Case Files, Modernism and Archival Decolonization: The Past, Current and Future Management of Case Files by Archives

by

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Abstract

By using three case studies, this thesis explores the past and current practices, systems, and methods that archivists developed to manage, destroy, select, and make available case file records, as well as how current innovations are influencing a change in the management of case files today and into the future. I examine of the destruction of case files pertaining to the eugenics program of Alberta, the management of eHealth case files in Canada, and the National Centre for Truth and Reconciliation archive's creation of "virtual case files." I provide an overview of past and current practices utilized by archivists to manage case files from the mid-twentieth century to the early 2000s by discussing the archival literature surrounding the management of case files. I also outline the way that historians have used case files and why case files are important to historians. I explore the use of databases to manage case file records and the challenges that come with preserving these complex, interactive digital systems. I discuss the development of third order archival interface systems which would allow users to easily arrange archival digital records into as many different aggregations they need, as well as allow archivists to further contextualize and decolonize the records by placing the perspectives and needs of marginalized communities first in all archival decisions. Lastly, I argue that the concepts of imagined records, affect, and radical empathy should influence the decisions regarding the management of case files such as appraisal, retention, arrangement, description, preservation, and access.

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Abbreviations

AHA – American Hospital Association

AMA – American Medical Association

CFAWG – Case Files Appraisal Working Group

CIRNAC – Crown-Indigenous Relations and Northern Affairs Canada

EAV – Entity Attribute Value Database

EHR – Electronic Health Record

EMR – Electronic Medical Record

EPR – Electronic Patient Record

EV – Enduring Value Guidelines

FIPPA – Freedom of Information and Protection of Privacy Act

GAGs – Generic Appraisal Guidelines

GVT – Generic Valuation Tools

IAP – Individual Assessment Process

IRSSA – Indian Residential Schools Settlement Agreement

JCAH – Joint Commission on Accreditation of Hospitals' (JCAH)

LAC – Library and Archives Canada

LANs – Local Area Networks

LCSH – Library of Congress Subject Headings

MIDA – Multi-Institutional Disposition Authority

NCTR – National Centre for Truth and Reconciliation

NWRO – National Welfare Rights Organization

OCAP – Ownership, Control, Access, and Possession

OPI – Office of Primary Interest

PHIA – Personal Health Information Act

PHR – Personal Health Record

PIM – Personal Information Management

REB – Research Ethics Board

TBS – Treasury Board of Canada

TCPS2 – Tri-council Policy Statement

TK – Traditional Knowledge

TRC – Truth and Reconciliation Commission

UNDRIP – United Nations Declaration on the Rights of Indigenous Peoples

Positionality

In this thesis I argue that Michelle Caswell's, Marika Cifor's, Anne Gilliland's concepts of feminist standpoint epistemologies, survivor-centered frameworks, imagined records, affect, and radical empathy should influence the decisions regarding the management of case files such as appraisal, arrangement, description, preservation, and access. Case files are the most mundane, common, and voluminous records produced by the modern state, but they also have the power to harm marginalized groups, such as Indigenous communities, as they are often used by the state to surveil and control these groups. By putting the concepts of radical empathy, affect, feminist standpoint appraisal, and survivor-centered frameworks into practice structural harms can be uprooted, archival systems can be transformed, and systems of oppression, like capitalism, sexism, racism, and ableism can be fought. To do this, archivists must acknowledge their positionality and place marginalized communities at the center of all archival endeavors. Positionality means accepting that archivists are not, and never were, objective, neutral preservers of historical records but subjective actors whose biases, perspectives, and experiences, along with the constraints imposed on them by their institutions, actively shape the records they choose to preserve and make available to the public.

In order to put into action, the concepts above and to work towards archival decolonization I endeavour to confront and disrupt unequal power structures, as well as attempt to reckon with my family's history as settler colonizers, by including my own statement of positionality. I am a straight, white, middle class, female. I am a settler and citizen of Canada. I was born and raised on a beef cattle ranch twenty kilometers north of Maple Creek, Saskatchewan in Treaty Four territory, the ancestral lands of the Cree, Saulteaux, Ojibwa, and Assiniboine peoples. I attended the University of Manitoba's Master's in Archival Studies

program in Winnipeg, which lies on the original lands of Anishinaabeg, Cree, Oji-Cree, Dakota and Dene peoples, and is the homeland of the Métis Nation on Treaty 1 territory. I wrote most of this thesis in Alida, Saskatchewan in Treaty 2 territory the homeland of the Anishinaabe, Cree, Dakota, and Nakota peoples. I was privileged in my pursuit of education in that with scholarships, financial support from my parents, and a well-paying summer job I did not need to take out student loans and I was able to follow my interests to various universities across Canada to pursue two history degrees and finally a degree in archival studies. I acknowledge that not everyone is able to pursue their interests and desire for education so freely. To me positionality and radical empathy means confronting what it means to be a white archivist working on colonized land and with colonizing records such as case files. I need to decenter myself and confront my biases and privileges and in so doing strive to learn from and to work collaboratively with marginalized groups who have previously been silenced.

Introduction

This thesis explores the past and current practices, systems, and methods that archivists developed to manage, destroy, select, and make available case file records, as well as how current innovations are influencing a change in the management of case files today and into the future. I use three case studies to examine how case files have been managed over time. These include an examination of the destruction of case files pertaining to the eugenics program of Alberta, the management of eHealth case files in Canada, and the National Centre for Truth and Reconciliation (NCTR) archive's creation of "virtual case files." To begin the thesis, I provide an overview of past and current practices utilized by archivists to manage case files from the mid-twentieth century to the early 2000s by discussing the archival literature surrounding the management of case files. I outline the way that historians have used case files and why case files are important to historians. Secondly, I explore the use of databases to manage case file records and the challenges that come with preserving these complex, interactive digital systems. Thirdly, I discuss the development of third order archival interface systems which would allow users to easily arrange archival digital records into as many different aggregations they need, as well as allow archivists to further contextualize and decolonize the records by placing the perspectives and needs of marginalized communities first in all archival decisions. Lastly, I argue that the concepts of imagined records, affect, and radical empathy should influence the decisions regarding the management of case files such as appraisal, arrangement, description, preservation, and access.

Chapter One, entitled "Case files in the Past," examines destruction of the case files pertaining to the eugenics program of Alberta. This case study provides an example of how case files were managed in the past and the consequences of those practices. This chapter also

discusses why case files are important to social historians and how the destruction of the case files of Alberta's eugenics program effects future historians' abilities to research the program's impact on society. Through the case study, the chapter provides an overview of the management practices undertaken by archivists to deal with case files from the late twentieth century to the early 2000s, such as the use of sampling and selection, fat files, macroappraisal, and destruction. The chapter concludes with the implementation of the Multi-Institutional Disposition Authority (MIDA) in 2005 and the implementation of Generic Appraisal Guidelines (GAGs) in 2014 at Library and Archives Canada.

Chapter Two, entitled "Case Files in the Present," examines how case files are currently managed. This chapter discusses the use of databases to manage case file records and the challenges that come with preserving these complex, interactive digital systems. For instance, by using queries to search a database, case files can be dynamically assembled for the user by pulling together data that formerly would have made up a physical paper case file, but which now exists as individual data in the digital database. The case file no longer exists as a discrete object within the database but rather is assembled based upon the user's search criteria. This chapter defines eHealth and databases and outlines the history of the development of paper and digital records in hospitals. Lastly, this chapter discusses the challenges of preserving databases and eHealth records.

Chapter Three, entitled "Case Files: Current Innovations," discusses theories and current innovations that demonstrate how case files could be managed going forward using third order systems and concepts such as affect, radical empathy, and imagined records. To do this, I examine the National Centre for Truth and Reconciliation (NCTR) archives and their development of "virtual case files". I explore how and why the NCTR wants to create these

virtual case files, as well as how the NCTR thinks differently in terms of access and ethical use of materials for research. This chapter discusses the development of third order archival interface systems to allow users to easily arrange archival digital records into as many different aggregations as required by the needs of the user.[1]

In this introductory section I outline what case files are, their management challenges, and the power they wield as tools of modern bureaucracies. I define concepts such as feminist standpoint epistemologies, affect, radical empathy, and imagined records.

What are case files?

After the First and Second World Wars there was an explosion of record creation and accumulation by both public and private sources. Primarily, these records were in the form of case files. The idea of case files is not new, as a form of these records were used long before the twentieth century in legal proceedings, in criminal investigations and by medical practitioners. However, while these so-called "case records" may have been produced through legal, investigatory, and medical practices in previous centuries, it is only through the recent development of institutions such as hospitals and the expansion of social welfare that case files as we understand them today came into prominent use.[2] Case files are file folders that maintain as a unit all the aggregated records created in the legal, regulatory, and investigative activities of a government or other political, social, and legal institutions which have been prescribed by the policies and procedures administering the "case" – that is, by a "transaction, event, person, thing,

[1] Victoria Lemieux, "Toward a 'Third Order' Archival Interface: Research Notes on Some Theoretical and Practical Implications of Visual Explorations in the Canadian Context of Financial Electronic Records," *Archivaria* 78 (2014), 54.
[2] Richard Dancy, "Case Files: Theory, History, Practice", Master of Archival Studies Graduating Paper, University of British Columbia, (December 1998), 20-33.

place, or subject."[3] Dancy further states that case files' main features include: repetition, completeness, unique information, and homogenous form.[4] Historians Franca Iacovetta and Wendy Mitchinson state that the purpose of case files is "categorizing and assessing certain populations, usually with the purpose of supervising, treating, punishing, servicing, and/or reforming individuals or groups deemed in some way deviants or victims."[5] The Multi-Institutional Records Disposition Authority (MIDA) developed by Library and Archives Canada (LAC) defines case files as "a file folder or file container, regardless of media, within which are gathered records that document a single type, or series of repetitive transactions."[6] The MIDA outlines three criteria to determine and limit which types of records are considered to be case files:

1. Case file records are those that document a single type of repetitive transaction within a business process relating continuously to a particular item, object, entity, person, event, or thing.
2. Case file records are those that contain replicated documentation in standardized formats and structures including forms, orders, pro forma letters and memos, contracts, invoices, vouchers, receipts, spreadsheets, announcements, bulletins, reports, and payments.
3. Case file records are those that document transactions that have a definite beginning and an end within the same file regardless of the size of the file or the number of records within the file. [7]

Therefore, case files are records of a transactional and repetitive nature about a person, event, place, thing or subject that are strictly regulated by policy and procedure, and which are maintained together within a complete and homogenous file folder.

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[3] Dancy, "Case Files," 2, 17; T.R. Schellenberg, *Modern Archives: Principles and techniques* (Chicago: University of Chicago Press, 1956), 85.
[4] Dancy, "Case Files", 17-18.
[5] Franca Iacovetta and Wendy Mitchinson, *On the Case: Explorations in Social History*, (Toronto: University of Toronto Press, 1998), 3.
[6] "Operational Case File Records (Authority No. 2005/006)" Library and Archives Canada (website) accessed September 6, 2021: Operational Case File Records (Authority No. 2005/006) - Library and Archives Canada (bac-lac.gc.ca)
[7] "Operational Case File Records (Authority No. 2005/006)" Library and Archives Canada.

Schellenberg stated that "because of their volume, the control of [case files] is an important aspect of record management," as if left uncontrolled, these records will "multiply like cells and become a cancerous growth on a government body."[8] These voluminous records cause huge challenges for archivists because of the expense required to appraise, arrange, describe, and store these records. Furthermore, while some case files do not have enduring archival value and should be destroyed, other case files that do have archival value cannot be kept because their sheer volume makes it impossible to keep them all.[9] Lastly, since case files are generally a compilation of information about individuals or corporations there is a concern for protecting the privacy of these entities.

Case Files, Knowledge, Power, and Modernism

Michel Foucault observed that the defining characteristic of the modern state is the expansion of information gathering practices. During the nineteenth century the discipline and practice of statistics greatly expanded and was "intimately connected with the rise of statehood" as political and economic life in industrialized countries became more complex, requiring states to gather and keep more information about their citizens.[10] Also during this time, modern industrial and scientific institutions began to develop systems of classification and standardization at a staggering rate. These improved standardization and classification systems resulted in an expansive increase in the production of paper records in both public and private spaces, of which case files played a prominent part.

During the twentieth and twenty-first centuries large modern states developed complex

[8] Schellenberg, *Modern Archives,* 47.
[9] Terry Cook, '"Many are called, but few are chosen"': Appraisal Guidelines for Sampling and Selecting Case Files", *Archivaria* 32 (1991), 26.
[10] Geoffrey C. Bowker and Susan Leigh Star. *Sorting Things Out: Classification and Its Consequences*. (Cambridge, Massachusetts: The MIT Press, 1999), 110-117.

classification systems to support their political and economic functions. Classification systems are integral to information systems and working infrastructures. Geoffrey Bowker and Susan Star argue that "as the modern state developed its view of legitimate government as the management of a large information system, states produced a proliferation of ever finer classifications systems," as well as bureaucratic structures to manage these systems and justifications for the mechanisms that surveilled the populace.[11] They further argue that all information and classification systems are suffused with ethical, social, and political values regulated by local administrative procedures and that as the "layers of a classification system became enfolded into a working infrastructure" the original purpose for creating the classification and intervening in individuals' lives became more firmly entrenched, naturalized, taken for granted, and invisible.[12]

Bowker and Star argue that a pervasive part of the work done by modern, bureaucratic states is to assign "things, people, or their actions to categories."[13] However, when classification systems are applied to individuals it can sometimes result in "a kind of surreal bureaucratic landscape," or an "iron cage of bureaucracy" that can hem in, twist, control, or destroy the lives of individuals, especially when people are assigned to categories based on race, age, gender, wealth, sexual orientation, mental capacity, criminal behaviour, location, or expertise.[14] For those who fit "naturally" into the classification system, their identities are confirmed, and they are given power and advantages over those who do not fit and who must constantly reclassify themselves in order to "act naturally" in society. Thus, standards and categories within a classification system ascribe significance to certain points of view while silencing others all

[11] Bowker and Star, *Sorting Things Out*, 16, 111-118, 123.
[12] Bowker and Star, *Sorting Things Out*, 196, 321.
[13] Bowker and Star, *Sorting Things Out*, 285.
[14] Bowker and Star, *Sorting Things Out*, 26.

while remaining invisible and taken for granted.[15]

One example of the power of classification systems to influence the identity of marginalized groups through control and surveillance is the issuing of disk numbers by the Government of Canada to identify the Inuit between 1941 and 1971. Inuit peoples were issued numbers on metal disks to act as a substitute for Inuit names, as the government considered Inuit names too difficult to spell or pronounce and the convention of having only one asexual name too confusing.[16] The disk classified individuals as "Eskimos" and separated or "othered" them from the rest of the white, English-speaking, Christian, population. This further subjugated and marginalized the Inuit population who were treated like children under Canadian law. This disk, which had to be worn at all times in order for Inuit peoples to receive government aid, medical care, and other basic necessities of life, became integrated (and naturalized) into the Inuit identity and way of life. This disk identification system allowed the Canadian state to create a system of knowledge about the Inuit through "intensive surveillance over the Inuit population."[17] However, the government never considered the sacred and spiritual meanings behind the practice of naming a child in traditional Inuit culture, which viewed the name as a means of honouring a death of a family member, explaining kinship ties, and connecting with a person's skills and traits. Thus, as Norma Dunning states, these disks' only purpose was to allow the state to control a certain segment of the population by replacing humanity (names) with digits.[18] Therefore, this disk identification system is an example of how a classification system can be used by a government to surveil and control marginalized groups, such as the Inuit, by separating them

[15] Bowker and Star, *Sorting Things Out*, 5, 224-225.
[16] Norma Dunning, "Reflections of a disk-less Inuk on Canada's Eskimo identification system," *Etudes/Inuit/Studies*, 36 (2012), 210-212.
[17] Dunning, "Reflections of a disk-less Inuk on Canada's Eskimo identification system," 219-220.
[18] Dunning, "Reflections of a disk-less Inuk on Canada's Eskimo identification system," 212, 218.

from the rest of society and removing their power and autonomy over their way of life though the use of numbers rather than names to identify/classify them as “Eskimos”. Furthermore, the records of this program demonstrate the importance of archives to preserve the records about marginalized groups made by the state with the purpose of controlling them. However, today these records could be used by archives in a decolonizing way to give power back to Inuit peoples by allowing individuals and communities to name themselves in the descriptions of historical records that are about them, as well as allowing them to find family members or traditions that were lost. These records also could be juxtaposed with descriptions of the experiences of Inuit peoples and how the disk impacted them and their communities. Through consultation with Inuit peoples, archives in possession of disk records can determine the best way to make these records accessible that would give agency and voice back to Inuit peoples, without causing them further harm or marginalization.

Another example of the power of classification systems to marginalize and create “others” is the use of controlled vocabularies such as the Library of Congress Subject Headings (LCSH). LCSH is used by many libraries and archives across the world to catalogue and organize their collections, as well as to aid in the discoverability and access of materials for users. Recently, there have been criticisms of the LCSH and its continued use of outdated and derogatory terms to describe minority and marginalized groups which further restricts these groups’ access to information, as well as continues to marginalize and colonize these groups. For instance, as Crystal Vaughan argues, if outdated subject headings remain unchanged they will continue to “propagate systemic colonial violence by upholding colonial discourse and affecting

the way in which information seekers create and internalize their own identities."[19]

Classifications like subject headings are not neutral but rather "reflect the socio-political climate and prescribed language of their times."[20] Subject headings are also inherently biased and are primarily constructed from a Western, white, Christian, male, and heteronormative viewpoint, which serves to "whitewash" the history of oppressed peoples. Vaughan further argues that while the representation of the "other" is inevitable within classification systems, it also removes the authority of marginalized communities to control "their own experiences while also upholding and perpetuating stereotypes."[21] Furthermore, she argues that the language used (or not used) in LCSH does not account for the experiences of marginalized groups, impedes their access to information and "prevents them from becoming empowered by their identities."[22] Thus, information provided using subject headings not only impacts how others are viewed but how others view themselves.

"Indigenous Peoples" has become the umbrella term under which, despite their distinct cultures, the thousands of global Indigenous cultures are placed. However, these communities did not choose this term nor any of the other terms that came before, such as "Indian," and their grouping under this umbrella term further gives legitimacy to their marginalization.[23] To change the language used in LCSH to describe the records of Indigenous peoples, Christine Bone and Brett Lougheed suggest continuing to use "Indigenous" as the broadest search term for information discovery but to also add in terms such as Inuit, Métis, Cree, Haida, etc. on a second

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[19] Crystal Vaughan, "The Language of Cataloguing: Deconstructing and Decolonizing Systems of Organization in Libraries," *Dalhousie Journal of Interdisciplinary Management* 14 (2018), 9.
[20] Vaughan, "The Language of Cataloguing," 2-4.
[21] Vaughan, "The Language of Cataloguing," 2-4, 10-12.
[22] Vaughan, "The Language of Cataloguing," 12.
[23] Vaughan, "The Language of Cataloguing," 7.

but equal level of discovery.[24] This should be done in consultation with Indigenous groups. Therefore, in order to decolonize the library, incorrect, outdated, and derogatory terms must be changed and Indigenous peoples "must be invited to participate in naming themselves so that they can be properly represented in organizational systems."[25]

Just as libraries hold power over the representation of and access to information for marginalized groups through the classification of materials and application of subject headings, archives too wield power over the creation of knowledge, social memory, and collective identity by preserving the voices of certain groups while simultaneously silencing others. Ann Laura Stoler states in her article "Colonial Archives and the Arts of Governance", that by critically reflecting on how documents are created and used it becomes clear that archives are "not sites of knowledge retrieval but of knowledge production."[26] She further states that archives do not equal the totality of a culture's preserved texts but rather a "system of statements," and "rules of practice" that shape "what can and cannot be said."[27] Terry Cook and Joan Schwartz argue in their article, "Archives, Records, and Power: The Making of Modern Memory," that "archives as institutions wield power over the administrative, legal, and fiscal accountability of governments, corporations, and individuals."[28] Furthermore, since archives are created to suit the values and needs of those who founded, maintained, and controlled them, they are a "reflection of and often justification for the society that creates them."[29] Thus, as Stoler argues, "to understand an archive

[24] Christine Bone and Brett Lougheed, "Library of Congress Subject Headings Related to Indigenous Peoples: Changing LCSH for Use in a Canadian Archival Context" *Cataloging & Classification Quarterly*, 56 (2018), 88.
[25] Vaughan, "The Language of Cataloguing," 8, 13.
[26] Ann Laura Stoler, "Colonial Archives and the Arts of Governance," *Archival Science* 2 (2002), 90.
[27] Stoler, "Colonial Archives and the Arts of Governance," 96.
[28] Joan Schwartz and Terry Cook, "Archives, Records, and Power: The Making of Modern Memory" *Archival Science* 2 (2002), 2.
[29] Schwartz and Cook, "Archives, Records, and Power," 12.

one needs to understand the institutions that it served."[30]

As Cook and Schwartz state, "archives have the power to privilege and to marginalize."[31] Archives privilege or highlight certain narratives by including only certain types of records created by certain groups such as those in the most powerful positions within mainstream society, mainly, white, male, English-speaking, middle class, heteronormative, and cisgendered citizens. This group has domination or control over other groups in society, those who do not conform to the ideals of those in power, by controlling the ability to create, access, and preserve information. By doing this, archives marginalize groups and create archival silences or gaps in the historical record as some groups, such as non-white, non-English speaking, lower class, and LGBTQ+, are actively denied entry to the archive.[32] Thus, since archives are "a reflection of and the source of state power" those that are "marginalized by the state are also marginalized by the archive," as archivists, who are faced with limited resources and time, a lack of understanding, exclusionary mandates, and their own personal biases make extremely selective decisions on what records to preserve in the archive.[33]

The archival principle of provenance is another example of the power of archives, as Jarrett Drake argues in his article "RadTech Meets RadArch: Towards A New Principle for Archives and Archival Description", that provenance is a "relic of the colonial and imperial era in which it emerged."[34] Drake describes provenance as the principle that works to preserve the context of records by asserting that records of different origins should not be mixed with those of

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[30] Stoler, "Colonial Archives and the Arts of Governance," 107.
[31] Schwartz and Cook, "Archives, Records, and Power," 14.
[32] Rodney Carter, "Of Things Said and Unsaid: Power, Archival Silence, and Power in Silence," *Archivaria* 61 (2006), 216-219.
[33] Carter, "Of Things Said and Unsaid," 219.
[34] Jarrett Drake, "RadTech Meets RadArch: Towards A New Principle for Archives and Archival Description" *On Archivy*, April 6, 2016: https://medium.com/on-archivy/radtech-meets-radarch-towards-a-new-principle-for-archives-and-archival-description-568f133e4325.

other origins. Furthermore, the principle requires the "presence of a clear creator or ownership of records with a hierarchical relationship between entities," which "reflects the bureaucratic and corporate needs of the Western colonial, capitalist, imperialist regimes."[35] For instance, the concept of provenance emerged in the West at a time when most people, such as Indigenous peoples, Black people, women, and gender non-conforming people, were excluded, by legal means or societal norms, from ownership over their own bodies, property, and records.[36]

The principle of provenance is the central organizing principle for archival description and is heavily influenced by patriarchal language. For example, the biographical note in the finding aid is where archivists write information about the creator of the record who are often members of the dominant group in society. Furthermore, records management tools use language such as parent, child, or sibling to order the records. According to Drake, "these practices and language are remnants of a colonized mode of thinking about the world" as these descriptions can often be viewed as shrines to white men written to revere and endorse the masculinity of western white men.[37] Instead, Drake envisions a new principle of description that would allow users to see the names of people, organizations, and communities responsible for the shared creation, stewardship, and custody of the records rather than names of an authorized source or agency. He argues that archivists should no longer legitimize "violent" description practices through the "process of naming and unnaming and gendering and degendering" and instead should "reflect the autonomous naming decisions of people and communities, including and especially if they wish to withhold their names."[38]

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[35] Drake, "RadTech Meets RadArch."
[36] Drake, "RadTech Meets RadArch."
[37] Drake, "RadTech Meets RadArch."
[38] Drake, "RadTech Meets RadArch."

Cook and Schwartz argue that records, such as case files, are about power as "they are about imposing control and order on transactions, events, people, and societies through legal, symbolic, structural, and operational power of recorded communication."[39] Ciaran Trace assert in their article "What is Recorded is Never Simply 'What Happened': Record Keeping in Modern Organizational Culture" that the nature of record creation is subjective as records are not strictly statistical and numerical objects but also powerful objects of social control in which "records are produced, maintained, and used in socially organized ways."[40] They further argue that records should be viewed as proactive rather than reactive as the record is molded by the prior assumptions and aims of the record creator. Furthermore, records are often created with a "purpose," with an audience or outsider in mind, and in anticipation of current and future uses of the record from both inside and outside of the creating organization.

Records are used on a daily basis by organizations to conduct their business, to preserve information about the occurrence of certain events, transactions, and interactions, and to help in decision making and as memory aids. Trace states that "how the organization is represented, through the manifestation of the record, has a direct impact on how the content of the record is subsequently received and how the records are actually read within the creating organization itself."[41] Records are structural attributes of an organization that serve to legitimize people both inside and outside the organization by representing, supporting, and standardizing the socially ordered business activities of the organization so they can be made meaningful. In addition, the record as a representation of the activities and order of the organization is reflected in its physical and intellectual form which is "shaped in terms of the language used in the text, as well as the

[39] Schwartz and Cook, "Archives, Records, and Power," 13-14.
[40] Ciaran B Trace, "What is Recorded is Never Simply 'What Happened': Record Keeping in Modern Organizational Culture," *Archival Science* 2 (2002): 143, 152.
[41] Trace, "What is Recorded is Never Simply 'What Happened,'" 144, 153-154.

record's content, structure, form, and even size of the record."[42] Therefore, a record's design, format, subject, organization within an information system (based on certain indexing/classification methodologies), its use by organizations or individuals for operational activities, use of particular media, and the requirement of elite training for its production and maintenance, are all factors that determine who can has the ability to generate and preserve their records, and whose voices will be privileged in the historical record and whose will be marginalized.[43]

Eric Ketalaar argues that "records are both enablers of democratic empowerment and instruments of oppression and domination."[44] For instance, an open and accountable government with reliable records can empower citizens to exercise their civil rights, but at the same time governments – as well as religious, economic, or social organizations – use records as instruments of power to surveil, discipline, and control its citizens. Governments and other organizations depend upon administrative power to keep track of its interactions with citizens, members, workers, patients, consumers, and clients, as well as how these people behave. This system of "disciplinary surveillance" uses a "number of technologies to collect and share information about certain groups and individuals in order to coordinate and control access to products and services in daily life."[45] As Ketalaar explains, while "the records themselves are dumb, without them the oppressor is powerless."[46] An example of this are the disks issued to Inuit to classify them as "Eskimos" and replace their names with numbers, which allowed the Canadian state to control their access to government services and other basic necessities, while

[42] Trace, "What is Recorded is Never Simply 'What Happened,'" 150-154.
[43] Schwartz and Cook, "Archives, Records, and Power," 13-14.
[44] Eric Ketelaar, "Archival Temples, Archival Prisons: Modes of Power and Protection" *Archival Science* 2 (2002), 224.
[45] Ketelaar, "Archival Temples, Archival Prisons," 228.
[46] Ketelaar, "Archival Temples, Archival Prisons," 226.

also gathering knowledge about the Inuit communities and individuals in order to further control them. As Carter argues, "archival violence is found in the use of documents to enforce and naturalize the state's power and in the active silencing of the disenfranchised."[47] For instance, the manipulation, destruction, and omission of records (physical or oral) of marginalized groups stops the handing down of their narratives to future generations, hindering their ability to form a collective identity and social memory.[48] For example, as stated in the TRC *Final Report,* residential schools were an "attack on Indigenous memory" as the "transmission of collective memory from generation to generation of First Nations, Inuit, and Métis individuals, families and communities was impaired by the actions of those who ran residential schools."[49] Thus, record collections within archives "wield power over the shape and direction of historical scholarship, collective memory, and national identity, over how we know ourselves as individuals, groups, and societies."[50]

Ironically, however, "it is through the records created in acts of repression that the voices of the oppressed remain," as the only information about marginalized communities is often found in the records created by the state in its active suppression of these groups.[51] Furthermore, these records of surveillance also reveal as much about those surveilling as about those being surveilled and can be used to empower resistance, liberation, salvation, and freedom.[52] An example of this are the case files of Alberta's eugenics program (which will be discussed at length in chapter one) which offer details about both the victims of the program as well as the

[47] Carter, "Of Things Said and Unsaid," 219.
[48] Carter, "Of Things Said and Unsaid," 217.
[49] Truth and Reconciliation Commission, *Canada's Residential Schools: Reconciliation – The Final Report of the Truth and Reconciliation Commission of Canada*, (Montreal: McGill-Queen's University Press, 2015), Vol. 6, 157.
[50] Schwartz and Cook, "Archives, Records, and Power," 2.
[51] Carter, "Of Things Said and Unsaid," 224.
[52] Ketelaar, "Archival Temples, Archival Prisons," 229.

administrative system in place that enforced and documented the implementation of the program. Furthermore, by looking for "information out of place" or the "failure of some kinds of practices, perceptions and populations to fit into a state's ready-made system of classification" more information can be found about marginalized groups.[53] This can be done by reading archives both *against* and *along* their grain. Reading against the archival grain means to read sources "upside down" or "from the bottom up" to reveal the silences, biases, marginalization, and resistances.[54] Reading along the archival grain means reading it for its "regularities, conventions of categorization, logics of accumulation,"[55] and looking at the error and omissions, misinformation and irregularities.[56] By looking at an archive's conventions – "those practices that make up its unspoken order, its rubrics of organization, its rules of placement and reference" – one can discern who was considered to be reliable sources and when and what evidence was deemed sufficient.[57] Stoler argues that if archives are only read against the grain, an understanding about the power in the production of the archive itself is lost.[58] Therefore, as Carter argues, "through their unique knowledge of the records in their collections, archivists have the opportunity to make injustices known, to read the archives against" and as Stoler argues, along, "the grain, flagging silences and identifying the presence of the marginalized within the records of the state and its apparatus."[59]

Dancy states that case files have occupied a "prominent place in the 'information explosion.'"[60] The idea of case files is not new, as a form of these records were used long before

[53] Stoler, "Colonial Archives and the Arts of Governance," 103.
[54] Stoler, "Colonial Archives and the Arts of Governance," 99.
[55] Schwartz, "Having New Eyes," 16.
[56] Stoler, "Colonial Archives and the Arts of Governance," 100.
[57] Stoler, "Colonial Archives and the Arts of Governance," 103.
[58] Stoler, "Colonial Archives and the Arts of Governance," 101.
[59] Carter, "Of Things Said and Unsaid," 231.
[60] Dancy, "Case Files," 2-4.

the twentieth century in legal proceedings, in criminal investigations, and by medical practitioners. However, while these so called "case records" may have been produced through legal, investigatory, and medical practices in previous centuries, it is only through the "modern" development of institutions such as hospitals and the expansion of social welfare that case files as we understand them today came into prominent use.[61] Furthermore, the large number of case files signifies not only an increase in state activity but also a shift in styles of governance and in how power and authority are employed as "more and more aspects of persons, places, things, and events are susceptible to being treated as 'cases.'"[62] For instance, case files document the information created by the government's classification systems and information infrastructure about individuals and communities who are under government surveillance and control. For example, case files records were produced to identify mentally defective patients to be sterilized in Alberta, and to record the identifying number or Christian name of Indigenous children placed into residential schools. Therefore, as Raymond Frogner argues, the "case file is the documentary embodiment of the modernist project."[63]

Feminist Standpoint Epistemologies, Survivor-centered Frameworks, Radical Empathy, Affect

Recent developments in archival theory and practice have been influenced by Michelle Caswell, Marika Cifor, Anne Gilliland, as well as many others who emphasize the use of feminist standpoint epistemologies, survivor-centered frameworks, and concepts like radical empathy, affect, and imagined records in every aspect of archival work. Michelle Caswell argues in her article "Dusting for Fingerprints: Introducing Feminist Standpoint Appraisal," that

[61] Dancy, "Case Files," 20-33.
[62] Dancy, "Case Files," 4.
[63] Raymond Frogner, "The train from Dunvegan: implementing the United Declaration on the Rights of Indigenous Peoples (UNDRIP) in public archives in Canada," *Archival Science* (2021), 5.

feminist standpoint epistemologies push archivists to think differently about how archival value is determined and their role in that process, leading towards a new strategy for appraisal, which she calls "feminist standpoint appraisal."[64] In their article "From Human Rights to Feminist Ethics: Radical Empathy in the Archives", Caswell and Marika Cifor define radical empathy as a willingness to feel the affects and be impacted by another person's experience while maintaining one's own sense of self. Furthermore, only by purposely shifting existing power relations in favour of marginalised groups can empathy be considered radical. However, using empathy in archives should not lead to the appropriation of the experiences of others but rather should be used to gain a better understanding of the positions of others while remaining conscious of what connects and divides oneself from the other's experience. [65] In her article, "Affecting Relations: Introducing Affect Theory to Archival Discourse", Cifor defines affect as "a force that creates a relationship (conscious or otherwise) between a body (individual or collective) and the world" and is a "culturally, socially and historically constructed category that both encompasses and reaches beyond feelings and emotions."[66]

To apply radical empathy to all aspects of archival practices (appraisal, arrangement, description, and access) archives are required to make Survivors and marginalized communities not just a target group of users but the central focal points in all aspects of the archival work.[67] This survivor-centered approach would ensure that survivors of human rights abuse and victims'

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[64] Michelle Caswell, "Dusting for Fingerprints: Introducing Feminist Standpoint Appraisal," in "Radical Empathy in Archival Practice," eds. Elvia Arroyo-Ramirez, Jasmine Jones, Shannon O'Neill, and Holly Smith. Special issue, *Journal of Critical Library and Information Studies* 3, (2021), 6.
[65] Elvia Arroyo-Ramírez, Jasmine Jones, Shannon O'Neill, and Holly Smith. "An Introduction to Radical Empathy in Archival Practice," in "Radical Empathy in Archival Practice," eds. Elvia Arroyo-Ramírez, Jasmine Jones, Shannon O'Neill, and Holly Smith. Special issue, *Journal of Critical Library and Information Studies* 3 (2021), 3.
[66] Marika Cifor, "Affecting Relations: Introducing Affect Theory to Archival Discourse," *Archival Science* 16 (2016), 10.
[67] Michelle Caswell and Marika Cifor, "From Human Rights to Feminist Ethics: Radical Empathy in the Archives," *Archivaria* 81 (2016), 24.

family members could maintain control over and take an active role in the decision-making processes, such as appraisal, description, digitization, and access, related to records documenting their abuse. Furthermore, archival institutions' and archivists' first responsibility should be to the survivors of abuse and victims' family members and not politicians, journalists, and academic researchers. This of course does not mean that the research requests from politicians, journalists, and academics would not be considered, especially requests from Indigenous researchers and researchers working on behalf of Indigenous communities, but an archivist would need to consider the context of the request and whether that person is working in the best interest of Indigenous communities. However, Survivors wishing to access their own records must be made first priority in terms of reference requests. Archives should reflect a multiplicity of formats (ephemera, artifactual objects, cassette tapes, pamphlets, flyers, videos, blogs, websites, photographs, and oral histories) and perspectives, and archivists should actively seek out and create new records of human rights abuses.[68] Caswell argues that the archival notion of provenance needs to be expanded to "include survivors as key stakeholders" and that relationship between archives and survivors needs to be shifted "from one of custodianship (in which archives maintain custody of records) to one of stewardship (in which archivists steward records on behalf of communities)."[69]

Radical empathy focuses on the importance of "communal care" – how do we relate to, care for, and advocate for each other – by extending the thinking around who archival stakeholders are, who archivists are responsible for, and by shifting archival interactions with survivors to think beyond simply how an individual or community feels and instead commit to

[68] Michelle Caswell, "Toward a survivor-centered approach to records documenting human rights abuse: lessons from community archives," *Archival Science* 14 (2014), 308-317.
[69] Michelle Caswell, "Rethinking Inalienability: Trusting Nongovernmental Archives in Transitional Societies," *The American Archivist* 76 (2013), 115.

performing just actions.[70] For instance, feminist standpoint appraisal has helped to shift our understanding of the position of the archivist. Archivists now recognize that they are not neutral and objective observers, and never have been. Instead, they recognize that an archivist is a "socially located, culturally situated agent" who should center their "ways of being and knowing from the margins."[71] Furthermore, Caswell and Cifor describe four interrelated and mutually affective relationships between archivists and records creators, subjects, users, and larger communities.[72] Amanda Demeter suggests that there is a fifth relationship that exists between archivists and other archivists in that we have a responsibility to care for each other and ourselves, especially when working with trauma-related collections.[73]

When an archivist is stewarding a collection, they must empathize with the record creator by navigating the complicated desires and needs of the creator to inform the archival decision-making processes. The archivist also has an "affective responsibility to those about whom records are created, often unwittingly and unwillingly."[74] Here the archivist must empathize with and consider the perspectives of the subjects of records.[75] This can be done by giving subjects rights to control, describe, respond to, and use records in ways deemed appropriate to them. Furthermore, by attempting to understand possible desires of records' subjects, an archivist may think more critically about who is allowed to access or manage records about certain subjects, people, or places.[76] Archivists must "acknowledge the deep emotional ties users have to records"

[70] Arroyo-Ramírez, Jones, O'Neill, and Smith. "An Introduction to Radical Empathy in Archival Practice," 6.
[71] Caswell, "Dusting for Fingerprints," 7.
[72] Caswell and Cifor, "From Human Rights to Feminist Ethics," 24.; James Lowry, "Radical empathy, the imaginary and affect in (post) colonial records: how to break out of international stalemates on displaced archives," *Archival Science* 19 (2019), 196.
[73] Amanda Demeter, "Disgust and Fascination: Feminist Ethics of Care and the Ted Bundy Investigative Files," in "Radical Empathy in Archival Practice," eds. Elvia Arroyo- Ramírez, Jasmine Jones, Shannon O'Neill, and Holly Smith. Special issue, *Journal of Critical Library and Information Studies* 3, (2021), 14.
[74] Caswell and Cifor, "From Human Rights to Feminist Ethics," 33-34, 36.
[75] Caswell and Cifor, "From Human Rights to Feminist Ethics," 36.
[76] Lowry, "Radical empathy, the imaginary and affect in (post) colonial records," 197.

such as the "impact of finding – or not finding – records that are personally meaningful, and the personal consequences that archival interaction can have on users."[77] Archivists also have a responsibility to empathize with the larger community, who may not be direct users of the records but "for whom the use of records has lasting consequences."[78] Lastly, archivists have a responsibility to themselves and their colleagues by building networks of support and a culture of care within the profession in order to acknowledge the affects that trauma-related collections have on us and to allow us to ask for help without judgment.[79]

Cifor argues that archivists should consider using affect throughout the appraisal process, as the archivist is not only "identifying records with archival value" but also creating archival value through their "own values and perspectives, the quality of their work," the policies of their institution, and their interactions with the record's creators, subjects, and communities.[80] Thus, when using affect as an appraisal criterion archivists must carefully consider the impact records have on their "creators, subjects, users, larger communities and systems of power."[81] Therefore, using radical empathy and affect means "thinking about the custodianship of the records at the individual, rather than organizational level," as well as recognizing the needs of people and communities when making archival decisions.[82]

Putting the concepts of radical empathy, affect, feminist standpoint appraisal, and survivor-centered frameworks into practice is to uproot structural harms, to take action with the aim of transforming archival systems, and to move against systems of oppression, like

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[77] Caswell and Cifor, "From Human Rights to Feminist Ethics," 37.
[78] Caswell and Cifor, "From Human Rights to Feminist Ethics," 38-39.
[79] Demeter, "Disgust and Fascination," 17.
[80] Cifor, "Affecting Relations," 13.
[81] Cifor, "Affecting Relations," 14.
[82] Lowry, "Radical empathy, the imaginary and affect in (post) colonial records," 197.

capitalism, sexism, racism, and ableism.[83] Therefore, these concepts and frameworks are used as an anti-racist practice that seek to shift power dynamics in archives by questioning archival concepts of value as a means to dismantle all forms of supremacy and hierarchies that have passively accepted for generations that the values and perspectives of the white, middle-class, able-bodied, heterosexual male of European descent and of Christian faith are the norm. Instead, archivists must "acknowledge their positionality, decenter themselves, and to center ways of being and knowing from the margins."[84]

Imagined Records and Impossible Archival Imaginaries

Anne Gilliland and Michelle Caswell define impossible archival imaginaries as situations in which the hoped for contents of an archive are "absent and forever unattainable."[85] Imagined records occur when records that are expected to exist do not, when there are different interpretations of the same records, when trust in records to represent reality is misplaced, when the unsubstantiated evidence is believed over the substantiated, as well as fearing what might be in the archive and frustrated over what is not, desiring to recover what is absent from the archive, and distrusting the authority of the archive and government institutions.[86] Furthermore, existing records can disappoint expectations or fail to meet the needs of individuals or communities and cause the conjuring up of "impossible records, never-to-materialize, but pregnant with the possibility of establishing a proof, a perspective, a justice," that have so far remained unattainable.[87] Thus, while the records do not actually exist, their weight as symbols of grief and

[83] Arroyo-Ramírez, Jones, O'Neill, and Smith. "An Introduction to Radical Empathy in Archival Practice," 4.
[84] Arroyo-Ramírez, Jones, O'Neill, and Smith. "An Introduction to Radical Empathy in Archival Practice," 11.
[85] Anne Gilliland and Michelle Caswell, "Records and their imaginaries: imagining the impossible, making the possible imagined," *Archival Science* 16 (2016), 61.
[86] Gilliland and Caswell, "Records and their imaginaries," 62, 64-65.
[87] Gilliland and Caswell, "Records and their imaginaries," 72.

aspiration, as evidence of impossible futures is immeasurable, to the point where the truth as perceived by individuals and communities "may live in the affect rather than in the fact."[88]

James Lowery uses the Migrated Archive, which is a displaced archive, as an example of imagined records and impossible archival imaginaries. The term displaced archives often refer to records that have been "removed from the place of their creation during decolonization and where their ownership is disputed by the former colonies, now independent nations."[89] The Migrated Archive contains records that were created by British colonial administrators across the globe which were removed from the colonies and taken to Britain at the 'end of Empire' or when a colony became independent. In this instance, records that were destroyed or removed create an impossible archival imaginary as any number of records may have existed, and as imagined records they become endless possibilities of secrets, stories, and truths. Lowery further explains that the Migrated Archive exists simultaneously as imagined and existing records due to the difficulties of accessing the records and the suspicion that more records might exist somewhere.[90]

Despite that fact that most case files contain minimal information about an individual, if they cannot be accessed, they can inflate in importance as people make them the locus of their hopes and fears. For instance, there is a considerable affect or emotional impact on communities when they realize that records that might have helped them find the truth have been destroyed, (often deliberately through disposition schedules).[91] Thus, archivists should consider the effect that destroying records such as case files could have on the individual or the community, as it

[88] Gilliland and Caswell, "Records and their imaginaries," 72.
[89] Lowry, "Radical empathy, the imaginary and affect in (post) colonial records," 187.
[90] Lowry, "Radical empathy, the imaginary and affect in (post) colonial records," 188-195.
[91] Gilliland and Caswell, "Records and their imaginaries," 63.

could create impossible archival imaginaries and imagined records.

Chapter One: Case Files in the Past

This chapter begins by providing an overview of the management practices undertaken by archivists to deal with case files from the late twentieth century to the early 2000s, such as the use of sampling and selection, fat files, macro appraisal, and destruction. I then examine the case files pertaining to the eugenics program of Alberta, particularly in how sampling was used to manage these case files and the consequences of this method for the victims whose records were destroyed and can no longer hold the government accountable for its actions against them. This chapter discusses how case files are used and why they are important to social historians, and how the destruction of the case files of Alberta's eugenics program affected future historians' abilities to research the program's impact on society. The chapter concludes with the implementation of the Multi-Institutional Disposition Authority (MIDA) in 2005 and the implementation of Generic Appraisal Guidelines (GAGs) in 2014 at Library and Archives Canada. I chose to focus on federal policies regarding the management of case files as details on these policies were readily available and often set the precedent for policies developed at provincial or institutional levels. I use the case files of Alberta's Eugenics Program as a clear example of how government policies on the management of case files can actually cause harm to the public these institutions are supposed to serve. This chapter argues that concepts such as radical empathy, affect, and imagined records need to play a larger role in the keep-destroy decisions surrounding case file records.

Management Practices

T.R. Schellenberg states in his 1956 book *Modern Archives: Principles and techniques*, that public records have grown in volume due to the increase of the human population since the

middle of the eighteenth century, which required a necessary expansion of government activity and records creation to efficiently govern the growing population, especially during times of emergency or strife.[1] Technologies such as the typewriter and duplicators also helped to increase the production of records, as documents no longer had to be written by hand and could be duplicated quickly. Other reasons for the explosion of records creation are the development of decentralized record-keeping systems which led to uncontrolled records creation, the increased reliance of organizations on information gathering, storage, and retrieval to conduct business, and the growth of social welfare and government programs along with the increased intervention and regulation by governments on the public's social and economic life throughout the twentieth century.[2]

According the Schellenberg, in the United States, between the signing of the Declaration of Independence and the Civil War the volume of records that was created by the federal government was around one hundred thousand cubic feet. It rose to about a million and a half cubic feet between the Civil War and the First World War. Between WW1 and the Great Depression, it was about three and a half million cubic feet, and during the 1930s and WW2 it reached two million cubic feet per year and continued to rise with each passing year. Primarily, these records were in the form of case files, which Schellenberg describes as records standard in nature and that pertain to routine or repetitive actions.[3] Dancy argues that case files reflect, in addition to increased state activity, changes in the mechanism and form governance and the exertion of power and authority by modern states. Lastly, case files have become so ubiquitous

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[1] T.R Schellenberg, *Modern Archives: Principles and techniques (Chicago: University of Chicago Press, 1956),* 35.
[2] Richard Dancy, "Case Files: Theory, History, Practice", Master of Archival Studies Graduating Paper, University of British Columbia, (December 1998), 4.
[3] Schellenberg, *Modern Archives,* 36, 46.

because more aspects of modern society that pertain to persons, places, things, and events are being treated as "cases."[4]

In the 1950s and 1960s, once archivists accepted that appraisal was an essential part of their professional responsibility, archivists had to decide what to do with bulky, homogeneous, and repetitive case file records which had little variation in information from document to document and are strictly regulated by policy and procedure. Ultimately, the most popular management practice at this time was to use a form of random sampling techniques in which archivists begin the selection process at a different randomly selected number to "weed" the collection down to 20 percent of its original volume. Archivists at the time felt that this sample size was sufficient as it was believed that researchers only needed as little as 2 or 3 percent from a total body of records to conduct their research. In 1978, Eleanor McKay stated that along with the randomly selected sample, an archivist familiar with the subject area of the collection could examine 80 percent of the discarded material to selectively retain atypical or significant items for permanent retention. She also recommended that archivists clearly describe in the finding aid the procedure of the random sample, as well as the identifying marks distinguishing the subjectively selected items which were identified later.[5] Thus, random selection was viewed by archivists in the mid twentieth century to be the best way to manage bulky, homogeneous case file records, as it saved space and still offered a sufficient sample size that represented the larger whole, which could be used by researchers.

In the late 1970s and early 1980s Peter Gillis and Gerald Ham suggested other possible ways to manage case file records beyond random sampling. Gillis argued that archivists must go

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[4] Dancy, "Case Files," 4.
[5] Eleanor McKay, "Random Sampling Techniques: A Method of Reducing Large, Homogeneous Series in Congressional Papers," *The American Archivist* 41 (1978), 285-287.

beyond the random selection idea and use more statistically accurate samples instead, which would consider variables such as name frequency, regional disparity, and the effectiveness of government programs involved.[6] Gillis further argued that more attention be paid to the private and confidential nature of case files as since those involved, such as individuals, organizations, and groups, may expose themselves or be discussed in an open and intimate manner. Because of this, Gillis argued that archivists needed to take prominent roles in devising guidelines which would make case file material available to researchers but would not invade the right to privacy.[7] Gerald Ham recommended the use of microfilm or electronic data storage to reduce the bulk of case file records. In fact, in the 1950s, microfilming became widely used in Canada to preserve vital records and manuscripts, as well as to make documentary sources available in more than one depository.[8] However, if this method was not affordable, Ham stated that statistical or systematic sampling were also acceptable methods for reducing bulk without significantly impairing the research value of records.[9] Thus, sampling – random or statistical – remained the key method for managing case file records.

In 1991, Terry Cook's article, "'Many are called, but few are chosen': Appraisal Guidelines for Sampling and Selecting Case Files", provided archivists with guidance of how to manage case file records. According to Cook, there are five decisions that archivists can make about case files: 1) to retain all records permanently; 2) to retain only key documents from the files; 3) to take a sample or selection of the records; 4) to take an example of the records; 5) to

[6] Peter Gillis, "The Case File: Problems of Acquisition and Access from the Federal Perspective," *Archivaria* 6 (1978), 33.
[7] Peter Gillis, "The Case File," 38- 39.
[8] William Ormsby, "The Public Archives of Canada: 1948-1968," *Archivaria* 15 (1982), 39.
[9] Gerald Ham, "Archival Choices: Managing the Historical Record in an Age of Abundance," *American Archivist* 47 (1984), 19-20.

destroy all records.[10] As we have seen, archivists often chose to use sampling and selection to manage case files. There are three common types of sampling. First, simple random in which "1400 chosen numbers are applied randomly across the entire population", and is most appropriate for homogenous, short-lived series without significant variations on geography, gender, or time period.[11] Second, systematic random sampling is when the first number is a random selection followed by the selection of every nth number until the full sample size is attained. According to Cook, this method "avoids the 'missing pockets' syndrome of simple random sampling."[12] However, this method works best when applied to case files that are organized chronologically. Third, stratified random sampling uses criteria such as organization or geography to break the series into subgroups and then samples of each of these smaller groups are taken separately, [13] allowing archivists to obtain two or more samples from the same series, further "protecting the different characteristics of the whole."[14] Out of the three methods, Cook recommends systematic random sampling as the most appropriate method for appraising, selecting, and destroying case files.

The second appraisal method is selection, which is defined as "the choosing of individual items from a series to obtain a qualitative reflection of some predetermined significant characteristic of the whole."[15] There are two types of selection: exemplary and exceptional. Exemplary selection "chooses groups of similar files from a series to obtain a qualitative reflection of the whole."[16] This method is most often used when a sample is either impossible,

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[10] Terry Cook, "Many are called, but few are chosen"': Appraisal Guidelines for Sampling and Selecting Case Files", *Archivaria* 32 (January 1991): 31-32.
[11] Cook, "Many are called, but few are chosen", 38.
[12] Cook, "Many are called, but few are chosen," 38.
[13] Ellen Scheinberg, "Case File Theory: Does it Work in Practice?" *Archivaria* 38 (1994), 52.
[14] Cook, "Many are called, but few are chosen", 38-39.
[15] Cook, "Many are called, but few are chosen", 27.
[16] Cook, "Many are called, but few are chosen", 39.

impractical, or unnecessary and can be used to gain a sense of the information that is typically found in the series as well as providing the human dimension, the local colour, the quotable quotes, and other supplemental information to be used by researchers. The disadvantages of this method is that it is statistically invalid and "cannot be used to reconstruct the whole or to do any quantitative research relating to the whole."[17] Furthermore, no exceptional individual files will be saved, only collective groupings, and there is no control over the eventual size of the collection.[18]

Exceptional selection "takes from the whole individual cases judged to have value, using some subjective criterion", such as the "unusual, controversial, famous, or precedent-setting cases".[19] Cook suggests four ways to select exceptional files: 1) isolate important cases by date; 2) focus on certain levels or categories of individuals; 3) concentrate on the areas of institutions where unusual and controversial cases are handled as a normal part of daily operations; 4) concentrate on the "fat file".[20] An advantage of this method of selection is that it keeps noteworthy files that may be valuable or interesting to researchers who do not conduct qualitative research. The limitations of this method are that "it has no statistical validity, it will always give a false impression of what the original complete series was like", substantial expertise, clear identification, and arrangement by the archivist is required to locate the files, and the size of the selection cannot be controlled.[21]

Lastly, archivists can concentrate on the "fat files" to select case file records. "Fat Files" are literally thick files, often including multiple sections, folders, or volumes. These are targeted

[17] Cook, "Many are called, but few are chosen", 40.
[18] Cook, "Many are called, but few are chosen", 40.
[19] Cook, "Many are called, but few are chosen", 27.
[20] Cook, "Many are called, but few are chosen", 42.
[21] Cook, "Many are called, but few are chosen", 43.

for acquisition because it is generally assumed that they will have greater exceptional or archival value than thinner files because unusual or controversial cases almost always generate more records than their routine counterparts. However, while "fat files" are not representative of the complete original series, they are effective in eliminating the more routine files, as well as preserving records that best document the individual experience and cases that had a greater impact on programme policy.[22] However, not all thick files have archival value and archivists need to determine each file's value on a series to series basis in order to assess the functional and operational reasons for the thickness of the file in each series. The "fat file" method can also be used in conjunction with other methods, such as sampling or selection, to ensure that more files with enduring value are preserved.

Why are case files important for an archive to acquire?

Cook states that case files are useful for protecting the rights of citizens and holding governments accountable, as well as for the administration of operational programs, the development of public policy, and for genealogical research.[23] Case files should be preserved because they contain evidence on the creation, organization, and development of an agency as well as details of its operations and functions and the consequences of its activities.[24] Furthermore, case files are indispensable to the government itself as these records contain precedents for policies and procedures, basic administrative tools, evidence of financial and legal commitments, and help ensure continuity and consistent government action.[25] These records should be preserved to prove the faithful stewardship of government's responsibilities as well as

[22] Scheinberg, "Case File Theory," 52-53; Cook, "Many are called, but few are chosen", 42.
[23] Cook, "Many are called, but few are chosen", 25-26.
[24] Schellenberg, *Modern Archives,* 29.
[25] Schellenberg, *Modern Archives,* 10, 140.

to hold the government accountable when it fails to meet these responsibilities. Therefore, case files should be acquired by archives because they document an organization's past decisions for operational, administrative, or service reasons and can be used by that organization to make future decisions, as well as by individuals who were served by the organization to document their experiences and rights.

Case files are valuable resources for social historians who study the lives of the less powerful, the ordinary, and the minority. Case files are valuable to historians because they can be used to reveal the hidden lives of ordinary citizens and because they are a systematic recording of personal information seldom found elsewhere. [26] Furthermore, when case files are used alongside conventional sources such as newspapers, government records, and autobiographical accounts, insights into a particular subject can be substantially extended.[27] Case files can help historians to discover how the state intervened in people's lives and how the people responded to such intrusions – acceptance, defiance, or arbitration. In addition, some case files can be qualitatively rich sources that reveal both the vulnerability and resilience of individuals and can offer rare insight into human interaction and conflict. These records can also help social historians to examine complex power dynamics between dominant and marginalized groups by illuminating the ways in which "class, gender, and racial ideologies shaped official discourses and actions."[28]

Deborah Park and John Radford demonstrate the importance of case files for historians in their article, "From the Case Files: Reconstructing a History of Involuntary Sterilisation", in

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[26] Scheinberg, "Two Perspectives of the Same Source: An Examination of Federal Deportation Case Files," *Archivaria* 57 (2004), 52; G.J. Parr, "Case Records as Sources for Social History," *Archivaria* 4 (1977), 123.
[27] Parr, "Case Records as Sources for Social History," 135.
[28] Franca Iacovetta and Wendy Mitchinson, *On the Case: Explorations in Social History. (*Toronto: University of Toronto Press, *1998),* 6-9.

which they state that by using the eugenics case files of Alberta they are able to "gain insight into the manner in which individual lives were constructed from a historical perspective and the way this was related to wider ideas of eugenic thought, inherent social relationships, and practices codified and sanctioned by a scientific community."[29] They further argue that the case files reveal a great deal about the beliefs and perspectives of those who supported a policy of sterilisation. For instance, the case files allow the researcher to reconstruct the justifications behind sterilisation and the medical community's perspectives about "deviancy, economic marginalisation and other abnormalities."[30] The records reveal the power-relations manifesting within the Canadian asylum landscape and how it impacted people labelled mentally deficient. Furthermore, the case files allowed them to study eugenics from the position of the victim. Even though the records are not presented in the patient's own voices, inferences can be made about their experiences by using the case files. Thus, case file records can be extremely valuable resources for the work that historians do.[31]

Case files of Alberta's Eugenics Program

Alberta had the longest running and most aggressive sexual sterilization policy in Canada, starting in 1928 with the passing of the Sexual Sterilization Act – the first such law in Canada – and finally ending in 1972, after the sterilization of 2,822 people. People who were recommended for the surgeries were first scrutinized by a Eugenics Board[32] and usually fell into five categories: "psychotic patients; mental defectives, which included individuals with arrested

[29] Deborah Park and John Radford, "From the Case Files: reconstructing a history of involuntary sterilisation" *Disability & Society*, Vol 13 No 3 (1998): 321.
[30] Park and Radford, "From the Case Files", 323-324.
[31] Park and Radford, "From the Case Files", 324.
[32] The Eugenics Board was composed of two medical practitioners nominated from the Senate of the University of Alberta and the Council of Physicians, and two persons appointed by the Lieutenant Governor in Council. (Karen Stote, *An Act of Genocide: Colonialism and the Sterilization of Aboriginal Women*, (Winnipeg: Fernwood Publishing, 2015), 46.)

mental development for congenital or acquired reasons before the age of eighteen; neurosyphilitic patients who did not respond to treatment; patients with epilepsy, psychosis, or mental deterioration; and individuals with Huntington's Chorea disease."[33] Sterilization surgeries were approved when the Eugenics Board members determined that there was a danger of children inheriting the mental deficiencies of the parent or if there was a risk of mental injury to the person or offspring if the surgery did not take place.[34]

The province's program was first implemented in 1928 as a part of a growing wave of support for "mental hygiene" programs and was linked to ideas about nationalism and healthy, ideal societies. The improvement of public health through a greater understanding of heredity, and concerns over issues of crime and immorality, high infant mortality rates, venereal disease and prostitution, and mental deficiency all served to garner support for eugenic interventions such as sterilization. Furthermore, both the provincial government and the Eugenics Board believed that sterilization would alleviate the financial burden caused by institutionalizing large numbers of people.[35] Supporters for the program included progressive reformers such as socialists, health activists, and feminists, as well as social and fiscal conservatives, and religious movements such as Social gospellers, temperance reformers, Baptists, and Mormons.[36] Generally, supporters for the program were part of "mainstream" society, in that they were often white, English-speaking, middle-class, heteronormative, and cis gendered. Thus, in a society that

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[33] Erika Dyck, *Facing Eugenics: Reproduction, Sterilization, and the Politics of Choice*. (Baltimore: Johns Hopkins University Press, 2012), 3.
[34] Dyck, *Facing Eugenics,* 3.
[35] Stote, *An Act of Genocide*, 14-18.
[36] Social and fiscal conservatives saw the potential benefits of eugenics, as the Great Depression encouraged financial prudence and the development of economically efficient social security programs. Religious movements such as Social gospellers, temperance reformers, Baptists, and Mormons fueled "the anti-'Other' rhetoric that lay at the heart of eugenics values" by using their sermons to justify "charity, exclusion, segregation, and deportation aimed at those who did not seem to fit with their vision of Canadian society." (Dyck, *Facing Eugenics*, 9-11.)

was concerned with designing healthy, working, and prosperous communities, individuals exhibiting mental illness, disability, or "unfit behaviour" became a source of concern.[37]

There were clear class, race, and gender biases to eugenic notions in Alberta, as the Act tended to be biased towards women, teenagers and young adults, and Indigenous peoples.[38] For the first decade of the program, immigrants and people deemed mentally deficient, were the main targets for sterilization, as ideas around poverty, class, responsibility, criminal activity, and large families played a key role in the development of the program. For instance, Eastern European immigrants, who were 16 percent of the population, made up 21.3 percent of Alberta's sterilization cases.[39] Teenagers and young adults were 55 percent of those sterilized despite making up only 20 percent of the population.[40] Furthermore, over the course of the program, women made up 58 per cent of sterilizations cases, whereas men made up only 42 per cent of cases. However, this shifted over time as men were equally or overrepresented in the program between the First and Second World Wars. Post WW2 women once again were the main victims of sterilization and "remained so until the Act was repealed in 1972."[41]

Sterilization was justified in various ways, such as the possibility that people with mental or physical disabilities were unable to responsibly parent their children, especially if their offspring inherited their parents' conditions, the financial burden on taxpayers and the state caused by placing disabled peoples into the care of institutions, and the need to help parents cope with their disabled children.[42] Furthermore, due to their apparent lack of intelligence or maturity

[37] Dyck, *Facing Eugenics*, 9-11.
[38] Stote, *An Act of Genocide*, 15, 46.
[39] Dyck, *Facing Eugenics,* 31-52, 59.
[40] Stote, *An Act of Genocide*, 46.
[41] Dyck, *Facing Eugenics*, 22.
[42] Dyck, *Facing Eugenics*, 233.

or simply because of their age, the victims of these operations were considered too irresponsible to make decisions about their own bodies.[43] In particular, Dyck argues that classifying individuals held in institutions as candidates for eugenics largely depended on the concept of intelligence, as intelligence quotients functioned as the dividing line – either above or below a rating of 70 – in cases where both consent and disclosure hinged upon a subject's presumed ability to comprehend the consequences of the surgery.[44]

Dyck outlines that for nearly forty years, the program did not explicitly target First Nations and Métis peoples because it was believed that their populations were already in a state of natural decline due to disease, and assimilation, and that the program did not need to expend energy or resources to speed that process along. However, First Nations and Métis peoples still appeared among those approved for sterilization from the beginning of the program. This was because eugenicists placed intelligence as the arbiter of human worth, which was equated with whiteness, the English language, Western customs, middle-class values, thrift, and hygiene. By the 1960s when it became clear that Indigenous populations were not a "vanishing race," the Eugenics program began to directly aim sterilization at these communities.[45] By the program's end, Indigenous peoples made up 8.2 percent of sterilization cases, despite being only 2.5 percent of Alberta's population. In the final three years of the program, the sterilization rate of First Nations and Métis populations increased from 3.6 percent to 25.7 percent, the highest rate of any racial group.[46]

Dyck argues that Indigenous peoples appear disproportionately in the eugenics files

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[43] Dyck, *Facing Eugenics*, 233.
[44] Dyck, *Facing Eugenics*, 232.
[45] Dyck, *Facing Eugenics*, 56-58; Stote*, An Act of Genocide, 22.*
[46] Dyck, *Facing Eugenics,* 59-60.

because of the power dynamics involved in the sexual sterilization program. For instance, intelligence quotients (IQs) assigned to Indigenous patients consistently ranked below the acceptable 'normal' rate resulting in a diagnosis of mentally defective more often than non-Indigenous patients. Dyck further argues that racism was integral to the eugenic movement even though it worked in more "subtle and complicated ways with ideas about mental capacity, intellectual prowess, work ethic, and assimilability."[47] Due to colonization, ill health, poverty, and lack of education were rampant in Indigenous communities. This was seen as proof that Indigenous peoples were of a lower racial evolution and had certain hereditary taints among them. Since eugenicists perceived intelligence as an indicator of human value, the struggling Indigenous communities, with their own customs and practices, were consistently ranked lower.[48] Furthermore, in the later years, the program also expanded the justification for sexual sterilization to include social or socio-cultural as well as biological factors. Essentially, this meant that children simply being born into impoverished communities could be used as an excuse for eugenic intervention. Thus, the Board believed that simply being a First Nations or Métis person was enough evidence of low intelligence and would warrant a recommendation for sexual sterilization. Therefore, while Indigenous peoples were not initially targeted by the Eugenics Board in the early years of the program, the eugenicists quietly adjusted their approach when the concept of the dying race was replaced by an image of a more resilient culture, and by the end of the program, Indigenous women had become its chief targets.[49]

Survivors of the Alberta sexual sterilization program began to sue the provincial government in the mid-1990s. The first to do so was Leilani Muir, whose case went to trial on

[47] Dyck, *Facing Eugenics*, 60-62.
[48] Stote, *An Act of Genocide*, 5; Dyck, *Facing Eugenics*, 60-62.
[49] Dyck, *Facing Eugenics*, 83.

June 12, 1995. Ms. Muir ultimately won her case which makes her the only person to have successfully to have sued the Alberta government for wrongful sexual sterilization. Her operation occurred in the 1960s while she was institutionalized at the Provincial Training School for Mental Defectives in Red Deer. While undergoing an appendectomy, the surgeon also cut out her fallopian tubes, which rendered her permanently incapable of bearing children. The law in Alberta at the time did not require the physician to inform Ms. Muir about this second operation, and nor did they need her consent.[50] In fact, when Ms. Muir was admitted to the institution her mother had signed a consent form permitting the Eugenics Board to surgically sterilize Ms. Muir if they deemed it necessary.[51] The justification for her sterilization was based upon an IQ rating below seventy that inaccurately ranked her in the moron category of intelligence.[52] Thus, when Ms. Muir left the institution, married, and attempted to start a family, she still did not know that she was physically unable to conceive, which caused her years of emotional turmoil.[53]

Six months after the start of the trial Honourable Madame Joanne B Viet, "ruled that although the program was legal at the time of Ms. Muir's surgery, the sterilization had nonetheless caused catastrophic damages, including personal humiliation and undignified treatment."[54] Viet further judged that "Ms. Muir's sterilization had proceeded wrongfully, that the institution had treated her unfairly, and that the accumulated effects had resulted in a loss of dignity and civil rights."[55] Ms. Muir received a million-dollar settlement – $740,780 to the

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[50] Dyck, *Facing Eugenics,* 169.
[51] Douglas Wahlsten, "Leilani Muir versus the Philosopher King: Eugenics on Trial in Alberta," *Genetica* 99 (1997), 193.
[52] This is an example of what happens when classification systems are applied to individuals, as it creates an "iron cage of bureaucracy" that can hem in, twist, control, or destroy the lives of individuals who do not fit "naturally" into the classification system. As discussed on pages 6-11. (Bowker and Star, *Sorting Things Out*, 26).
[53] Dyck, *Facing Eugenics,* 34, 169.
[54] Dyck, *Facing Eugenics,* 169.
[55] Dyck, *Facing Eugenics,* 197.

plaintiff and $230,000 for her lawyers – "and soon after the trial she emerged as a new face among human rights campaigners in Canada."[56] Ms. Muir's case is important because it produced "the largest collection of documents on a single eugenics case,"[57] which include extensive correspondence with lawyers in Canada and abroad, the judge's formal decision, a synopsis of the case, a chronology by Ms. Muir's lawyers, numerous newspaper articles, and a documentary film.[58] Ms. Muir's trial also helped to expose some of the injustices faced by institutionalized individuals who find their rights stripped away upon entering the hospital, as well as "raised the profile of anti-discrimination campaigns, patients' organizations, and family support groups."[59]

After her legal success, more than seven hundred "sterilization victims in Alberta… came forward in an attempt to force the province to compensate them for similar damages."[60] However, the premier of Alberta at the time, Ralph Klein, in attempt to avoid the "unflattering exposé of Alberta's pro-eugenics past" tried, and ultimately failed, "to invoke the constitution's notwithstanding clause," by claiming that Alberta's current government and taxpayers "should not be held responsible for decisions made in the past."[61] However, the class action law suit for the other sterilization victims slowly lost its momentum and was eventually settled out of court, resulting in a "meagre provincial payment to be shared among hundreds of sterilized victims, with a substantial portion devoted to paying the sizeable legal expenses."[62] Therefore, due to the failure of this collective action, Leilani was further elevated as the "sole visible public figure in

[56] Dyck, *Facing Eugenics*, 169.
[57] Dyck, *Facing Eugenics*, 25.
[58] Wahlsten, "Leilani Muir versus the Philosopher King," 192.
[59] Dyck, *Facing Eugenics,* 170.
[60] Dyck, *Facing Eugenics,* 170.
[61] Dyck, *Facing Eugenics,* 170.
[62] Dyck, *Facing Eugenics,* 170.

the contemporary human rights struggles associated with eugenics in Canada," and in particular the right for individuals in the mental health system to make their own decisions about their reproductive futures.[63]

This brief historical overview of the program demonstrates why records of such a program are important to victims and historians alike. One of the earliest historians to write about the eugenics program of Alberta was Timothy Christian, in his 1974 honour's thesis, which remains a key and often cited study of the program today. His analysis is especially important since he conducted his study before the government destroyed 80 percent of the records. This destruction has dire consequences for victims of the program whose records were destroyed as they can no longer hold the government accountable for its actions against them. Portions of their lives and the lives of loved ones will forever remain a mystery. Furthermore, the destruction also made it impossible for historians to write a comprehensive history of the program, to analyze how understandings of race, gender, class and intelligence impacted the implementation of the program, as well as the program's impact on its victims and their families and communities.[64] However, if the sampling method, the size of the sample, the reasons for sampling, and the size and character of the original collection of case files before it was sampled had been explained in detail, some historical and statistical analysis would have still been possible.[65] Unfortunately, details of the sampling method and the characteristics of the whole collection were not described for future reference so much of the information about the program and its victims will be forever lost. The destruction of these records has created imagined records and impossible archival imaginings as the contents of these records will be forever unattainable,

[63] Dyck, *Facing Eugenics,* 170.
[64] Dyck, *Facing Eugenics,* 19, 60-61, 118.
[65] Cook, "Many are called, but few are chosen", 45.

while becoming symbols of hope, grief, proof, truth and justice as victims and historians continue to imagine what information may or may not have been revealed in the files. This is a source of much pain to victims and their families, and a disappointment to historians trying to tell their story.

Therefore, while it was the pervasive method of the time, it is clear that sampling and selection was not always an appropriate method for managing certain types of case file records, such as the eugenics case files of Alberta. Not all case files have archival value as they can be mundane and routine in nature but some case files, such as the eugenics case files, clearly demonstrate archival value as they show the negative impacts of a government policy on individual's lives and the extended trauma on the community and future generations. This is where concepts of radical empathy and affect could have been used to make the argument for preserving the entirety of the case file collection, as archivists would have placed the needs of the survivors first and recognized the effect the records have on individuals looking for justice. Instead macroappraisal became increasingly used in the 1990s to appraise case file records, as it was believed that this model could locate and document the records that accurately represented society, as well as giving a voice to marginalized communities.

Macroappraisal

In order to understand why the concept of macroappraisal was developed and how it was intended to improve the appraisal process of government records, one must first understand the context in which macroappraisal was born. In the 1950s, the Public Archives of Canada followed a three-stage life cycle for managing government records. First was the active phase in which records were created, received, classified, catalogued and used regularly by the originating government office. Second, was a dormant phase for files stored in low-cost, warehouse-like

records centres and used or referenced only on occasion. The last phase was disposition in which records were either destroyed or transferred to the Public Archives to become a part of its archival holdings. The majority of the copious records sent to the record centres were simple recordings of administrative or housekeeping tasks or "transactional files of operational programs."[66] While archivists intended to appraise records at the records centre once the dormant-storage retention periods had expired, a majority of the records were not given a retention period. These records would often accumulate until they caused a space problem, and an archivist would need to extemporaneously appraise the records, which would be transferred directly to the archives or destroyed. Therefore, records schedules in the 1980s were not concerned with identifying the best archival record, but rather served needs of the records managers by focusing more on "issues of administrative efficiency, cost savings, and space management."[67] As a result, this reactive and incidental appraisal process was overshadowed by a disposition process more concerned with destroying superfluous and no longer operational records that were taking up space in the departments or records centre.[68]

The method of appraisal between the 1950s and 1980s in Canada primarily followed Schellenberg's evidential and informational values. Schellenberg stated that public records have two types of value: "a primary value to the originating agency, and a secondary value to other agencies and private users," such as researchers (primarily historians).[69] As Cook explains, "primary value related to the degree to which records served their creators ongoing operational

[66] Terry Cook, "Macroappraisal in Theory and Practice: Origins, Characteristics, and Implementation in Canada, 1950-2000," *Archival Science* 5 (2005), 107-109.
[67] Cook, "Macroappraisal in Theory and Practice," 109, 112.
[68] Cook, "Macroappraisal in Theory and Practice," 112.
[69] Schellenberg, *Modern Archives,* 28.

needs."[70] Secondary values were further divided into evidential values – researchers ability to document the minutia of government agency operations – and informational values – records that contained information on "persons, corporate bodies, things, problems, conditions that were incidental to the action of the government itself."[71] The Schellenbergian, use-based appraisal method was "driven by the desire to have the best record for actual or anticipated historical research use."[72]

In the early 1980s when Canada began to prosecute Nazi war criminals who had emigrated into the country after 1945, it was discovered that a large portion of the immigration case files had been destroyed.[73] The Deschenes Commission was established to inquire into records scheduling and disposition and appraisal methods at the National Archives. This commission pushed archivists to see the failings of the current disposition and scheduling processes, as well as to challenge the Schellenbergian appraisal method. Ham asserted that the "Schellenbergian approach had resulted in a selection process that was so random, so fragmented, so uncoordinated, and even so accidental that it too often reflected narrow research interests rather than the broad spectrum of human experience."[74] Other archival theories developing at this time were pushing archivists to recognize that they were agents of power and memory and to move away from seeing themselves as passive guardians to active shapers of records by using societal perspectives and values as a guide to appraisal to illustrate more

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[70] Terry Cook, "What is Past is Prologue: A History of Archival Ideas Since 1898, and the Future Paradigm Shift," *Archivaria* 43 (1997), 27.
[71] Cook, "What is Past is Prologue," 27.
[72] Cook, "Macroappraisal in Theory and Practice," 112.
[73] Cook, "Macroappraisal in Theory and Practice," 116.
[74] F. Gerald Ham, "The Archival Edge", in Maygene F. Daniels and Timothy Walch, eds. *A Modern Archives Reader: Basic Readings on Archival Theory and Practice* (Washington: Society of American Archivists, 1984), 328-329.; Cook, "Macroappraisal in Theory and Practice," 116-120.

broadly the human experience.[75] Postmodernism and feminist critiques also influenced archival thinkers at this time. It is from this climate then that the archivists at the National Archives began to reform and improve the scheduling and disposition systems for government records and Terry Cook began to develop Macroappraisal as an alternative to the Schellenberg appraisal method.

Macroappraisal is "a theory of appraisal that assesses the value of records based on the role of the record creators, placing priority on why the records were created (function), where they were created (structure), and how they were created, rather than on content (information value)."[76] The theory of macroappraisal was first developed by Terry Cook in his 1992 essay "Mind over Matter: Towards a New Theory of Archival Appraisal." However, while Cook originated the concept and was the chief theoretician, other archivists such as Catherine Bailey, Brain Beavan, and Candace Loewen also contributed to the development of macroappraisal. Macroappraisal is a top-down, functional-structural, provenance-centered approach to appraisal that requires archivists to extensively research the processes, programmes, activities, structures, transactions, and functions of record creators to identify the records that best represent the "controversial 'hot spots' in the citizen-state interaction, the most important structures, the key functions," and which present the sharpest image of society as a whole.[77] However, while macroappraisal's top-down approach can be accused of favouring the views of elite policy-makers over those of ordinary citizens, Cook argues that the emphasis on finding "hot spots" in the records where citizen-state interaction is at its most vigorous is an example of how macroappraisal is also a bottom-up approach. In this way, macroapprasial blends a top-down

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[75] Cook, "Macroappraisal in Theory and Practice," 120.
[76] Richard Pearce-Moses, "Macroappraisal," in Glossary of Archival and Records Terminology (Chicago: Society of American Archivists, 2005), 237.
[77] Terry Cook, "Mind over Matter: Towards a New Theory of Archival Appraisal", in "*All Shook Up": The Archival Legacy of Terry Cook*, eds. Tom Nesmith, Greg Bak, and Joan Schwartz (Ontario: Association of Canadian Archivists, 2020), 121, 124.

approach of documenting the functionality of the government with a bottom-up approach of documenting the level of interaction citizens – how they accept, reject, protest, appeal, change, modify, and influence state programs – have with the state.[78] Furthermore, it must be stated that the concept of macroappraisal is constantly evolving, refreshing, and updating to better reflect new archival theories and concepts. For instance, while the strategy of focusing on the "hot-spots" of citizen-state interaction alongside the functions of government was present in macroappraisal from the beginning, the bottom-up approach to macroappraisal was increasingly emphasized by Cook over the following decades after its creation.

The macroappraisal model has two parts. First, are "criteria to assign priorities to record-creating structures within the functional context of society."[79] Second, are variables which "determine the nature and importance of the interaction of individual citizens with those structures and functions."[80] A note about the problems with the concept of citizen is important to outline here, as it is core to macroappraisal. The concept of citizen is not a good fit for those who for whatever reason are not considered citizens, such as immigrants, refugees, illegal aliens, and Indigenous peoples who consider themselves to be a citizen of their own Indigenous Nation rather than Canadian. This is one of the failings of macroappraisal in that it focuses on the citizen-state interaction without considering those who do not fall into those categories and whose records may not always be found in the same places as those who are citizens. For instance, Verne Harris "urges archivists to explore more fully the need to document the 'other,' the marginalized, the victims, and those who fall below most active citizen-state interactions."[81]

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[78] Cook, "Macroappraisal in Theory and Practice," 131-132; Terry Cook, "Macro-appraisal and functional analysis: documenting governance rather than government." *Journal of the Society of Archivists* 25, no. 1 (2004), 16.
[79] Catherine Bailey, "From the Top Down: The Practice of Macro-Appraisal," *Archivaria* 43 (1997), 94.
[80] Bailey, "From the Top Down", 94.
[81] Cook, "Macroappraisal in Theory and Practice," 148.

Once individual institutions and their internal structures and functions are ranked by order of importance the finding of evidence of societal value and the interaction between state and citizens begins. This is the central tenet of macro-appraisal and is accomplished by analysing the three-way interaction, intersection, and conflict between the creators of records (government agencies), socio-historical processes (functions, transactions, and services provided by the state), and citizens.[82] After the macroappraisal model has identified the key areas where the best archival records are likely to be found, these records are assessed in a process called 'micro-appraisal' in which a macroappraisal decision is confirmed, rejected, or refined.[83] Beavan states that the complexities of this form of appraisal are hidden by its seeming simplicity as it is "not a single practice or model, but a menu of choices" that results in different appraisal decisions and disposition authorities based on client needs and their information management infrastructure.[84] Furthermore, the model ensures that archival decisions can be held accountable as each step of the process is well documented through internal documentation detailing appraisal procedure and practices.[85] Cook states that "macroappraisal focuses on governance rather than the structures and functions of government" in that it "emphasises the dialogue and interaction of citizens with the state" and documents how society functions and how it is impacted by the state.[86] With its focus on documenting the "hot spots" in the records and on representing society as a whole, the macroappraisal model seeks to give voices to the marginalized communities that are often

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[82] Cook, "Macroappraisal in Theory and Practice," 126-128; Bailey, "From the Top Down", 95.
[83] Bailey, "From the Top Down", 96, 114.
[84] Brain Beaven, "'But am I getting My Records?' Squaring the Circle with Terms and Conditions Expressed in Relation to Function and Activity," *Archival Science* 5 (2005) , 318.
[85] Normand Fortier, "Transparency, Compliance, and Accountability: Developing a Knowledge Infrastructure for Macroappraisal at Library and Archives Canada," *Archival Science* 5 (2005) 346; Candace Loewen, "Accounting for Macroappraisal at Library and Archives Canada: From Disposition to Acquisition and Accessibility," *Archival Science* 5 (2005), 243.
[86] Terry Cook, "Fashionable Nonsense or Professional rebirth" in "*All Shook Up": The Archival Legacy of Terry Cook*, eds. Tom Nesmith, Greg Bak, and Joan Schwartz (Ontario: Association of Canadian Archivists, 2020), 325.

missing from archival holdings.[87] However, another flaw to this model is that by focusing solely on citizens, government programs, and the functions of the state, one is not focusing on marginalized or non-citizen populations directly leading to some records being missed and the archive failing to be wholly representative of these groups.

Cook states that case file records that are generated at the point of citizen-state interaction and that document variations between the goals and the actual operations of a programme, or greater detail of a momentous event, or where marginalized groups find a voice, have potential to be of permanent value, as long as there are no other less voluminous records that could document the interaction instead.[88] Macroappraisal is used to appraise case file records because it focuses on the functions and context of records creation and records creators,[89] and examines "the contextual characteristics of the series as a whole and the 'generic' nature of the records within each file,"[90] which provides a more comprehensive overview of the records and allows archivists to make appraisal decisions without needing to scrutinize records file-by-file.[91] Macroappraisal also saves archivists' time as they no longer have to become preoccupied with determining the most appropriate sampling technique (random, statistical, fat file, etc.) because instead they are making the hard decisions of "whether the case files add any value to the already identified archival record or not."[92]

Multi-Institutional Disposition Authority (MIDA)

The macroappraisal program developed for the National Archives of Canada (now

[87] Cook, "Fashionable Nonsense or Professional rebirth," 325.
[88] Cook, "Mind over Matter," 132.
[89] Scheinberg, "Case File Theory", 48.
[90] Cook, "Many are called, but few are chosen", 29.
[91] Margaret Dixon, "Beyond Sampling: Returning to Macroappraisal for the Appraisal and Selection of Case Files," *Archival Science* 5 (2005), 288.
[92] Dixon, "Beyond Sampling", 289.

Library and Archives Canada (LAC)) in 1991 was the intellectual core of a planned approach to the disposition of government records.[93] Along with macroappraisal, records disposition authorities were also developed at LAC to identify important records within government agencies and provide for their eventual transfer to archives, as well as facilitate the disposal of records having no permanent value according to a records schedule.[94] Despite these developments and the existence of other more sufficient documentation of a particular function at a higher activity level, archivist's reluctance to 'destroy all' led to "inconsistencies in the archival appraisal recommendations for case file records."[95] This led to appraisal decisions that were based on "idiosyncratic selection according to information or research potential" with each archivist having a different definition and criteria for appraising and sampling case files.[96] Between 2000 and 2003 LAC conducted several studies into the disposition problems at LAC and concluded that the disposition authorities only covered up to 67% of operational records, with some departments having no authorities at all, and that 63% of the authorities were considered obsolete. These discoveries led to the establishment of the Case Files Appraisal Working Group (CFAWG) in February 2003, to "examine issues surrounding the appraisal and disposition of case files in the context of macroappraisal."[97] From the CFAWG the Multi-Institutional Disposition Authority (MIDA) was born.

The Multi-Institutional Disposition Authority (MIDA) for the disposition of operational case file records created by the government of Canada was published in 2005.[98] MIDAs "are a

[93] Cook, "Macroappraisal in Theory and Practice,"105.
[94] Eldon Frost, "A weak link in the chain: Records Scheduling as a Source of Archival Acquisition," *Archivaria* 33 (1991-92), 84.
[95] Dixon, "Beyond Sampling", 292.
[96] Dixon, "Beyond Sampling", 291.
[97] Dixon, "Beyond Sampling", 290-291.
[98] Dixon, "Beyond Sampling", 294.

specific type of disposition authorization issued by LAC to provide direction to government institutions subject to the Library and Archives of Canada Act regarding the disposal of records managed" by those government institutions.[99] The MIDA enabled government agencies to dispose of case file records under certain terms and conditions without having to individually request disposition authorization from LAC. This facilitated and expedited their records management operations.[100] Furthermore, "the MIDA provided a common understanding of the definition and description of case file records" as well as established which ones were considered to have archival value based on seven criteria.[101] Thus, by using the MIDA, LAC was able to restrict the volume of the case files transferred to archives as only case file records of archival value would be received and the keep-destroy decisions would be made before the records were transferred to the archive. The MIDA also allowed LAC to deal with case file records of "dubious archival value" held in its backlog.[102] While Loewen argues that the MIDA is "an expression of macroappraisal," because of the macro approach required to appraise the large quantity of case files, decisions to keep or destroy, however, were based on the definition of case files and seven appraisal criteria and not on functional analysis, the central tenet of macroappraisal. [103] The MIDA was applied to the government's operational case files by first applying certain exclusions to the entire group of records requiring disposition action to narrow

[99] "Multi-Institution Disposition Authorizations (MIDAs)" Library and Archives Canada, (website) accessed September 6, 2021: Multi-Institution Disposition Authorizations (MIDAs) - Library and Archives Canada (bac-lac.gc.ca).
[100] "Multi-Institution Disposition Authorizations (MIDAs)"; Dixon, "Beyond Sampling", 294.
[101] Dixon, "Beyond Sampling", 295, 312.
[102] Dixon, "Beyond Sampling", 295; Tina Lloyd states that during the Clearing the Path Reappraisal project that LAC undertook in 2007-2008, they were able to identify more than five kilometers of records for deaccessioning. (Tina Lloyd, "From Projects to Policy: The Evolution of a Systematic Reappraisal Program." In Kate Theimer, ed. *Appraisal and Acquisition: Innovative Practices for Archives and Special Collections* (Rowman & Littlefield, 2015), 66.)
[103] Loewen, "Accounting for Macroappraisal at Library and Archives Canada", 256; Candace Loewen, "The Evolution, Application , and Future of Macroappraisal," *Archival Science* 5 (2005), 97.

the group of records covered by the MIDA. Second, the case file definition is applied to the remaining files to eliminate those that do not fit the definition. Lastly, the remaining records are either determined to have archival value and transferred to the archive or determined to have no archival value and disposed of. For the operational case file to have archival value the record must meet any of these seven criteria: 1) records that are crucial for the protection of the individual and/or collective rights and that document obligations to citizens; 2) Records of judicial or quasi-judicial decisions; 3) records that document decision-making by the Deputy Head, Minister, Cabinet, or Prime Minister; 4) Records that document federal responsibility in the areas of compensation and fiduciary obligations; 5) Records that document federal responsibilities and claims by or against the Canadian government under any of its domestic treaties, or bilateral and multilateral international treaty obligations; 6) records that document specific investigative activities under a federal jurisdiction; 7) records that document and/or are used for research activities. Thus, by using the MIDA to identify which case files records have archival value and which do not, the risk of inadvertent destruction of archival records is mitigated.[104]

Generic Appraisal Guidelines (GAGs)

The concept of generic appraisal was first explored in the 1990s, during the macroappraisal era with the first "Government-Wide Plan for the Disposition of Government Records", which aimed to group similar institutions according to common operational functions in order to efficiently provide complete disposition authorization coverage.[105] Despite the success of macroappraisal to appraise and dispose of records, by 2009 LAC's disposition

[104] Dixon, "Beyond Sampling," 300-312.
[105] Rebecca Giesbrecht and Jenna Murdock Smith. "Everything Old is New Again: The Evolution of Generic Appraisal at Library and Archives Canada." *Archivaria* 84 (Fall 2017), 39.

program had become unsustainable as "appraisal projects were taking several years to complete, and most institutions had outdated, problematic disposition authorities, or no coverage at all for their operational records."[106] Furthermore, LAC did not have the resources to back a disposal program that was so heavily based on research. In 2009, after the Treasury Board of Canada Secretariat (TBS) issued the *Directive on Recordkeeping* with the aim of addressing recordkeeping challenges in the Government of Canada, LAC's appraisal program shifted from focusing on disposition to supporting recordkeeping within Government of Canada institutions, and to "developing new tools that were based on common activities performed by many or all government institutions."[107]

A working group was established in 2010 with a mandate to create new MIDAs, to assist government institutions in complying with the *Directive,* and to allow institutions to dispose of more of their records. The working group utilized the eleven common activities or 'service groupings' of the TBS' *Profile of Internal Services* which was used by federal government institutions to conduct and report on their work.[108] Eight of these were already mirrored in existing administrative MIDAs.[109] The remaining three were considered strategic activities such as communications, legal services, and management and oversight. In 2012, the group developed Generic Valuation Tools (GVTs) a series of outward facing recordkeeping tools designed to assist government institutions to comply with the *Directive*. GVTs are "overviews of specific business activities that are commonly carried out in the federal government" that both define and

[106] Giesbrecht and Smith. "Everything Old is New Again," 40.
[107] Giesbrecht and Smith. "Everything Old is New Again," 40-41.
[108] "Generic Appraisal Guidelines: Contextual Overview for Archivists", Library and Archives Canada, 2018, LAC File 6243-11-1, 3. (This document was generously provided to me through email by LAC archivist Jenna Smith.)
[109] Information Management, Information Technology, Human Resources Management, Financial Management, Acquisitions Services, Material Management, Real Property Management, and Travel and Other Administrative Services. ("Generic Appraisal Guidelines," 3.)

analyze processes and activities along with offering "recommendations on information resources of business value (IRBV) and their retention specifications."[110] In order to create a GVT and perform a business process analysis on specific activities, the activities had to be prescribed and predictable. This meant being able to divide activities into business processes and "identify the common record types created by those processes."[111] Each GVT was accompanied by archival appraisals known as Enduring Value (EV) Guidelines.[112] EV Guidelines were the forerunner to GAGs and provided comprehensive coverage to multiple institutions performing similar activities with a single disposition authorization. The EV Guidelines are useful tools because they "codified collective knowledge and common decision-making for archival appraisal", improved "LAC's understanding of how government operates", and gave archivists a more comprehensive look at the inner workings of the federal government and the information produced by its operations.[113]

The group also attempted to write GVTs for operational activities, which were "performed by multiple institutions and were prescribed and predictable."[114] To do this, the group examined the "MIDA for Operational Case File Records", which was not based on common functions but on the type of operational record. This particular MIDA helped the group to develop a better understanding of both the common operational activities that resulted in the creation of prescribed and predictable, transactional case files and the "content of the records themselves."[115] However, they moved away from developing new MIDAs because it was found to be easier to develop recordkeeping advice than to create new generic disposition

[110] "Generic Appraisal Guidelines," 3-4.
[111] Giesbrecht and Smith. "Everything Old is New Again," 45.
[112] Giesbrecht and Smith. "Everything Old is New Again," 44.
[113] "Generic Appraisal Guidelines,"5-6.
[114] "Generic Appraisal Guidelines," 4.
[115] Giesbrecht and Smith. "Everything Old is New Again," 44.

authorizations which proved to be a much greater challenge than anticipated.[116] For example, in instances where MIDAs existed, a simple mapping exercise between the GVT and the appropriate MIDA was all that was necessary but in cases where activities did not have an associated MIDA and where the records were at the core of work done by the government, there was a risk of missing records of archival value by appraising records in a generic fashion without institutional context. Thus, instead of creating new MIDAs, the group developed a set of appraisal guidelines that archivists could refer to when creating disposition authorizations.[117]

In 2014, LAC was audited by the Auditor General of Canada which reported that "LAC had not provided government institutions with up-to-date, comprehensive disposition authorizations and could not ensure that it was acquiring all records of archival value from federal institutions."[118] In response a small team of archivists was established to rebuild the appraisal and disposition program of the LAC. With the goal of getting back to the original tenets of macroappraisal, the team based the new approach to disposition on three core principles: to simplify the disposition program by ensuring that government institutions only need to apply one disposition authorization; to cluster institutions wherever possible; and a phased approach to disposition. This last principle is the most significant and occurs in two steps: 1) authorization – LAC issues a disposition authorization that indicates areas of archival interest at a strategic level, based on research about mandate, functions, and activities; and 2) validation – the archivist validates these recommendations by examining schedules, business analyses prepared by institutional staff, and records, and/or by speaking to operational staff to determine

[116] "Generic Appraisal Guidelines," 4.
[117] "Generic Appraisal Guidelines," 4.
[118] Giesbrecht and Smith. "Everything Old is New Again," 52.

which specific records LAC wants to acquire.[119] The team also realized that the EV Guidelines were not being used to their full potential.

In 2014, Generic Appraisal Guidelines (GAGs) were developed to work alongside MIDAs and GVTs. Generic Appraisal Guidelines evaluate the common, predictable, and legally prescribed activities performed by the multiple institutions within the Government of Canada. GAGs provide information, recommendations, and guidance on the significance of the federal government's role in performing certain activities and the potential archival value of records created because of those activities. The GAGs also provide archivists a selection criterion to help them identify what records best document a given activity. However, GAGs are not disposition authorizations and are meant to be consulted and not applied. They were written to provide generic recommendations and guidance to assist archivists in their appraisal decisions by providing a common, documented understanding of how government works and of the information it produces. Furthermore, "the records identified in the GAGs will not necessarily have archival value in all contexts" and archivists will have to evaluate "institutions within their own context in order to determine which records will best document the institution."[120] Also, the GAGs are not meant to be used retroactively or for appraising older records, as the original EV Guidelines and GAGs were created within the parameters of their time and are "rooted in legislation and policies that establish specific reporting mechanisms and documents on which the analysis is based."[121]

[119] Giesbrecht and Smith. "Everything Old is New Again," 54.
[120] "Generic Appraisal Guidelines," 2, 7.
[121] "Generic Appraisal Guidelines," 8.

The three types of GAGs are administrative activities,[122] strategic activities,[123] and operational activities.[124] Administrative activities contain no records of archival value. Strategic Activities are crucial to the governance of institutions and produce "records that best document the ways in which federal government institutions fulfill their mandates."[125] Operational activities are identified for generic appraisal only if numerous institutions carried out the activities and the related business processes were directed by policy or legislation and were always likely to occur. Thus, by facilitating several phases of the appraisal process – authorization, validation, transfer, and monitoring – GAGs are able to support the government records disposition program. In 2017, the Government Records Disposition Committee updated the language of EV Guidelines to reflect the current disposition program and changed its name to Generic Appraisal Guidelines (GAGs). Thus, while the GAGs are revised versions of the EV Guidelines and have evolved and in some cases diverged from the scope of the original GVTs, GVTs are an integral part of the contextual understanding of the GAGs and should be taken into consideration during appraisals.[126]

Giesbrecht and Smith argue that the development of the GVTs and GAGs was a significant step forward in terms of improving LAC archivists' understanding of how government works and the relationships between activities, as well as improved consistency in appraisal decisions.[127] Communication and recordkeeping efficiency was also improved as the

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[122] Administrative activities: Human Resource Management, Information Management, Information Technology, Financial Technology, Asset Management, and Travel and Other Administrative Services. ("Generic Appraisal Guidelines," 9-10.)
[123] Strategic Activities: Management and Oversight, Legal Services, and Communications. ("Generic Appraisal Guidelines," 10.)
[124] Operational activities: Transfer Payments, Regulatory Compliance and Enforcement, Authorization, Investigation, Adjudication, and Science and Technology Activities. ("Generic Appraisal Guidelines," 11.)
[125] Giesbrecht and Smith. "Everything Old is New Again," 47-48.
[126] "Generic Appraisal Guidelines," 2-12.
[127] Giesbrecht and Smith. "Everything Old is New Again," 51, 58.

GAGs give LAC archivists and government professionals a common language and understanding of activities performed by the federal government.[128] Furthermore, GAGs have made archival decision-making more accountable as archivists have an improved understanding of the records created by the government which allows them to better explain and defend decisions made about these records. Generic appraisal has also streamlined the process of appraisal without sacrificing the quality of research and analysis. Therefore, GAGs "allow for a balance between codified, evidence-based analysis" and "professional judgement of archivists to account for nuances and adapt to contextual differences in individual institutions."[129]

According to the overview of generic appraisal published by the LAC, the concept of generic appraisal has refined and improved the practice of macroappraisal at LAC, as it allows archivists to examine "particular government activities as a whole to develop a more refined, nuanced understanding of how central reporting and documentation works in the federal government."[130] Furthermore, the concept promotes a top down approach to appraisal which assumes that archivists will better understand the context of records creation by moving from the top down, further enabling them to properly document activities and functions without having to examine every record. The GAGs make recommendations based on the notion proposed by macroappraisal "that the best record to document a particular function/activity can be found in the Office of Primary Interest (OPI)."[131] However, while it is true that macroappraisal is a top-down approach focused on documenting the functions of the most important offices of the government, the GAGs miss another central tenet of macroappraisal which is the citizen-state interaction. While records found in the OPI may encompass records that represent the citizen-

[128] Giesbrecht and Smith. "Everything Old is New Again," 51.
[129] Giesbrecht and Smith. "Everything Old is New Again," 58.
[130] "Generic Appraisal Guidelines," 8.
[131] "Generic Appraisal Guidelines," 8-9.

state interaction, the importance of documenting these particular records is not emphasized in the overview. Instead, the GAGs seem to be focused more on finding the high-level, mandate, and policy records to document the functions and activities of the government to avoid closely examining the lower-level records like case files. While this is understandable as most case files are voluminous, routine, mundane, and have no archival value, as I demonstrated with the discussion of Alberta's eugenics case files (pages 20-26), some case files do have archival value in that they represent the citizen-state interaction, give voice to marginalized communities, and offer greater detail for certain activities/events. Thus, the GAGs only follow certain aspects of macroappraisal and need to place more emphasis on locating records that represent the citizen-state interaction.

Conclusion

This chapter has outlined the management methods that archivists have used to appraise and manage case file records. From the 1950s to the 1990s sampling and selection was the most popular method to deal with the bulky and homogenous case file records. However, as my example of the eugenics case files of Alberta made clear, sampling and selection was not always an appropriate method for managing certain types of case file records as it led to the destruction of records that could have allowed victims to hold the government accountable, to find the truth about what happened to them, and to allow historians to tell their stories. In the 1990s macroappraisal was used to appraise case file records because it focused on the functions and context of records creation and records creators, and examined "the contextual characteristics of the series as a whole and the 'generic' nature of the records within each file."[132] This provided a

[132] Scheinberg, "Case File Theory," 48; Cook, "Many are called, but few are chosen," 29.

more comprehensive overview of the records and allowed archivists to make appraisal decisions without needing to scrutinize records file-by-file.[133] However, a flaw to this model is that by focusing solely on citizens (ignoring those who do not fall into this category), government programs, and the functions of the state, one is not focusing on marginalized or non-citizen populations directly leading to some records being missed and the archive failing to be wholly representative of these groups.

With the realization that macroappraisal was a resource intensive method of appraisal and that many disposition authorities for government institutions were obsolete, LAC created the MIDA in 2005 to appraise case files more efficiently by applying a single definition and seven criteria to records found in agencies with similar functions and mandates. However, in order to return to the original tenets of macroappraisal and to further improve the disposition program at LAC, GAGs were also developed in 2014 to accompany MIDAs in the decision-making process surrounding case files. GAGs allowed archivists to develop a more refined, nuanced understanding of how the government functions and where the best documentation may be found, such as in the OPI. However, GAGs seem to focus more on finding the high-level, mandate, and policy records to document the functions and activities of the government in order to avoid closely examining the lower-level records like case files and do not focus on the citizen-state interactions or on records representing marginalized communities. This is a gap that could be addressed by including a more robust understanding of macroappraisal in the GAGs, as well as using concepts such as radical empathy, affect, and imagined records to influence their appraisal decisions surrounding case file records.

[133] Dixon, "Beyond Sampling," 288.

Not only should archivists be focused on using macroappraisal to locate the citizen-state interactions, but they should also be placing survivors, victims, and marginalized communities at the center of their appraisal decisions. Archivists should be asking themselves where records pertaining to marginalized and victimized groups may be located within the government's records (made possible by macroappraisal and GAGs). They should also be asking themselves the effect these records would have on these communities if made accessible (truth, justice, hope) and what effect destroying the records would have on them (impossible imaginaries). Is keeping the policy and mandate records enough, or should the entirety of the case files be kept, ensuring that individual stories are not lost, and that governments can be held accountable? Therefore, using concepts such as radical empathy, affect, and imagined records should influence keep-destroy decisions surrounding case files, as it calls on archivists to consider the effect records (real or imaginary) have on individuals and communities, rather than focusing solely on institutional mandates and policies.[134]

[134] James Lowry, "Radical empathy, the imaginary and affect in (post) colonial records: how to break out of international stalemates on displaced archives," *Archival Science* 19 (2019), 197.

Chapter 2: Case Files in the Present

This chapter examines how case files are currently managed by using electronic health or eHealth records as an example of present-day case files. This chapter discusses the implications that new and advancing record keeping technologies and born-digital records pose for the management of the kind of information that formerly would have been managed in case files. For instance, by using queries to search a database, case files can be dynamically assembled for the user by pulling together data that formerly would have made up a case file in the paper realm, but which now exists as individual elements of data in the digital. The case file no longer exists as a discrete object within the database but rather is assembled based upon the user's search criteria. This chapter will begin with definitions of eHealth and databases and will then outline the history of the development of paper and digital records in hospitals. Lastly, this chapter will discuss the challenges of preserving databases and eHealth records.

What are eHealth records?

Put simply, eHealth refers to the use of information systems and communications technology in health care.[1] The purpose of eHealth is to gather, preserve, share, retain, and when appropriate, to dispose of health information while providing electronic health records (EHRs).[2] The components of eHealth include health informatics (data collection, analysis, and distribution), telehealth (communication technology through which providers and patients interact either directly or indirectly), e-learning (utilizing technology to provide opportunities for learning to both healthcare workers and the public), and e-commerce (billing, reimbursement,

[1] Jens Weber-Jahnke, Liam Peyton, and Thodoros Topaloglou, "eHealth System Interoperability" *Information Systems Frontiers* 14 (2012), 1.
[2] Tony Sahama, Leonie Simpson, and Bill Lane, "Security and Privacy in eHealth: is it possible? – A Sociotechnical analysis," *2013 IEEE 15th International Conference on e-health, Networking, Applications and Services*, 249.

accounting, and business side of healthcare).[3]

In general, health records are paper or electronic documents that contain a more or less complete and accurate description of a patient's health history and conditions, identification data, physical examination findings, laboratory reports, diagnosis, medications, therapeutic treatment, surgical procedures, and the results of treatment. Health records should "provide accurate information on who the patient is, who provided health care, and what, when, why, and how services were provided and the outcome of care and treatment."[4] The data contained within these records is used by physicians, nurses, medical technologists, administrators, and other health care providers to enter, store, and retrieve patients' data and to justify present and future courses of treatment. The data is also relied on by medical, nursing and scientific communities as a primary source of information for research and medical advancement and discovery.[5] The National Library of Medicine defines an electronic patient record (EPR) as a "computer-based system for input, storage, display, retrieval, and printing of information contained in a patient's medical record."[6] Electronic patient records (EPRs) are also commonly referred to as electronic health records (EHRs) or as electronic medical records (EMRs). These terms are often used interchangeably across the literature.

Kisha Hortman Hawthorne and Lorraine Richards define Personal Health Records (PHRs) an extension, component, or module of "an EMR which is a medical record that is

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[3] Richard Scott and Maurice Mars, "Principles and Framework for eHealth Strategy Development" *Journal of Medical Internet Research* 15 (2013), 7.
[4] Jacob Kehinde Opele, Michael Segun Omole, Tajudeen Temitayo Adebayo, "The Management of Health Records Libraries Through the Lens of Ranganathan's theory," *Library Philosophy and Practice*, (2019): 1-2.
[5] Opele, Omole, Adebayo, "The Management of Health Records Libraries Through the Lens of Ranganathan's theory," 1-2; Morris F. Collen and Marion J Ball, eds. *The History of Medical Informatics in the United States* (New York: Springer, 2015), 216.
[6] Morris F Collen and Marion J Ball, *The History of Medical Informatics in the United States*. (New York: Springer, 2015), 216.

created and maintained digitally."[7] They further define a PHR as an EMR that is maintained, managed, controlled, and shared by the patient, typically combining information from multiple healthcare providers.[8] Kaelber et al describe PHRs as computer-based tools that allow people to access, manage, and make available their personal health information. PHRs have four main functions: 1) Information collection which allows patients to input their own health information and to access their personal health data from other external sources; 2) Information sharing allowing patients to share their health information with others while receiving no communication in return; 3) Information exchange which allows patients two-way communication with others regarding their health data; and 4) Information self-management which allows "patients to record, track, and edit information about their own health/healthcare" in order to better manage their health/healthcare.[9] The three primary components of PHRs are 1) data – "the types and elements of information that are exchanged, analyzed, and stored by different information technologies;" 2) infrastructure – computing platforms, software packages, or websites that exchange and process data – and 3) applications which include appointment scheduling, medication renewals, and education materials.[10] There are multiple types of PHRs including, tethered, untethered, Web-based or integrated. Tethered is the most popular version of PHRs and occurs when hospitals or other health care organizations that maintain patient data electronically provide patients access to a portion or to the whole of their permanent medical records using patient portals. In some cases, patients can add their own notes or information gathered from personal health apps to the medical records. This means that these records are "co-created and

[7] Kisha Hortman Hawthorne and Lorraine Richards, "Personal Health Records: a new type of electronic medical record" *Records Management Journal* 27 (2016), 287.
[8] Hawthorne and Richards, "Personal Health Records," 287.
[9] David Kaelber, Ashish Jha, Douglas Johnston, Blackford Middleton, and David Bates. "A Research Agenda for Personal Health Records (PHRs)" *Journal of the American Informatics Association* 15 (2008), 730.
[10] Kaelber, Jha, Johnston, Middleton, and Bates, "A Research Agenda for Personal Health Records (PHRs)," 732.

maintained by both providers and patients, creating an evolving medical record that exhibits multiple provenance."[11] Untethered PHRs refer to applications or software that are not connected to an organization but is installed on a personal computer or accessed through an internet-based portal service, allowing only the user to control the health data that is inputted and retained.[12]

What is a database?

Databases or data banks, "collect, store, use, exchange, and distribute data."[13] William Frawley et al. define databases as "a logically integrated collection of data maintained in one or more files and organized to facilitate the efficient storage, modification, query, and retrieval of related information."[14] Lev Manovich defines a database as collected data which has been structured so that users can perform various operations such as view, navigate, and search.[15] The different types of databases are hierarchical, network, relational, multi-dimensional, object-oriented, distributed, entity attribute value, federated and translational and use different models to organize data to enable fast search and retrieval by a computer. According to Manovich, "the database form becomes a support for individual users' trajectories," as "users may choose to present items in a way that supplies a particular narrative but such a narrative has no privileged status; it is just one method of accessing data among many."[16] Yeo explains that databases "are

[11] Hawthorne and Richards, "Personal Health Records," 287.
[12] N. Archer, U. Fevrier-Thomas, C Lokker, K.A. McKibbon, S.E. Straus, "Personal Health Records: a scoping review," *Journal of the American Medical Informatics* Association 18 (2011), 515; Hawthorne and Richards, "Personal Health Records," 287.
[13] Morris F Collen. *Computer Medical Databases: The First Six Decades (1950–2010)*. 1st ed. (London: Springer, 2012), 1.
[14] William J. Frawley, Gregory Piatetsky-Shapiro, and Christopher J. Matheus, "Knowledge Discovery in Databases: An Overview". *AI Magazine* 13 (1992), 60.
[15] Lev Manovich, "Database as a Genre of New Media," *AI & Society* 14 (2000), 177.
[16] Geoffrey Yeo, "Bringing Things Together: Aggregate Records in a Digital Age", *Archivaria* 74 (2012), 71.

increasingly used to record transactions and activities" as a database allows data to be "reused, rearranged, and regrouped" based on user requirements.[17]

Alongside the creation of database systems, database management systems were developed to "capture and process all of the data stored in the computer system, and to implement all of the functional requirements of the database."[18] Frawley et al state that a database management system is a collection of procedures, hardware, and software for controlling, storing, retrieving, transferring, processing, organizing, updating, maintaining, and manipulating data within databases.[19] Database management systems are required to process large amounts of data "in a way that permits their ready retrieval" and present it as a collated record.[20] Within database management systems are metadatabases which were developed to store metadata such as data from patients' examinations, clinical reports, patients' demographic identifiers, and accounting information.[21] Also associated with a database is a data dictionary, "which defines field names, the allowable data types for field values, and defines the syntax of database use."[22] Data dictionaries use these defined terms, and a coded data list along with their codes, to provide a thesaurus that recognizes "different terms that have similar meanings," as well as providing a glossary of standard terms that are correctly spelled and defined.[23] A data dictionary ensures that records will be accurate and consistent across time and place, as well as understood by a large number of users.[24]

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[17] Yeo, "Bringing Things Together", 72.
[18] Collen and Ball, *The History of Medical Informatics in the United States*, 27.
[19] Frawley, Piatetsky-Shapiro, and Matheus, "Knowledge Discovery in Databases," 60; Collen and Ball, *The History of Medical Informatics in the United States*, 27.
[20] Collen and Ball, *The History of Medical Informatics in the United States*, 227-228.
[21] Collen and Ball, *The History of Medical Informatics in the United States*, 26.
[22] Frawley, Piatetsky-Shapiro, and Matheus, "Knowledge Discovery in Databases," 63.
[23] Collen and Ball, *The History of Medical Informatics in the United States*, 219.
[24] J. Anderson, "Data Dictionaries – A Way Forward to Write Meaning and Terminology into Medical Information Systems," *Methods of Information in Medicine* 25 (1986), 137.

History of Hospital Paper Records

As hospitals grew in number and in social and medical importance between c. 1850 and c. 1950 so too did their records. Before the 1900s, administrative records such as minutes, reports, ledgers, correspondence and patient records that were kept by medical staff in casebooks were prepared and transcribed by hand.[25] Patient records were a collated series of handwritten, paper-based documents detailing the "encounters between the patient and the health professional that had been collected serially over time."[26] The casebook, which was created retrospectively to aid individual physician's memories, did not have standardized rules for what patient information would be kept. However, information in casebooks generally included direct observations by the medical staff about the condition of the patient as well as "supporting documentation such as admission letters, warrants and orders, and other records which were produced on the wards."[27] Once these documents were summarized or transcribed into the casebook they were destroyed. To keep track of individual casebooks, indexes were created by the name of the patient at the time that each case had begun, which were then bound together and filed alphabetically with the casebooks.[28] Between 1920 and 1950, however, after the adoption of case files, hospitals began filing cases numerically by register number instead of, as had been done previously, alphabetically by patient name. Register numbers and card – rather than book – indexes ensured easier retrieval of clinical records as well as enabled the ability to link together records of patients who had been admitted multiple times.[29]

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[25] Barbara Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part II: The Development of Record-Keeping in Hospitals," *Archivaria* 30 (1990), 22-23.
[26] Collen and Ball, *The History of Medical Informatics in the United States*, 238-239.
[27] Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part II," 22-23.
[28] Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part II," 23.
[29] Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part II," 29.

After 1880, hospitals grew in size and complexity leading to more patients being treated in hospital and as outpatients, which resulted in an increase in production of administrative and medical records. Between 1880 and 1950, more administrative staff was hired to perform record related duties and were aided by the development of machines such as duplicators and typewriters.[30] By the 1940s official records were primarily typescript and no longer produced by hand.[31] Furthermore, loose items were no longer bound together but rather filed (usually by subject) into files and cabinets or into ringed binders to allow for flexibility in retrieval and the addition of new records and files. After 1890, the increasing patient load, medical staff growth, and the advancement of specialties and services contributing to the care of the patient, resulted in the replacement of casebooks by flexible case files. These new case files contained all the documents relating to the personal information of the patient, clinical histories, test results, procedures, doctor's orders, progress notes, charts, scans, x-rays, photographs, discharge summaries, and death certificates, as well as correspondence and administrative forms that were produced in the process of caring for the patient were placed in the case file at the time of the document's creation. Over time, the case file grew in size with the adoption of standardized forms ("common forms of uniform size for each procedure, technique, and function"), the documentation of new medical techniques, and the expansion within the hospital of special medical services or departments.[32] The case file contained the inpatient chart, or the documents created when the individual was in the hospital and served as the outpatient chart which was consulted and added to by the physician upon the patient's return. This case file, or outpatient

[30] Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part II," 24-25.
[31] Barbara Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part I: The Development of Records in Hospitals," *Archivaria* 29 (1989-90), 60.
[32] Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part II," 25-28; Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part I," 63, 77.

chart, was "a physician's primary means of documenting the continuity of care" for a patient.[33] Therefore, since these case files were constructed by accumulating records from many different hospital departments and from all the people involved in the treatment of the patient over subsequent visits to the hospital, the case file became integral to clinical practice, as it kept the records of a patient over their lifetime all in one place.[34]

History of Electronic Hospital Records

Bruce Blum divides the development of using computers in medicine into three phases. The first phase, from 1955 to 1965, emphasized experimentation and understanding the technology to hypothesize how computers could be used to process patient data. In the second phase, from 1965 to 1975, computer systems were successfully implemented to process, collect, and analyse data. In the third phase, from 1975 to 1985, the information processing requirements of the medical field were able to be met by the emerging computer technology.[35] Since Blum was writing in 1986, he could only predict how future advances of technology could affect medical informatics and the development of electronic patient records. Today, we can see the effect that handheld devices, cloud computing, the World Wide Web, and linked data has on the development of electronic patient records as they improve data collection, storage, and access, as well as the ability to more accurately diagnose and care for patients.

Collen and Ball state that "computer-stored databases were the origins of modern electronic patient records (EPR)," also known as computer-stored patient records (CPR), electronic health records (EHR), or electronic medical records (EMR).[36] Blum states that

[33] Collen and Ball, *The History of Medical Informatics in the United States, 239.*
[34] Craig, "Hospital Records and Record Keeping, c. 1850-1950 Part I," 63.
[35] Bruce Blum, *Clinical Information Systems* (New York: Springer, 1986), 35-37.
[36] Collen and Ball, *The History of Medical Informatics in the United States*, 208, 240.

computers in the 1950s were "large, required considerable support in maintenance and environmental control, were generally limited to running one job at a time… and the applications were limited to the routine processing of high volume data."[37] With the development of large mainframe computers in the 1950s, some medical facilities began to store patient's data electronically. Physicians would collect information including patient identifiers, time spent in hospital, and the codes that detailed diagnoses, procedures, and the attending physicians.[38] They would bring this data to a central computer where it was entered into the computer by punched cards and stored on magnetic tape and printed out in batches.[39]

In the 1960s, large, time-shared, mainframe computers, were developed that allowed a single computer to concurrently complete multiple tasks with the use of multiprogramming operating systems. Smaller, minicomputers, were also manufactured, which were linked electronically to larger mainframe computers and were used as process control devices.[40] These special purpose computers linked to remote data entry terminals via telephone lines which allowed patient data to be processed and accessed simultaneously by many users.[41] Originally stored on magnetic tape within a database, this data was then "stored and accessed sequentially in computer flat files that had little structured relationships, and they were aggregated in file-management systems." Database designs in the 1960s usually reflected the traditional, time-sourced, paper-based medical record in that databases "linked the individual patient's data in a hierarchical, tree-structured, model."[42] Hierarchical databases required that the "connections between the files, or between fields within the files," be defined at the creation of the database

[37] Blum, *Clinical Information Systems,* 33.
[38] Collen and Ball, *The History of Medical Informatics in the United States*, 240.
[39] Collen, *Computer Medical Databases,* 26.
[40] Blum, *Clinical Information Systems,* 34.
[41] Collen and Ball, *The History of Medical Informatics in the United States*, 125.
[42] Collen and Ball, *The History of Medical Informatics in the United States*, 245.

and that "data was organized in what was described as a 'parent-child' relationship, where each 'parent' could have many 'children,' but each 'child' only had one 'parent.'"[43]

In the 1970s, computers became smaller, cheaper, and more reliable, with mainframe computers remaining functionally the same but becoming more available due to reduced prices.[44] Collen and Ball argue that it is in the 1970s with the availability of random-access disc storage and the advent of microcomputer technology that the development of modern electronic patient records and database management systems began.[45] In the 1970s, lower-cost minicomputers that were dedicated to the activities of a hospital department became common in places like the clinical laboratory, radiology, medical records, hospital billing, and the pharmacy, as well as at nursing stations and at the patient's bedside. [46] These computers developed "their own separate subsystem databases" that were "linked to a central mainframe computer that integrated all patients' data" into one clinical record which was "stored in a mainframe computer's database."[47] This is called a distributed database system, as each subsystem collected and stored locally created data that was linked to a central mainframe or integrated central database through a communications network which allowed for the entry and retrieval of data from any of the computers in the system.[48]

In 1970, E.F. Codd proposed the use of a relational database model to organize and retrieve data. In a relational database model, data is logically structured in a named table or relation, which are two-dimensional structures made up of named columns or attributes of data

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[43] Collen, *Computer Medical Databases,* 36.
[44] Blum, *Clinical Information Systems,* 34.
[45] Collen and Ball, *The History of Medical Informatics in the United States*, 125.
[46] Jack W. London, "A Computer Solution to Clinical and Research Computing Needs." *Proceedings of the Annual Symposium on Computer Application in Medical Care* (1985), 722-723.
[47] Collen and Ball, *The History of Medical Informatics in the United States*, 125, 192.
[48] Collen and Ball, *The History of Medical Informatics in the United States*, 228-229.

with each row containing one value per column/attribute.[49] By using the names of tables and columns, the data elements in a relational database are easily found.[50] A separate metadatabase or data dictionary maintains information about "each column's name and potential values."[51] Multi-dimensional databases – relational databases that "contained multiple attributes, such as time periods, locations, product codes, and other attributes that could be defined in advance and aggregated in hierarchies" – were soon developed as relational databases grew in size and in popularity in the 1970s.[52]

During this decade object-oriented databases were also developed, which "treated the database as a modular collection of component data-items called objects." An object-oriented database has the ability to integrate descriptions of the data's behavior and interrelationships as well as the data.[53] Objects represent persons, places, activities, events, concepts, or observations and are described by attributes ("properties that describe aspects of objects") and relationships ("the association between objects.")[54] If an object has the same attributes as another object they can be grouped together to form a class or type. Furthermore, since objects contain both a data structure and a set of operations, as well as belong to types or classes of data with their own data and programming codes, they can be easily manipulated and copied into other programs.[55]

Medical databases contain highly heterogeneous data. Entity Attribute Value (EAV) databases were designed in the 1970s to manage this by storing the data as distinct entities

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[49] Alan Coltri, "Databases in Health Care" in Harold Lehmann, Nancy Roderer, Patricia Abbot, et al. eds. *Aspects of Electronic Health Record Systems* (New York: Springer, 2006), 233; Thomas Connolly and Carolyn Begg, *Database Systems: A Practical Approach to Design, Implementations, and Management* (Harlow: Pearson Education Limited, 2005), 69.
[50] Frawley, Piatetsky-Shapiro, and Matheus, "Knowledge Discovery in Databases," 60.
[51] Collen and Ball, *The History of Medical Informatics in the United States*, 211.
[52] Collen and Ball, *The History of Medical Informatics in the United States*, 24-25.
[53] Collen, *Computer Medical Databases,* 38-39.
[54] Connolly and Begg, *Database Systems,* 15; Collen, *Computer Medical Databases,* 39.
[55] Connolly and Begg, *Database Systems,* 844; Collen, *Computer Medical Databases,* 39.

"whose properties were defined by attribute-value pairs."[56] EAV databases used a table with three columns. First, the entity column which contained patient information, with a timestamp on each clinical event. The second column, attribute, identified the event such as a laboratory test. Thirdly, the value column, which "contained the value of the attribute (such as the result of the laboratory test)."[57]

Distributed databases and distributed database management systems further evolved in the 1980s as minicomputers and microcomputers were increasingly used in small database systems, and as storage technology became larger, cheaper, and more efficient.[58] The development of local area networks (LANs) meant hospitals could integrate their various microcomputers with their individual databases one into large, shared database, as well as improve the efficiency of their database management systems.[59] However, because patient data was being stored on many computers with direct random-access disks, various distributed databases were created as a result and required the use of a distributed database management system to retrieve patient data. Furthermore, the development of interfaced and integrated systems made patient data more accessible for clinicians as all of the patient's data was placed into a single electronic medical record.[60] Each system in an interfaced system had its "own authority for defining, managing, and controlling data," and exchanged data by transmitting a copy of the data from one system to another which often caused delays in processing and changes in data format and size.[61] In contrast, integrated systems do not define or control their

[56] Coltri, "Databases in Health Care," 247.
[57] Collen, *Computer Medical Databases,* 39.
[58] Collen and Ball, *The History of Medical Informatics in the United States*, 125-126.
[59] Collen and Ball, *The History of Medical Informatics in the United States*, 343-344.
[60] Collen and Ball, *The History of Medical Informatics in the United States*, 146-147.
[61] Robert M. Curtice and John P Glaser, "The Difference Between Interfaced and Integrated Systems," *Journal of Medical Systems*, 13 (1989), 56.

own data but rather share a single, commonly-defined data pool or central database, which ensures that no copying or transfer is necessary as the same data is shared directly by many systems, ensuring that delays or changes to the data do not occur.[62]

During this decade, federated database models were developed in which large volumes of aggregated data continued to reside in multiple, domain or functional-oriented databases that were logically interconnected and accessible through the use of multiple applications. This meant that data could be concurrently accessed by many users in the various databases.[63] The term "data warehouses was applied to large, extended, central databases that collected and managed data from several different databases" which developed partitions for "specialized sub-sets of data in order to better serve users with different functional needs."[64] The purpose of a data warehouse is to integrate data from many databases into a single repository that supports and improves decision making by allowing users to efficiently make queries, perform analysis, and create reports.[65]

With the introduction of more powerful computers and more user-friendly software in the 1990s, physicians began to input data straight into electronic patient records using keyboards terminals and clinical workstations.[66] In the late 1990s, the information available from the world's many medical databases continued to grow. Wide area networks, the Internet, and the World Wide Web, in addition to the development of translational databases allowed this information to be more efficiently and broadly accessed and exchanged through improved

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[62] Curtice and Glaser, "The Difference Between Interfaced and Integrated Systems," 56-57.
[63] Coltri, "Databases in Health Care" 227; Collen and Ball, *The History of Medical Informatics in the United States*, 214.
[64] Collen, *Computer Medical Databases,* 40.
[65] Connolly and Begg, *Database Systems,* 1152.
[66] Collen and Ball, *The History of Medical Informatics in the United States*, 253.

translation and integration of the different systems.[67] Internet medical databases began to be used during this decade for the creation of Web-based, electronic patient records. Electronic patient records became more common in the 2000s and in the 2010s with the replacement of desktop computers with portable laptops, tablets, and smartphones and the development of linked data and cloud storage.[68] These technological developments improved the efficiency in managing large and expanding databases, as well as led to the inclusion of multimedia data and the development of personal electronic health records.[69]

Privacy and Confidentiality

Protecting the privacy and confidentiality of identifiable health information is the major challenge and concern of eHealth systems. Collen and Ball define privacy as "the individual patient's right to control their personal information held by others" and confidentiality as "the obligation of health professionals and the hospital to safeguard the privacy of information in the medical record."[70] Sahama et al define information privacy as an individual's ability to exercise control over the collection, maintenance, use and disclosure of their personal data held by others, including "names, addresses, date of birth, medical records, bank account details, unique clinical identifies, and biological and/or physiological information of individuals."[71] Data protection for an eHealth system means ensuring that patient's data cannot be accessed by those unauthorized whether intentionally or unintentionally by any means such as reading, copying, altering, falsifying, manipulating, or destroying. The privacy, confidentiality, security and integrity of

[67] Collen, *Computer Medical Databases,* 40.
[68] Cloud computing refers to a group of remote computers, or servers, that are connected through a communication network such as the Internet, local area network (LAN), wide area network (WAN), or the World Wide Web, that are able to run a program or application at the same time. (Collen and Ball, *The History of Medical Informatics in the United States*, 28.)
[69] Collen and Ball, *The History of Medical Informatics in the United States*, 226, 253, 275.
[70] Collen and Ball, *The History of Medical Informatics in the United States*, 231.
[71] Sahama, Simpson, and Lane, "Security and Privacy in eHealth," 249-250.

medical data is required. [72] Database security is the apparatus used to protect the database against intentional or accidental threats such as theft, fraud, vandalism, power loss or surge, fire, and flood.[73] While access by others must be authorized, private and secure access by the patient should be readily available at any healthcare facility or at home. As Tracy Scott argues, patients have "both the right and the responsibility to be accountable and knowledgeable about their medical record."[74]

Archivists need to balance an individual's "need for data security and personal privacy, with the needs of current and future researchers for deep and effective access to rich primary materials."[75] When researchers discovered that large medical databases were useful for collecting data on large numbers of people, a problem of how to maintain patient confidentiality arose. It was soon recognized that in order to protect the identity of patients and to preserve the confidentiality of the data, research restrictions regarding the use of medical databases had to be put into place.[76] For instance, the patient privacy and information security is strictly regulated by the healthcare industry through internal policies and procedures as well as by complying with national and provincial privacy legislation.[77] For example, in Canada, individuals are protected under the *Privacy Act* which protects "the privacy of individuals with respect to personal information about themselves held by a government institution and that provides individuals with a right of access to that information."[78] In Manitoba, the *Personal Health Information Act*

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[72] Collen and Ball, *The History of Medical Informatics in the United States*, 236.
[73] Connolly and Begg, *Database Systems,* 542.
[74] Tracy Scott, "Canadian Health informatics – Why we should share our data" *Access to Knowledge: A Course Journal* 1 (2009), 2.
[75] Laura Carroll, Erika Farr, Peter Hornsby, and Ben Ranker, "A Comprehensive Approach to Born-Digital Archives," *Archivaria* 72 (2011), 76.
[76] Collen and Ball, *The History of Medical Informatics in the United States*, 234.
[77] Hawthorne and Richards, "Personal Health Records," 293.
[78] "Privacy Act," *Government of Canada - Justice Laws Website*, Accessed January 12, 2023: https://laws-lois.justice.gc.ca/eng/acts/P-21/page-1.html#h-397177.

(PHIA), gives individuals the right to access their personal health information, as well as requiring organizations that keep health records to protect the privacy of an individual's health information.[79]

Patients' Rights Movement and eHealth

The patients' rights movement arose out of concerns over "access to medical care, its quality, and its rising cost."[80] The patients' rights movement originated in the United States during civil rights movement in the late 1960s and early 1970s and from the work done by the National Welfare Rights Organization (NWRO) who argued that patient rights were not only an assertion of consumer rights but a special application of human rights in the demand for universal health insurance.[81] The first comprehensive statement of "patient rights" came from the NWRO when it responded to the Joint Commission on Accreditation of Hospitals' (JCAH) – an accreditation organization composed of members from the American Hospital Association (AHA) and the American Medical College of Surgeons – call for "suggestions regarding accreditation standards from a consumer viewpoint."[82] The NWRO drafted a document containing twenty-six demands such as "provisions for such things as grievance procedures, community representation on hospital governing boards, non-discrimination of the basis of source of payment, restrictions on transfers, provisions on privacy and confidentiality, and

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[79] "Health Information Access and Privacy: A Guide to the *Personal Health Information Act*," *Manitoba Ombudsman*, (website) Accessed January 12, 2023: https://www.gov.mb.ca/health/phia/docs/phia_guide.pdf#:~:text=In%20Manitoba%2C%20a%20law%20called%20The%20Personal%20Health,%E2%80%93%20to%20protect%20the%20privacy%20of%20your%20information.
[80] George Annas, *The Rights of Patients: The Basic ACLU Guide to Patient Rights* (Carbondale: Southern Illinois University Press, 1989), 2.
[81] Joseph D'Oronzio, "A Human Right to Health Care Access: Returning to the origins of the Patients' Rights Movement," *Cambridge Quarterly of Healthcare Ethics* 10 (2001), 286.
[82] D'Oronzio, "A Human Right to Health Care Access," 290; "Patients' Rights: I. Origin and Nature of Patients' Rights ." Encyclopedia of Bioethics. . *Encyclopedia.com.* (June 29, 2023). https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/patients-rights-i-origin-and-nature-patientsrights

prompt attention to patients' requests for nursing assistance."[83] These twenty-six demands led to the adoption of a Patients' Bill of Rights in many medical associations such as the AHA and the American Medical Association (AMA), as well as in many states such as, Arizona, California, Illinois, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont between the years of 1972 and 1989.[84] Some of the provisions in these Bills were directed towards issues of informed consent, privacy, confidentiality, and access to medical records.

The patients' rights movement was born to fight against the benign paternalism of doctors. For instance, it was believed that doctors always worked in the best interests of the patient and that doctors, as medical experts, knew better than the patient what was best for them, as patients did not have the knowledge to make complicated medical decisions. Starting in the 1950s, malpractice suits brought about the creation of legislation surrounding the principle of informed consent, in which doctors must inform patients of the risk and benefits of medical care.[85] This helped to "maintain a balance in which decision making is shared and the patient retains the right and responsibility to make the ultimate decisions regarding personal care and medical treatment."[86] Other patients rights have also been specified through court cases and statutes such as the right to "receive copies of one's medical records and to have medical records and other information about one's medical treatment kept confidential."[87] Thus, due to these

[83] "Patients' Rights: I. Origin and Nature of Patients' Rights ."
[84] "Patients' Rights: I. Origin and Nature of Patients' Rights ."
[85] Marc Rodwin, "Patient Accountability and Quality of Care: Lessons from Medical Consumerism and the Patients' Rights, Women's Health, and Disability Rights Movements," *American Journal of Law and Medicine* 20 (1994), 2-3.
[86] Annas, *The Rights of Patients,* 2.
[87] Rodwin, "Patient Accountability and Quality of Care," 3.

lawsuits courts expanded patients' rights with the aim to "protect patients, to provide legal remedies in the case of mistreatment, and to curb the paternalism of the medical profession."[88]

eHealth records and Personal Health Records (PHRs) can help improve patients' rights by allowing greater access to their medical records which improves patients' decision-making abilities as well as their ability to hold doctors, hospitals, and insurers accountable when they make mistakes. This is why it is important for these records to be preserved as without them patients have less information to guide their decisions regarding their health. By using the concepts of affect and radical empathy record managers can make more informed and empathetic decisions based around the effect it has on patients to not have access to their own records, limiting their ability to make decisions and hold health care professionals accountable, and as well as whether patients would want their records available after their death. Due to their sensitive, personal, and confidential nature, medical records are often destroyed by default after the death of the patient. However, they are an important source of information for historians wanting to study medical advancement and disease. There needs to be a greater discussion by archivists, historians, and the public surrounding the preservation of medical records past the life of the patient.

Challenges of Preservation

Archivists are acutely aware that swift and immediate action needs to be taken to ensure the preservation of digital data as digital and magnetic media deteriorates and computer hardware and software becomes obsolete much sooner than paper records. [89] Today, in the age of

[88] Rodwin, "Patient Accountability and Quality of Care," 3.
[89] Roy Rosenzweig, "Scarcity or Abundance?: Preserving the Past in a Digital Era," *American Historical Review* (2003), 742.

digital data, we are experiencing a "data deluge" as "our ability to create data seems to greatly outpace our capacity to manage and make sense of it."[90] Furthermore, the creation of digital data is currently outpacing the storage capacity available to hold it.[91] This means that archivists will be expected to devote more time to appraisal or the thoughtful and methodical selection of data sets fit for long-term preservation. Ciaran Trace states that "computers and computer systems are integral to the accessioning, arrangement, description, storage, and preservation of digital collections," and archivists are designing specialized digital tools for users to utilize to access the increasingly complex digital environments and collections held in archives.[92]

Richard Scott states that archiving digital materials is a matter of data preservation or "safeguarding the information content on any digital resource from the ravages of time, technological change, and decaying media."[93] Mike Kastellec states that "there are two purely technical issues at the core of digital preservation: data loss and technological obsolescence."[94] Data loss is caused by the physical decay of the medium on which the digital data is stored, as well as software bugs, human action, and environmental dangers. Technological obsolescence "occurs when either the hardware or software needed to render a bitstream usable is no longer available."[95] Initially, to preserve digital media archivists would translate digital information onto "hard copies" such as paper or microfilm but this action destroys the "unique functionality

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[90] Dharma Akmon, Ann Zimmerman, Morgan Daniels, and Margaret Hedstrom, "The application of archival concepts to a data-intensive environment: working with scientists to understand data management and preservation needs," *Archival Science* 11 (2011), 329.
[91] Francine Berman, "Got Data? A Guide to Data Preservation in the Information Age," *Communications of the ACM 51* (2008), 51.
[92] Ciaran B Trace, "Beyond the Magic to the Mechanism: Computers, Materiality, and What It Means for Records to Be "Born Digital," *Archivaria* 72 (2011), 8.
[93] Richard E. Scott, "e-Records in health – Preserving our future," *International Journal of Medical Informatics* 76 (2007), 428.
[94] Mike Kastellec, "Practical Limits to the Scope of Digital Preservation," *Information and Technology and Libraries* (2012), 63.
[95] Kastellec, "Practical Limits to the Scope of Digital Preservation," 64.

(such as dynamic interaction, nonlinearity, and integration) and core digital attributes (perfect copying, access, distribution) and sacrifices the original form, which may be of unique historical, contextual, or evidential interest."[96] Another option is to preserve the original computer equipment, hardware, and software to access files and documents created on certain types of equipment. However, original equipment will eventually degrade beyond repair and the variety of electronics currently being produced does not make this method a viable option in the long-term unless the archive wants to create its own computer museum.[97] Preserving original equipment would mean relying more heavily on computer experts and technology specialists, as the older the computer system is the less likely it is to find someone with working knowledge of that system.[98] In addition, many users would not have working knowledge of an older system and would find it difficult to navigate in order to access records.

The two most common options for preserving and providing access to digital materials are format migration and emulation. Format migration happens when archivists identify a digital object that is at-risk for becoming obsolete in its current file format or storage container and transfer its contents to an up-to-date file format that is more stable or into a new storage container.[99] Format migration is described by John Garret as "the periodic transfer of digital materials from one hardware/software configuration to another, or from one generation of computer technology to a subsequent generation."[100] Each time a digital object is format migrated a new record with its own provenance – which includes the provenance of the older

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[96] Rosenzweig, "Scarcity or Abundance?" 746.
[97] Rosenzweig, "Scarcity or Abundance?" 747.
[98] Jordan Roy, "Preserving Interactivity: Towards Next Generation Digital Preservation Philosophy and Systems." Master's Thesis, University of Manitoba, 2019, 4.
[99] Carroll, Farr, Hornsby, and Ranker, "A Comprehensive Approach to Born-Digital Archives," 77.
[100] John Garret. Task Force on Archiving of Digital Information, Commission on Preservation Access, and Research Libraries Group. Preserving Digital Information: Report of the Task Force on Archiving of Digital Information. Washington, D.C.: Commission on Preservation and Access, 1996, iii.

record – is created. Format migration is a viable preservation strategy because it keeps digital objects accessible and no longer reliant on obsolete technology. However, migration can result in a loss of information and functionality of the digital files as the new file format may not be able to transform or support the "full range of significant properties required to preserve the performance of the original."[101] Furthermore, over time further format migrations may be needed and with each migration the record moves further from its original.[102] The format migrated record is different from the original with its own characteristics and metadata and without the original there is no way to ensure that the migrated version is representative of the functionality, interactivity of the original.[103] In addition, format "migration is also unsuited to the preservation of software, or other digital objects which display complex behaviours," such as databases.[104] Because of this, format migration as a preservation method has led archivists into a debate over what 'significant properties,' 'salient features,' or 'essential characteristics' of digital objects need to be saved for digital objects to remain accessible and meaningful, as well as whether content or context is more important to preserve.[105] David Bearman argues that a "complete record is one that retains content, structure, and context," along with the record's accompanying metadata.[106] Therefore, archivists will need to make judgements on a case by case basis to determine which properties are significant to preserve based on an object's content, structure and function, context of creation, future use, and the ability to preserve the object long-term.[107]

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[101] Adrian Brown, *Practical Digital Preservation: a how-to guide for organizations of any size* (London: Facet Publishing, 2013), 209.
[102] Geoffrey Yeo, "'Nothing is the same as something else': significant properties and notions of identity and originality," *Archival Science* 10 (2010), 109.
[103] Roy, "Preserving Interactivity," 55.
[104] Brown, *Practical Digital Preservation,* 212.
[105] Yeo, "'Nothing is the same as something else,'" 87; Carroll, Farr, Hornsby, and Ranker, "A Comprehensive Approach to Born-Digital Archives," 78-79.
[106] David Bearman, "Item level control and electronic recordkeeping," *Archives and Museum Informatics* 10 (1996), 208-209.
[107] Yeo, "'Nothing is the same as something else,'" 100.

Jordan Roy argues in his 2019 master's thesis that "emulation is the best tool that archivists have to maintain the interactivity of a digital record."[108] Roy defines interactivity as "a property of a digital record, where a user's input is integral for its use and comprehension" and is deemed just as important to preserve as the content of the media.[109] Interaction, he argues, is a part of the record and when interactive elements are removed part of the record is lost. He further states that "how people use a technology is just as important as the outcomes from the use of that technology" and that every aspect of the machine, including the mouse, keyboard, screen, graphical interfaces, hypertext, and web browsers, affects the user in some way.[110] Emulation as a preservation strategy requires the use of "software that recreates the functionality of an obsolete technology environment on a modern platform."[111] This method enables archivists to preserve the behaviour, look, and feel of interactive and multimedia digital creations. However, while all records are interactive, not all digital objects will require emulation, as only records with a high degree of user input or participation, such as databases, will need to be emulated to maintain its interactivity.[112] Therefore, while format migration assures a digital object's continuous accessibility regardless of format, software, and hardware, emulation promises to provide authenticity and context to digital materials by replicating obsolete operating systems, applications and software, and hardware on current systems.[113]

Roy describes tools and approaches used by archives to preserve interactive records through emulation. One approach is known as Emulation as a Service which "simplifies emulation by shifting development, access, and implementation to a third party specializing in

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[108] Roy, "Preserving Interactivity," 4.
[109] Roy, "Preserving Interactivity," 11.
[110] Roy, "Preserving Interactivity," 13, 18-19, 60.
[111] Brown, *Practical Digital Preservation,* 212.
[112] Roy, "Preserving Interactivity," 48.
[113] Carroll, Farr, Hornsby, and Ranker, "A Comprehensive Approach to Born-Digital Archives," 78-79.

emulation of digital records."[114] A third party or service provider would maintain a server that would provide the emulated environments for any digital records accessible through a browser.[115] In theory, an archive would download the emulation service software onto the archive's computer infrastructure which would save the archive storage space and processing power. The environments and emulation software are held on the service's main server which is accessed through a browser or user interface. When a user opens a record on the user interface a request is sent to the service which indicates the proper emulation environment required to interact with the record.[116]

The complexity, expense, expertise, and lack of access to original hardware and software limits the ability to create and use emulators. In addition, users may lack the knowledge of how to operate obsolete technologies which makes their use of emulators overly challenging and limiting.[117] Emulation systems can also suffer from obsolescence and new emulators will need to be made to replace outdated emulation systems or even to run the emulator itself.[118] Currently, and despite these limitations, the preservation of digital objects such as games, multimedia content, databases, and other objects with complex behaviours are best met through the use of emulators.[119] Therefore, Carrol et al. state the ideal approach for archives is to "have both migrated data and an emulated system available to research simultaneously" by seeking and finding materials through a text searchable database, and "then exploring relevant files in their native context through emulation."[120]

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[114] Roy, "Preserving Interactivity," 79-80.
[115] Roy, "Preserving Interactivity," 92-93.
[116] Roy, "Preserving Interactivity," 105.
[117] Brown, *Practical Digital Preservation,* 213-213.
[118] Roy, "Preserving Interactivity," 57.
[119] Brown, *Practical Digital Preservation,* 213.
[120] Carroll, Farr, Hornsby, and Ranker, "A Comprehensive Approach to Born-Digital Archives," 85.

In terms of preservation, databases can be complex as they are composed of multiple objects distributed across multiple tables, which will require higher levels of processing to ensure preservation and storage for the long-term, as the risk of failure due to obsolescence is higher. Yeo argues that further innovation of advanced systems are required so that discreet objects and aggregated records can be complied on demand by users and so the different aggregations made by previous users can be saved for future viewing.[121] In regard to eHealth, the "barriers to exemplary recordkeeping of PHRs include lack of data management standards, EHR fragmentation, disparate vendor systems, technology and architectural issues, and the psychological and clinical complexities associated with cross-management of PHRs by physicians, clinics and patients."[122] Because of their nature, the management and preservation of PHRs fall between personal information management (PIM) and institutional records management, with neither side collaborating to develop a satisfactory management and preservation strategy for these records.[123]

Archiving EMRs present significant challenges because of the distributed ownership of health data, the special needs for privacy, authenticity and integrity issues, the diversity of the technical systems and varying types of data, the availability and capabilities of storage media, and the rapid obsolescence of hardware and software.[124] Other challenges to the preservation of EMRs and PHRs include the health industry's inconsistent or non-existent standards that would ensure long-term management, curation, and preservation of health data. This is due to the fact that each healthcare organization has its own "internal governance structures, management

[121] Yeo, "Bringing Things Together," 72-73.
[122] Hawthorne and Richards, "Personal Health Records," 288.
[123] Hawthorne and Richards, "Personal Health Records," 288.
[124] Milton Corn, "Archiving the Phenome: Clinical Records Deserve Long-term Preservation", *Journal of the American Medical Informatics Association* 16 (2009), 4.

practices, and data quality policies and procedures."[125] Another issue is the interoperability between healthcare information systems, as not all organizations use applications that can interface easily with each other in order to deposit and share information, which can result in data loss.[126] The use of many different data types, formats, and archiving systems with differing capabilities drives further fragmentation. One solution is to develop common data structures and open-source programming to enable EMRs to exchange stored data easily between systems according to public standards.[127] To prevent data loss, coherent, defined, and universal data retention policies, guidelines, and strategies for digital preservation need to be implemented across the whole of the healthcare industry.[128]

Kieffer et al state that "little attention is given to the implications of digitizing health data and storing them over long periods as required by regulations or by life-long electronic health records."[129] For instance, storage of eHealth records for long periods of time will demand the use of a storage system that is able to archive information separate from the records used on a more daily basis. Furthermore, archiving electronic data is technically demanding as each year sees exponential increases in the number of bytes of data that is created. Milton Corn stated in 2009 that "archiving clinical information as a national goal has not received much attention" as archival literature has published relatively little regarding the preservation of EMRs.[130] Scott stated in 2007 that there were no "internationally accepted digital preservation formats, standards, or strategies to preserve health related data for protracted periods and broad awareness

[125] Hawthorne and Richards, "Personal Health Records," 289-290.
[126] Scott, "Canadian Health Informatics," 8.
[127] Hawthorne and Richards, "Personal Health Records," 291-292.
[128] Hawthorne and Richards, "Personal Health Records," 292; Corn, "Archiving the Phenome," 1.
[129] S. Kiefer, M. Schafer, and J Rauch, "Workflow studies in health technology and informatics" MIE (2012), 265.
[130] Corn, "Archiving the Phenome," 2-5.

of this critical issue remains poor."[131] While awareness of this issue is currently rising and there are increasing efforts to improve and implement EMRs and PHRs at the provincial and federal level, there is still a gap in the archival literature regarding strategies for preserving eHealth records for the long-term.

Conclusion

This chapter used the example of electronic health records to examine how case files are currently managed. Electronic patient records (EPR), electronic medical records (EMR), and electronic health records (EHR) use computer-based information systems and communication technologies to gather, store, share, retrieve, display, and dispose of a patient's health information/data. A personal health record (PHR) is an EMR that is maintained, managed, controlled, and shared by the patient in combination with their health care providers. Case files like EMRs are stored in databases in the digital realm. Databases are a collection of linked data that is structured and maintained in such a way as to facilitate the efficient storage, modification, query, and retrieval of information. By using queries to search a database, case files can be dynamically assembled for the user by pulling together data that formerly would have made up a case file in the paper realm, but which now exists as individual items in the digital. The case file no longer exists as a discrete object within the database but rather is assembled based upon the user's search criteria.

Protecting the privacy and confidentiality of identifiable health information in eHealth systems is a major concern and challenge for record managers and archivists. This means allowing patients to control the collection, maintenance, use and disclosure of their personal data

[131] Scott, "e-Records in health," 430.

held by others, as well as ensuring that patient data cannot be accessed by those unauthorized whether intentionally or unintentionally by any means such as reading, copying, altering, falsifying, manipulating, or destroying. eHealth databases must also be protected against theft, fraud, vandalism, power loss or surge, fire, and flood. To protect patient privacy and ensure that information is confidential and secure the healthcare industry is strictly regulated through internal policies and procedures as well as by complying with national and provincial privacy legislation.

Archivists face many challenges when preserving complex databases like the ones associated with eHealth records. Like all digital records, databases are susceptible to data loss caused by the physical decay of the storage medium or software bugs, human action, and environmental dangers and to technological obsolescence or the unavailability of the hardware or software needed to render digital objects. Databases are difficult to preserve because they are complex digital systems, composed of multiple objects distributed across multiple tables, requiring higher levels of processing to ensure preservation and storage for the long-term, as the risk of failure due to obsolescence is higher. Archiving EMRs present significant challenges because of the distributed ownership of health data, issues of ensuring data privacy, authenticity and integrity, lack of interoperability due to the diversity of the technical systems and varying types of data, the health industry's inconsistent or non-existent standards regarding data preservation, the availability and capabilities of storage media, and the rapid obsolescence of hardware and software. Despite these challenges, the best preservation tool that archivists have to maintain the interactivity of a complex digital record like an eHealth database is emulation. Emulation preserves the behaviour, look, and feel of interactive and multimedia digital creations by using software to recreate the "functionality of an obsolete technology environment on a

modern platform."[132] However, while awareness of the issue of preserving electronic health data has started to increase, especially amongst record managers, there continues to be a gap in the archival literature regarding strategies for preserving eHealth records for the long-term. If archivists do not start to seriously consider the implications for failing to preserve eHealth records and start developing strategies to do so, I fear that much digital health information may be lost for good.

[132] Brown, *Practical Digital Preservation,* 212.

Chapter Three: Current Innovations

This chapter discusses theories and current innovations that demonstrate how case files could be managed going forward using third order systems and concepts such as affect, radical empathy, and imagined records. To do this, I examine the National Centre for Truth and Reconciliation archives and their development of "virtual case files". I explore how and why the NCTR wants to create these virtual case files, as well as how the NCTR thinks differently in terms of access and ethical use of materials for research. This chapter discusses the development of third order archival interface systems to allow users to easily arrange archival digital records into as many different aggregations as required by the needs of the user.[1] The NCTR's virtual case files are not only an example of a third-order system but also what it looks like when an archive places Survivors at the center of all archival work including appraisal, arrangement, description, and access.

Third Order Systems

Geoffrey Yeo argues that new archival practices are needed in a world that is "no longer constrained by traditional assumptions about stable aggregations and hierarchical systems", as "users can now make orders of their own choosing and construct their own aggregations as they wish."[2] In the paper world, the arrangement of collections into tree-like hierarchies with the use of fonds, series, files, and items, has been set before the user arrives in the reading room. Paper environments are limited to a single ordering in which physical objects can only be accessed in one sequence at a time.[3] This arrangement of physical items such as books, documents, or

[1] Victoria Lemieux, "Toward a 'Third Order' Archival Interface: Research Notes on Some Theoretical and Practical Implications of Visual Explorations in the Canadian Context of Financial Electronic Records," *Archivaria* 78 (2014), 54.
[2] Yeo, "Bringing Things Together: Aggregate Records in a Digital Age." *Archivaria* 74 (2012), 44-45.
[3] Yeo, "Bringing Things Together," 56-57.

photographs into one place and into one order is what David Weinberger has termed the "first order of order." He explains that "second order of order" systems are "the ordering of physical pointers to the physical objects."[4] Examples of second order systems include card catalogues or indexes that provide some information about the first order objects separately and point to the physical place where the first-order object is being stored. Second order systems allow archivists to alternatively organize information by title or subject or author, but this is only possible if the information about the physical first order items is very limited. Because second order of order is information about information it can also be understood as metadata.[5]

There are problems, however, with the first two orders of order. First, these orders of order arrange atoms, or physical objects taking up a certain amount of physical space, which means that these "things made of atoms can be in only one spot at a time."[6] Thus, since the first order of order requires archivists to pick one way of arranging the objects, it is likely that every need of every user will not be met. Furthermore, the second order of order has inherent limitations in that the small size of the catalogue cards limits the information that can be included about the physical objects.[7] This means that archivists or librarians have to choose what to include on the cards and what they think is important may not be helpful for all users who are searching for a particular object. In addition, like the physical ordering of objects, the physical ordering of paper-based second order systems like indexes or card catalogues are also held hostage by the physicality of the pointer, as well as the work required to maintain the system.[8]

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[4] Greg Bak, "Continuous Classification: capturing dynamic relationships among information resources," *Archival Science* 12 (2012), 304.
[5] David Weinberger, *Everything is Miscellaneous: The power of the New Digital Disorder* (New York: Henry Holt and Company, LLC, 2007), 17-21, 174.
[6] Weinberger, *Everything is Miscellaneous,* 19.
[7] Weinberger, *Everything is Miscellaneous,* 19, 174.
[8] Bak, "Continuous Classification," 304.

Furthermore, access to second order information can be limited to those with certain expertise as the information is found in many ledgers and catalogues and may be incomplete.[9] Lastly, politicization or biases occur in the classification or arrangement of the first two orders of order as the manner in which they can be accessed is limited.[10] Through the creation, implementation, and maintenance of the classification system, records managers and archivists are empowered to become the information gatekeepers who determine how archival materials are classified and the points of access for each record.[11] Therefore, as Weinberger argues, "the physical limitations on how we have organized information have not only limited our visions, but they have also given the people who control the organization of information more power than those who create information."[12]

Digital technologies represent a new order of order as it opens new possibilities for how information can be classified and organized that is not restricted by physical space.[13] In the "third order of order," both the content and the metadata are digital which allows any set of content to be brought next to any other through relationships created by users and/or creators.[14] In the third order, value is determined by the records' relationships to each other and not on a unchanging, fixed, and predetermined classification structure that was imposed upon them.[15] As Weinberger explains, the power of the third order system comes directly from the fact that in the third order "everything is connected and therefore everything is metadata."[16] In addition, since "computers store information in ways that have nothing to do with how we want it presented to us, we are

[9] Weinberger, *Everything is Miscellaneous,* 20.
[10] Bak, "Continuous Classification," 305.
[11] Bak, "Continuous Classification," 305.
[12] Weinberger, *Everything is Miscellaneous,* 89.
[13] Bak, "Continuous Classification," 305.
[14] Weinberger, *Everything is Miscellaneous,* 171.
[15] Bak, "Continuous Classification," 305.
[16] Weinberger, *Everything is Miscellaneous,* 105.

freed from having to organize the original information the way we eventually want to get at it."[17] Furthermore, an understanding of the inner organization of a computer is unnecessary because the preferred order of use is not dependent upon that inner order.[18] Thus, the third order of order enables the arrangement of objects into an infinite number of desired sequences, allowing users to control, select, and construct their own orderings, collections, and narratives. Users can repurpose or reuse content in whatever way they wish, allowing them to break free of the "limitations imposed by analog systems."[19]

Australian archivist Peter Scott's notion of multiple provenance – a complete list of all the entities, and the relationships between them, that were in some way involved in the creation, maintenance, and use of records in a series – provides a foundation for the creation of third order systems in archives.[20] Since multiple representations and aggregations of records are accepted as a norm in a third order system archivists no will longer need to identify a single 'best' ordering and instead overlapping conceptual series and fonds can be realized as archivists and users will be able to construct aggregations on demand.[21] Furthermore, third-order systems would enable users to "juxtapose one item with others previously unconnected to it" and to "form and reform temporary collections that may sometimes cross the boundaries of provenance", which would "enhance user experiences and provide scope for innovative modes of research and intellectual discovery."[22]

It is also important, however, that the context and provenance of each item that a user

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[17] Weinberger, *Everything is Miscellaneous,* 99.
[18] Weinberger, *Everything is Miscellaneous,* 100.
[19] Yeo, "Bringing Things Together," 58.
[20] Bak, "Continuous Classification," 306-307.
[21] Yeo, "Bringing Things Together," 64-65.
[22] Yeo, "Bringing Things Together," 70.

aggregates into a collection are presented and preserved.[23] For instance, knowing how records were organized historically can be achieved by combining "linear descriptions reflecting a past or present physical arrangement with interactive features that offer the openness and flexibility of the third order."[24] However, as Lemieux states, in the creation of third order systems there is often a trade off between parsimoniousness – the ability to create a model that represents the records "in such a way that relevant details about particular instances are not lost, yet not providing so much detail as to lose sight of the essence of the domain of interest" and expressiveness – "the inclusion of enough detail in the model to fully represent a domain of interest without reductionism."[25] Lemieux states that network graphs – a collection of nodes and links tied together by relationships – and other visual images are typically utilized to visualize/represent the relationships between items in third-order systems. Images or graphs enables users to remember, compare, and find patterns in data faster as the "image acts as a repository of data that relieves the user's 'working memory' from having to remember the features of an entire data set."[26] Furthermore, Lemieux argues that interactive visual interfaces provide rich contextual information about a domain space as it "permits the user to view that domain space from a traditional hierarchical perspective, a networked perspective, or possibly to reconfigure the records into a multiverse of representational forms or visual metaphors in order to support visual exploration."[27] Thus, systems and interfaces that are robust, scalable, and user-friendly with enough computing power to support the inputs and outputs of the system will be required to allow "archival resources to be presented in many different ways, reflecting their

[23] Yeo, "Bringing Things Together," 75.
[24] Yeo, "Bringing Things Together," 77.
[25] Lemieux, "Toward a 'Third Order' Archival Interface," 62.
[26] Lemieux, "Toward a 'Third Order' Archival Interface," 81.
[27] Lemieux, "Toward a 'Third Order' Archival Interface," 82, 89.

various 'original' orders, different interpretations of context, and other orders newly desired by users."[28]

To allow for efficient identification and retrieval of data and to prevent the loss of context, rich metadata will be required for a third-order system to be effective.[29] As Bak explains, "metadata is created through the actual use of a record: through its viewing, for example, or through cross-references and citations within other records."[30] This user-generated metadata accumulates at the level of the individual item and reveals meaningful patterns of use and relationships between records. Additionally, item-level management is required in digital preservation to identify format, size, location, and information structure of every digital object, as well as demonstrating the integrity and authenticity of each individual object. Thus, in order to integrate the management of technical, preservation, and archival descriptive metadata, a new generation of metadata management tools will need to be developed.[31]

Implementing third order systems into archives would mean that records and their corresponding metadata were "managed and maintained at the item level," allowing records to be "compiled into temporary aggregations in response to user queries."[32] Just as in the paper realm, explanations of the appraisal criteria used to determine which digital records were selected for preservation and how they were classified and ordered should be kept to better identify the specific records that were retained. Item-level management and the accumulation of user-generated metadata would create a deeper and broader insight into the use of records and how they can be repurposed, which would allow archives to produce more sophisticated, accurate,

[28] Yeo, "Bringing Things Together," 79, 85.
[29] Yeo, "Bringing Things Together," 84.
[30] Bak, "Continuous Classification," 309.
[31] Bak, "Continuous Classification," 309-312.
[32] Bak, "Continuous Classification," 313.

and user-friendly systems to improve the discovery and use of archival records through the use of full-text searching or the manipulation of metadata.[33] Therefore, third-order archival interfaces as described by Lemieux, Yeo, Bak, and Weinberger would improve user access to archival materials and allow archives to better display the notion of multiple provenance and the relationships between the records and record creators.

NCTR and Virtual Case Files

Archives, like the National Centre for Truth and Reconciliation (NCTR), which hold archival materials that "document the abuses, neglect, systemic racism, and other atrocities that occurred as part of the residential school system" are "often directly linked to colonial violence and trauma" and "can be deeply personal spaces of emotion."[34] For example, as Krista McCraken and Skylee-Storm Hogan explain, the violence, hatred, and racism that is part of government-sanctioned colonialism is evident in residential school records, even though they may not contain specific details of exact occurrences of abuse, the derogatory language used clearly demonstrates the colonial perspectives and general disregard for Indigenous life. Furthermore, there is often a disparity between the perception of lived experience described in a government or church record and the actual lives and experiences of the students and the marginalized communities impacted by residential schools. McCracken and Hogan argue that "archivists have a responsibility to acknowledge and address the symbolic violence in archival records and to challenge the social inequalities reinforced by archival practice," and to move

[33] Bak, "Continuous Classification," 313-314.
[34] Krista McCracken and Skylee-Storm Hogan. "Residential School Community Archives: Spaces of Trauma and Community Healing," in "Radical Empathy in Archival Practice," eds. Elvia ArroyoRamírez, Jasmine Jones, Shannon O'Neill, and Holly Smith. Special issue*, Journal of Critical Library and Information Studies 3*, 2 (2021), 6, 14.

away from colonial definitions of archival and intrinsic value.[35] One way this can be achieved is by placing Survivors at the center of the archival endeavour and by allowing communities to have input on decisions regarding archival management, use, and access of residential school records which transforms the archive into spaces of remembrance, healing, education, and truth.[36] I use the NCTR as an example of an archive that uses Survivor-centered approaches and community involvement to decolonize the archive, to work towards reconciliation, and to create a space that serves the needs of Survivors and their families. I also argue that the NCTR uses concepts such as radical empathy, affect, and imagined records – although they do not directly reference these concepts when framing their work – to better serve Survivors and Indigenous communities.

In 2007, the Indian Residential Schools Settlement Agreement (IRSSA) was established in an agreement between residential school Survivors, the Assembly of First Nations and Inuit representatives, the federal government, and the church bodies that operated the schools, to "provide compensation for damage inflicted by the Residential School system," to "support healing initiatives for Residential School Survivors across Canada" and to create the Truth and Reconciliation Commission (TRC) of Canada in 2008.[37] The TRC gathered and chronicled Residential School history in Canada, using this material to further reconciliation efforts and improve accountability for the violation of Survivors' Indigenous, civil, and human rights, by allowing Survivors and communities to share the truth about their experiences in the residential school system, as well as teaching the general public about Residential Schools. The TRC was also charged with writing comprehensive report on the operation of the Residential School

[35] McCracken and Hogan, "Residential School Community Archives," 6-11.
[36] McCracken and Hogan, "Residential School Community Archives," 11, 14; Caswell, "Toward a survivor-centered approach to records documenting human rights abuse," 307-322.
[37] McCracken and Hogan. "Residential School Community Archives," 3-5.

system in Canada. Before the TRC's mandate ended, the University of Manitoba and the TRC worked together to create an agreement that established the National Centre for Truth and Reconciliation (NCTR).[38] The NCTR's mandate is outlined in Schedule "N" of the IRSSA, which states that a research centre shall be established to "archive all such documents, materials, and transcripts or recordings of statements received" by the TRC during the completion of its mandate and these records would be made available to the Survivors of residential schools and their families and communities. Additionally, access would be granted to educators, researchers, and members of the public.[39] In short, the NCTR, which opened its doors in 2015, is an Indigenous guided resource centre that is responsible for preserving and making available the records collected by the TRC for the "purposes of research, healing, education, and reconciliation."[40]

The senior archivist at the NCTR, Jessie Boiteau, states that it is "important to continue the work of the TRC to ensure that those who were not ready to tell their story at that time now have a safe space to do so."[41] The NCTR is also furthering the work of the TRC by continuing to acquire new records from government, church groups, and private donors in order to document the history and legacy of the residential school system in Canada. The NCTR is guided by TRC's Calls to Action 65, 71, 72, 77, and 78,[42] as well as the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP)[43] and the United Nations Joinet-Orentlicher Principles. These

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[38] "About," *National Centre for Truth and Reconciliation*, (website) accessed April 29, 2022: https://nctr.ca/about/.
[39] "Schedule 'N': Mandate for the Truth and Reconciliation Commission," *Residential Schools Settlement*, https://www.residentialschoolsettlement.ca/settlement.html, (website) accessed April 29, 2022, pg. 2, 11.
[40] Raymond Frogner, interview by Brynne Martin, April 18, 2022.
[41] Jessie Boiteau, interview by Brynne Martin, April 11, 2022.
[42] The TRC's Calls to Action can be found on the NCTR's website under Reports: https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf.
[43] UNDRIP: https://www-un-org.uml.idm.oclc.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.

help the NCTR to responsibly "preserve the record of Canada's human rights violations and ensure that such violations can never happen again," as well as to honour and steward the truths of the Survivors of residential schools.[44]

There are several ways in which the NCTR is different from traditional understandings of archives. First, the NCTR is unique because it is one of the few Indigenous guided resource centres in the country that pulls together all the documentation of the history of the residential school system in Canada into one place. As Raymond Frogner, who is head of the NCTR archives, states, "up until now, there has never been one resource space where one could turn to for the research" as "it was scattered across various public and private archives."[45] Furthermore, according to Frogner, the gem of the collection is the "over seven thousand interviews and Survivor statements that document, from the perspective of Indigenous communities, the experience and legacy of residential schools."[46] Secondly, the NCTR views ownership of records differently in that the archive views the ownership of the records in its possession as still residing with the creator or donor of the records, excluding church and government agencies. Creators or donors are then at any time able to make changes to their access restrictions on their records, as well as take their records back or have them destroyed. Another key difference is that the NCTR is primarily a digital archive with 99% of its holdings as digital records. While this presents a number of digital preservation and storage challenges due to the sheer volume of data within the NCTR's possession, the item level descriptions of the records create opportunities to more creatively arrange, describe, and make available the records to better serve survivors,

[44] "Our Mandate," *National Centre for Truth and Reconciliation*, (website) accessed April 29, 2022: https://nctr.ca/about/about-the-nctr/our-mandate/.
[45] Frogner, interview.
[46] Frogner, interview.

communities, and researchers.[47]

Another difference between the NCTR and traditional archives is its understanding of access and use of records. The NCTR's access policy outlines the different levels of access provided and the different procedures that are followed depending on who is making the request. For instance, a Survivor or family member is granted a different level in priority of access compared to someone from the media or academia.[48] The Survivor inquiry process recognizes that working with Survivors and their records is the first priority of the NCTR, and the workflow that is followed throughout the reference inquiry from start to finish creates a case file about a particular student, pulling together relevant Survivor statements, federal government records and church records. Currently, when a Survivor or relative contacts the NCTR with the name of a student, a case file is opened, and an archivist is assigned to go through all the records in the NCTR's internal database to identify all relevant records related to that student and create a set of records that document that child's attendance or experiences at school. This package is then reviewed by the NCTR's Access and Privacy Office who proactively release the records and redact them for ideas of harm, sensitive information about individuals, and names of perpetrators. The entire package is then mailed out to the person who made the reference request.[49] The case file that is created documents both the correspondence between the archivist and the inquirer, as well as all the relevant documents about the student all in one convenient package. This case file is then kept together for future reference and will be continuously added to over time as more records are found.[50]

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[47] Boiteau, interview.
[48] Boiteau, interview.
[49] Frogner, interview.
[50] Boiteau, interview.

The NCTR's access policies are also unique because of its creation of an Academic Access Committee which ensures the archive's records are consulted in a respectful and ethical manner and is "designed to basically reset the relationship between the academy and Indigenous communities."[51] Presently, Indigenous communities are suspicious of studies conducted by academic researchers based on past experiences in which communities were exploited or misrepresented in research. For example, as Brian Schnarch states in his article, "Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities," that when it came to research done in the past about Indigenous peoples, there was no consultation with Indigenous peoples "about what information should be collected, who should gather that information, who should maintain it, and who should have access to it."[52] Furthermore, quite often the information that was gathered was not relevant to the questions, needs, priorities or concerns of Indigenous communities. This is why the principles of ownership, control, access, and possession (OCAP) were created to be applied to future research about Indigenous peoples. OCAP seeks to ensure that Indigenous communities have collective ownership over information, that they have control over all aspects of research and how the information is managed, that they have access to information about themselves and can control

[51] Frogner, "The train from Dunvegan," 22; Frogner, interview.

[52] Other complaints about past research methods include: governments gathering data on First Nations without their knowledge or consent, researchers treating First Nations as merely a source of data or informants without acknowledging their contributions, health risks were not fully explained, inadequate language was used to fully explain risks or to gain fully informed consent, disrespect of First Nations' religious, spiritual or cultural beliefs, disregard of cultural taboos and secrecy by publicising sensitive cultural information, presenting cultural information out of context or drawing inaccurate conclusions, removing of human remains and other cultural property from the community to display in museums, information made available by researchers is later distorted, appropriated, and treated as a commodity, research is sensationalizing problems and portraying First Nations as poor, sick, dependent, violent, and child-like. (Brian Schnarch, "Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities." *International Journal of Indigenous Health* 1, no. 1 (2004): 81-83.)

access to that information, and that they have possession of the information to protect it from misuse. Additionally, as Schnarch argues, existing research ethics guidelines and the Research Ethics Boards (REB) that apply them can sometimes provide a false sense of security in that they do not always adequately address the research issues of First Nations, Inuit, or Métis peoples, and generally do not have Indigenous participation or mandates. [53]Another problem is that archives have been undervalued by the academy. For instance, researchers are often unaware that Tri-Council Policy Statement (TCPS2) allows for the secondary use of research by the initial researcher or others, despite that fact that it explicitly states that "REBs should not automatically impose a requirement that researchers destroy the research data."[54] However, the TCPS2 does not offer guidance on how to deposit research data into archives even though archives are the most logical place to ensure that research data can be discovered and accessed by other researchers. Furthermore, TCPS2 only references national, provincial, or municipal archives, and not archives of postsecondary institutions, community archives, and Indigenous archives, which would also be logical and appropriates places for the preservation of research data.[55] In addition, chapter two of the TCPS2 states that researchers do not need to have REB approval if it is done by using archival records, including primary documents and the secondary use of research data. According to Frogner, this is "tremendous hole because archival records can hold very sensitive information in the same way that an oral interview can."[56] Thus, to fill that void, the NCTR created an Academic Access Committee that includes five Indigenous representatives from across the country.[57]

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[53] Schnarch, "Ownership, control, access, and possession (OCAP) or self-determination applied to research," 80-84.
[54] Esyllt W. Jones, Shelley Sweeney, Ian Milligan, Greg Bak, and Jo-Anne McCutcheon. "Remembering is a form of honouring: preserving the COVID-19 archival record." *Facets* 6, no. 1 (2021), 556-557.
[55] Jones, Sweeney, Milligan, Bak, and McCutcheon, "Remembering is a form of honouring," 556-558.
[56] Frogner, interview.
[57] Frogner, interview.

The NCTR's Survivor's Circle, a select group of seven Indigenous Residential School Survivors, representative of gender, culture, and region, must give assent to all Access Committee decisions.[58] If an academic wishes to use NCTR's records for "an extended research project, a book, dissertation, or thesis, they will have to fill out an application form which asks several questions, such as: How will you prioritize the values of communities that you are studying? Will you be using Indigenous languages? Are you consulting with Elders, Knowledge Keepers, or any other cultural authorities of those communities? Do you agree to share your research in its final draft with those communities? And can you describe how your research is a benefit and not somehow harmful to the community?"[59] Thus, the Academic Access Committee seeks to encourage "research methodologies that prioritize Indigenous local knowledge over general academic perspectives on research."[60] The NCTR Access Committee guarantees privacy will be upheld throughout the research and the research will benefit Indigenous communities by promoting consultation with Indigenous communities.[61] Therefore, "a successful NCTR research project must address local community knowledge in a meaningful way" and "it should be aware and informed of an Indigenous methodology and answer to community concerns."[62]

Since the NCTR is guided by the TRC Calls to Action, UNDRIP and United Nations Joinet-Orentlicher Principles, the NCTR and its archivists are "forcefully aware that we need to be guided by Indigenous communities, that we are an Indigenous research centre, and our priorities are the priorities of the Survivors and their relations."[63] Furthermore, the main goal of the NCTR is to focus on the rights of children and to find the Indigenous voices within the highly

[58] Frogner, "The train from Dunvegan," 22.
[59] Frogner, interview.
[60] Frogner, interview.
[61] Frogner, "The train from Dunvegan," 22.
[62] Frogner, "The train from Dunvegan," 22.
[63] Frogner, interview.

bureaucratic, administrative records that document both the routine functions of schools, as well as the systemically racist program designed to remove the children's Indigenous identities and destroy Indigenous communities.[64] The NCTR's focus on the finding the voices of children in the residential school records puts into practice Caswell's and Cifor's affective relationship between the archivist and the record's subject, in which they state that archivists have "an affective responsibility to empathize with the subjects of the records" by aiming to recover and reassert their voices within the records and by considering their perspectives when making archival decisions.[65] Thus, the NCTR brings Indigenous perspectives into the records themselves by looking not just at who created the record, but who are the subjects of the record and who actively played a part in the development of those records.[66]

This mission to prioritize Indigenous voices in the records is further demonstrated by the NCTR's understanding and use of authority records. Boiteau explains that traditional archival authority records list the original creator of the records, such as a government, school, convent, or individual.[67] By identifying the creator of the records, archivists can better understand the "archival context of creation, the use, and the custodial history" of the records.[68] However, today archivists understand records to be multi-provenancial or to be overlapping in authorities as the provenance of the record belongs to both the creator and to the subjects of the records. Furthermore, as Frogner explains, a record is shaped over time through the "course of making,

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[64] Frogner, interview.
[65] Michelle Caswell and Marika Cifor, "From Human Rights to Feminist Ethics: Radical Empathy in the Archives," *Archivaria* 81 (2016), 36.
[66] Boiteau, interview.
[67] Melissa Martin "Connecting with Context, Compassion: Archivists, Elder at National Center for Truth and Reconciliation Work to Empower Long-Suffering Indigenous Communities with Carefully Preserved, Painful Evidence of Their Trauma's Origins," *Winnipeg Free Press*, September 29, 2021, https://www.winnipegfreepress.com/special/trc/connecting-with-context-compassion-575420892.html.
[68] Frogner, interview.

using, and sharing these records, they pass through many hands and influence many destinies."[69] At the NCTR, "all records are described under the authority of the community" or individual that is "represented in the records."[70] Boiteau argues that the individuals who are written about in the records are not just the record's passive subjects but should be viewed as active participants, who have some authority over these records. By viewing record subjects this way, agency is given back to the students.[71] Thus, by linking a record to the authority records of students or communities who are represented within the record, the NCTR is "looking beyond who created the record in the first place and seeing what impact that record had on an individual level, on a familial level, and on a community level."[72]

Currently, there are authority records for individuals already available in the NCTR's public AtoM database which were developed on a case-by-case basis in consultation with individuals like the TRC Commissioners and other Survivors who gave witness statements during the Individual Assessment Process (IAP) process. The NCTR worked with these individuals to help them write their own bios that would be included in their authority record.[73] Other authority records already held by the NCTR are the so called "narratives" that were created by the federal government, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), and Justice Canada, which provide a detailed breakdown of the history and chronology of the 129 residential schools recognized by the IRSSA.[74] The NCTR is now in the process of developing community narratives or community authority records that would describe

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[69] Frogner, interview.
[70] Martin, "Connecting with Context, Compassion."
[71] Martin, "Connecting with Context, Compassion."; Boiteau, interview.
[72] Boiteau, interview.
[73] Boiteau, interview.
[74] Frogner, interview; National Centre for Truth and Reconciliation, "Item NAR-NCTR-017-Ahousaht Residential School" (website) accessed May 7, 2023: https://archives.nctr.ca/NAR-NCTR-017.

the history of the schools from the perspective of communities. These community narratives will be linked to the government created narratives to provide users with better insights into the impacts and legacies of the residential school system.[75]

The NCTR is further expanding this multi-provenancial understanding of records through the creation of "virtual case files." However, as Frogner explains, calling this concept a case file is offensive as case files are strongly associated with the bureaucracy of modern government. For instance, Frogner states that "for if the case file is the documentary embodiment of the modernist project, then the predetermined cultural erasure and social engineering of the Canadian residential school system is modernism's most complete, thorough, and enveloping public programme."[76] This harkens to the reality that case files are often created when a government sets out to surveil or control the lives of individuals, and in the case of Indigenous peoples, often in a negative or harmful way as demonstrated by residential schools and Alberta's eugenics program. While Frogner suggests that they should be called aggregations instead, he still continues to use the term "case file" because it is an easier concept to understand. However, the virtual case file concept at the NCTR is still in its early stages of development, as the staff are working on completing other projects such as the aggregation of the TRC names database and unmarked burials research which would feed into the creation of the authority records and case files. The NCTR would also need to get significant funding, knowledgeable IT staff to develop a linked data protocol and an open-source app for linking data, and a dedicated team that would

[75] Boiteau, interview; This approach is similar to the integrated metadata scheme that Mukurtu's Plateau Peoples' Web Portal utilizes which allows for Indigenous knowledge to be viewed along side institutional and academic knowledge through the use of "tribal catalogue record" or "tribal knowledge" tabs, which "highlights the layered history for each piece of content, linking histories of collection and colonization with those of survival and adaptation and thus expanding both the historical record and the range of expert voices online." (Kimberly Christen, "Opening Archives: Respectful Repatriation," *The American Archivist* 74 (2011), 201-206.)
[76] Frogner, "The train from Dunvegan," 5.

devote full-time energy to the creation of these case files in order to make it successful.

These case files will consist of all the documentation relating to individuals who attended Indian residential schools. The NCTR will create an authority record for each student within its digital database which will be linked all the records pertaining to that student while they were at school along with their Survivor statement.[77] By doing this, the NCTR is finding and bringing student voices to the forefront in the records by making them the first point of entry into the primarily bureaucratic and administrative records. By focusing on the students' perspectives, the systemic racism that is documented in these records comes out more clearly. To do this, the NCTR is using the names list that was given to them by the TRC. Frogner explains that "when the TRC was pulling together records, they 'scraped' or 'removed' the names of students, teachers, and administrators off every document as they collected them."[78] However, a new entry was created each time for every name, which resulted in a prodigious amount of duplication, as one individual could have 100 different entries on the names list. This created a database of about 11.2 million entries. NCTR is now using different parameters such as date range, spelling, language, and location as filters to create clusters of names within the database.[79] "We are doing data wrangling," explains Boiteau, "to create as many clusters as we can and then, with a certain degree of certainty, we can amalgamate those names into one single authority record" within our AtoM database and link it to all the records relating to that student.[80] These linked authority records are facilitated by the item level descriptions of records held by the NCTR, which traditional archives would not normally have access to in such abundance. Therefore, the basis of the "virtual case file" concept is the creation and implementation of these linked authority

[77] Boiteau, interview.
[78] Frogner, interview.
[79] Boiteau, interview.
[80] Boiteau, interview.

records of individual students.

Frogner explains that, by giving priority to the voices of Indigenous children over school operators and administrators, these virtual case files manage records from a decolonizing approach. He further states that "it would be the very first time in a public archive that the records were sorted and prioritized based on the identity of students rather than on other interests that were more colonial," such as the "operations of the schools, by the concerns of the religious orders, or by different offices of government."[81] The virtual case files will also improve the Survivor inquiry process, as archivists would have access to all the linked data relating to one student's authority record within the NCTR's internal database. It will accelerate the process of searching for records as the majority of the records would already be linked to that student. Of course, a case file will never be complete as there are always more records to be found and acquired as more research is done and more Survivors come forward with their oral histories. The Survivor inquiry process will be further improved because it will empower individuals to do their own research as they could access the NCTR's public facing database to peruse the online records independently and make decisions regarding the content of the records to determine which ones they want to focus on. Thus, instead of a comprehensive package that consists of every record possible, the package that is sent out can be more nuanced and focussed on the issues that the inquirer wants to know about.[82]

Another way to improve virtual case files is through encouraging the engagement of communities in describing archival records, particularly photographs. McCraken and Hogan explain that "photographs preserved in archives are deeply connected to concepts of evidence,

[81] Frogner, interview.
[82] Frogner, interview.

power, and silence" particularly when in "archives representing historical trauma, human rights, and marginalized communities."[83] Furthermore, how the photograph is named, described, displayed, preserved, and archived can drastically change the connotation of the photograph and shape the understanding of the image's depicted events.[84] Through participatory description programs, the NCTR allows Indigenous communities to describe and identify individuals in photographs, which enables survivors to "write personal experiences back into the historical record" and "begins a process of individualizing the historical record and eliminating the erasure enacted through past archival and government approaches to recordkeeping."[85] This also allows the NCTR to juxtapose original descriptions with new community descriptions to demonstrate how the records were understood in the past and how they are understood by communities today.[86] This act of naming further ensures that more records would be linked to individual students which would improve the discoverability of individual students' records. Therefore, by having all the records linked to individuals and then linking individuals to communities, the virtual case file creates new and improved avenues for Survivors, communities, and researchers to find records that are of concern to them.[87] In this way, the NCTR's virtual case files are an example of a third order system.

The additional layer of access and discoverability created by the virtual case files brings with it the risk of disclosing personal or sensitive data about individuals, as well as making available traumatic, triggering or harmful records. Through the NCTR Act, the NCTR has been explicitly placed under Manitoba Freedom of Information and Protection of Privacy Act (FIPPA)

[83] McCracken and Hogan, "Residential School Community Archives," 10.
[84] McCracken and Hogan, "Residential School Community Archives," 10.
[85] McCracken and Hogan, "Residential School Community Archives," 10-11.
[86] Frogner, interview.
[87] Boiteau, interview.

legislation and has to be responsive to concerns over the release of sensitive information that could cause potential harm. All records held by the NCTR must be proactively released and are reviewed by the NCTR's Access and Privacy Office who are guided by the provincial legislation.[88] Furthermore, IRSSA prohibits the NCTR from revealing the identities of perpetrators, unless the perpetrator has been convicted in a court of law.[89] In addition, the NCTR needs to be careful not to release records that might be offensive based on the social protocols of communities. It is important that the NCTR builds relationships with requesters and communities doing research in order to determine what is appropriate and not appropriate to release and to gain an individual's or community's consent to release certain information.[90] Daniela Agostinho provides an example of the harms that can occur when archives digitize and provide open access to colonial records without considering the impact that the records would have on the subjects of the records. She describes in her article, "Archival encounters: rethinking access and care in digital colonial archives," that when the Danish National Archives provided open access to digitized copies of colonial records, such as records of slave auctions, plantation records, hospital and police reports, and photographs, taken from the former Danish West-Indies (now the US Virgin Islands) the archives were continuing to practice colonial violence as open access fostered new ways for the records' subjects to be accessed and exploited without their consent.[91]

Boiteau states that a safer way to make authority records available on the public database is to start with communities' narratives/authority records first and then link out to individuals. Furthermore, individual authority records will only be made available on the public database if

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[88] Frogner, interview.
[89] Frogner, interview; Residential Schools Agreement, "Schedule 'N,'" 3.
[90] Boiteau, interview.
[91] Daniela Agostinho, "Archival encounters: rethinking access and care in digital colonial archives." *Archival Science* 19, no. 2 (2019): 153.

those individuals gave their consent to have their records made available in that way. In addition, records of individuals who are long deceased and where the community or family has given permission will be released on the public database. Boiteau explains that a complete list of names of residential school students, some of whom are still alive, on the public database could be seen as an invasion of privacy by some people.[92] Thus, in the public facing database authority records and names will only be available for those who gave their consent. Furthermore, not every single record for every individual will be made available on the public database as the records will need to be approved and released by the Access and Privacy Office and will not be released if they contained sensitive or harmful information. Therefore, a Survivor, relative, or researcher will still have to make a request to an archivist to gain access to records of individuals not available on the public database. However, they may have a better idea of who and what they are looking for by looking at what records are available on the database, which would speed up the inquiry process.

The prioritization of Survivors and Indigenous communities when responding to reference requests and the use of individual and community authority records as the first point of entry into residential school records is a demonstration of the act of privileging by NCTR archivists. Craig Guald explains that privilege or privileging "is often viewed in derogatory terms, denoting a 'special right or advantage for a particular person or group' due to wealth or social status."[93] In archives, privileging occurs when archivists choose which records are worthy of preservation and what information can be disseminated to the public. Currently, there is a move to democratize the archive by ensuring that those who were previously left out of the historical record are now represented in the archive and that everyone is able to access the

[92] Boiteau, interview.
[93] Craig Gauld, "Democratising or privileging: the democratisation of knowledge and the role of the archivist," *Archival Science* 17 (2017), 227.

records important to them.[94] Through outreach programs, oral history projects, and other documentation strategies archivists are attempting to fill in the gaps in their collections by offering space to marginalized groups to include their experiences and voices in the archive. However, archivists must also recognize that not everyone wants to be represented by their institution and should respect the "right of groups to keep their own silence."[95]

Archivists continue "to serve as gatekeepers to historical knowledge" by choosing or privileging information that is deemed important enough to preserve.[96] In the digital realm there are increased possibilities to circumvent gatekeeping and for the full democratisation of knowledge by implementing open access policies on information. However, despite the fact that users can create, find, upload, and download their own content, completely bypassing traditional access points for information, access to a knowledgeable expert, "who has an in-depth knowledge and understanding of their professional domain" is still important and desirable.[97] This is where archivists, by identifying, contextualizing, authenticating, mediating, and legitimising records of value, can continue to be arbiters, gatekeepers, and mediators of information by making the choice for the user. Gauld argues that while the archival profession currently sees itself as moving towards a democratisation of the archives, "in actuality, the move towards representation and justice has inserted the archivist directly into moral and political discourse in a manner that required conscious decision-making and necessitated the active use of archival privileging tools so as to address the unequal balance of power that so distorted the documentary heritage."[98]

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[94] Gauld, "Democratising or privileging," 228.
[95] Carter, "Of Things Said and Unsaid," 231-233.
[96] Gauld, "Democratising or privileging," 228-230.
[97] Gauld, "Democratising or privileging,"231-237.
[98] Gauld, "Democratising or privileging," 239-242.

By prioritizing reference requests from Survivors and Indigenous communities over those made by academics or media, by requiring researchers to justify their projects to the Survivor's Circle, and by making community or individual authority records the first point of entry into residential school records and giving communities a chance to tell their own stories, archivists at the NCTR are privileging the voices of Survivors, and are acting as gatekeepers to the records by ensuring that the information is accessible to those who need it while also ensuring that it will be used in a way that will benefit Indigenous communities. In this way the act of privileging can be seen as putting into action concepts of radical empathy, affect, and imagined records, as archivists at the NCTR center Survivor's voices and feelings in every decision made about the records including appraisal, description, preservation and access. Therefore, by acting as gatekeepers and by privileging specific historical records and narratives, archivists actually democratize knowledge and archival practice, as well as bring forward users' voices and broaden access. As Gauld states this is "democratisation via privileging."[99] Gauld argues that archivists need to accept their roles as "a privileger of information and a gatekeeper of knowledge," as "gatekeepers have an ethical responsibility to users, to themselves, to the profession and to society."[100]

Since the NCTR was established with decolonizing frameworks at the time of its creation, it is easier for the NCTR to implement policies that prioritize the voices of Survivors and the perspectives of Indigenous communities' and work towards decolonization and reconciliation within the archive. State archives on the other hand find it much harder to implement these policies as from their inception they have "remained bound to National

[99] Gauld, "Democratising or privileging," 244.
[100] Gauld, "Democratising or privileging," 243.

imaginaries and histories."[101] Due to the inherent colonial realities of state archives and the fact that decolonizing or Indigenizing the archive would mean a complete "erasure of the colonial realities of archives themselves," decolonization of state archives can "only ever be partial."[102] Therefore, Crystal Fraser and Zoe Todd argue in their article, "Decolonial Sensibilities: Indigenous Research and Engaging with Archives in Contemporary Colonial Canada," that instead of decolonizing archives, decolonial sensibilities should be applied instead to "attend to the complex relationships between archives and Indigenous peoples" and to make archives friendlier to Indigenous peoples while still recognizing state archives as places whose original intent was to "legitimize the nation state by excluding Indigenous voices, bodies, economies, histories, and socio-political structures."[103]

In other archives, such as state archives like Library and Archives Canada, there are numerous ways that access to archival materials is restricted, such as the Access to Information and Privacy Acts. Many scholars complain that that they have had to wait onerous periods of time to access materials and then materials are often heavily redacted once they are received. Furthermore, as Fraser and Todd describe, "to access archival materials in Canada is to move across geographic, political, and even linguistic boundaries," as well as "to contend with the structures and rules that govern each organization."[104] One of the ironies often faced by Indigenous researchers is that in order to undertake research on their own communities they must be able to afford to travel to the national capital, which is the "symbol of their marginalization,

[101] Crystal Fraser and Zoe Todd, "Decolonial Sensibilities: Indigenous Research and Engaging with Archives in Contemporary Colonial Canada," *L'Internationale, Special Edition Decolonizing Archives* (February 2016): 34-35.
[102] Fraser and Todd, "Decolonial Sensibilities," 32.
[103] Fraser and Todd, "Decolonial Sensibilities," 35.
[104] Fraser and Todd, "Decolonial Sensibilities," 33.

the seat of federal power and white, masculine, colonial display."[105] Once there, indigenous researchers "toil away reading records that were written and collected by people who were not part of their communities and taken without their knowledge or consent under the regime of the Indian Act and later deposited according to pre-set mandates created, again without their consultation."[106] Often these records were written by people who disliked Indigenous peoples and contain derogatory or harmful language. Mary Jane Logan McCallum states that finding and reading records made by the state about family members can conjure up many contradictory feelings such as elation over finding missing or unknown family history as well as vulnerable and uneasy over the ways humanity has been stripped from your people.[107] This demonstrates the emotional and affective impact that finding or not finding records has on Indigenous users of archive, as well as how physically, emotionally and intellectually exhausting archival research can be. Archives can better support Survivors and families who are accessing potentially traumatic and triggering information by making things available that can bring comfort and solace, from the practical (such as water and tissues), to the spiritual (including space to smudge, Elders, and Knowledge Keepers), to the medical (such as access to mental health resources and professionals). Furthermore, the staff dealing with reference inquiries should be given some "basic training on trauma and how to support someone who is experiencing emotional distress."[108]

Another way to safeguard against the release of traumatic or harmful materials is already in use at the NCTR. The NCTR developed an app that is applied to sensitive photographs on its

[105] Mary Jane Logan McCallum, "Indigenous People, Archives and History," Shekon Neechie: An Indigenous History Site, https://shekonneechie.ca/2018/06/21/indigenous-people-archives-and-history/ (accessed July 11, 2023)
[106] McCallum, "Indigenous People, Archives and History."
[107] McCallum, "Indigenous People, Archives and History."
[108] McCracken and Hogan, "Residential School Community Archives," 12.

public database which creates a disclaimer page that describes the content of the photograph and warns users that the photograph may be disturbing and gives them an option to either view or not to view the photograph.[109] This app could be expanded to include traditional knowledge (TK) labels and community protocols which would recommend that certain records should only be viewed when the user meets certain requirements based on age, gender, time of year, band affiliation, etc.

The NCTR could use Mukurtu CMS and TK labels as a guide to help further develop their public facing database and virtual case files. Mukurtu is "a free and open-source community archive platform that provides international standards-based content management tools adaptable to the local cultural protocols and intellectual property systems of Indigenous communities, libraries, archives and museums."[110] In 2007, Kimberly Christen and her team of Warumungu community members and software designers launched the Mukurtu Wumpurrarni-kari Archive, which allowed the Warumungu people to "define the terms of access to and distribution of their cultural materials through an interface that links each community member to each piece of content via an extensive user profile and a rich content-tagging upload process."[111] Access to certain cultural materials is further decided based on a set of cultural protocols such as by "age, gender, ritual status, family, and place-based relationships."[112] Christen furthered her work on Mukurtu with the Plateau Peoples' Web Portal, which expanded the functionality of the alpha version of Mukurtu by creating a multi-tribal archive that allows members from many tribes to curate their cultural materials held in multiple institutions. Extended narrative features

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[109] Frogner, interview.
[110] Indri Pasaribu, "Indigenous Digital Oral History," in Camille Callison, Loriene Roy, and LeCheminant, Alice Gretchen, Eds. *Indigenous Notions of Ownership and Libraries, Archives and Museums*. (Boston: De Gruyter Saur, 2016), 338.
[111] Christen, "Opening Archives," 186.
[112] Christen, "Opening Archives," 189.

allowed for multiple voices to be heard through the "inclusion of community records, layered context, and diverse forms of metadata at the item and collection level."[113] The portal created layered narratives for each "digital heritage item" by placing Indigenous knowledge alongside institutional data within the metadata.[114] In 2011, Mukurtu became a free and open source content management system tool that provides:

1) Customizable, granular cultural protocol-driven access to digital content based on local knowledge systems;
2) Pathways for sharing content and metadata between multiple community groups within the platform;
3) Layered narratives and curation for materials that go beyond the "item" level to connect content, metadata, traditional knowledge and cultural narratives in one view;
4) Flexible and clear licensing and labelling of content;
5) Selective metadata transfer between collecting institutions and Indigenous communities using Mukurtu's "roundtrip" feature.[115]

In 2014, in the 2.0 release of Mukurtu, Traditional Knowledge (TK) labels – "digital markers that define attribution, access and use rights for Indigenous cultural heritage"[116] – were added to "provide context to public domain and third-party owned works circulating to the general public."[117]

In 2010, Christen and Jane Anderson founded Local Contexts to "enhance and legitimize locally based decision-making and Indigenous governance frameworks for determining ownership, access, and culturally appropriate conditions for sharing historical, contemporary and future collections of cultural heritage and Indigenous data."[118] This is accomplished through the use of the Local Contexts Hub which allows Indigenous communities to customize the TK

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[113] Kimberly Christen, "A Community of Relations: Mukurtu Hubs and Spokes," *D-Lib Magazine* 23 (2017): https://doi.org/10.1045/may2017-christen
[114] Christen, "A Community of Relations."
[115] Christen, "A Community of Relations."
[116] *Local Contexts*, "Grounding Indigenous Rights" (website) Accessed January 27, 2023: https://localcontexts.org/
[117] Christen, "A Community of Relations."
[118] *Local Contexts*, "About Local Contexts" (website) Accessed January 27, 2023: https://localcontexts.org/about/about-local-contexts/

labels. The Local Contexts Hub is a web portal that allows Indigenous communities to create, apply, and share their labels nationally and internationally. The portal connects researchers and institutions with Indigenous communities in order to encourage collaboration in the addition of labels to existing catalogues and digital items.[119] TK labels "allow communities to express local and specific conditions for sharing and engaging in future research and relationships in ways that are consistent with already existing community rules, governance, and protocols for accessing, using, sharing, and circulating knowledge and data."[120]

There are twenty labels to choose from which are separated into three groups, 1) provenance labels which "identify the group or sub-group that is the primary cultural authority for the material;" 2) protocol labels which outline the traditional access protocols associated with the material; and 3) permissions labels which detail actions which would generally be approved by the community.[121] Some examples of provenance labels include: the *attribution* label which corrects historical naming errors and "acknowledges the legitimate authorities for the material;" the *family* and *clan* labels which denote that the material can only be circulated between family members or according to protocols for clan relationships, and the *multiple communities* label which signifies that multiple communities have the responsibility of custodianship.[122] Another provenance label that could be of use to the NCTR is the *community voice* label which is used to "encourage community members to share their knowledge, stories, and experiences."[123] Examples of protocol labels include *women, men, seasonal*, and *sacred* labels, which denote the

[119] *Local Contexts*, "Local Contexts Hub" (website) Accessed January 27, 2023: https://localcontexts.org/tk-label-hub/
[120] *Local Contexts*, "TK Labels" (website) Accessed January 27, 2023: https://localcontexts.org/labels/traditional-knowledge-labels/
[121] *Local Contexts*, "TK Labels."
[122] *Local Contexts*, "TK Labels."
[123] *Local Contexts*, "TK Labels."

access conditions according to these specific protocols. Permissions labels include *commercialization* and *non-commercial* labels which signify whether the material can be used for economic gain and that the community should be the primary benefactors of these uses. Other permissions labels include *community use only, outreach*, and *collaboration* labels which denote whether the materials can be used solely by the community or if they can be used for research or educational purposes.[124] The use of TK labels, or a similar system, at the NCTR could facilitate record corrections, encourage story and knowledge sharing, while furthering community engagement concerning the access and use of residential school records as communities could place labels denoting access restrictions (gender, clan, family, season) on the records.

The NCTR's virtual case files and authority records are an example of a third-order archival interface system that allows users to locate and draw together information about a Survivor, community, or school by first accessing an authority record of the community or Survivor in question. Furthermore, Mukurtu demonstrates the ability to create an interface that can connect many communities to the same residential school records, as well as the benefits of using a metadata scheme that places Indigenous and institutional knowledge/data about the record side-by-side.

Conclusion

In this chapter I discussed the development of third-order archival interfaces to improve user access to materials and heighten understandings of provenance and context. Third order systems allow users to arrange digital items "into as many sequences as may be desired," which further reflects records of various "original" orders and different interpretations of context, as

[124] *Local Contexts*, "TK Labels."

well as represent the records' multiple provenance.[125] A third order system should permit the user to view items from different perspectives such as from a "traditional hierarchical perspective, a networked perspective, or a multiverse of representational forms or visual metaphors in order to support visual exploration."[126] The management and maintenance of records at an item-level are necessary for a third-order system to be effective. Each item will need extensive metadata to aid identification and search, and to ensure that important context is not lost.[127] Therefore "robust, scalable, and user-friendly" third-order systems will enable users to "construct different aggregations of records, to preserve information about past orderings, and to provide richer evidential contexts."[128]

The NCTR's use of authority records and the creation of "virtual case files" serves as an example of a third-order archival interface. When a user queries the NCTR's database, a case file would be created that would draw together all of the documentation relating to a residential school Survivor with the Survivor's authority record serving as the first point of entry into the primarily bureaucratic and administrative records. The virtual case files concept and the NCTR's database as a whole would benefit from the addition of TK labels, or a similar system, to further encourage community engagement with reference to the access and use of residential school records. Communities could place labels denoting access restrictions (gender, clan, family, season) on the records, as well as adding contextual information such as names, locations, tribal knowledge, experiences, and stories to the records. This concept of virtual case files is a decolonizing approach to managing these records because they prioritize Survivors voices and experiences over the entities who administered and operated the schools. By using case files in

[125] Yeo, "Bringing Things Together," 58, 64, 85.
[126] Lemieux, "Toward a 'Third Order' Archival Interface," 82, 89.
[127] Yeo, "Bringing Things Together," 84; Bak, "Continuous Classification," 313.
[128] Yeo, "Bringing Things Together," 79.

this way, the power of case files, which historically were used as tools by modern states to classify, surveil, subjugate, and control marginalized peoples, is reversed as Survivors and not the government are given the power to have their voices and experiences preserved and represented in the archival record.

By prioritizing reference requests from Survivors and Indigenous communities over those made by academics or media and by requiring researchers to justify their projects to the Survivor's Circle, by making community or individual authority records the first point of entry into residential school records and giving communities a chance to tell their own stories, archivists at the NCTR are privileging the voices of Survivors. The archivists at the NCTR are acting as gatekeepers to the records by ensuring that the information is accessible to those who need it while also ensuring that it will be used in a way that will benefit Indigenous communities.[129] In this way this act of privileging can be seen as putting into action the concepts of radical empathy, affect, and imagined records, as archivists at the NCTR center Survivors' voices and feelings in every decision made about the records including their appraisal, description, preservation and access.

[129] Gauld, "Democratising or privileging," 227-245.

Conclusion

In this thesis I explored the past and current practices, systems, and methods that archivists developed to manage, destroy, select, and make available case file records, as well as how current innovations are influencing changes in the management of case files. In chapter one I outlined the management methods, such as sampling, selection, and macroappraisal that archivists have used to appraise and manage case file records. While sampling and selection was the most popular method to deal with the bulky and homogenous case file records from the 1950s to the 1990s, it was not always an appropriate management method. As in the case of the eugenics case files of Alberta, it can lead to the destruction of records that could allow victims to hold the government accountable, to find the truth of what happened to them, and to allow historians to tell their stories. Macroappraisal was used in the 1990s to appraise case file records because it focused on the functions and context of records creation and records creators, the interaction between the state and its citizens, and "the contextual characteristics of the series as a whole and the 'generic' nature of the records within each file."[1] This provided a more comprehensive overview of the records and allowed archivists to make appraisal decisions without needing to scrutinize records file-by-file.[2] However, a flaw to this model is that by focusing solely on citizens (ignoring those who do not fall into this category), government programs, and the functions of the state, a focus on marginalized or non-citizen populations is missed, leading to some records to not be included in the archive's collections and the archive failing to be representative of these groups.

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[1] Ellen Scheinberg, "Case File Theory: Does It Work in Practice?," *Archivaria,* 38 (January 1994)," 48; Terry Cook, "Many are called, but few are chosen"': Appraisal Guidelines for Sampling and Selecting Case Files," *Archivaria* 32 (January 1991), 29.

[2] Margaret Dixon, "Beyond Sampling: Returning to Macroappraisal for the Appraisal and Selection of Case Files", *Archival Science*, 5 (2005), 288.

With the realization that macroappraisal was a resource intensive method of appraisal and that many disposition authorities for government institutions were obsolete, LAC created the case file MIDA in 2005 to appraise case files more efficiently by applying a single definition and seven criteria to records found in agencies with similar functions and mandates. However, in order to return to the original tenets of macroappraisal and to further improve the disposition program at LAC, GAGs were also developed in 2014 to accompany MIDAs in the decision-making process surrounding case files. GAGs allowed archivists to develop a more refined, nuanced understanding of how the government functions and where the best documentation may be found, such as in the OPI. However, GAGs seem to focus more on finding the high-level, mandate, and policy records to document the functions and activities of the government in order to avoid closely examining the lower-level records like case files and do not focus on the citizen-state interactions or on records representing marginalized communities. This is a gap that could be addressed by including a more robust understanding of macroappraisal in the GAGs, as well as using concepts such as radical empathy, affect, and imagined records to influence their appraisal decisions surrounding case file records.

Not only should archivists be focused on using macroappraisal to locate the citizen-state interactions, but they should also be placing Survivors, victims, and marginalized communities at the center of their appraisal decisions. Archivists should be asking themselves where records pertaining to marginalized and victimized groups may be located within the government's records (made possible by macroappraisal and GAGs). They should also be asking themselves the effect these records would have on these communities if made accessible (truth, justice, hope) and what effect destroying the records would have on them (impossible imaginaries). Is keeping the policy and mandate records enough, or should the entirety of the case files be kept,

ensuring that individual stories are not lost, and that governments can be held accountable? Therefore, concepts such as radical empathy, affect, and imagined records should influence keep-destroy decisions surrounding case files, as they call on archivists to consider the effect records (real or imaginary) have on individuals and communities, rather than focusing solely on institutional mandates and policies.[3]

In my second chapter I used the example of electronic health records to examine how case files are currently managed. Case files like EMRs are stored in digital databases. By using queries to search a database, case files can be dynamically assembled for the user by pulling together data that formerly would have made up a case file in the paper realm, but which now exists as individual data items in the digital. The case file no longer exists as a discrete object within the database but rather is assembled based upon the user's search criteria. Archivists face many challenges when preserving complex databases like eHealth records. Like all digital records, databases are susceptible to data loss and to technological obsolescence. Databases are difficult to preserve because they are complex, interactive, digital systems, composed of multiple objects distributed across multiple tables which are aggregated together in different ways according to the needs of the user. Archiving EMRs present significant challenges because of the distributed ownership of health data, issues of ensuring data privacy, authenticity and integrity, lack of interoperability due to the diversity of the technical systems and varying types of data, the health industry's inconsistent or non-existent standards regarding data preservation, the availability and capabilities of storage media, and the rapid obsolescence of hardware and software. Due to these challenges, the best preservation tool that archivists have to maintain the

[3] James Lowry, "Radical empathy, the imaginary and affect in (post) colonial records: how to break out of international stalemates on displaced archives," *Archival Science* 19 (2019), 197.

interactivity of a complex digital record like an eHealth database is emulation. Emulation preserves the behaviour, look, and feel of interactive and multimedia digital creations by using software to recreate the "functionality of an obsolete technology environment on a modern platform."[4] However, while awareness of the issue of preserving electronic health data has started to increase, especially amongst record managers, there continues to be a gap in the archival literature regarding strategies for preserving eHealth records for the long-term. Archivists need to develop strategies for preserving eHealth records before it is too late, and they are lost for good.

In my third chapter, I discussed the development of third-order archival interfaces to improve user access to materials and heighten understandings of provenance and context. Third order systems allow users to arrange digital items into as many aggregations as they want which further reflects records of various original orders and different interpretations of context, as well as represent the records' multiple provenances.[5] The NCTR's use of authority records and the creation of "virtual case files" serve as an example of a third-order archival interface. In the future, when a user queries the NCTR's database, a case file would be created that would draw together all of the documentation relating to a residential school Survivor with the Survivor's authority record serving as the first point of entry into the primarily bureaucratic and administrative records. The virtual case files concept and the NCTR's database could benefit from the addition of TK labels, or some similar system, to further encourage community engagement surrounding access restrictions and use of residential school records, as well as adding contextual information such as names, locations, tribal knowledge, experiences, and

[4] Adrian Brown, *Practical Digital Preservation: a how-to guide for organizations of any size*. (London: Facet Publishing, 2013), 212.
[5] Geoffrey Yeo, "Bringing Things Together: Aggregate Records in a Digital Age." *Archivaria* 74 (2012), 58, 64, 85.

stories to the records. This concept of virtual case files is a decolonizing approach to managing these records as they prioritize Survivors' voices and experiences over the those who administered and operated the schools. By using case files in this way, the power of case files, which historically were used as tools by modern governments to classify, surveil, subjugate, and control marginalized peoples, is reversed as Survivors and not the stateare given the power to have their voices and experiences preserved and represented in the archival record. Furthermore, by prioritizing reference requests from Survivors and Indigenous communities over those made by academics or media and by requiring researchers to justify their projects to the Survivor's Circle, by making community or individual authority records the first point of entry into residential school records and giving communities a chance to tell their own stories, archivists at the NCTR are privileging the voices of Survivors. The archivists at the NCTR are acting as gatekeepers to the records by ensuring that the information is accessible to those who need it while also ensuring that it will be used in a way that will benefit Indigenous communities.[6] In this way this act of privileging can be seen as putting into action the concepts of radical empathy, affect, and imagined records, as archivists at the NCTR center Survivors' voices and feelings in every decision made about the records including their appraisal, description, preservation and access.

Concepts of radical empathy, affect, and imagined records should influence all archival decisions, including appraisal, arrangement, description, preservation and access, surrounding the management of case files records in both paper and digital form. Archivists need to decide whether a sample is enough to represent the whole record series or if important information

[6] Craig Gauld, "Democratising or privileging: the democratisation of knowledge and the role of the archivist," *Archival Science* 17 (2017), 227-245.

would be lost if all or most of the records were destroyed, hindering victims' and historians' ability to gain access to the truth and hold governments accountable. Current case files, managed in databases, represent a preservation and management challenge that at present can be met through emulation. Archivists should also utilize new digital technologies to create third order systems that place marginalized groups at the centre of the archival endeavour, whether that be by making them the first point of entry to the records or finding other ways to further contextualize and decolonize the records.

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