
- Five MARC formats IBERMARC (Spain), INTERMARC (France), BLMARC (UK), KBRMARC (Belgium), and UNIMARC (Portugal)
- Four bibliographic software packages ARIADNA (Spain), GEAC (France and Portugal), VUBIS (Belgium), and WLN (UK)

Many issues addressed by Project AUTHOR had little to do with personal name standardization (e.g., differing file formats). The following four issues, however, pointed to significant adjustments that the practice of international authority control would require (Zillhardt & Bourdon, 1998):

- Need for explanatory notes
- Different national MARC systems handled headings differently
- Differing transliteration systems for non-Latin alphabets
- Multiple name authority files maintained by some nations

Some of the subject national authority files did not include explanatory notes. North American Indian personal names, with name sequences and name sets (See Section 2.3), may have required explanatory notes more than other naming traditions.

Different national MARC formats handled some headings differently. For example, Belgium is one country with two official languages; their name authority file created records in parallel format to avoid having two separate authority files.

Names in non-Roman languages (e.g., Cyrillic) were transliterated differently in different countries, so an effort was required to integrate some name authority records.

Some countries participating in Project AUTHOR maintained more than one national name authority file. For example, the National Library of France maintained separate name authority files for book authors and music composers.

Though Project AUTHOR involved European countries only, it pointed to the kind of problems that the practice of international authority control must resolve.

5.4.9 Anglo-American Authority File (AAAF)

The AAAF program was a project sponsored by the Library of Congress (LOC) and the British Library (BL) in which each combined their national name authority files in 1994 (Library of Congress, 1994). At the beginning, the two national libraries considered their formats and the effort that would be necessary to bring them together in one file. Most of these differences were resolved, but several differences, which remained, were excluded from the resulting AAAF. These differences included the romanization of Chinese characters (BL used Pinyin; LOC used Wade-Giles) and Uniform Titles that would not convert between MARC formats (Danskin, 1996).

The AAAF project had three phases (Danskin, 1996):

Phase 1 - The Library of Congress Name Authority File (LCNAF) was loaded into the BL cataloging system (which included the British Library Name Authority List [BLNAL]). When an authority record was needed by BL, LCNAF was searched before BL created a new record.

Phase 2 - Switching software was implemented to convert the records between USMARC and UKMARC. Only those records whose contents required no changes were converted. The result was the base AAAF.

Phase 3 - Retrospective conversion was applied to the remnants of LCNAF and BLNAL and the AAAF was completed.

The creation of the AAAF demonstrated the problems and processes of international name authority control. Only two national bibliographic agencies (BL and LOC) were involved in the project, but problems occurred in the areas of authority record format, representation systems (e.g., how to romanize Chinese characters), and MARC record formats. As more national bibliographic agencies merge their authority files, the problems can be expected to increase.

5.4.10 Project Linking and Exploring Authority Files (LEAF)

The Linking and Exploring Authority Files (LEAF) project, which proposed a distributed search mechanism for name authority files, began in 2001 and continues to the present (Clavel, 2003; Kaiser, Lieder, Majcen, and Vallant, 2003; LEAF, 2003). The LEAF project, sponsored by the EC, worked with 15 institutions, including "libraries, archives, documentation and research centers" (Kaiser, Lieder, Majcen, and Vallant, 2003). Its final purposes were (and are) to:

- Allow public users to retrieve data directly or to improve their bibliographic searches
- Grant users throughout the world access to the international authority file

The major steps supported by the LEAF architecture are (Kaiser, Lieder, Majcen, and Vallant, 2003):

- "New or updated local name authority records are harvested by, or uploaded to, the LEAF system on a regular basis;
- All records in the LEAF system are converted into one common exchange format and inserted into a central database;
- Records describing the same person are automatically linked;
- All records in the LEAF database become available for search and retrieval;
- Retrieved search results are stored in a *Central Name Authority File*;
- Registered users can annotate records;
- External systems can query the LEAF service;
- LEAF can query external systems;
- External resources can link to LEAF records;
- Results retrieved in LEAF can be used as search arguments in other applications."

According to the project LEAF website (2004), the design phase has been completed and documented; the implementation phase has not yet begun. Assuming that the LEAF architecture performs as expected, it will be a major step forward in international name authority file sharing.

5.4.11 NACO

Maxwell (2002) lists the following cooperative cataloging programs relating to name authority control:

- The Program for Cooperative Cataloging (PCC)
- Name Authority Cooperative Program (NACO)

PCC is the overall program that includes NACO and other cooperative cataloging programs. Begun in 1995, program goals include making authoritative bibliographic and authority records available for use by all libraries and "to develop mutually standards for record creation" (Maxwell, 2002:258). PCC is self-governing; every member (including the Library of Congress) has an equal vote.

In 2000, 400 libraries participated in one or more PCC project. These libraries were located in Australasia (Australia, Hong Kong and New Zealand), Europe (England, Scotland, Wales, Ireland, Italy, Lithuania), Africa (including South Africa), North America (the United States, Canada, and Mexico), and South America (Argentina and Brazil).

"NACO is typically the first PCC program a library joins. NACO participants are trained to create and revise name, uniform title, and series authority records and contribute them to the Name Authority File (NAF)" (Maxwell, 2002:259). After training, participants can submit records to NAF. At first the individual who trained the participants checks these records. Later, records are submitted independently and the library appoints a liaison with NACO.

Additional shared cataloging programs that fall under PCC are the Subject Authority Cooperative Program (SACO), Bibliographic Record Cooperative Program (BIBCO), and Cooperative Online Serials Program (CONSER). Though these programs are very important to the services offered in libraries, they do not affect name authority control.

5.4.12 Virtual International Authority File (VIAF) Project

The Virtual International Authority File (VIAF) project is a combined effort of the Library of Congress (LOC), Online Computer Library Center (OCLC), and Die Deutsche Bibliothek - (the German national library) initiated in 2003 (Jordan, 2004; Kaiser, Lieder, Majcen, and Vallant, 2003; OCLC, 2004). The project's purpose was to "match and link the authority records for personal names in the retrospective personal name authority files of Die Deutsche Bibliothek and the Library of Congress" (OCLC, 2004).

This proof-of-concept project uses matching software developed by OCLC. The resulting file will be implemented in and maintained through the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) (Kaiser, Lieder, Majcen, and Vallant, 2003). The VIAF project is currently underway.

Both the VIAF project and project LEAF (See Section 5.4.10) offer the possibility of real automated international authority files. And both projects highlight the need for the standardization of personal names. Clavel (2003) notes, "Two records representing two different persons might nevertheless be automatically linked, because they do not contain enough discriminating information. On the other hand, two records representing the same person might not be automatically linked, because they do not share an identical form."

Clearly, the intellectual work of personal name authority control is still necessary and remains beyond the capability of state-of-the-art automatic authority programs.

5.4.13 International Organization for Standardization (ISO)

The International Organization for Standardization (ISO) is "a network of national standards institutes from 148 countries working in partnership with international organizations, governments, industry, business and consumer representatives" (ISO, 2004a). Of interest for this thesis ISO sponsors standards in information sciences, writing, and transliteration (ISO, 2004b; ISO 2004c). Among the writing and transliteration standards published by ISO are those that document the Romanization of Cyrillic, Arabic, Hebrew, Greek, Japanese, Chinese, Georgian, Armenian, Thai, Korean, and Indic scripts (ISO, 2004b).

And among the publication standards are those that document (ISO, 2004c):

- Thesaurus construction
- Bibliographic description
- ISDN
- Vocabulary

ISO standards provide identifiers for International Standard Musical Work Codes (ISWC), International Standard Audiovisual Number (ISAN), International Standard Technical Report Number (ISRN), and International Standard Music Number (ISMN) (ISO, 2004c). Unfortunately, concepts such as work, expression, and manifestation have different meaning for the ISO standards than they do for the library world. Indeed, terms had different meanings among the various ISO standards themselves (Bourdon, 2001).

The very existence of ISO, however, shows the level of recognition throughout the world of the need for

standardization. Surely the authority control of personal names could take advantage of ISO and the movement it represents.

5.4.14 Names of Persons: National Usages for Entry in Catalogs

One of IFLA's most important standards publications on international name authority control is Names of persons: national usages for entries in catalogs. The most recent issue is the fourth edition (IFLA, 1996a). It is arranged alphabetically by national name and includes the description of the elements and proper organization of personal names found in national imprints, as defined by each country's national bibliographic agency. Names of persons: national usages for entries in catalogs is so significant that it is referred to on page 419 of AACR2R as the authority for otherwise unspecified name forms.

International politics can add problems at the levels of national and international institutions. This inhibits name standardization. For example, the entry for the United States of America in Names of persons: national usages for entry in catalogs (IFLA, 1996a) notes that most expected names are English or easily converted to an English-like appearance. In fact, the US entry refers to the English name section of the United Kingdom's national entry and then gives three examples of names of foreign extraction ('Bernard De Voto,' 'Christopher La Farge', and 'Mark Van Doren') (IFLA, 1996a:252). As an American, Bernard De Voto's name is entered as 'De Voto, Bernard'; had he been French the rules in the entry for France in Names of persons: national usages for entry in catalogs (IFLA, 1996a) say that his name should be entered as 'Voto, Bernard De'. As an American, Mark Van Doren's name is entered as 'Van Doren, Mark'; had he been Dutch the rules in the entry for the Netherlands in Names of persons: national usages for entry in catalogs (IFLA, 1996a) say

that his name should be entered as 'Doren, Mark Van'.

Apparently, an assumed part of the US entry is to Anglicise names of non-English extraction. Clearly, international bibliographic control needs a standard set of rules so that one person's name will not be separated in various country's catalogs.

5.4.15 AACR2R

The relation between AACR2R (1998) and authority control was discussed in the last chapter (See Sections 4.2, 4.3, and 4.5); this section examines the ways AACR2R increases personal name standardization. AACR2R increases name standardization in two ways:

- Internally Chapter 22 describes rules for the control of names from many ethnic groups. National libraries using the same national cataloging code (in this case AACR2R) will be more likely to create identical authority records.
- Externally One hundred five states, members of IFLA, contributed to Names of persons: national usages for entry in catalogs. Of these states, 30 states declared AACR2R as their primary national catalog code and one entry declared AACR2R as its secondary national catalog code (See Appendix E).

Thirty-one countries, determining their authorized name forms from a common set of rules, will clearly increase the standardization (or at least decrease the variation) in international personal name authority control.

5.5 SPECIFIC PROBLEMS WITH THE STANDARDIZATION OF NORTH AMERICAN INDIAN NAMES

North American Indian names present particular problems for authority control in addition to those presented by other kinds of names. Based on the findings reported in Section 3.2.2, this section reviews the special characteristics of North American

Indian names and their presence in the publication environment. Finally, it examines the presentation of authors' names in Appendix D to determine the current status of name standardization among North American Indian personal names.

5.5.1 Structure of North American Indian names

Chapter two detailed the structure of North American Indian personal names. Most are the same as the names of other North Americans, that is, their names follow the European pattern of the country's colonial power. Some North American Indian names are truly traditional (i.e., following naming forms and patterns established before colonization). And some personal names mix pre-colonial and colonial forms. Each form requires different authority control standardization and practices.

European-form names should be controlled like the names after which they are patterned. North American Indian traditional names (which are conceptual rather than genealogical) should be treated as one-word names, even when the name is written as two or more words. Mixed-form names require special sensitivity. When the name's traditional part precedes the surname, the rules for European-form names are perfectly adequate. When the surname is derived from a traditional name, that surname should be entered as if it were a one-word name followed by the individual's forenames.

Another important aspect in the standardization of North American Indian names is the need to handle name sets and name sequences. A name set is two or more official names identifying the same person at the same time. A name sequence is two or more official names identifying the same person at different times. Both structures, which reflect pre-colonial North American Indian cultures, affect authority-record cross-references.

5.5.2 Personal names in the publication environment

The presence of North American Indian names in the publication environment was documented in Chapter three. Four bibliographies that collect publications by and about North American Indians were selected and analyzed. Section 3.2.2 documented that 2,021 separate authors were represented on at least one of the lists. Appendix D includes 234 names that were included on two or more lists (201 names appear on two lists; 30 names appear on three lists; and three names appear on all four lists). Clearly North American Indian names can be found throughout the publication environment and the authority control system must be able to standardize them.

5.5.3 North American Indian name variation

Research sub-problem three is: Why is it necessary to control and standardize North American Indian names? This section reports on an examination of the variation among names reported in Chapters two and three and is based on information included in Appendix D. The study is based on the assumption that the author names reflect the chief source of information of the related document. When the same author's name is presented differently on different bibliographies, it is a reflection of differences in the chief sources of information. These differences reflect the standardization problems that authority control was developed to resolve.

The one exception to the assumption about author names above is the addition of tribal identification to an author's name. Many North American Indians consider a person's tribe to be a very important part of their identification (a Lakota Sioux is different from a Squamish just as a Swede is different from an

Italian). Since tribal identification is significant, the creator of a bibliography may add it.

There were five major categories of difference in the multiple presentations of names among the 234 authors in Appendix D. The two or more presentations of the names of 151 authors exhibited no change. The presentations of the names of the remaining 83 authors exhibited one, two, or even three of the following characteristics:

- Fuller forms exhibited by 45 authors' names
- Variant spellings exhibited by 13 authors' names
- Tribal name added exhibited by 37 authors' names
- Name sets exhibited by three authors' names
- Either name set or variant spellings exhibited by two authors' names
- Honorific added exhibited by one author's name

Fuller forms and variant spellings are authority issues for names from many cultures. The addition of tribal names, the presence of name sets, name forms that confuse the issues of name set and variant spelling, and the addition of North American Indian honorifics are authority control issues that are specific to North American Indian personal names.

The 40 authors' names exhibiting fuller form show the following characteristics:

- Presence or absence of middle initial (European names) e.g. 'Bolton, Jonathon' or 'Bolton, Jonathon W.'
- Middle initial or middle name (European names) e.g. 'Bowen, Duwayne L.' or 'Bowen, Duwayne Leslie'
- Presence or absence of middle name (European names) e.g. 'Deloria, Ella' or 'Deloria, Ella Cara'

- Forename or nickname (European names) e.g. 'Hoig, Stanley' or 'Hoig, Stan'
- Presence or absence of European surname (Mixed name) e.g. 'Hopkins, Sarah Winnemucca' or 'Winnemucca, Sarah'
- Presence or absence of name extensions (European name) e.g. 'Josephy, Alvin M. Jr.' or 'Josephy, Alvin M.'
- First initial or first name (European names) e.g. 'Momaday, N. Scott' or 'Momaday, Natachee Scott'

The 17 authors' names exhibiting variant spelling show the following characteristics:

- Order of name elements (European names) e.g. 'Aulaire, Ingrid'' or 'D'Aulaire', Ingri'
- Alternate spelling of name element (European names) e.g. 'Banks, Lynne Reid' or 'Banks, Lynn Reid'
- Alternate name elements (European names) e.g. 'Fletcher, Alice C.' or 'Fletcher, Alice E.'
- Reversed name elements (European names) e.g. 'Kavasch, E. Barrie' or 'Kavasch, Barrie E.'

The 39 authors' whose names exhibited tribal name additions came from the following nations:

Abenaki LenapeApache/Hopi/Tewa MaiduBlackfoot Modoc

• Cherokee Muskogee Creek

ChippewaChoctawOjibwa

• Gros Ventre Okanagan
• Haida Pawnee

HopiInuitSalish KootenaiSanta Clara Pueblo

• Inupiaq Santee Sioux

• Jemez Pueblo Sioux

• Hidatasa

Pima

• Kiowa Wampanoag

• Kwakiutl Wyandot

• Laguna Pueblo Yankton Sioux

• Lakota

A tribal name is never a consistent extension of an author's name in the test bibliographies. This researcher believes that the tribal name was added as the bibliography was created and that it reflects the importance of tribal identity to North American Indians.

The four authors' names exhibiting name sets were:

- Eastman, Charles Alexander (Ohiyesa): Charles Eastman was a nineteenth century Santee Sioux man who received his M.D. degree. Charles Eastman was his name in the White community; Ohiyesa was his name among the Sioux.
- Hofsinde, Robert (Gray-Wolf): Both Robert Hofsinde and Gray-Wolf are the author's names. He uses either separately or the combination.
- Horn, Gabriel (White Deer of Autumn): Both Gabriel Horn and White Deer of Autumn are the author's names. He uses either separately or the combination.
- Wanbli Numpa Afraid of Hawk: Both Wanbli Numpa and Afraid of Hawk are the author's names. He uses either separately or the combination.

Clearly the choice of main entry and cross-references needs to be considered carefully when the name's authority record is being created and maintained.

The two authors' whose names might exhibit either name set or variant spellings are Lame Deer, Archie (Fire) (or Lame Deer, Archie Fire) and Lame Deer, John (Fire) (or Lame Deer, John Fire). The choice of main entry and cross-references needs to be considered carefully when the name's authority record is being created or maintained.

The author's name exhibiting a title added was Standing Bear, Luther or Standing Bear, Chief Luther.

5.6 SUMMARY

This goal of this chapter was to answer research sub-question three (as defined in Section 1.2): "Why is it necessary to control and standardize names, especially North American Indian names, in the bibliographic environment?"

The reasons to standardize all personal names include:

- Supporting catalog functions
- Promoting cooperation among libraries and information services
- Supporting national and universal bibliographic control

Both the finding and gathering catalog functions are supported by personal name standardization. Serving the finding function supports the needs of catalog users by minimizing the effort required to obtain a specific work. When all of a person's works are under one name, it simplifies the process of locating a work. Proper authority control collects all alternative names too, so that users who know any name used by the author can find all desired works. In that way, authority control both standardizes a non-standard bibliographic universe and allows access to that universe from any point.

Serving the gathering function supports the needs of browsers by minimizing the effort required to obtain all of the work created by a single person. When all of the works are side-by-side, only one work has to be found in the catalog. Proper authority control collects all alternative names, so that users who know any name used by the author can find all desired works.

Standardizing personal names in the bibliographic environment promotes cooperation among large numbers of libraries. Resource

sharing (e.g., ILL) and shared cataloging (e.g., the Library of Congress catalog) are the two kinds of inter-library cooperation. Non-standard entries will almost certainly lead to a patron not finding a desired document.

Standardizing names also supports national and universal bibliographic control, which require standardized files to be matched to a common standard. At the national level, this is a function of each country's national bibliographic agency. At the international level, IFLA has taken on this function through its UBC program.

North American Indian personal names, as described in Chapter two, provide additional reasons to focus on standardization.

North American Indians are given names that take three different forms:

- European-form names like those of colonizing nations
- Traditional names like those of pre-colonial times
- Mixed-form names which combine characteristics of Europeanform and traditional names

In addition, North American Indians can have two or more names at the same time (name sets) and two or more names in a series (name sequences). Clearly standardization is necessary in order to assure that users can find the works of a single author who may have multiple names of several types. Both main entries and cross-references need to be carefully structured to support both finding and gathering.

To determine the state of information scattering among North American Indian names in the publication environment, the names listed in Appendix D were analyzed. Of the 2,021 authors whose

books made up the test bibliographies, 201 authors were in two lists, 20 authors were in three lists, and three authors were in all four lists for a total of 234 authors in multiple lists. These 234 names make up Appendix D. There were no differences between the listings of 151 authors names. Of those names remaining:

- 40 exhibit fuller form
- 39 have tribal identification added
- 17 show variant spellings
- 4 show the presence of name sets
- 2 show the presence of either variant spellings or a name set
- 1 has an added honorific

Standardization would obviously assist patrons searching for the works of one of these 83 authors.

Up to this point, this thesis has examined the nature of North American Indian names and naming, answering research sub-problem one (Chapter two). Then Chapter three examined the presence of North American Indian names in the publication environment, which answered research sub-problem two. The current chapter answered sub-problem three by considering the need to standardize names, especially North American Indian names. The next chapter addresses research sub-problem four: How do current authority control rules control North American Indian names?

CHAPTER 6

NORTH AMERICAN INDIAN NAMES AND AUTHORITY RULES

6.1 INTRODUCTION

As detailed in Chapter one, the overall research problem for this thesis is: What is the impact of naming practices among North American Indians on name authority control. This main research problem can be divided into five sub-problems, one of which (sub-problem four: How do current authority control rules control North American Indian names) is resolved in this chapter. The resolution is achieved using the information described in Chapters four and five. Specifically, Chapter six addresses the ways in which authority practices interact with the publishing environment that was described in Chapter three.

The following issues will be discussed:

- The authorities on name authority control (Section 6.2) and the control of North American Indian personal names
- North American Indian names as described in *Names of persons:* national usages for entry in catalogues (Section 6.3)
- Cataloging rules (modeled on AACR2R [1998]) (Section 6.4) which will resolve the issues of multiple names and nameforms as described in Section 6.3
- A discussion of the ways that North American Indian personal names affect authority control practice (Section 6.5)
- North American Indian personal name authority resources (Section 6.6) which describe major resources librarians can use to resolve authority control problems

Traditional and mixed-form North American Indian personal names reflect the ways that traditional North American Indian cultures and the cultures that colonized them interacted (Section 2.4). Authority control, on the other hand, is an

artifact of librarianship and the written culture in which it developed.

As noted in Section 4.2.1, Hagler and Simmons (cited in Clack, 1990:2) define authority control as "the name given to the function of discovering all available evidence relative to the naming of a person, body, topic, etc. and then establishing an access point and references according to some rule." This indicates that:

- The authority control of personal names is significant when considering people both as authors and as subjects.
- Authority files depend on the application of common authority control rule sets.
- Patrons expect librarians to show familiarity with the patrons' cultures; authority control files assist librarians who come from outside the culture.
- Authority control rule sets, and the files generated from them, help gather and collocate like with like.

6.2 AUTHORITIES ON NAME AUTHORITY CONTROL

Personal name authority practice is defined by several major documents. Few propose rules to control North American Indian personal names. Of those documents that do not propose rules for North American Indians, some provide general guidance to use with names not specifically covered, some refer to other sources, and some do neither.

Three databases were accessed on 1 October 2000 through the DIALOG Information Retrieval Service survey library and information science literature: Educational Resources

Information Center (ERIC, DIALOG File 1), Library and Information Science Abstracts (LISA, DIALOG File 61), and Information Science Abstracts (ISA, DIALOG File 202). Each database was searched for entries that included the strings authority control and personal names. ERIC and LISA each yielded ten entries, none of which were relevant to North American Indians. Information Science Abstracts (ISA) yielded five entries, none of which were relevant to North American Indian names.

Wellisch's *Indexing from A to Z* (1995), a standard reference work for indexers, includes a 23-page entry under the heading *Personal Names* describing the authority control rules for personal names from many cultures. Again, North American Indian cultures are not among them.

Chapter ten of Taylor's Introduction to cataloging (1992) discusses the handling of personal names in catalogs. The only portion that could be considered a reference to North American Indian names is the discussion of Rule 22.1 of AACR2R (1988). Taylor (1992:226) says, "The name by which a person is commonly known is the one that should be chosen, whether that name be the person's real name, nickname, pseudonym, shortened form of name, or other form of name customarily used by a person." This rule presupposes a single true name ("the person's real name") for each person. Any other name would not be their real name (i.e., "nickname, pseudonym, shortened form of name, or other form of name customarily used by a person"). As shown in Chapters two and three, this concept does not work in a North American Indian context because name sequences and name sets presuppose multiple real names.

Chapter 22, "Headings for Persons," of the Anglo-American cataloging rules (1998) is the sine qua non for cataloging authority control rules about personal names. It specifies official authority rules for name patterns from many cultures. North American Indians are not among them. For authority work with names from unspecified cultures, AACR2R (1998) Rule 22.3B4 states, "In all cases of names found in different language forms and not covered in 22.3B1-22.3B3, choose the form most frequently found in reference sources of the person's country of residence or activity." There are relatively few authoritative reference sources for oral cultures.

On page 419 AACR2R (1998) does refer to Names of persons:
national usages for entries in catalogues, third edition
(IFLA, 1977) for unspecified name forms. In Names of persons:
national usages for entries in catalogues, fourth edition
(IFLA, 1996a) under the entry for the United States of
America, both the Name Elements and the Order of Elements
imply that all American names are derived from English (e.g.,
Adams, John Quincy) or should be made to conform (e.g., De
Voto, Bernard). However, there is no discussion of North
American Indian names that follow either mixed or traditional
forms.

The entry for Canada has a section for personal names in native languages (which, in the context of that country, refers to North American Indians). The following name elements are listed:

- Given name
 - o Single e.g., Crowfoot
 - o Compound e.g., Big Bear
 - o Employed as a middle name e.g., One-onti
- Forename e.g., George
- Surname
 - o Single e.g., Nungak
 - o Compound e.g., Bear Robe

These elements can be combined to form catalog headings in the following ways:

- Enter single given name under the given name e.g., Crowfoot
- Enter compound given name under the first part of the name e.g., Buffalo Child Long Lance
- Enter single surname under the surname e.g., Clutesi, George
- Enter compound surname under the first part of the surname e.g., Bear Robe, Andrew

North American Indian traditional form personal names encompass single and compound given names entered under the first part of the surname (which, for a single given name, is its first letter). Mixed personal names encompass single and compound surnames with either a forename or a single or compound given name.

As noted at the end of Section 3.2.1.4, Humes (2003b) said that the policy of the Library of Congress (as set by the Cataloging Policy and Support Office) is to "follow AACR2 when establishing heading (sic) for person (sic) Native American

names. We have no special rules or directives." Application of the native language section of the Canadian entry of Names of persons: national usages for entries in catalogues, fourth edition (IFLA, 1996a) by the Library of Congress would assure the accuracy of traditional and mixed form authoritative name forms.

Issues of name sets, name sequences, and many issues of cultural interaction are not addressed by the Canadian entry in Names of persons: national usages for entries in catalogues. Both the U.S. and Canadian entries assume that one person has only one name that need concern catalogers. No structure is provided that offers a sense of time or group. And there is no way to describe non-linguistic elements of cultural interaction (e.g., a person might be called by different names in his clan and his hunting group).

6.3 NORTH AMERICAN INDIAN NAMES IN NAMES OF PERSONS AUTHORITY FORMAT

The entry for Canadian native language personal names in *Names of persons: national usages for entries in catalogues*, fourth edition (IFLA, 1996a) does provide, in its *initial note*, an excellent base on which to develop a full pattern for authority work with North American Indian names. The current Canadian entry under Native Languages says:

LANGUAGES: Native Languages

NOTE: Some names of native origin consist of a single or compound given name. These are often names of historical interest, and were common among the Inuit until the 1960s. Other native names consist of a surname of native origin and one or more forenames, often of English or French origin. A native name may also be employed as a middle name with an English or French surname and forename, as in the names of some contemporary chiefs.

NAME ELEMENTS

Elements Normally Forming Part of Name

Element		Туре	Examples
1.	Given Name	single	Crowfoot Nuligak Oronhyatekha Pitseolak
		compound	Big Bear Buffalo Child Long Lance
		Employed as a middle name	One-Onti
2.	Forename		Andrew Charlotte George Kateria Max Seepee Zebedee

3.	Surname	single	Clutesi
			Ipellie
			Nahbixie
			Nungak
			Tekakwitha
		Compound	Bear Robe
			Gros-Louis

ORDER OF ELEMENTS IN CATALOGUE HEADING

<u>General Rule</u>

Type of name		Entry element	Examples
1.	Single given name	given name	CROWFOOT NULIGAK ORONHYATEKHA PITSEOLAK
2.	Compound given name	first part of name	BIG BEAR BUFFALO CHILD
3.	Single surname	surname	CLUTESI, George IPELLIE, Seepee NAHBIXIE, Charlotte NUNGAK, Zebedee TEKAKWITHA, Kateri
4.	Compound surname	first part of surname	BEAR ROBE, Andrew GROS-LOUIS, Max One-Onti

National Cataloguing Code

Anglo-American cataloguing rules - 2^{nd} Edition rev. 1988. - Ottawa: Canadian Library Association, 1988. ISBN 0-88802-242-5 (Casebound)

Anglo-American cataloguing rules. Amendments 1993. - Ottawa: Canadian Library Association, 1993. ISBN 0-93893-431-5

Though this entry adequately resolves the issues surrounding traditional and mixed-form names, it does not deal with name sequences or name sets. Resolution of these issues requires both their recognition and documentation in *Names of persons:* national usages for entries in catalogues, fourth edition (IFLA, 1996a).

One way to achieve this documentation would be to add the following words, as a second paragraph, to the note that begins the Native Languages section of the Canadian entry.

Some individuals of native origin have more than one name either in sequence or at the same time. These name changes can occur as a result of significant personal or social events. Individuals who have two or more personal names at the same time have a name set. Individuals who replace one personal name with another have a name sequence.

This modified Canadian entry for native language names should also be added to the United States entry as the same kind of native language names are common in both countries.

6.4 NORTH AMERICAN INDIAN NAMES AND AACR2R (1998)

Chapter 22, "Headings for Persons," of the Anglo-American cataloguing rules (1998) contains the set of rules for authority control about personal names. The chapter contains portions called Choice of Name, Entry Element, Additions to Names, and Special Rules for Names in Certain Languages. Each includes one or more rules allowing a librarian to normalize the name as it is presented on the chief source of information and place it in the catalog.

The most important aspect of the application of AACR2R's (1998) authority control rules to North American Indian personal names is the librarian's attitude. Few rules require change and those changes are minor. As long as a cataloger thinks of a person's name as an identifying string rather than a descriptive concept, authority control difficulties will remain.

The remainder of this section examines those rules requiring alteration in the light of traditional and mixed North American Indian personal names. AACR2R Chapter 22 (1998) already controls European-style personal names and will serve as a check against modifying rules too much.

First each rule that needs to be changed will be quoted. Then its weakness will be identified. Finally a solution to that weakness will be proposed.

After the rules in AACR2R (1998) Chapter 22 are discussed, there will be a discussion of Rule 26.2A3. AACR2R (1998) Chapter 26 describes the rules for cross-reference formation; Rule 26.2A3 explains the proper handling of multiple potential name entry elements. The interaction of North American Indian names and Rule 26.2A3 will be the focus.

6.4.1 Rule 22.1: General Rule

Rule 22.1A begins, "In general, choose, as the basis for the heading for a person, the name by which he or she is commonly known. This may be the person's real name, pseudonym, title of nobility, nickname, initials or other appellation" (AACR2R,

1998:381). This rule presupposes a single name ("the person's real name") for each person. Any other name would not be their real name (i.e., "nickname, pseudonym, shortened form of name, or other form of name customarily used by a person"). As shown in Chapters two and three of this thesis, this idea does not work in a North American Indian context; many individuals have two or more names sequentially or at the same time.

Rule 22.1B continues, "Determine the name by which a person is commonly known from the chief sources of information by that person issued in his or her language" (AACR2R, 1998:382). The assumption built into this sub-rule is that all cultures have written language and the author's name will be found on "the chief sources of information by that person issued in his or her language." Most documents that are authored by North American Indians are published in English or other colonial language.

North American Indians would be better represented if "the person's real name" were changed to "the person's real names." Another improvement would be to change "issued in his or her language" to "issued in documents reflecting his or her culture." The first change fits name sequences and name sets into the name authority structure set forth in AACR2R (1998). The second change fits names of people from oral cultures into the name authority structure set forth in AACR2R (1998).

6.4.2 Rule 22.2: Choice Among Different Names

Rule 22.2A says, "If a person ... is known by more than one name, choose the name by which the person is clearly most commonly known, if there is one. Otherwise, choose one name or form of name according to the following list of preference:

- a) the name that appears most frequently in that persons works
- b) the name that appears most frequently in reference sources
- c) the latest name" (AACR2R, 1998:383)

Rule 22.2A, like Rule 22.1, presupposes that the normal state in the bibliographic universe is a single name for each person. As shown in Chapters two and three, this idea does not work in a North American Indian context; many individuals have two or more names sequentially or at the same time.

Change of name (Rule 22.2C) says, "If a person ... has changed his or her name, choose the latest name or form of name unless there is reason to believe that an earlier name will persist as the name by which a person is better known" (AACR2R, 1998:386)

Rule 22.2C implies that the purpose of a personal name is the identification of the individual. As shown in Chapter two, this is only one of the reasons for a North American Indian name. A person's name may change from one context to another (a name set); therefore correct authority control would have to distinguish both the person's name and the document's purpose.

North American Indians would be better represented if Rule 22.2A1 added a bullet item reading "the name that is most culturally fitting" to its preference list between b and c. An equal improvement could be made to Rule 22.2C by adding the words "or the name that is most culturally fitting" after "choose the latest name or form of name."

6.4.3 Rules 22.17-22.20: Additions to Distinguish Identical Names

Rules 22.17 through to 22.20 define appropriate additions to distinguish identical names. The accepted additions, placed to the right of the name, are:

- Birth and/or death dates Rule 22.17
- Fuller forms of the authorized name Rule 22.18
- Other distinguishing terms Rule 22.19
 - Profession
 - Academic degree or professional honor
 - Family links (Sr., Jr., etc.)
- Undifferentiated names Rule 22.20

As an example of Rule 22.17, LCNAF (accessed through DRA web on 26 March 2002) lists 28 authors named 'Smith, James' (many other authors have fuller forms of the name). All but one of these names is distinguished by dates differentiating life spans; the first 'Smith, James' is undifferentiated.

These additions are very appropriate for names in cultures with written language, where records of birth and death dates, profession, and locations are commonly available. These

records are much less likely to be available in an oral culture. For example, Wong (1986:12) writes about North American Indian identity,

"First, a Native American concept of self is different from a Western (or Euro-American) idea of self in that it is more inclusive. Generally, Native Americans, although individuals, tend to see themselves first as tribal members and second as discrete individuals."

In response to this consideration, an addition to Rule 22.19 is appropriate. The current Rule 22.19 (AACR2R, 1998:418) ("Distinguishing Terms") is:

- 22.19A. Names in which the entry element is a given name, etc.
- 22.19A1. If neither a fuller form of name nor dates are available to distinguish between identical headings of which the entry element is a given name, etc., devise a suitable brief term and add it in parentheses.

Johannes (Notary)
Thomas (Anglo-Norman poet)

- 22.19B. Names in which the entry element is a surname
- 22.19B1. If neither a fuller form of name nor dates are available to distinguish between identical headings of which the entry element is a surname, add a qualifier (e.g., term of address, title of position or office, initials of an academic degree, initials denoting membership in an organization) that appears with the name in works by the person or in reference sources.

Brown, George, Captain Brown, George, F.I.P.S.

Brown, George, Rev. Valmer, capitaine Saur, Karl-Otto Saur, Karl-Otto, Jr.

Do not use such a term if dates are available for one person and it seems likely that dates will eventually become available for the other(s).

Mudge, Lewis Seymour, 1868-1945 Mudge, Lewis Seymour (Name appears as: Lewis Seymour Mudge, Jr.)

A proposed sub-rule, 22.19C, would read:

22.19C Names in which the entry element is Native American

22.19C1. If known, use the individual's tribal identity as the primary distinguishing addition.

6.4.4 Rules 26.2A3: Different Entry Elements

AACR2R (1998) Chapter 26 describes the rules for cross-reference formation including the following sections:

- General rule (Rule 26.1)
- Names of persons (Rule 26.2)
- Geographic names and names of corporate bodies (Rule 26.3)
- Uniform titles (Rule 26.4)
- References to added entries for series and serials (Rule 26.5)
- References instead of added entries common to many editions (Rule 26.6)

The subject of this section is Rule 26.2A3, the rule for forming cross-references to names containing two or more potential entry elements. The rule says, "Refer from

different elements of the heading for a person under which that name might reasonably be sought" (AACR2R, 1998:544).

One result of this rule is the formation of cross-references by rotation. For example, the US Library of Congress's main entry for Maria Rostworowski de Diez Canseco is Rostworowski de Diez Canseco, Maria. Among the cross-references are:

- De Diez Canseco, Maria Rostworowski
- Diez Conseco, Maria Rostworowski de
- Canseco, Maria Rostworowski de Diez

Rotating the author's name elements so a patron can find her works by knowing any of those elements forms each cross-reference.

An addition to Rule 26.2A3 would make clear what is and is not an entry element. The current rule says, "Refer from different elements of the heading for a person under which that name might reasonably be sought" (AACR2R, 1998:544). A sentence should be added saying, "An entry element can be two or more words as long as they form a single concept."

6.5 NORTH AMERICAN INDIAN NAMES AND THE AUTHORITY CONTROL PROCESS

As shown in Sections 6.3 and 6.4, authority control with North American Indian personal names requires little change to the current cataloging rules. Most of the errors occur because of problems in the authority control process, and most of those problems indicate a misunderstanding of the basic purpose and structure of the name being considered.

Burger (1985) said that the first step in the authority process is the creation of authority records and that these records control some of the access points in a work's catalog record. An access point is a standardized name or heading form that is unique to the point accessed. Therefore a proper understanding of North American Indian personal names is essential if the authority process is to produce effective access points.

As noted in Section 4.2.2, Clack (1990:107) describes a three-step process regarding personal names. After the modifications to AACR2R (1998) as discussed in Section 6.4 are made, Clack's steps one and two become the most important parts of the authority process.

Step one is the examination of a document's chief source of information, introduction, text, and accompanying materials for possible name variants, allowing the cataloger to discover the context in which the author's name is used and the possible variations involved. North American Indian personal names may exhibit variations for all of the reasons discussed in Chapter two.

Clack's step two is the examination of reference material and authority files for names variants and usage, which provides an opportunity to discover more name variations that should be considered in the creation of the final authority record.

Svenonius (2000:89) three-part authority work process was also discussed in Section 4.3.2. North American Indian personal names can present problems in step one, because, between name sets and name series, AACR2R's (1998) concept of a real name is

less precise than with other cultures. North American Indian personal names can also present problems in both steps two and three, because an individual can have so many names relating to different aspects of his or her life that make disambiguation among individuals and the mapping of variants difficult.

Clearly authority work with North American Indian personal names can, at any time, create a very complex authority record.

One possible solution to these problems is the International Standard Authority Data Number (ISADN). According to Tillett (1996),

In 1978 IFLA conducted a study on authority files and established a Working Group on an International Authority System that standardized the content and structure of authority records. The Working Group envisioned a standard number, like ISBN and ISSN for an authority entry (ISADN, International Standard Authority Data Number) to be present in all variant records to serve as the identity.

One ISADN would be assigned to each author (or bibliographic presence) and its record includes all names, name sequences, and name sets.

Willer (1996), in discussing the status of the ISADN concept, says,

[I]t is obvious that an international standard authority data number (ISADN) must be defined in such a way as to accommodate linguistic and national variants in the accepted form of heading. Is it the design of an ISADN that should cater for these instances, or should it be some kind mechanism or

procedure within an international authority data system?

Snyman and Jansen van Rensburg (1999) proposed and tested a prototype for a relational database implementing the ISADN concept. Adding a third table (possibly called Additional Names) to their architecture would allow the correlation of name sequences and name sets to the primary name specified in the Agency ISADN System. Using the personal identification (ID) number as primary key, as in the Agency ISADN System's table, name sequences and name sets can be listed and, through the other tables, linked to the authorized name.

Although the possibility of overcoming authority control problems with North American Indian names exists, a question of feasibility should be raised: Will the ISADN idea survive the implementation process and become a successful tool?

6.6 NORTH AMERICAN INDIAN PERSONAL NAME AUTHORITY RESOURCES

While there are standard references used throughout the United States and Canada to determine authoritative name forms (e.g., the Name Authority File of the U.S. Library of Congress), there are also special bibliographic resources for work with North American Indian personal names.

The American Indian Library Association (2000) website includes a section called "Other Native and Minority Library and Literature Organizations and Resources" which includes several websites (see Appendix F for a detailed list).

Finally, many North American Indian Nations have their own web pages. If an author's or subject's tribal identity has been determined, checking with her or his tribal home page (or, if necessary, the home page of a culturally similar tribe) may offer significant information about his or her name.

6.7 SUMMARY

Chapter six resolved research sub-problem four: How do current authority control rules control North American Indian names?

Few of AACR2R's rules require change to organize North American Indian personal names and those changes are minor. However, if a cataloger thinks of a person's name as a string indicating genealogy rather than a descriptive concept, authority control problems will remain.

AACR2R Chapter 22 (1998) already controls European-style personal names and will serve as a check against modifying rules too much. Traditional and mixed-form North American Indian personal names, reflecting the interaction of their original oral cultures and colonizing cultures, are not described in AACR2R (1998).

On page 419 AACR2R (1998) refers to Names of persons: national usages for entries in catalogues, third edition (IFLA, 1977) for determining the patterns of unspecified name forms. The United States entry in Names of persons: national usages for entries in catalogues, fourth edition (IFLA, 1996a) states that all American names are derived from English (e.g., Adams, John Quincy) or should be made to conform to the English name model

(e.g., De Voto, Bernard); there is no discussion of North
American Indian names that follow either mixed or traditional forms.

The Canadian entry, in its section for personal names in native languages, lists the following name elements:

- Given name which can be single, compound, or employed as a middle name
- Single forename
- Surname which can be single or compound

These elements can be combined to form catalog headings in the following ways:

- Enter single given name under the given name
- Enter compound given name under the first part of the name
- Enter single surname under the surname
- Enter compound surname under the first part of the surname

Issues of name sets, name sequences, and many issues of cultural interaction are not addressed by the Canadian entry in Names of persons: national usages for entries in catalogs.

In addition to AACR2R (1998) and Names of persons: national usages for entries in catalogues (IFLA, 1996a), other sources of name authority information include:

- Wellisch's Indexing from A to Z (1995) a standard reference work for indexers. North American Indian personal name forms are not among those described.
- Taylor's Introduction to cataloging (1992), Chapter 10 the only portion that might consider North American Indian name

forms refers to Rule 22.1 of AACR2R (1998). As shown in Chapters two and three of this thesis, the concept of real names does not work in a North American Indian context because name sequences and name sets presuppose multiple real names.

• LCNAF - The Library of Congress Name Authority File - The official name authority file of the United States of America. Even though it has some errors, their name authority specialists do a fine job (see Chapter eight). LCNAF is available at http://authorities.loc.gov/help/name-auth.htm

Finally, many North American Indian Nations have their own web pages.

Most errors involving North American Indian personal names occur because of problems in the authority control process.

Between name sets, name series, and AACR2R's (1998) concept of a real name, North American Indian personal names can present problems.

One possible solution to these problems is the International Standard Authority Data Number (ISADN). One ISADN would be assigned to each author (or bibliographic presence) and its record includes all names, name sequences, and name sets.

Unfortunately the feasibility of the ISADN has not been tested in practice. Libraries and other information agencies, therefore, must rely on sources such as the AACR2R (1998) and Names of persons: national usages for entries in catalogues, fourth edition (IFLA, 1996a), to control North American Indian personal names.

Shortcomings do occur in these rules and guidelines regarding North American Indian names and naming practices among North American Indian cultures present additional problems. As a result, North American Indian personal names may not have a standardized presentation in bibliographic databases.

Chapter seven presents a method of examining the presentation of North American Indian naming practices in national bibliographies authority files. Chapter eight describes the results of the study driven by Chapter seven resolving research sub-problem five.

CHAPTER 7

NORTH AMERICAN INDIAN NAMES AND NATIONAL AUTHORITY CONTROL: RESEARCH METHODOLOGY

7.1 INTRODUCTION

Chapters two, three, five, and six each addressed parts of this thesis' overall research problem. Chapter two examined personal names and their application among North American Indians (sub-problem one). Chapter three explored the presence of North American Indian personal names in the publications environment (sub-problem two). Chapter five examined why names (especially North American Indian names) require standardization in order to maximize authority control's effectiveness (sub-problem three). And Chapter six discussed how authority control principles and practice (as explored in Chapters four and five) interacted with North American Indian personal names (sub-problem four).

With this information in mind, Chapters seven and eight examine North American Indian names in selected national libraries and the national authority files that are the responsibility of those national libraries in order to determine how name authority control is practiced. First, Chapter seven restates the main research problem and subproblem five, specifies the test sets used to answer it, and details the method by which the test sets will be applied to the sub-problem. The data gathered and the conclusions pointed to will be explored in chapter eight.

The specific issues considered in Chapter seven are:

• The problem, sub-problem five, and hypotheses (Section 7.2) which formally restate the research subject of Chapters seven and eight.

- The methodology (Section 7.3), which allows sub-problem five to be answered and the validation of the associated hypotheses.
- The samples (Section 7.4) which, applied through the methodology, answer the problem and validate the hypotheses.
- The analysis (Section 7.5), which describes how the data resulting from applying the samples to the methodology will validate the hypotheses.
- The summary (Section 7.6) that completes the chapter.

7.2 SUB-PROBLEM FIVE AND ITS HYPOTHESES

Chapters seven and eight resolve research sub-problem five. In order to begin this process, Section 7.2 restates the research problem and sub-problem five and develops the hypotheses that guide the study.

7.2.1 The Problem and Relevant Sub-problem Restated

The research problem for this thesis is: What is the impact of naming practices among North American Indians on name authority control. The sub-problem addressed in this chapter and the next is: How are North American Indian names presented in national authority files? The ten national libraries were selected from a list sponsored by IFLA, represented countries throughout the world, and had active, accessible personal name authority control lists.

7.2.2 The Hypotheses

Leedy and Ormrod (2000) defined a research hypothesis as an intuitive feeling or educated guess with respect to the outcome of the problem. On page 60 they wrote, "hypotheses are tentative, intelligent guesses posited to direct one's thinking toward the solution of the problem."

The three hypotheses suggested by sub-problem five were:

- 1. Of the authority records found in the US Library of Congress Name Authority File (LCNAF) (see Appendix S), fewer than 20% of the authorized forms will differ from the forms on the personal name test set.
- 2. Of the authority records found in the Canadian National Library name authority file (see Appendix L), fewer than 20% of the authorized forms will differ from the forms on the personal name test set.
- 3. Of the authority records found in at least four of the non-North American authority files on the library test list (see Appendix U), fewer than 20% of the authorized forms will be identical in all of the authority files containing the authors.

The US Library of Congress (LC) and National Library of Canada/Bibliotheque Nationale du Canada were chosen as the focus of this study because they are the national libraries that serve the nations within which North American Indian cultures are located.

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¹ The allowed error rate has no empirical reason. Some error level was required in order to validate the hypotheses, and 20% was chosen.

According to Powell (1997:34) the ideal hypothesis has the following five characteristics:

- 1. "Generalizability" the ideal hypothesis will allow research to extend the principles discovered over a larger intellectual area than the domain containing the specific data gathered for the research.
- 2. "Compatibility with current knowledge" the ideal hypothesis will allow research to extend the borders of a knowledge domain by fitting the established domain patterns.
- 3. "Testability" the ideal hypothesis will allow research to validate or invalidate it.
- 4. "Invariability" the concepts underlying the ideal hypothesis should not change over time.
- 5. "Causality" the ideal hypothesis connects cause and effect.

The hypotheses proposed in this chapter result in generalizable research because North American Indians exemplify indigenous subcultures that mingled for many generations while maintaining their individuality. This allowed disparate naming traditions to produce names whose forms converge; research like that reported in this thesis may, therefore, apply across North American Indian societies.

The proposed hypotheses certainly are compatible with current knowledge. This compatibility is enhanced by situating this research in the context of cross-cultural literature about naming and that of the practice of authority control.

A means of testing of the proposed hypotheses will be described in the Section 7.5. This simple, direct protocol suggests the transparent testability of these hypotheses.

The research results may be variable, since the methods by which the test sets were developed might yield different test sets at different times. The hypotheses, though, are invariable.

Finally, the characteristics of causality are not relevant to the proposed hypotheses. The research is descriptive and reflects the authority work at different national libraries. Causality might be inferred (i.e., errors were made by employees of the national libraries). However, without additional data, such cause-effect connections cannot be supported.

7.3 THE METHODOLOGY

The research question and hypotheses defined in the previous section were explored by taking a survey of the authority files of a group of national bibliographic agencies. The steps were:

- 1. Develop a set of North American Indian test names.
- 2. Develop a set of National Libraries to be surveyed.
- 3. Develop an instrument, modelled on those used in content analysis 2 , allowing the status of the test names in each National Library's authority file to be recorded.
- 4. Survey the National Authority Files and record the results.
- 5. Analyse the results.

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² Powell (1998:50) defines content analysis as "essentially a systematic analysis of the occurrence of words, phrases, concepts, etc. in books, films, and other kinds of materials."

The development of the test sets is discussed in more detail in the next section.

7.4 THE TEST SETS

This section describes the development of the test set of names and the test set of national authority files.

7.4.1 The Set of Names

This test set provides the personal names with which to survey the selected national library authority files. Requirements for the set of names included:

- 1. Reasonable expectation of presence in national library authority files
- 2. Reasonable size
- 3. Representatives of the three name forms
- 4. Presence of apparent name sets

The first requirement (a reasonable expectation of the names presence in national library authority files) will be met by basing the test set on the 2021 names found in the four bibliographic lists examined for Chapter three (American Indian Names in the Publication Environment). These lists comprise books (or other information bearing objects) available through the book trade that can be expected in the catalogs of the Library of Congress and the National Library of Canada.

Working with a list containing 2021 names would be very unwieldy. One option to ease the situation would be to take a random sample of 322 names. Powell (1997:80) suggests 322 as a proper sample size for a population of 2000 to 2200 individuals. Such a random sample would provide no assurance that the requisite name forms and name sets would be present (indeed such an assurance would itself be a bias negating randomness). A second way to structure the names test set would be to select names from the list according to a detailed standard. Following this option, names were selected from the original list of 2021 according to the following rules:

- Include all names that appear on two or more lists.
- Include all traditional name.
- Include all mixed-form names.
- Include the names of authors known by the researcher to be North American Indian.

Applying these rules, the original list of 2021 names was reduced to a test set of 185 names (see Appendix G).

7.4.2 The Set of Libraries

There are many lists of national libraries. Entering *National Libraries* in the Google! search engine produced 24,400 hits, many of which are lists of national libraries from sources all over the world. To select the set of libraries for this research, the following rules were applied:

- The list must be sponsored by an international agency.
- The list must include national libraries from around the world.
- The list must include national libraries that have shown an interest in the authority control of personal names.
- The list must include access to the national libraries that will facilitate this research.

The most significant international agency in the field of library and information science is the International Federation of Library and Information Agencies (IFLA). The two lists of national libraries on their website include libraries on every continent representing countries large and small. One of the lists, National Libraries of the World: an Address List, includes 166 entries with mailing addresses for each; the other list, Web Accessible National and Major Libraries, includes 54 national libraries with the URL for each.

To assure an institutional interest in personal name authority control, only national libraries represented in Names of persons: national usages for entry in catalogues (IFLA, 1996a) were accepted for this research. As access by the researcher was a requirement, the Web Accessible National and Major Libraries list was selected and compared to the list of countries represented in Names of persons: national usages for entry in catalogues (IFLA, 1996a). This produced a set of 50 libraries. The set (Appendix H) includes national libraries of large and small countries on all continents that have demonstrated a concern with personal name authority control and that provide access for research.

7.4.3 The Nature of the Analysed Libraries

Unfortunately, most of the 50 libraries do not make authority files available through their on-line OPACs. Application of the methodology for the present research depends on access to on-line national library OPACs, so only ten of the 50 possible test libraries provided detailed data. Those libraries were:

- US Library of Congress
- National Library of Canada
- Biblioteque nationale de France
- Danish National Library
- Koninklijke Bibliotheek (The Netherlands)
- Oesterreichische National Bibliothek (Austria)
- Narodni knihovna Ceske republiky (the Czech Republic)
- Biblioteca Nacional de Chile (Chile)
- Latvijas Nacionalas bibliotekas (Latvia)
- National Library of Australia

In each of these libraries, a search on an author's name produces both the national OPAC's authorized name choice and all of their recognized variant names. These ten national libraries provided the data pool for study.

7.4.4 Validity, Reliability, and the Library Test Set

"The validity of a measuring instrument is the extent to which the instrument measures what it is supposed to measure" (Leedy and Ormrod, 2000:31).

Leedy and Ormrod (2000) list six different kinds of validity:

- Face Validity
- Criterion Validity
- Content Validity
- Construct Validity
- Internal Validity
- External Validity

Each will be discussed below.

"[R]eliability is the consistency with which a measuring instrument yields a certain result when the entity being measured hasn't changed" (Leedy and Ormrod, 2000:31).
Reliability, too, is also described below.

7.4.4.1 Face Validity

Definition: "Face validity is the extent to which, on the surface, an instrument looks like it's measuring a particular characteristic" (Leedy and Ormrod, 2000:98)

Response: The instrument (Appendix I) certainly seems to measure what it purports to measure (i.e., the ways specific national library authority files record North American Indian names). The sample studied, however, is small and is certainly not random. Since no hypotheses tested for a pattern of names selected for main entries or references, the size and non-random nature of the sample seems acceptable.

7.4.4.2 Criterion Validity

Definition: "Criterion validity is the extent to which the results of an assessment instrument correlate with another, presumably related measure" (Leedy and Ormrod, 2000:98)

Response: Criterion validity is not applicable to this study as no previous or current instrument tests for name patterns.

7.4.4.3 Content Validity

Definition: "Content validity is the extent to which a measurement is a representative sample of the content area (domain) being measured" (Leedy and Ormrod, 2000:98).

Response: This study exhibits high content validity within the parameters defined by the nature of the sample. Both the information found about the possible entry names and the number of authors represented in the sampled libraries provide a foundation for this study's conclusions and suggestions for future study.

7.4.4.4 Construct Validity

Definition: "Construct validation is the extent too which an instrument measures a characteristic that cannot be directly observed but must instead be inferred from patterns in people's behaviour (such a characteristic is called a construct)" (Leedy and Ormrod, 2000:98).

Response: Construct validity is not applicable to this study. How national authority files control authors' names can be directly observed, therefore no constructs exist.

7.4.4.5 Internal Validity

Definition: "The internal validity of a research study is the extent to which its design and the data that it yields allow the researcher to draw accurate about cause-and-effect and other relationships within the data" (Leedy and Ormrod, 2000:103-104).

Response: Since the methodology applied to this research was arithmetic (what Savage [1997] calls 'science by numbers'), the relationships in the data should be clear to the researcher.

7.4.4.6 External Validity

Definition: "The external validity of a research study is the extent to which its results apply to situations beyond the study itself - in other words, the extent to which the conclusions drawn can be generalized to other contexts" (Leedy and Ormrod, 2000:105).

Response: Given the size and non-random nature of the sample, the external validity of this study is low. Since it is a descriptive study, however, the results may suggest patterns that can be used in future research.

7.4.4.7 Reliability

Definition: "[R]eliability is the consistency with which a measuring instrument yields a certain result when the entity being measured hasn't changed" (Leedy and Ormrod, 2000:31).

Response: Since the names on the test list (Appendix G) were generated from independent sources, all names fit the proposed schema, and since the libraries in the sample are independent of each other, the study's results are reliable.

7.4.5 The Instrument

The research instrument supports and documents a survey of the authority files of national libraries. To achieve this, each name in the set of names had a line added for documenting authority control main entry, references, and notes. The resulting instrument (See Appendix I) was applied to each test national library's authority file and the results were recorded in Appendixes J through S.

7.5 PROPOSED ANALYSIS

Section 7.2 listed the hypotheses that direct the research reported in this chapter and the next. The first and second hypotheses indicate the state of North American Indian personal name authority control among the national libraries serving these communities. The third hypothesis indicates the state of North American Indian personal name authority control among the national libraries of other countries.

The data is gathered on instruments that resemble content analysis forms. (Indeed, according to Powell [1997:50] this research could be considered to be a content analysis of national library authority files.) Every name in the name test set is checked against each selected national library's authority file so that the hypotheses that guide this research can be affirmed or denied.

The name test set is made up of individuals who are members of nations indigenous to the U.S. and Canada and whose publications are sold in both countries, so their names should, reasonably, be in both authority files. Hypothesis one, a measure of the Library of Congress authority file, was tested by:

- 1. Determine the number of authors who do not appear in LCNAF, and subtract it from 185 (the number of names in the name test list).
- 2. Determine the number of author names whose LCNAF authorized forms differ from the name test set.
- 3. Divide the number of differing names (step two) by the number of present names (step one). The hypothesis will be validated if the quotient is 20% or less.

Hypothesis two was a measure of the National Library of Canada's authority file. It was assessed using a methodology parallel to that applied to LCNAF.

Hypothesis three was a measure of the state of North American Indian personal names in eight national library authority files throughout the world (the national bibliography test set without LCNAF and the National Library of Canada). All

authorized forms of the author names that appeared in four or more national authority files were compared to each other. This indicated the level of uniformity within international authority control. Hypothesis three was affirmed if 20% or fewer of the authors whose names appear in at least four of the eight tested national authority files have identical authorized forms in all of the national authority files in which they appear.

7.6 SUMMARY

Chapter seven described the methodology that was used to test research sub-problem five first proposed in Chapter one. Specifically, this chapter examined:

- The hypotheses that convert sub-problem five into a form that can be affirmed or denied.
- The methodology that allows the resolution of the problem and its sub-problems by the affirmation of the hypotheses.
- The samples, applied through the methodology, which affirm or reject the hypotheses.
- The analysis defining how the data that was produced by this research affirmed or rejected each hypothesis.

Chapter eight reports on the data collected through the application of the methodology described in this chapter resolving research sub-problem five.

CHAPTER 8

DATA AND ANALYSIS OF NORTH AMERICAN INDIAN NAMES IN NATIONAL AUTHORITY FILES

8.1 INTRODUCTION

Chapter seven described the methodology that was used to test research sub-problem five (how are North American Indian names presented in national authority files) as detailed in Chapter one.

Chapter eight reports the data collected by the application of this methodology and analyzes their significance. By the end of this chapter, the hypotheses that undergird sub-problem five are resolved.

8.2 OVERVIEW OF DATA

Detailed results from the application of the research methodology to each of the national library's authority files in the sample can be found in Appendixes J through S. The libraries and their accompanying appendixes are:

- National Library of Australia (for detailed results see Appendix J)
- Oesterreichische National Bibliothek (The National Library of Austria) (for detailed results see Appendix K)
- National Library of Canada (for detailed results see Appendix L)
- Biblioteca Nacional de Chile (The National Library of Chile) (for detailed results see Appendix M)
- Narodni knihovna Ceske republiky (The National Library of the Czech Republic) (for detailed results see Appendix N)
- Danish National Library (for detailed results see Appendix O)
- Biblioteque nationale de France (The National Library of France) (for detailed results see Appendix P)

- Latvijas Nacionalas bibliotekas (The National Library of Latvia) (for detailed results see Appendix Q)
- Koninklijke Bibliotheek (The National Library of the Netherlands) (for detailed results see Appendix R)
- US Library of Congress (LC) (for detailed results see Appendix S)

In each of these libraries, a search on an author's name produced both the national name authority file's authorized name choice and all of their recognized variants.

Statistical frequency procedures (SAS's FREQ procedure) (SAS Institute, Inc., 1999) were performed on a spreadsheet including all of the information in Appendixes J through S. Details of authorized-form data are reported in Appendix T and summarized in Table 8-1.

Table 8-1: The FREQ procedure applied to authorized forms

NATIONAL	TRADITIONAL	EUROPEAN	MIXED	UNEXPECTED	NOT FOUND	TOTAL
LIBRARY	NAMES	NAMES	NAMES	NAMES ¹		NAMES ²
AUSTRALIA	No.=5	No.=28	No.=7	No.=1	No.=144	No.=185
	%=2.70	%=15.14	%=3.78	%=0.54	%=77.84	%=100.00
AUSTRIA	No.=3	No.=3	No.=4	No.=0	No.=175	No.=185
	%=1.62	%=1.62	%=2.16	%=0.00	%=94.59	%=100.00
CANADA	No.=34	No.=90	No.=28	No.=2	No.=31	No.=185
	%=18.38	%=48.65	%=15.14	%=1.08	%=16.76	%=100.00
CHILE	No.=0	No.=5	No.=1	No.=0	No.=179	No.=185
	%=0.00	%=2.70	%=0.54	%=0.00	%=96.76	%=100.00

¹ Unexpected Names are those cross-references (or authorised forms) which do not represent the application of the rules of authority control.

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 $^{^2}$ The sum of name form percentages may not equal 100% due to rounding errors.

NATIONAL	TRADITIONAL	EUROPEAN	MIXED	UNEXPECTED	NOT FOUND	TOTAL
LIBRARY	NAMES	NAMES	NAMES	NAMES		NAMES ³
CZECH REP	No.=1	No.=5	No.=2	No.=1	No.=176	No.=185
	%=0.54	%=2 . 70	%=1.08	%=0.54	%=95.14	%=100.00
DENMARK	No.=9	No.=21	No.=6	No.=1	No.=148	No.=185
	%=4.86	%=11.35	%=3.24	%=0.54	%=80.00	%=100.00
FRANCE	No.=4	No.=22	No.=6	No.=3	No.=150	No.=185
	%=2.16	%=11.89	%=3.24	%=1.62	%=81.08	%=100.00
LATVIA	No.=1	No.=1	No.=0	No.=0	No.=183	No.=185
	%=0.54	%=0.54	%=0.00	%=0.00	%=98.92	%=100.00
NETHER-	No.=3	No.=13	No.=2	No.=1	No.=166	No.=185
LANDS	%=1.62	%=7.03	%=1.08	%=0.54	%=89.73	%=100.00
USA	No.=32	No.=99	No.=23	No.=2	No.=29	No.=185
	%=17.30	%=53 . 51	%=12.43	%=1.08	%=15.68	%=100.00
TOTAL	No.=92	No.=287	No.=79	No.=11	No.=1381	No.=1850
	%=4.97	%=15.51	%=4.27	%=0.59	%=74.65	%=100.00

It is true that most authorized forms in the tested national authority files take the European form with the remaining names divided between traditional and mixed forms. But 92 authorized forms (from nine national authority files) did take traditional form and 79 (also from nine national authority files) took mixed forms. In other words, a total of 171 (9.24%) of authorized forms examined were not a European form and needed the authority control structure proposed in Chapter six.

Traditional names were reported in different ways by national authority files. For example the Oglala Lakota author Black Elk was called:

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³ The sum of name form percentages may not equal 100% due to rounding errors.

- Elan Noir (his tribal name in French): French cross-reference
- Zwarte Eland (his tribal name in Dutch): Netherlands cross-reference
- Schwartzer Hirsch (his tribal name in German): Netherlands cross-reference

Apparently, then, entries for a traditional name can include translations of the name in any language. This is a result of names that both identify and describe the individual, since conceptual names lend themselves to translation.

As detailed in Section 6.4.4, one approach to cross-reference formation for a multi-word concept name (both traditional and mixed-form names) was rotating name parts. An example was the set of cross-references chosen for the author Peter Blue Cloud. The authorized form was Blue Cloud, Peter. The set of cross-references included Cloud, Peter Blue. This researcher would not expect anyone to search under Cloud since Blue Cloud is a single concept (see Section 6.4.4).

As another example, LC lists the authorized form for Adam Fortunate Eagle as Eagle, Adam Fortunate. The chosen references are:

- Nordwall, Adam
- Fortunate Eagle, Adam
- Adam Fortunate Eagle

The first reference is a reasonable selection according to AACR2R (1998) Rule 22.2Cl, since Adam Nordwall was the author's birth name. The second reference appears to follow rule

26.2A.3 because a patron might reasonably be expected to look for the author under this name (especially since it is the author's current mixed name). The third reference is peculiar; a patron is unlikely to look for the author Adam Fortunate Eagle under A. (This approach is like including Nelson Mandela as a cross-reference to Mandela, Nelson.) The pattern followed seems to be one of taking care of all options by rotating all entry elements until the possibilities are exhausted. Though this pattern would be amenable to automation, it does not appear to meet any intellectual standard.

Another example of odd references was the set chosen for the author Archie Fire Lame Deer (*Lame Deer*, *Archie Fire*, 1935- was the authorized form chosen by LC), which were:

- Fire, Archie, 1935-
- Deer, Archie Fire Lame, 1935-
- Archie Fire Lame Deer, 1935-

This researcher's commentary on the above authority record is based on *Lame Deer* (no date), a World Wide Web site that includes the story "Lame Deer, Or How My Family Got Its Name."

The chosen authorized form, Lame Deer, Archie Fire, is correct. The family name is Lame Deer, Archie Fire are given names; Fire has been a middle name for three generations (Archie Fire Lame Deer, John Fire Lame Deer [Archie's father], and Josephine Fire Lame Deer [Archie's daughter].

The first cross-reference (Fire, Archie, 1935-) makes no sense, since Lame Deer was part of the author's name from birth. The third cross-reference (Archie Fire Lame Deer, 1935-) follows

the same pattern as *Adam Fortunate Eagle*, and seems equally unlikely to be used as a search point.

The second reference (Deer, Archie Fire Lame, 1935-) is very interesting because it appears to both follow a standard authority control practice and break a principle of naming among North American Indians. Clack (1990:107-108) said, "references are made if ... [t]he name is a compound or multipart name and the parts are likely access points." If Deer is a likely access point, Deer, Archie Fire Lame is a reasonable reference; if, however, Deer is not a likely access point, Deer, Archie Fire Lame is not a reasonable reference. It seems to this researcher that, since both mixed and traditional names can comprise one concept expressed as two (or more) related words, searching on the second (or later) word is a way of changing the name. A changed name is not a likely access point, so this kind of reference is not acceptable.

Indeed many North American Indians created the English forms of their names by placing a hyphen between the name-words or simply putting the words together with no space. Examples are George P. Horse-Capture and Martin Brokenleg. Apparently many North American Indians found it necessary to use grammatical devices to assure that their names were not inverted. It would be reasonable to treat other traditional and mixed names in the same way.

8.3 RESOLVING THE HYPOTHESES

As noted in Chapter seven, the three hypotheses that controlled this research were:

- 1. Of the authority records found in the US Library of Congress Name Authority File (LCNAF) (see Appendix S), fewer than $20\%^4$ of the authorized forms will differ from the forms on the personal name test set.
- 2. Of the authority records found in the Canadian National Library name authority file (see Appendix L), fewer than 20% of the authorized forms will differ from the forms on the personal name test set.
- 3. Of the authority records found in at least four of the non-North American authority files on the library test list (see Appendix U), fewer than 20% of the authorized forms will be identical in all of the authority files containing the author.

8.3.1 Hypothesis One

Table 8-1 indicates that the authority files of the Library of Congress (one of the USA's four national libraries⁵) had records for 156 of the 185 test names (a rate of 84.32%). However, the hypothesis referred to "authority records that differ from the personal name test set." In other words, it was the authorized form, not the author's presence, which was being tested for.

Some names had dates (especially birth or death dates) added to an author's name when an authority record was created to separate people with the same name. These dates could be expected in the authority files tested but not on the list of test names. As a result, the presence of such dates could not be considered a deviation from the 185-name test set.

⁴ The allowed error rate has no empirical reason. Some rate of difference was required in order to validate the hypotheses, and 20% was chosen.

⁵ The USA's four national libraries are the Library of Congress, the National Library of Medicine, the National Library of Agriculture, and the National Library of Education.

The authorized forms for 39 of the 156 names in LCNAF (25.0%) differed from the form on the test list, so hypothesis one was not substantiated. Bibliographers prepared the four bibliographies selected for this research, so the main sources of information (usually the title pages) were probably used to create the test names. In most cases LCNAF authorized forms were also selected from the main source of information, so a difference rate of 25.0% is higher than this researcher expected. Reasons for the differences may include:

- The author's name on a title page may be a cross-reference in LCNAF (for authors of more than one book). An example is the choice of *Brave Bird*, *Mary* or *Crow Dog*, *Mary*.
- The author's name may be a multi-word traditional form or a mixed form and LCNAF may have created the authorized form incorrectly. An example is the choice of Fortunate Eagle, Adam or Eagle, Adam Fortunate.

The differences exhibited by the 39 names included:

- Fullness of name: e.g., Big Crow, Moses in the test list versus Big Crow, Moses Nelson in the authority record.
- Added title: e.g., *Blacksnake* in the test list versus *Blacksnake*, *Governor* in the authority record.
- Added label: e.g., *Black Hawk* in the test list versus *Black Hawk*, *Sauk Chief* in the authority record.
- Name in the named person's original language: e.g., *Buffalo Bird Woman* in the test list versus *Wahenee* in the authority record.
- Both European-form name and name in author's language: e.g., Eastman, Charles Alexander (Ohiyesa) in the test list versus Eastman, Charles Alexander in the authority record. This record hid a name set.

• Unsupported form: e.g., Fortunate Eagle, Adam in the test list versus Eagle, Adam Fortunate in the authority record.

The unsupported form is particularly interesting and an instructive example of North American Indian naming. Adam Nordwall was a leader in the 1969 takeover of Alcatraz Island by a coalition of North American Indian activists including members of the American Indian Movement. During the standoff that followed, Adam Nordwall was given the name Fortunate Eagle (Fortunate Eagle, 1992). Virtually all references, at least in North American Indian literature, refer to either Adam Fortunate Eagle or Fortunate Eagle. The Library of Congress Name Authority File (LCNAF), however, appears to have applied the English name paradigm, so that Eagle was taken as a family name and Adam Fortunate as given names.

8.3.2 Hypothesis Two

Table 8-1 above indicates that the Authority files of the National Library of Canada had records for 154 of the 185 test names (a rate of 83.24%). However, the hypothesis referred to "authority records that differ from the personal name test set." It was the authorized form, not the author's presence, which was being tested for.

As discussed in Section 8.3.1, the presence of birth or death dates to separate identically named individuals is not considered a deviation from the 185-name test set.

The authorized forms for 31 of the 154 names in the National Library of Canada authority file (20.12%) differed from the forms on the test list, so hypothesis two was (barely) not substantiated. Bibliographers prepared the four bibliographies selected for this research, so the main sources of information (usually the title pages) were probably used to create the test names. In most cases the National Library of Canada's authorized forms were also selected from the main source of information, so a difference rate of 20.12% is higher that this researcher expected. Reasons for the differences may include:

- The author's name on a title page may be a cross-reference in Canada's name authority file (for authors of more than one book). An example is the choice of *Brave Bird*, *Mary* or *Crow Dog*, *Mary*.
- The author's name may be a multi-word traditional form or a mixed form and Canada's name authority file may have created the authorized form incorrectly. An example is the choice of Fortunate Eagle, Adam or Eagle, Adam Fortunate.

The differences exhibited by the 31 names included:

- Form of name: e.g., Benton-Benai, Edward in the test list versus Benton-Benai, Eddie in the authority record.
- Fullness of name: e.g., Ashoona, Pitseolak in the test list versus Pitseolak in the authority record.
- Added title: e.g., *Blacksnake* in the test list versus *Blacksnake*, *Governor* in the authority record.
- Name in author's language: e.g., Storm Horse in the test list versus Bernie, Clifford in the authority record.

- Both European-form name and name in author's language: e.g., Eastman, Charles Alexander (Ohiyesa) in the test list versus Eastman, Charles Alexander in the authority record. This record hid a name set.
- Unsupported form: e.g., Fortunate Eagle, Adam in the test list versus Eagle, Adam Fortunate in the authority record.

8.3.3 Hypothesis Three

Appendix U documented the number of national bibliographies (other than the National Library of Canada and the US Library of Congress) that contained each name in the 185-name test set. Only 75 of the 185 test names (40.55%) appeared in one or more of the national authority files. Of those test names:

- Thirty-eight names appeared in one list only
- Fourteen names appeared in two lists
- Nine names appeared in three lists
- Six names appeared in four lists
- Six names appeared in five lists
- Two names appeared in six lists
- No names appeared in seven or eight lists

The remainder of this section will be concerned with those names that appear in at least half of the eight lists. Fourteen names appeared in four or more test national authority files. Fourteen names do appear in two lists, but these are not the names used to test hypothesis three. Six names appeared in four lists, six more names appeared in five lists, and two names appeared in six lists making a total of fourteen names in four or more lists.

The names appearing in at least four lists were:

- Black Elk (five lists)
- Brave Bird, Mary (six lists)
- Craven, Margaret (four lists)
- Eastman, Charles Alexander (Ohiyesa) (four lists)
- Iwabuchi, Akifumi (four lists)
- La Flesche, Francis (four lists)
- Least Heat-Moon, William (five lists)
- Littlefield, Daniel F. (four lists)
- Rostworowski de Diez Canseco, Maria (four lists)
- Schoolcraft, Henry Rowe (five lists)
- Seattle, Chief (five lists)
- Snow, Dean R. (five lists)
- Tanaka, Beatrice (five lists)
- Tum, Rigoberta Menchu (six lists)

As described in Sections 8.3.1 and 8.3.2, authorized forms of the test names were compared for this research. For hypothesis three the comparison was between the authorized forms given to the same author by different national authority files. As discussed in Section 8.3.1, the presence of birth or death dates to separate identically named individuals is not considered a deviation from the names on the test set.

The authorized forms were:

- Black Elk
 - AUSTRALIA: Black Elk, 1863-1950
 - AUSTRIA: Black ElkDENMARK: Black ElkFRANCE: Hehaka Sapa
 - NETHERLANDS: Black Elk (1863-1950)

- Brave Bird, Mary
 - AUSTRALIA: Brave Bird, Mary
 - AUSTRIA: Crow Dog, Mary
 - CHILE: Crow Dog, Mary
 - DENMARK: Crow Dog, Mary
 - FRANCE: Crow Dog, Mary (1954-...)
 - NETHERLANDS: Crow Dog, Mary
- Craven, Margaret
 - AUSTRALIA: Craven, Margaret
 - CZECH REPUBLIC: Craven, Margaret
 - DENMARK: Craven, Margaret
 - NETHERLANDS: Craven, Margaret
- Eastman, Charles Alexander (Ohiyesa)
 - AUSTRALIA: Eastman, Charles Alexander, 1858-1939
 - CZECH REPUBLIC: Eastman, Charles Alexander 1858-1939
 - DENMARK: Eastman, Charles Alexander
 - FRANCE: Eastman, Charles Alexander (1858-1939)
- Iwabuchi, Akifumi
 - AUSTRALIA: Iwabuchi, Akifumi
 - DENMARK: Iwabuchi, Akifumi
 - FRANCE: Iwabuchi, Akifumi
 - NETHERLANDS: Iwabuchi, Akifumi
- La Flesche, Francis
 - CHILE: La Flesche, Francis, -1932.
 - DENMARK: La Flesche, Francis
 - FRANCE: La Flesche, Francis
 - NETHERLANDS: La Flesche, Francis (Francis; -1932)

- Least Heat-Moon, William
 - AUSTRALIA: Heat Moon, William Least
 - CZECH REPUBLIC: Least Heat Moon, William
 - DENMARK: Heat Moon, William Least
 - FRANCE: Heat-Moon, William Least (1934-...)
 - NETHERLANDS: Heat Moon, William Least (pseud. Van: William Trogdon)
- Littlefield, Daniel F.
 - AUSTRALIA: Littlefield, Daniel F.
 - DENMARK: Littlefield, Daniel F.
 - FRANCE: Littlefield, Daniel F.
 - NETHERLANDS: Littlefield, Daniel F. (jr.)
- Rostworowski de Diez Canseco, Maria
 - AUSTRALIA: Rostworowski de Diez Canseco, Maria
 - AUSTRIA: Rostworowski de Diez Canseco, Maria
 - CHILE: Rostworowski de Diez Canseco, Maria
 - FRANCE: Rostworowski de Diez Canseco, Maria
- Schoolcraft, Henry Rowe
 - AUSTRALIA: Schoolcraft, Henry R. (Henry Rowe), 1793-1864
 - CHILE: Schoolcraft, Henry Rowe 1793-1864
 - DENMARK: Schoolcraft, Henry Rowe
 - FRANCE: Schoolcraft, Henry Rowe
 - NETHERLANDS: Schoolcraft, Henry Rowe (Henry Rowe; 1793-1864)
- Seattle, Chief
 - AUSTRALIA: Seattle, Chief, 1790-1866
 - AUSTRIA: Seattle
 - DENMARK: Seattle, Hovding
 - FRANCE: Seattle, Chief (1790-1866)
 - NETHERLANDS: Seattle (ca 1786-1866)

- Snow, Dean R.
 - AUSTRALIA: Snow, Dean R., 1940-
 - CZECH REPUBLIC: Snow, Dean
 - DENMARK: Snow, Dean R., 1940-
 - FRANCE: Snow, Dean R. (1940-...)
 - NETHERLANDS: Snow, Dean R. (Dean R.; 1940-)
- Tanaka, Beatrice
 - CHILE: Tanaka, Beatrice
 - DENMARK: Tanaka, Beatrice
 - FRANCE: Tanaka, Beatrice (1932-....)
 - LATVIA: Tanaka, Beatrice
 - NETHERLANDS: Tanaka, Beatrice
- Tum, Rigoberta Menchu
 - AUSTRALIA: Menchu, Rigoberta
 - AUSTRIA: Menchu, Rigoberta
 - CHILE: Menchu, Rigoberta, 1959-
 - DENMARK: Menchu, Rigoberta
 - FRANCE: Menchu, Rigoberta (1959-...)
 - NETHERLANDS: Menchu, Rigoberta (Rigoberta; 1960-)

Of the 14 authors relevant to hypothesis three, the authorized forms for five names were the same in all of the national authority files containing them. The authorized forms for nine of the names were different in different national authority files. Five names equalled 35.71% of the total fourteen and hypothesis three was not substantiated. One of the foundations of the international authority control movement is standardization (see Section 5.3.3). A different name presentation rate of 64.29% indicates that standardization is far from being accomplished.

At least one of the 14 authors was included in each of the eight test bibliographies considered in hypothesis three.

Three of the authors (Craven, Margaret; Iwabuchi, Akifumi; and Rostworowski de Diez Canseco, Maria) had identical authorized forms in all of the national bibliographies including them. All of the authorized forms except one for Daniel F. Littlefield were identical; the national authority file of the Netherlands adds (jr.) to Littlefield, Daniel F.

Two additional authors (Eastman, Charles Alexander and Tanaka, Beatrice) appeared in several national authority files with identical authorized forms with birth and death date extensions.

Four of the 12 test names found in the national authority file of the Netherlands followed the authorized form with a repetition of the author's given name as well as a date extension in parentheses. For example, the Danish authorized form for Francis La Flesche was La Flesche, Francis but the authorized form in the national authority file of the Netherlands was La Flesche, Francis (Francis; -1932). The Danish authorized form for William Least Heat-Moon was Heat Moon, William Least but the authorized form in the national bibliography of the Netherlands was Heat Moon, William Least (pseud. Van: William Trogdon).

The authorized forms in the national authority files of Australia, Austria, Denmark, and the Netherlands for the Lakota author Black Elk were *Black Elk* with or without date

extensions. But the main entry in the national authority file of France was Hehaka Sapa, the author's name in Lakota.

The Australian authorized form for Mary Brave Bird is Brave Bird, Mary. The authorized forms in the six test national authority files are all Crow Dog, Mary with or without a date extension. Crow Dog is the family name of the author's first husband; Brave Bird is the family name of the author's second husband.

The national authority file of Chile stated that its records are taken from LCNAF (see Appendix M). The LCNAF authorized form for Mary Brave Bird, however, is *Brave Bird*, *Mary*, and the Chilean authorized form is *Crow Dog*, *Mary*. Apparently, Chile's national authority file, while it might originate in LCNAF, does not maintain its authorized forms scrupulously.

The authorized forms for Rigoberta Menchu Tum in all seven of the national bibliographies examined were *Menchu*, *Rigoberta*, with or without a date extension. At the time that she won the 1992 Nobel Peace Prize for Peace and wrote her best-known book, *Rigoberta Menchu Tum* was already her name.

Overall, the analysis of the 14 names contained in multiple national authority files (nine or 64.28% of which had more than one authorized form) indicated a lack of standardization among authorized forms.

Section 5.3.3 described the need for standardization in international authority control. The results for hypothesis three suggest that the authority control principle of

uniqueness (see Section 4.5.1) has broad application at the international level.

8.4 SUMMARY

Chapter eight reported the results of the application of the methodology described in Chapter seven. After a review of the method and an overview of the data, each hypothesis was examined in detail.

Hypothesis one, which examined the presentation of North American Indian names in LCNAF, failed because the authorized forms of 39 names differed from the form in the name test set. The differences included:

- Fullness of name
- Added title
- Added label
- Name in the named person's original language
- Both European-form name and name in author's language
- Unsupported form

Hypothesis two, which examined the presentation of North American Indian names in the authority files of the National Library of Canada, failed because the authorized forms of 31 names differed from the form in the name test set. The differences included:

- Form of name
- Fullness of name
- Added title
- Name in author's language

- Both European-form name and name in author's language
- Unsupported form

Hypothesis three, which examined the presentation of North American Indian names in the eight authority files of test national libraries, other than those of LCNAF and the National Library of Canada, failed because five of the authorized forms were the same in all national authority files containing them. Since one of the foundations of international authority control is standardization, different national authority files presenting nine authors' names in different authorized forms indicate that standardization is far from being accomplished.

Chapters two through eight answered the research problem and its sub-problems that serve as a basis for this thesis.

Chapter nine will examine the implications of these results and possible future research directions.

CHAPTER 9

CONCLUSION

9.1 INTRODUCTION

In chapters two through eight of this thesis, this researcher described the impact of the naming practices of North American Indians on name authority control. The research required study in five areas:

- The nature of personal names and naming among North American Indians (Chapter two).
- The presence of North American Indian names in the publication environment (Chapter three).
- The significance of standardization for the authority control of North American Indian names (Chapter five informed by information in Chapter four).
- The interrelationship of North American Indian names and authority control practice (Chapter six).
- The presentation of North American Indian names in selected national personal name authority files (Chapter eight informed by information in Chapter seven).

The five research sub-problems represent these five areas, and, when the answers were conflated, the overall research problem were answered.

The purpose of this chapter is to document conclusions drawn from the key findings regarding the research problem and its sub-problems as identified in Chapter one of this thesis. Sections 9.2 through 9.6 deal with the research findings relating to the research problem and its corresponding sub-problems. Significant findings will be summarized, and, where applicable, recommendations will be made.

In the second part of the chapter (Section 9.7) this researcher identifies problems needing further research. Some of these topics focus on resolving questions discovered as this thesis was researched; others focus on extending and generalizing the findings.

9.2 NORTH AMERICAN INDIAN NAMES AND NAMING (Sub-Problem one; Chapter two)

According to the literature of onomastics (the study of names), a name is (at least) a noun phrase that has denotative meaning but no connotative meaning (see section 2.2.1). In addition to serving as an identifier, personal names have many other purposes including:

- Express his or her self-concept (see section 2.2.4)
- Cultural inclusion (see section 2.2.4)

Self-concept can be indicated by name form. An author writing children's joke books might use a different name form than the same author writing popular science.

Aspects of cultural inclusion that could affect authority control practice include family, national, ethnic, and clan membership (i.e., cultural aspects of personal names).

One example of national or ethnic membership is North American Indians. Their names have three forms: a European model, a traditional form, and names that mix the two (see Section 2.3).

Traditional names are analogous to those given before contact with European cultures. They describe at least three aspects of an individual:

- They tell a story
- They may be autobiographical
- They may identify clan membership

For example, Black Pipe (see Section 2.3.1) was a Cheyenne scout for the U. S. Army in the nineteenth century. During his life he was named boy baby, Little Bird, Long Horn, Tall-White-Man, and Black Pipe. Each of these names has semantic meaning, so their connotation becomes significant.

European-form names are like those of immigrants to what is now the United States and Canada. They have some combination of a first name, middle name, and family name and they do not exhibit semantic meaning. An example is the Spokane author Sherman Alexie.

Often North American Indians mix traditional and European name forms. An example is Severt Young Bear, a Lakota Sioux writer; his given name is Severt and his family name is Young Bear. Young Bear is like a traditional name, with two words which should not be separated, making a single concept.

North American Indians often create English-looking names by placing a hyphen between their name-words or removing the spaces between the words. Examples are George P. Horse-Capture and Martin Brokenleg.

In addition to the three forms of North American Indian names, they can exhibit:

- Name sequences (change over time)
- Name sets (two or more names at one time)

The Lakota chief Sitting Bull's story exhibited a name sequence. He was given the name Jumping Badger at birth. This was changed to Slow (reflecting his deliberate manner) when he was a youth, then Sitting Bull after his first battle.

An example of a person with a name set is Severt Young Bear who is also named Hehaka Luzahan (Swift Elk in English). Both are correct names and he holds both at the same time. Each name has significance and different responsibilities are attached to its use.

Black Pipe (referred to above) had both a name sequence and a name set. Within Cheyenne society he was named boy baby, Little Bird, Long Horn, and Black Pipe one after the other (a name sequence). During his adult life white traders named him Tall-White-Man so that he had different names in different social settings (a name set).

The three possible problems specific to North American Indian names are:

- Using a personal name in an inappropriate way.
- Using the wrong name for an individual with a name sequence.
- Using the wrong name for a person with a name set.

For example, in the case of Severt Young Bear it would be inappropriate to call him Severt Young Bear if formal tribal

obligations were involved and it would be inappropriate to call him Hehaka Luzahan when inviting him to a party.

A name sequence requires tact and understanding to avoid problems. When referring to his first battle the Cheyenne scout would be called Little Bird, the name he earned there. When referring to him in his last days, he would be called Black Pipe.

And a name set also requires the user to be careful. Is Long Horn or Tall-White-Man proper? Is Severt Young Bear or Hehaka Luzahan the name that communicates the desired message?

9.3 NORTH AMERICAN INDIAN NAMES IN THE PUBLICATIONS ENVIRONMENT (Sub-Problem two; Chapter three)

The publications environment for North American Indian authors is very broad. Two thousand twenty-one authors produced works found in the four research bibliographies.

As indicated in section 3.2.2, of the 234 author names that appear in two or more bibliographic lists, 175 author's names (75%) are identical in all of the bibliographies in which they appear. The names of 59 authors (25%) are different in different lists. These differences included:

- Forty instances of fullness variation, including 18 cases of name pairs or triplets
- Seven cases of spelling variations
- Three cases of punctuation variations

- Three cases of capitalization variations
- Three cases of alternative-name variations
- Two cases of inversion variations
- One case of a title variation

The extent of differences (likely copied from the chief sources of the publications that made up the test bibliographies) and the number of authors with traditional or mixed-form names both indicate that the peculiarities of North American Indian names documented in Chapter two and summarized in section 9.2 should concern personal name authority control practitioners.

North American Indian names that exhibit mixed or traditional form and those that exhibit name sets do require particular authority control rules. For example, a name like Black Pipe (see Section 2.3.1) is a single concept; Black cannot be considered his forename and Pipe his surname (allowing an authorized form such as Pipe, Black).

Yet the Library of Congress' authority control policy (as set by its Cataloging Policy and Support Office) is to "follow AACR 2 when establishing heading (sic) for person (sic) Native American names. We have no special rules or directives" (see the last paragraph of section 3.2.1). Clearly, the special characteristics of North American Indian names have not been recognized.

9.4 STANDARDIZING NORTH AMERICAN INDIAN NAMES (Sub-Problem three; Chapter five)

From the discussion of the nature, principles, and reasons for authority control in Chapter four, it is clear that authority control and authority work have played an important role in the library and online environment over the years and that they still play that important role.

It is clear that authority control can never be (or, at least, has never been) fully automated. Authority control will always require thought and judgment. The standardization of access points is a primary result of authority control (see Chapter four). Johnston (see section 5.2) noted that authority control offers full linking and guiding functions that cannot be replaced by computer capabilities. Only through true authority control can pseudonyms be identified, name changes be traced, and related subjects be brought together, to name but a few functions.

To achieve the purpose of library catalogues and bibliographic databases, personal names are essential access points.

Without standardizing the names of authors, a library patron will be unable to retrieve a desired document by a known author (the catalogue's finding function) or determine which documents by a specific author exist in the library (the catalogue's gathering function).

One advantage of computer-based automation is that two or more libraries can share cataloguing and authority work. However, effective use of this capacity requires increasing name

standardization, because what were the functions of one catalogue now apply to several catalogs. An extreme example of this is national bibliographic control, where the number of catalogs requiring common content and format is very large. Indeed, Universal Bibliographic Control requires many nations to cooperate (in its current conception, at least), with each nation doing the world's authority work for its national bibliographic imprint.

The three name forms that North American Indians use were discussed in Chapter two and summarized in section 9.2. The rules of authority control must be able to standardize all three name forms. The same is true of name sets and sequences, another characteristic of North American Indian names.

9.5 NORTH AMERICAN INDIAN NAMES AND AUTHORITY CONTROL (Sub-Problem four; Chapter six)

Section 9.3 noted that North American Indian names present particular issues for authority control. Personal name authority practice is defined by several major sources. Most sources, including the following, do not propose rules to control North American Indian personal names:

- DIALOG databases such as Information Science Abstracts (ISA), Educational Resources Information Center (ERIC), and Library and Information Abstracts (LISA)
- Wellisch's Indexing from A to Z (1995)
- Introduction to cataloguing (Taylor, 1992) Chapter ten

- Anglo-American cataloguing rules (1998) Chapter 22, "Headings for Persons"
- Names of persons: national usages for entries in catalogues, fourth edition (IFLA, 1996a)
- Library of Congress guidelines (see section 3.2.1.4)

AACR2R (1998) and Names of persons: national usages for entry in catalogues, fourth edition (IFLA, 1996a) are the two primary sources for authority control rules at the Library of Congress (LOC) and the National Library of Canada (NLC), the national authority control files of the United States of America (US) and Canada. However, these two sources do not adequately control North American Indian names. Solutions to the problems presented by North American Indian names must be included in AACR2R (1998) and Names of persons: national usages for entry in catalogues, fourth edition (IFLA, 1996a).

In section 6.4 suggestions were made for adjustments to AACR2R (1998) rules 22.1, 22.2, 22.19, and 26.2A3.

In section 6.3 it was suggested that a paragraph be added to the Canada entry's Native Languages scope note in *Names of persons: national usages for entry in catalogues*, page 48. Then add the entire modified Canadian Native Languages section to the US entry, since the same kind of native language names are common in both countries.

Clearly authority work with North American Indian personal names can create a complex authority record. Most errors occur because of problems in the authority control process, and most

of these problems indicate a misunderstanding of the basic purpose and structure of the name being considered. One possible solution to these problems is instituting an International Standard Authority Data Number (ISADN) system. This would allow any combination of name forms, name sequences, and name sets to be assigned as access points without inconveniencing searchers.

9.6 NORTH AMERICAN INDIAN NAMES IN NATIONAL AUTHORITY CONTROL FILES (Sub-Problem five; Chapter eight)

Having discussed the need to standardize North American Indian names in Chapter five and summarized it in section 9.4, research sub-problem five (the subject of Chapter eight) determined the state of North American Indian name standardization in selected national authority files.

As discussed in Chapter seven, three hypotheses were proposed to test the current state of authorized forms in the test national files:

- 1. Of the authority records found in the US Library of Congress Name Authority File (LCNAF) (see Appendix S), fewer than 20% of the authorized forms will differ from the forms on the personal name test set.
- 2. Of the authority records found in the Canadian National Library name authority file (see Appendix L), fewer than 20% of the authorized forms will differ from the forms on the personal name test set.
- 3. Of the authority records found in at least four of the non-North American authority files on the library test list (see Appendix U), fewer than 20% of the authorized forms will be identical in all of the authority files containing the author.

Hypothesis one determined the current state of authorized forms in the LCNAF. The authorized forms for 39 of the 156 names in LCNAF (25.0%) differed from the form on the test list, so hypothesis one was not substantiated. There was a significant lack of standardization in the LCNAF, one of the national authority files controlling North American Indian names.

Hypothesis two determined the current state of authorized forms in the authority files of the NLC. The authorized forms for 31 of the 154 names in the National Library of Canada authority file (20.12%) differed from the forms on the test list, so hypothesis two was not substantiated. Again there was a significant lack of standardization in the NLC's authority file, the other national authority files controlling North American Indian names.

Hypothesis three determined the current standardization levels in the authority files of the remaining eight national authority files tested. Of the 14 relevant authors, the authorized forms for five names (35.71%) were the same in all national authority files containing them, and the authorized forms for nine of the names were different in different national authority files. Hypothesis three was not substantiated. This showed a great lack of standardization among national authority files that, if UBC was implemented, would have been uniform.

From these conclusions it is clear that North American Indian naming practices have an impact on bibliographic control at all levels. Traditional and mixed North American Indian names are a significant part of the publication environment, and, because

they contain semantic meaning, these name forms create problems that the authority control system must resolve. North American Indian names, like all personal names, require standardization to support international bibliographic control. But this research shows that different national authority files control these names differently, indicating that the goals of UBC have not yet been met. Finally changes to the authority control system that would accomplish those goals were suggested, completing the study of the effect of North American Indian names on authority control.

9.7 RECOMMENDATIONS FOR FUTURE RESEARCH

Five lines of future research have been suggested by these conclusions:

- Detailed studies of naming practices of different North American Indian nations
- Detailed studies of naming practices of other cultures whose names can include semantic meaning
- Determine the name authority control practices required by indigenous cultures around the world
- Determine whether authority control practices of academic and public libraries accommodate the findings of this thesis
- Determine whether authority control practices of Tribal College libraries accommodate the findings of this thesis

9.7.1 Detailed Studies of Naming Practices of Different North American Indian Nations

One of the assumptions of this research was that North American Indian naming practices are uniform enough to make the conclusions valid. Studies of the naming practices of various North American Indian Nations can determine whether their systems are truly compatible with the suggested rules.

9.7.2 Detailed Studies of Naming Practices of Other Cultures Whose Names Can Include Semantic Meaning

Alford (1988) lists 15 cultures in South America, Africa, Russia, and Asia whose personal names have semantic meaning. In many cases, these cultures are not considered in Names of persons: national usages for entries in catalogues, fourth edition. Just as this thesis details North American Indian names and their effect on authority control, research on other cultures whose names have semantic meanings could lead to modifications of rules and references in the rules for their home countries.

9.7.3 Determine the Name Authority Control Practices Required by Indigenous Cultures Around the World

North American Indians are one set of the world's indigenous peoples. This line of research would be a set of studies, similar to this thesis, determining the required authority control practices for indigenous cultures around the world and filling more of the holes in the resources for international authority control.

9.7.4 Determine Whether Authority Control Practices of Academic and Public Libraries Accommodate the Findings of this Thesis

Do the authority control practices of academic and public libraries reflect their national bibliographic agencies? These studies would indicate whether the practices of school, public, and academic libraries use the records of national authority files.

9.7.5 Determine Whether Authority Control Practices of Tribal College Libraries Accommodate the Findings of this Thesis

Do Tribal College libraries practice authority control with the special needs of North American Indian authors needs? These studies would act as independent tests of the LCNAF and NLC name authority files.

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