WORDS MATTER: LEXICON USAGE AND INDIGENOUS CULTURAL BELONGINGS

Collections Stewardship: Lexicon Task Force Report 2018
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Preface and Acknowledgements

In 1979, Bonnie Wilson of the Minnesota Historical Society reviewed a new publication, *Nomenclature for Museum Cataloging: A System for Classifying Man-Made Objects*, in the publication *The Midwestern Archivist*. While overall praising the much needed and much welcome work of Robert Chenhall, Ms. Wilson made a prescient observation:

“Chenhall’s system is designed by an American using American English, yet many museums have objects produced by other cultures and will have to add the objects names to chapters six and seven.”

Since that time, additional lexicons have been developed and implemented, yet still the complex nature of multi-use ethnographic objects are not fully addressed within these systems. The Registrars Committee, AAM (now Collections Stewardship) established this Lexicon Task Force in order for its membership of primarily non-Indigenous institutions to research the issue of implementing ethnographic terms into such database fields as Object Name and Cultural Group. This report is the result of that Task Force. We will look at lexicon options currently available for two types of data: object names and self-defined cultural groups. Based on surveys, research, and conversations conducted by Task Force members, a set of possible solutions and potential funding sources are proposed. Developing an ethnographic lexicon is a complex and often emotionally fraught process, but one with great potential to improve understanding and communication between Indigenous communities and object repositories.

At the core of this discussion are Indigenous communities and their belongings. These objects, held in both Indigenous and non-Indigenous institutions, bear with them the historical context of forced and inequitable removal from their home communities. We recognize the makers of these belongings, who are often separate from the holders of these belongings. We recognize that, as institutions located in what is currently known as North America, our buildings reside on lands and territories that are the traditional home of Indigenous Nations that may no longer live on these lands or territories due to forced removal. As museum professionals in the

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United States and Canada, we recognize the United Nations Declaration of the Rights of Indigenous People (UNDRIP), supported by the United States in 2011 and Canada in 2016, which includes Articles that call for a right to self-determination (Article 3), to maintenance and protection of manifestations of their culture (Article 11), and the right to use and control their ceremonial objects (Article 12)².

Lexicon Task Force members strongly recommend to Collections Stewardship, AAM, that a committee of collaborators from a range of Indigenous and non-Indigenous museums be formed to continue the work initiated by the Task Force. This committee would serve to liaise with such established lexicon developers as Nomenclature Affinity Group (AASLH) and Getty Research Institute, follow through on report recommendations, and respond to current issues facing the field.

Task Force Membership 2015-2018
Charlie Iverson, Science Museum of Minnesota
Isabel Tovar, Denver Art Museum
Stephanie Allen, The Sixth Floor Museum at Dealey Plaza (formerly Sam Noble Museum, University of Oklahoma)
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Ann Stevenson, Museum of Anthropology at the University of British Columbia
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Thanks also goes to the professional colleagues who gave of their time to thoughtfully participate in the survey and interview process.

Glossary

The Lexicon Task Force recognizes that museum catalogs, lexicons and nomenclature, and glossaries of terms are colonial knowledge structures that “…privilege some information while silencing other perspectives” (Turner 2016:103). Computerization of museum catalogs ushered in a need for greater standardization, which further normalized and embedded these knowledge structures in collections management. The Task Force is aware of these historic knowledge structures and cognizant of the need to decolonize documentation systems so that they can be equitable and inclusive of diverse ways of knowing. We present the below glossary of terms to clarify how the Lexicon Task Force is using these terms through the report. We do so fully recognizing the limitations and authority they cast, and expect that the museum field will apply them critically with an eye toward future revision.

Archaeological collections – material culture remnants found on or in the ground. Often ancestral remains are included and described in these collections.

Authority control—the process of verifying and authorizing the choice of unique access points, such as names and subjects and ensuring that the access points are consistently applied and maintained. This method of data management might inadvertently make assumptions about the cultural background of the person selecting the terminology.

Authority list—a common set of records identifying a standard for established forms of headings, names, index terms, or other items that are used for information retrieval. Many also contain established cross-references or multi-lingual equivalencies. Synonymous with controlled vocabulary.

Controlled vocabulary—a regularized or standardized list of preferred (and non-preferred) terms used to increase uniformity in indexing or information retrieval. Controlled vocabularies differ from classification systems, nomenclature, lexicon, and thesauri in that their structure is not hierarchical. In databases, these lists are often available in a “dropdown” or “picklist” form. Synonymous with authority list.

Collections management software system (CMS)—commercial software systems fully adapted for museum collections management. These systems are used to track all information related to and about collections objects. CMS are relational databases.

Cultural Group Name—the name of the cultural group(s) affiliated or associated with an object. It often indicates the community membership(s) for the individual group that produced an object, or it can sometimes be the subjective affiliation made by external individuals based on

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stylistic or design elements or collecting history. Cultural group names are often based on Euro Western traditions of anthropology / ethnology and linguistic groupings rather than contemporary names of Indigenous Nations (what people call themselves). As required by UNDRIP, decolonization and self-representation will require at least the inclusion of referencing by contemporary Nation for cultural collections.

Classification system—the grouping of objects into classes owing to their joint possession of attributes of form or function. Usually characterized by a hierarchical structure in which topics are grouped under broad subjects of which they form a part. Multiple classifications may be required to express the full use of objects within given culture, which sometimes is only known by the community members themselves.

Database—a collection of electronically organized and stored data (information) that can be manipulated or extracted.

Data dictionary—a structured assembly of information about the definition, structure, and use of data. It does not, however, contain the actual data itself. Specifically, the data dictionary contains the name of each data element, its definition (size and type), where and how it is used, and its relationship to other data.

Ethnographic collections—also called anthropological collections -- objects originating from typically non-European / non-white cultural groups⁴ that have historically been studied by anthropologists from the late 19th century, usually in areas with that have colonial structures imposed on them (in the past or ongoing) by ‘Empire’ or metropole. These same objects, or belongings in Indigenous-curated based collections in Indigenous run centers, are more often described or classified in accordance by community usage or understanding, with community needs rather than by anthropological terminology, and would likely be called ‘collections’ or ‘social history’.

It is essential to be aware of current criticisms of ethnography and anthropology by Indigenous scholars and academics to understand the changing paradigm in caring for these collections,

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⁴ Some ethnographic / anthropological collections do contain white European culture but these are usually to demonstrate a ‘folk’ aspect of that culture.
alongside the changes that will result from the implementation of UNDRIP into Canadian museum procedures\(^6\).\(^7\)

**Indigenous Community**—for the purposes of this report, this term refers to communities that are connected to the objects/belongings held within museums and cultural institutions\(^8\). These communities and their objects/belongings are located in many geographical areas, and should not be assumed to apply strictly to communities located in North America.

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\(^5\) "Of all the disciplines, anthropology is the one most closely associated with the study of the Other and with the defining of primitivism. As Adam Kuper argued, ‘The anthropologists took this primitive society as their special subject, but in practice primitive society proved to be their own society (as they understood it) seen in a distorting mirror’\(^5\). The ethnographic ‘gaze’ of anthropology has collected, classified and represented other cultures to the extent that anthropologists are often the academics popularly perceived by the Indigenous world as the epitome of all that is bad with academics.” Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 2nd ed, London; New York; Zed Books, 2012, p. 70.

\(^6\) “…historically, non-Indian society has had almost exclusive control over the interpretation of Indian cultures to the larger society, non-Indian institutions such as museums have dehumanized cultural objects, converting them from a part of the intellectual traditions of Indian people into abstract symbols, disinherit, isolated objects of art” Deborah Doxtator, “Reconnecting the Past - an Indian Idea of History,” in *Revisions*, 25–34 (Banff: Banff Centre for the Arts, 1992), p. 27.

\(^7\) “The anthropological interest in a timeless and unchanging cultural Indian demeans Aboriginal and American-Indian Peoples who have had to constantly adjust to and live with the context of ongoing and normalized racism...The idea that cultural adaptation is regarded as ‘broken’ relegates Indians as interesting to the degree that they can serve as windows to the past, ignoring the effects of colonization by aiming to celebrate and recoup as much ‘traditional’ cultural as possible...Here we have an anthropology that cared more about ‘Indian culture’ than the people of that culture, yet another example of the belief in a culture as something outside and existing independently of its people”. Vera St Denis, “Rethinking Culture Theory in Aboriginal Education”, in Martin J. Cannon and Lina Sunseri, eds, *Racism, Colonialism, and Indigeneity in Canada: A Reader*, 177-185 (Don Mills, Ont: Oxford University Press), 2011, p. 182.

\(^8\) “To the studied, the critique of ethnography is significant, because it probes the framework of the subaltern experience and provides a discursive opening to expose and understand the subordinated voice...Native reality is grounded in the experience of being inscribed as subaltern in the history of Others and as subjects in one’s own heritage”. Gail Guthrie Valaskakis, *Indian Country: Essays on Contemporary Native Culture*, Aboriginal Studies Series (Waterloo, Ont: Wilfrid Laurier University Press, 2005), p. 70-71.

\(^9\) “To speak of Indigeneity is to speak of colonialism and anthropology, as these are the means through which Indigenous people have been known and sometimes are still known. In different moments, anthropology has imagined itself to be a voice, and in some disciplinary iterations, the voice of the colonized.” Audra Simpson, *Mohawk Interruptus: Political Life Across the Borders of Settler States*, (Durham: Duke University Press, 2014), p. 95 - her emphasis.
Knowledge Organization System (KOS) – overarching term that encompasses classification systems, name authorities, nomenclatures, or other systems for systematically structuring information for retrieval.

Nomenclature—a type of classification system for naming objects, often using terms that view the objects from the context of a particular discipline.

Lexicon—the structure of nomenclature. Often used synonymously with nomenclature. For example, Robert G. Chenhall’s Nomenclature is a type of lexicon.

Object name—term used to identify an object/belonging. Object names may be part of a classification system and are generally the most narrow term in a given classification system. Structured knowledge systems within ethnographic and anthropological museums usually use terminology from the perspective of the dominant society rather than the local name used by the makers of the object / belonging. When space for this terminology exists, it is usually not the primary object name, even when the language of the dominant society is deficient in describing the object / belonging with the specificity the original language allows.

Ontology – a formalized specification of the entities, their properties, and their inter-relationships either of common concepts or those specialized within a specific domain of knowledge. One way ontologies are currently deployed is to define data models for semantic web and linked open data applications.

Relational database—database in which relationships between data are explicitly specified through the structure of the database, with data types organised in modular, interrelated subsystems. For museums, it means data is entered into the computer only once for each item, regardless of the number of different files that might be generated from that information.

Thesaurus—a compilation of concepts showing synonymous, hierarchical, and other relationships and dependencies, the function of which is to provide a standardized vocabulary for information storage retrieval that can also manage non preferred terms and multi-lingual / multi-alphabet data entry and retrievals.
Section 1: Climate Assessment

This section seeks to identify the current perceptions and opinions of the collections care community regarding standardized terminology for ethnographic object names and for cultural group names. In order to proceed with this project, the Task Force sought to understand the collections community’s level of interest in this topic as well as their perceptions of the success of current available methods, systems, and tools. Efforts were made to gather information from both Indigenous and non-Indigenous based institutions.

In order to get a better sense of how collections care professionals implement lexicon usage for ethnographic object names and cultural group names on a practical level, the Task Force enacted a two-phase survey. Phase I consisted of an online survey crafted by the founding Task Force members with the assistance of Janice Klein. Titled “Ethnographic Terminology Survey” and created on SurveyMonkey, it was open from April 2015 to December 2016 to any who wished to respond. The survey was promoted on the RCAAM listserv and shared with the Association of Tribal Archives, Libraries and Museums (ATALM) listserv, which shared it with their members via the ATALM webpage and Facebook page. The questions sought basic information about the type, size, and ethnographic and archaeological makeup of their collection. Questions also included type of database system, standardized terminology system, and whether and how the institution made modifications to a given system. These responses formed the basis of the AAM 2015 session titled “Developing an Ethnographic Lexicon.” There were 71 respondents to the Terminology Survey. Survey questions and results can be found in Appendix B of this report. Approximately one third (34%) identified as archaeology, anthropology, or natural history museums. 10% identified as a Culturally Specific museum, and the remainder identified as history, art, general, children’s museums or other. Half of the respondents stated that they used Nomenclature, and 34% said that they developed an in-house standardized terminology. Over 90% of respondents stated that they were “interested in working on a standardized ethnographic lexicon for use among museums.”

Phase II of the survey consisted of individual interviews with collections care professionals, conducted by Task Force members from June-December 2016. Task Force members
endeavored to compile an interviewee list representing a wide range of institution types and sizes, selecting from respondents to the Phase I survey who consented to future contact, as well as collections care professionals who attended Task Force presentations at ARCS and ATALM and expressed interest in future contact. Out of the 50 interviewees initially contacted, 23 interviews were completed. Interviewees signed consent forms that allowed for anonymity of the individuals and their institutions. The interviewees represent collections care professionals from across the United States and Canada who work with large and small collections housed in art museums, Indigenous-affiliated museums and libraries, anthropology museums, and archaeological repositories, among others. The interview questions, provided in Appendix B, were developed to gather a more in-depth look at how various institutions address the use of Object Names and Cultural Group Names on a day-to-day basis.

In addition to the survey and interviews, the Task Force searched for resources to observe whether discussions and informational requests about lexicon terms occurred, as well as where they were taking place. The topic of lexicon usage and development, particularly for ethnographic and special collection entries, is documented on the CSAAM (formerly RCAAM) listserv. Beyond the CSAAM listserv, open-access conversation that allows general users to exchange ideas about the practical application of existing lexicons is hard to find. Other potential venues for museums professionals to engage in lexicon discussions are AAM’s Museum Junction and ARCS forum, both of which are member-restricted forums. The Getty Research Institute, source for Getty AAT and CONA vocabularies, lists an FAQ but no forums or listserv options. The American Association of State and Local History (AASLH) provides instructional resources from the Nomenclature Affinity Group via a blog and email communication through their AASLH-hosted webpages. Both Getty and Nomenclature encourage users to submit edits and new entries for future updates via their websites.

Responses to existing standards for Object Name and Cultural Group terms will be discussed in greater detail in Sections 2 and 3. However, consistent trends emerged across both topics. The database program utilized by an institution often determines what type of classification system can be employed, and there are often limitations to how each institution can develop or implement standardizations within classification schemes. It should be noted that institutions
use a wide variety of Collection Management Systems (CMS) which already have built-in classification systems: The Museum System (TMS), PastPerfect, Access, Filemaker Pro, Re:discovery Proficio, KE: EMU, CollectionsSpace, Argus, Minisis MINT, Mimsy XG, Text Works in Magic, and many others.

Issues identified by the Task Force in the course of the Phase II interviews include the impact of inconsistent lexicons on online collections sharing initiatives. It has been documented in other sources that when collections develop their own naming systems, those systems do not necessarily overlap. This impacts the ability of institutions to effectively communicate with Indigenous communities, researchers, or the public regarding the type and source of objects in their care. Another communications aspect to address is language barriers, which were brought up in discussions with Canadian collections care professionals. Multilingual collection names and collections users impacts the object name entries in particular and the ability of museum professionals to communicate with one another. These communications difficulties affect not only museum professionals but also Indigenous communities, researchers, users, and our publics as they struggle to utilize our collections for research, education, or other purposes while trying to navigate our variable and complex classification systems.

The challenges of working with legacy data are a concern of any professional attempting to standardize vocabulary. Many of the respondents cited lack of funds or institutional support as a barrier to taking on wholesale cleanup of existing data. One of the biggest factors in determining whether or not an institution addresses Object Name or Culture Name legacy cleanup was its connection to a larger event or specific project, such as a building move or installation of a new database system. One interviewee brought up an interesting legacy data conundrum: how do we reconcile the changing use of objects over time as reflected in the changing use of object names or even cultural names? We also cannot ignore the colonizing that is imbedded in current terms and the decision to privilege one term over another. A “work” or an “object” may have a complex history, as do the “people” who are associated with it. Which terms do we choose to privilege within a hierarchical structure, and how do we make that determination? Many institutions, but especially Indigenous-based or Tribal institutions, feel strongly that any classification scheme developed needs to originate with the home
communities (i.e. existing lexicons are not appropriate and cannot be adapted to make them appropriate). Many problems have been created by cultural institutions trying to create manageable groupings. Important histories and documentation trails can be unintentionally hidden or obscured by replacing messy data with data values that give the appearance of data certainty. Applying data authorities, such as lexicons, can exacerbate these problems rather than providing meaningful access points for relevant research.

Looking at Survey Phases I and II, there is an expressed desire from the collections care community for standardized Object Name and Cultural Group terms for ethnographic collections. Close interaction with a specific Indigenous community group, either through a NAGPRA visit or through another project-based event that brings community members to the collection, appears to be a determining factor in the implementation of Indigenous terms into the database. When Indigenous communities were nearby or directly part of the institution, then those communities were more likely to be involved in the updating of object names and cultural group names. At every institution who responded, staff expressed interest in the concept of Indigenous community involvement. However, while some museum professionals were proactive in involving Indigenous communities in the terminology-development process, others were uncertain where to best begin with their small staff and resources. If they were able to achieve community interaction, it tended toward a project-based approach rather than long-term relationships.

The most commonly applied solution among respondents is to attempt to develop something in-house, to seek out lists developed by other institutions, or to modify existing standards (while acknowledging that this is an imperfect solution). Previous classification systems such as those based on language groupings or groupings based on shared cultural traits, defined by anthropologists interested in cultural comparisons, have a problematic history that should be well understood in order to inform new cultural schemas that may be developed or adapted. Staff and funding, or lack thereof, impact the collections care professional’s ability to make updating legacy data a priority. In order to identify potential solutions, the Task Force reviewed responses to the two components, Object Names and Cultural Group Names, independently.
Section 2: Object Name Terms

This section will assess and summarize the survey responses addressing the various classification systems in use at institutions that maintain collections of Indigenous material culture. Reflections on the most commonly used classification systems and their implementation methods, as shared through interviews with individual collections staff, are also included.

Assessment of Survey and Interview Responses

For a detailed description of each system and structure mentioned here, refer to Appendix A: Standards and Practices. Currently there are a wide variety of approaches to organizing information about Indigenous collections from classification systems such as Chenhall’s Nomenclature to standardized controlled vocabularies and the Getty Art & Architecture Thesaurus (AAT). However, the Task Force found that the application of these standards within individual institutions varied widely because the systems themselves are inherently limited and because different collections professionals do not always agree on appropriate terminology. Some of these knowledge organization standards, such as Nomenclature and AAT, are contribution-based. While these systems can be somewhat responsive to the needs and desires of their many users, awareness of who is contributing and how the contributions are selected should be kept in consideration. Other systems are more static. The following responses are drawn from survey responses, interviews conducted by the Lexicon Task Force and from discussions among Task Force members.

In the course of interviews and survey responses, some general comments emerged.

- Some institutions have expressed a desire to use more “common” terms as opposed to academic-based terms used traditionally in many collections. This speaks to the idea of reaching an audience beyond academics and researchers.
- Another point raised references the creation of a “preferred term” along with a list of other, associated terms. On one hand, this would allow searchability regardless of which term a user knows, which increases accessibility to collections. However, this hierarchical system presents the inherent challenge of prioritizing one term above
other, alternate terms. Given the colonizing history of most institutions containing Indigenous collections, this means that most institutions would likely prioritize an English language term for a object rather than utilizing the appropriate Indigenous term or phrase.

- Many respondents discussed the challenges of dealing with multi-part objects, fragments, parts and compound objects in existing lexicons.
- Respondents who work with collections classified as “archaeological” noted that they come with additional challenges that are not always accommodated in current lexicon systems as their collecting methods and descriptive fields tend to be very different than from other Indigenous objects. For instance, these collections tend to prioritize or organize collection data based on the physical site or material type rather than origination from an Indigenous culture. These differences are reflective of the treatment of these collections as subjects of scientific investigation and often do not integrate specialist community knowledge.
- Many institutions, especially Indigenous or culturally-specific institutions, have challenges related to multi-lingual data entry, such as paying for required expertise if a language specialist is not on staff (e.g. for translation). Additionally, data entry and searchability using Indigenous languages requires knowledge of the language as well as the ability to type in those languages (rather than just speak the language).
- Few of the institutions interviewed have content specialists on staff to help with lexicon development or maintenance, which proves extremely challenging for the database managers and collections professionals. They often make decisions about data, terminology, and collections management activities in general without having adequate specialist knowledge. Involvement by Indigenous communities is necessary to develop useful and important collaborations and partnerships, while also improving data quality.
- One fine art institution interviewed that collects contemporary materials, stated that they struggle with getting in touch with Indigenous artists. They said that it often seems impossible (whether the artists are deceased or simply unreachable due to location, communication methods, etc.). Items related to these artists get flagged for
revisiting later. This example highlights what may be a common issue, that institutions with contemporary Indigenous collections may not have, or be willing to prioritize, funding to focus on the research and communication necessary to identify and contact Indigenous artists or makers.

Looking at Current Standards

The classification systems for object names that are currently in use by the survey respondents and interviewees are listed below along with a summary of their reactions and opinions on how effective each system is for describing objects created by Indigenous cultures of North America. According to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), Indigenous peoples have a basic right to self-determination,\(^{10}\) or exercising control over how their cultures are represented, and institutions that collect and preserve Indigenous collections have a responsibility to facilitate this self-determination. Some of the following systems do a better job than others at engaging Indigenous communities in this way.

**Nomenclature 4.0** – Formerly known as Chenhall’s Nomenclature, Nomenclature is widely used by institutions both due to its long history as a standard in the museum field and given that it is automatically included when purchasing certain CMS databases such as PastPerfect. It is therefore often a default lexicon for many institutions. Since Nomenclature was prevalent among collections professionals interviewed, there were a few specific reactions pertaining to the use of this lexicon. An advantage noted includes the fact that it has a big-picture breakdown of categories (ex. Technology, Personal Artifacts, Tools and Equipment, etc.) as well as the more specific object names. On the other hand, while this classification system focuses primarily on historical collections, it has not traditionally been good for Indigenous collections. For instance, it does not accommodate raw materials, tourist art, food, or medicine. Ancestral human remains are often included in archaeological collections, making the Nomenclature

even more problematic. Additionally, it can be difficult to incorporate additional terms, including terms supplied by Indigenous communities, since this classification system is organized around use, and not all cultures use objects in the same way. Interview respondents reported that this lexicon was not useful for their Indigenous fine art collections. Version 4.0 is supposed to be better at incorporating ethnographic terms, but as none of the interviewees had any experience with it yet, we do not have relevant reactions to this version.

**Getty’s Art and Architecture Thesaurus (AAT)** – While a number of those interviewed used the Getty’s AAT thesaurus, their reactions often had more to do with their CMS database rather than the lexicon specifically, limiting the relevance to our research. Like Chenhall’s Nomenclature, the Getty’s AAT vocabulary is also built into certain CMS databases such as The Museum System (TMS), becoming default for institutions who utilize those CMS databases. While it is an extremely robust thesaurus, the AAT was originally designed for use in fine art institutions. It does not always incorporate the Object Names needed for working with collections of objects from Indigenous cultures or provide ways of incorporating Indigenous community-defined terms.

**National Museum of the American Indian (NMAI) Reference Lists** – The NMAI’s reference lists were developed by Indigenous community members in what is now known as Native North America through a very collaborative process and therefore is an excellent example of a very comprehensive set of contemporary Indigenous community terms. However, because it was based exclusively on the collections held at the National Museum of the American Indian, which is primarily Indigenous and fine art in nature, it does not thoroughly address the concerns of archaeological collections, including ancestral remains and anything incorporating human components (ex. Teeth or hair). Additionally, these term lists relate predominately to North American collections and are therefore not as helpful when working with objects from cultures in other areas of the world.

**In-House** – Many institutions interviewed had an entirely in-house designed lexicon for Object Names that works with their specific collections, local language requirements, or regions of focus. One advantage of this type of system is that it is very flexible and customizable,
however it does not have the ability to easily map to other collections at other institutions, therefore making sharing information extremely difficult. Sharing information in this manner, of course, may not be a goal of all institutions and comes with some inherent ethical and cultural sensitivity issues. Another advantage of this type of system is that, when Indigenous communities are consulted, it is easier to incorporate UNDRIP’s concept of self-determination so that Indigenous communities control the terms used to describe their own material culture. An in-house created system can also incorporate the fact that Object Names may need to be in multiple languages to provide the most precise description, acknowledging the deficiency of colonial languages to accurately translate or describe an object (which may need a descriptive phrase rather than a single noun).

One institution interviewed used the Canadian Heritage Information Network (CHIN) to create an in-house object name lexicon, which has then been refined multiple times over the past 30 years. They incorporated Indigenous terms through their alternate name and associated fields in conjunction with object terms. Since the CHIN lexicon required single terms, an “object type” modifier was added and these terms concatenated for display and user access. In this manner, the CHIN data structure was successfully utilized to create in-house-designed lexicons for Indigenous cultural materials.

Institutions that have developed their own customizable database system (ex. Filemaker Pro) often create their own in-house lexicon out of necessity. They are, of course, subject to the restrictions that are inherent to the way the database was originally developed. Even though these systems can be more flexible than pre-set systems, if the institutions don’t have staff to trouble-shoot the CMS program or specialized community knowledge, they often end up running into issues, including problems with standardization for how the data is entered and how the lexicon is applied to different objects.

Combination of set classification system and added in-house terms – This is the “We make it up as we go” approach, according to one interviewee. As none of the existing lexicons seem to be adequate for Indigenous collections, most institutions interviewed use modified lexicons, which start with an existing lexicon such as Nomenclature or the Getty’s AAT and is
then modified by the institution, reflecting the collecting institution’s focus and strengths. As with a completely in-house designed lexicon, this system has the potential to more easily include Indigenous community defined terms, however it was not clear from the interviews whether or not this has been a common practice. One institution took this hybrid system to a whole new level by implementing a system where their fine art based materials utilize the Getty’s AAT thesaurus, their contemporary cultural materials utilize an internally-designed term list, and the materials deemed archaeological in nature utilize a specialized lexicon from Arkansas called Archaeological Survey.

Despite the prevalence of modified lexicons, they can prove challenging to work with. Different institutions add terms in different ways (and often utilize different terms for similar or the same types of objects), therefore, as with the in-house designed lexicons, they cannot be easily mapped to one another, reducing the potential accessibility of the data. As mentioned before, sharing information in this matter may not be a goal of all institutions and comes with some inherent ethical and cultural sensitivity issues.

**No set lexicon at all** – Having no lexicon at all can only be described as a challenge for everyone: the staff of the institution, researchers, community members, and members of the public who want to access the data. Not only can the data not be shared between institutions, the object data cannot be reliably accessed within the institution. On the other hand, it also presents lots of possibilities when considering how to move forward for such institutions. They are basically “starting from scratch” and can learn from the successes and failures of other institutions when implementing a standardized lexicon. They are also positioned in a prime spot to engage in community partnerships to create a truly community-defined lexicon.

**ICOM’s International Committee for Documentation (CIDOC)** – According to one interviewee, the CIDOC-CRM concept model might be helpful not only in object identification and classification but could include a visual equivalent coupled with audio of Indigenous terms. For example, there is a Canadian object visual dictionary that was developed by Parks Canada (currently only available in the colonial languages of English and French, although there are plans to expand to the more than 60 relevant Indigenous languages) that had its
roots in Chenhall’s Nomenclature and can be found at https://app.pch.gc.ca/application/dvp-pvd/appli/descr-eng.php. While this is not a lexicon, this type of system might be helpful in actively helping to keep Indigenous languages alive. Such examples illustrate an innovative way of implementing this kind of data structure.

Summary
There were a number of issues, comments, and suggestions made to the interviewers regarding data standardization, use of CMS databases, existing lexicons, the incorporation of Indigenous-defined community terms, and related topics when discussing object names. Based on these comments, we have identified factors to consider while implementing an Object Name classification system or lexicon:

1. Data standardization:
   - The database or system used is a significant factor in how cultural information can be structured and informs local cataloging practice. Breaking free of the inherent structure provided by the standard CMS databases and creating a system that allows the data to be organized in a different manner would require another type of structure that has yet to be fully conceptualized for large-scale implementation.
   - Standardization issues are often a result of how data was originally populated in the CMS databases. For example, entering skeletal data from a physical inventory or entering data verbatim from catalog cards, which historically did not employ a standardized lexicon, makes imposing standardization later a challenge. It also often prioritized colonial terms for objects and does not adequately incorporate mechanisms for including Indigenous community-defined terms.
   - Legacy issues of inconsistent data and the need for wide-scale data clean-up are ubiquitous; addressing these issues is an overwhelming task for most institutions, who may not have the necessary resources or expertise from Indigenous community specialists or other personnel to complete these tasks.
   - CMS database conversion projects have presented opportunities to address the lack of standardized lexicons or simply shift from one imperfect system to another (ex. one interviewee discussed a shift from Past Perfect using Nomenclature to
CollectionsSpace using Getty AAT).

- One respondent said that their use of the Nomenclature was “cherry-picking” and that “controlled” lists have not been controlled, so that much clean-up would be needed to be done to meet this or other standards. This seems to be an extremely common problem for many institutions.

- Many institutions use multiple fields for object names. (Ex. A broader object type field might draw directly from the standardized thesaurus, imported from Getty AAT or Nomenclature, while a more specific object name field is a free text field that allows for a variety of entries, sometimes in different languages when appropriate or including community-defined terms).

- Trying to develop an internal standardization system that prevents unauthorized additions to the lexicons can be challenging, as noted by many of the interviewees.

- Standardization of data in general takes lots of time and resources that are often difficult to come by.

- Challenges with object names in general include plural forms of terms (ex. moccasin vs. moccasins), fragments or pieces of objects, and use of qualifying words (ex. modified stone). Many institutions run into the problem of using different names for the same objects within their own databases (ex. dish vs. plate or shirt vs. blouse).

- Different disciplines from which materials are collected have their own sets of terms that need to co-exist with others. For example, objects classified as archaeological can be problematic when determining object names (ex. Soil sample when it includes shell and stone, or “lots” of materials etc.).

2. General Comments:

- Using Object Names to determine cultural sensitivity is not always accurate (ex. a “totem” may be a culturally sensitive object for one culture but not for another). Consistently, the responses from interviewees was that cultural sensitivity is addressed in other fields or flagged in ways specific to the given CMS. This could mean blocking or restricting database record access to certain staff. No terms or warnings were placed in the Object Name field for any institutions interviewed.
Hierarchies and classifications that place a term in a single category can be problematic. For example: “knife” can be a weapon or it can be a “knife, butter.” Alternatively, objects may have been intended to have multiple purposes, which means systems need to be able to respond to the intended purpose or purposes of different objects.

There can be issues with non-English language terms that arise from using different alphabets. Should words be produced phonetically? Does staff have the knowledge or capabilities to do data entry in another language? Does the font exist for the language? Are there Indigenous language speakers available to work with this data?

Interviewees expressed some concerns with using specific vs. generalized terms (ex. Huipil vs blouse, Amphora vs jar). While some respondents liked the fact that their object name/title fields are more simple (and therefore more standardized), others felt like more descriptive object name/title fields would be more appropriate for their collections and would better incorporate terms specific to Indigenous cultures.

For objects with multiple names/terms, difficulties arise when privileging one “primary name.” Some CMS databases, such as CollectionsSpace, can accommodate multiple object names for a single object, but often one must be chosen as the “primary.” Historically, this system has led to the prioritization of colonial terms over Indigenous community-defined terms. How is this primary term chosen? What are the characteristics of a “primary” name? What is the purpose of having a single term? Who gets to choose the primary term? How can we build applications that can better select among available terms for one that is appropriate for the use context?

Is there a hierarchy to naming in Indigenous languages? How does this relate to a standardized set of terms in English? English is often considered the primary language for many institutions because of their location in North America (predominantly in the United States of America), but English cannot be considered the primary language for all institutions.
In conclusion, while there are a number of existing lexicons and data structures in use among collections professionals who work with collections of Indigenous cultural materials, none of them completely meet the needs of these institutions with regards to object names. This results in an abundance of modified lexicons or in-house designed lexicons. A number of challenges and issues arise when discussing lexicon standardization issues, and these are all factors to take into consideration when deciding next steps. In the words of one interviewee, “Anthropology collections are just messy: made by one culture, used by another culture, and multiple uses for the same object.” Regardless of what lexicon or data structure is used, one of the most important issues to consider is compliance with the United Nations Declaration of the Rights of Indigenous Peoples’ statement on the basic rights of Indigenous communities to self-determination. Moving forward, it is essential that the museum field understand and respond to what this means for collections management as a whole. As institutions that preserve and collect these objects, we have a responsibility to assist Indigenous communities to achieve self-determination for their belongings.
Section 3: Cultural Group Terms

This section assesses and summarizes the survey responses addressing the context in which cultural terms, related fields, and hierarchies are understood and applied at institutions that maintain collections of objects from Indigenous communities. Reflections on existing lexicons related to culture group terms shared through interviews with individual collections staff are also included. Cultural group terms are most often legacies of the Western knowledge systems of disciplines such as anthropology rather than the names of the contemporary Nations whose belongings are described in the collections under consideration in these survey results.

Assessment of Survey and Interview Responses

For a detailed description of each system and structure mentioned here, refer to Appendix A: Standards and Practices. The Getty Art and Architecture Thesaurus (AAT) was mentioned most often with the Murdock’s Ethnographic Bibliography and the related Atlas of World Cultures mentioned and reflected in many of the shared lexicons. The Smithsonian Handbook, Library of Congress Subject Headings, and borrowing from other institutions was also mentioned. The NMAI, the Milwaukee Public Museum, Peabody (Harvard) and the Burke Museum were some of the museums that others have looked to for culture names and structures. When discussing the culture field, survey respondents also talked about related authorities for artist names, place names or art dictionaries as providing information relevant to developing authority lists. Some respondents see these fields or elements as part of complementary field sets when looking at their use of “culture.”

The most prevalent comments were that institutions had either built their own list of terms for cultures, or had adapted standards (such as the AAT) to reflect internal needs, such as curatorial access, or in response to work with Indigenous communities. A number of respondents mentioned that older terms and newer terms were both used, but that their management systems either supported or hindered how they would like to record or display these terms. For example, some used equivalencies in repeatable fields, others used phrased

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11 A review of the shared lexicons shows similar structures or variations on classifications first outlined in Ethnology and coded in the Ethnographic Atlas by 1971.
entries, bracketed entries or separate note fields. Many factors come into play in choosing what to privilege, for example, some privilege the names Indigenous communities are now using, while others seek to balance searchability by using colonial terms that many be more familiar to researchers and museum staff. Many of the respondents mentioned either that community input on cultural terminology was ongoing, based on specific projects, or that they were looking to undertake this work systematically.

Respondents mentioned a range of possibilities for who was responsible for developing cultural terms, a common solution being collections staff working with curators and relevant communities. Cross departmental collaboration or application of terms from a centralized library standard were also cited.

A number of museum collections staff shared their lexicons with the Task Force. These schemas are very helpful in understanding how museums have conceptualized and applied the culture field and how they have structured cultural terms in various ways. A number of factors go into developing and implementing such schemas, so that their broader application needs to be considered in light of the scope of collections (geographic or material, etc.), the focus of collections (e.g. art, archaeological, ethnological, or a combination).

Some museums have shared specific term lists and others have provided the hierarchies in which a specific culture may fit. Often these schemas include broader geo-cultural groupings. In some cases, hierarchies are expressed in a single phrased field, or museums have used combinations of these frequently because their CMS structures dictate entry strategies. These legacy hierarchies and CMS limitations need to be acknowledged as potential barriers to contemporary community access.

Looking at Current Standards

None of the following standards were developed with Indigenous communities or collections as a central focus, and certainly not with contemporary Indigenous community access as a primary concern. Given a goal to try and find tools that will allow existing collections to be brought together in shared systems and a goal of providing better, more transparent access for contemporary Indigenous communities, the limitations of these tools must be acknowledged. Since many of the current terms
and systems are colonial and Eurocentric in origins they are unlikely to provide the answer for a
decolonized access system. The following observations are based on information gathered during the
Phase I survey and Phase II interview.

**Cultural Object Name Authority (CONA) & Union List of Artist Names (ULAN)**

Getty’s CONA editorial rules has a Culture Term field (see: 3.6.2.15) defined as “The name of
the culture, people, or nationality from which the work originated.” It also states that the values
are a controlled list that is part of the ULAN Nationality/Culture list. Although they are not as
yet linked, it is anticipated that the two standards will be linked with the AAT in the near future.
Although this may work well for art collections with known makers, the data set only allows
objects without named makers to be described through the facet “Unknown people by culture.”
Culture is part of Nationality as it relates to a person, not a group of people in the ULAN, or in
CONA or potentially through the AAT.

**Cataloguing Cultural Objects (CCO)**

Although the Cataloguing Cultural Objects (CCO) allows for specific cultures to be noted, it’s
privileging of the AAT and the AAT’s connection to the ULAN may cause issues for those
trying to use the AAT and ULAN in a linked system who prefer to use stand-alone groups that
are not linked to people as “unknown.” Also, if an institution wants to use “culture” or Nation as
part of a hierarchy with broader regional groupings, or as a phrased series (e.g. broader to
more specific) using these tools may be challenging. It is clear that the strength of the CCO,
AAT and ULAN integration is for art collections with known makers. Potentially, Indigenous
Nations could be added to CONA and the CCO in a way that reflects a contemporary and
decolonized objective.

**Canadian Heritage Information Network (CHIN)**

The Canadian Heritage Information Network’s discussion of “Culture” (a field in the Humanities
Data Dictionary’s Ethnographic Fields) suggests harmonization with the CCO and gives the
AAT as an authority list\textsuperscript{12} that could be used.

There are relevant discussions of the use of standards and guides on the Canadian Heritage (government website). From the 1970’s through 1990’s Canadian museums of all types worked together on shared standards and had committees that addressed specific collection types and fields (e.g. Ethnology). More recently, CHIN has continued to work internationally on standards, including current involvement with the Nomenclature Task Force, and consideration of the Parks Canada Descriptive and Visual Dictionary of Objects (see: https://app.pch.gc.ca/application/dvp-pvd/appli/descr-eng.php) in concert with the Nomenclature. In the past they undertook a major project to harmonize CHIN data dictionary standards with the CCO and the AAT.

**NMAI Cultural Thesaurus**

Although the NMAI Cultural Thesaurus is detailed, and mentioned by several interviewees as a model, it reflects this institution’s specific collections strengths and objectives and may not be widely applicable without modifications.

Considering the Northwest Coast > Coast Salish > Cowichan > Musqueam hierarchy reveals an old classification problem that is common in such schemes. Although the Cowichan (Quw’utsun’) people speak a language dialect (hul’q’umi’num) related to the Musqueam dialect (hən’q̓əmʔəm), they are completely separate groups. In many hierarchies the “Halkomelem” language (part of the Salishan family), as described by linguists, subsumes distinct groups of peoples and communities. The Halkomelem language has been interchangeably labeled “Cowichan” creating additional confusion when it is a classification term applied to these separate communities. It would be useful for those with knowledge of specific areas to review the Cultural Thesaurus for issues, such as described above, prior to adapting it for local use.

**Other sources of cultural terms**

\textsuperscript{12} See https://app.pch.gc.ca/application/ddrcip-chin dd/description-about.xhtml?lang=en Select Artefacts Canada Humanities Data Dictionary and search for “culture” in field name search box.
International applications that have attempted to develop data standards include ICONCLASS, a multilingual classification system for cultural content that has a Linked Open Data API (See: http://www.iconclass.org/); however, it is European in origin and Eurocentric in application.\textsuperscript{13}

The CIDOC Conceptual Reference Model is a ISO Standard developed through ICOM and was developed as an extensible ontology for concepts and information in cultural heritage and museum documentation, specifically for the interchange of cultural heritage information.\textsuperscript{14} This conceptual model requires high level data standards and relational data modelling. For more information on how the CIDOC CRM’s model deals with cultural terms see definitions of \textbf{E74 Group}, which is a sub-class of E39 Actor, and a Superclass of E40 Legal Body. Examples for “Group” range from “the impressionists”, “the Navajo”, the Greeks”, “the peace protestors in New York City on February 15 2003” etc. Although using this conceptual model would require considerable work to integrate Indigenous collections, recent work by the Foundation for Research Technology - Hellas (FORTH) may show promise for decolonizing approaches through the CIDOC CRM.

\textbf{Summary}

Based on interview and survey responses, we observed the following factors when considering when and how to organize Cultural Group names for database use. Respondents provided the following reasons for the necessity of lexicon development.

1. Providing cultural affiliation information for communities
2. Supporting precision and / or recall for defined user groups
   a. Public
   b. Community
   c. Specialists
3. Providing management support for grouping collections in storage or display

\textsuperscript{13} Outdated and objectionable classifications under 36B – human races; peoples; nationalities; Whereas 4 Society, Civilization, Culture refers to the “other type of Culture” even though products of universal activities may be found here (e.g. "crafts"). Discussion board comments about updating terminology for Indigenous people met with concerns for historical research “authenticity” – clearly not a system capable of “use for”

\textsuperscript{14} See ISO 21127:2014(en) and http://cidoc-crm.org/html/5.0.4/cidoc-crm.html
4. Supporting data sharing with other cultural institutions and consortia or supporting access between collections based on shared terminology.

The following observations were made about structuring cultural data.

1. Collections systems constrain or support data management by
   a. Limiting the fields and structures available or by providing flexible structures that require in-house data modeling
   b. Providing multiple fields for levels (or collection types) vs recording cultural hierarchies as a phrase in less fields
   c. Providing for controlled values list or authority control (including integration with tools)
   d. Restricting terms by authority control tools
   e. Supporting UNICODE for non-Latin character sets allow for language support, or by limiting non-standard character use if non-UNICODE compliant

2. Size of the collection often results in varying structures of culture data; creating issues for data aggregation if syntax logic is not consistent or has many exceptions.
   a. An example from a natural history museum listed up to five levels for American collections, less for other regions of the world (e.g. no need for sub-region in some areas).
   b. An anthropology museum that was interviewed uses phrased entries for region, community with additional level for specific local descendant communities, at more specific entries

3. Some collections containing archaeological objects and materials in concert with ethnological / historic objects have used qualifiers in data fields to distinguish these (e.g. NMAI brackets for archaeological cultures)

4. Thesaurus use is less common for culture terms than for object names; for an exception see this example from an interviewee at a university anthropology museum:

<table>
<thead>
<tr>
<th>Term</th>
<th>Tlingit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broader Term</td>
<td>Northwest Coast Indians</td>
</tr>
<tr>
<td>Alternate Term</td>
<td>Chilcoot</td>
</tr>
</tbody>
</table>
Tlingit Indians
Klingit
Tlingit?

Additionally, the form that cultural group terms take is often ascribed by the lexical tool that is under consideration. For example, although adjectival form of cultural names are proscribed or suggested for art collections where the culture is determined by stylistic criteria, anthropological and historic collections are more likely to use nouns.

**Museum-specific culture hierarchies**

Although it has been noted that there are no existing cataloguing standards for Indigenous or anthropological collections that have been widely applied such as are found in libraries (Library of Congress or Dewey) there have been a number of systems developed and used by museums over time. These standards reflect their largely Western, colonial origins and the organization of cultural groups are often based on geography, geo-cultural areas that are originally derived from projects focusing on cross-cultural comparisons, or use language family groupings.

Some issues raised about these systems include:

1. Cross-cultural comparative schemas such as those championed by Murdock, Clark Wissler, Alfred Kroeber, manifested in the journal *Ethnology* and published as the Ethnographic Atlas in 1971. Several respondents and bibliographic notations on shared lexicons reference these origins. A primary caution is that these groupings can obscure specific community information. This is particularly true of smaller communities where they are adjacent to communities who have been used as a designated “type” for comparative purposes; especially where coding has been applied to these designations. Murdock’s objective was to produce a degree of unity through coding decisions and given that he alone was responsible for these decisions, these biases have created

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15 Style as it has been related to culture could be expanded and further problematized. For example an art work may be described as Salishan in style whereas the artist’s community may be a specific Salish group. Again the focus of the collection often determines which terminology is privileged.
2. Classifications based on linguistic groupings are problematic, especially when they use the name of one group represented by that linguistic family or dialect to represent others. Kwakiutl (and close variations) derived from the Fort Rupert Kwagu’l (where Franz Boas worked) to represent many Kwakwaka’wakw communities, is a classic example. Cowichan or Halkomelem, discussed earlier, is another example for Salish speakers.

The diversity of museums with Indigenous collections, the colonial legacy of collecting, the relative size and range of collections, and the purposes of building cultural lexicons all contribute to the challenges of building a shared lexicon, especially as it relates to cultural group names. Art museums and archaeology collections face different challenges in structuring data and in taking advantage of tools such as the AAT, which may work well for the first, but not the latter.

Current anthropological theory that critiques the culture concept does so from different vantage points: cultural theorists criticize the essentializing nature of the concept that does not take into account the ongoing dynamic nature of communities and that any individual may have a complex relationship to communities. Indigenous critics of museum practice often emphasize the need to support interconnectedness with traditional knowledge and problematize a “tiresome nomenclature of classifying Indigenous peoples” 17 or, that cultural classification systems developed as part of salvage ethnography or cultural comparative projects perpetuate the colonial mindset of a dated anthropology providing poor tools for contemporary museums committed to working with Indigenous communities.

Many communities, on the other hand, are interested in affirming their affiliation to belongings in museum collections, and legal processes such as NAGPRA require museums to provide such information. Practical management needs, research objectives and legal mandates

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16 The UBC Museum of Anthropology can illustrate many such problems; older collections such as the National Museum of Natural History, the American Museum of Natural History and others have applied these schemas in the past.

suggest that cultural affiliations will be an important determinant for the foreseeable future.

Future work for a Lexicon Committee could include broadening considerations of the culture concept with other related information. Several of the respondents mentioned geographic information and other fields as relevant to their work defining or cleaning up cultural terms. Providing context such as geographic information, collection history and sources may be useful in bridging legacy systems with new mandates. Although a number of legacy issues have been problematized in this report, online tools that provide a level of transparency which allows classification issues to be revealed or provide access to original cataloguing ledgers (e.g. American Museum of Natural History) may be useful to show the context of collecting and the types of classification schemes that have been applied. The Reciprocal Research Network provides levels of access to collections records and tools for researchers to respond to holding institutions.
Section 4: Potential Solutions and Funding Options

This section builds on the interview responses and the summaries of existing object name and cultural name classification systems in order to propose potential technical solutions to the problem, along with potential funding options. The Lexicon Task Force recommends that Collections Stewardship, AAM, establish a Lexicon Committee to explore the professional value and financial viability of these potential solutions.

The survey assessments compiled in this report make clear the challenges presented by attempting to develop a standard lexicon for use across the diverse museum landscape. The Cultural Group Terms assessment acknowledges the colonial history inherently embedded in classification systems. These assessments point to two separate, but entangled sets of issues: (1) grounded in the depth and complexity of collections management systems that use different classification schemes and the history of colonial institutions creating classifications scheme to fit their own needs and (2) that any classification system will have colonial baggage. Linked to this second issue is the logistical challenge of how to responsibly engage with hundreds of Indigenous communities.

There are a number of ways a Lexicon Committee could potentially contribute to the resolution of issues that were identified in the surveys and interviews. These include:

1. Creating a listserv to provide a forum for collections professionals to discuss, debate, or simply commiserate over shared conundrums related to cultural and object names.
2. Promoting the use of an already existing online data portal, such as the Getty’s CONA for accessibility to anthropological collections across the world.
3. Connecting with the producers and managers of existing commonly-used lexicons to bring up issues and concerns faced by collections professionals working with all types of anthropological collections.
4. Conducting further intensive research to produce a comprehensive set of resources that details the pros and cons of different database systems in relation to anthropological collections.
5. Working to develop a shared portal that coordinates access to existing ethnographic terminology resources. This contribution has its own challenges related to accurately connecting relevant data, while also providing an opportunity to reveal commonalities across data sets.

6. Producing a standardized lexicon for use with anthropological collections that takes into consideration ethnographic, fine art, and archaeological materials as well as all of the concerns and issues discovered throughout the course of these surveys and interviews.

   a. Note: this approach may not be very practical for a number of reasons. First, as described by one of the interviewees, even when groups have tried standardizing across a smaller consortium of institutions, it can be very time and resource intensive. As demonstrated in our interviews, developing a standardized list, even internally at a single institution, depends on the users and what they will want to get out it or how they intend to use it. This will vary wildly from one institution to the next, so attempting to develop a single standard does not seem logical. Finally, as discussed above, the only responsible approach for developing a standardized anthropological lexicon would involve community leadership or consultation with the cultures whose materials are represented. The best approach to this method may be to initiate pilot projects at a regional level in order to gauge the level of resources and time necessary to approach this project on a larger scale.

At this juncture, it’s important we consider multiple approaches to solving the problem and that we weigh these approaches based on available human and financial resources. Each solution presents a different funding scenario. This report presents three possible solutions and offers corresponding funding scenarios for consideration by a Lexicon Committee.

Solution 1: Anthropology Lexicon Resource Portal

The Lexicon Committee might decide that the task of creating a standardized lexicon was unrealistic and instead could focus future work on the creation of a suite of resources available for free to lexicon users. This comprehensive suite of resources might include the following
deliverables:

- Summary of the findings of the Lexicon Task Force.
- Listserv to provide a forum for collections professionals to discuss, debate, or simply commiserate over shared conundrums related to cultural and object names.
- Glossary of terms to help users understand core terminology.
- Comprehensive bibliography and links to articles related to classification systems and data structures used by institutions that manage anthropology collections.
- A summary of the pros and cons of different database systems in relation to anthropological collections.
- Examples of classifications systems currently used by diverse institutions and contact information. This would create and foster a community of users. When possible, the Committee should encourage the publication of existing data by members of the community in ways that fosters re-use.
- Promotion of the use of the already existing online data portal, Cultural Object Name Authority (CONA).

Funding Options for Solution 1

This solution could be accomplished at no cost. The Lexicon Committee could expand into sub-committees and assigned tasks related to the creation of one or more of the proposed resources. Web hosting would ideally be hosted by a professional organization such as AAM or ATALM. Considering the Task Force and a potential Committee are parts of CSAAM, hopefully this is not an unrealistic goal.

If minimal funding is required to implement Solution 1, the Society for the Preservation of Natural History Collections (SPNHC) and the Institute of Museum and Library Services (IMLS) may be options.

- SPNHC, Faber Research Grant ($1,000). A cash grant for a competitive research proposal, intended to encourage innovative projects that promote the objectives of the Society in collections management, conservation, or other collection-oriented aspects of natural history. For more information, please see http://www.spnhc.org/41.
- IMLS, National Leadership Grants for Museums, Rapid Prototyping grant ($5,000-
Solution 2: Create a Standardized Anthropology Lexicon

If the Lexicon Committee determines that the creation of a standardized anthropology lexicon for Object Name Terms and for Cultural Group Terms is feasible and offers the best solution to the problem, then the primary function of the Committee will shift from assessment to lexicon development. Creation of a standardized anthropology lexicon will be the primary deliverable, but it will require outside funding. The greatest challenge will be preparing to write the grant proposal (i.e., becoming “grant ready”). This will entail a clear understanding and assessment of the problem (already accomplished), the development of a series of goals and objectives, a comprehensive plan of action and methodology, and the identification of individuals qualified to implement the plan. Essentially, we need to know how to solve the problem and who will be involved in order to request funding to create the solution. Developing the lexicon at a regional or local level, then demonstrating how to “scale up” to a national resource, may be worth considering.

If we are not sure how to create the solution (i.e., a standardized anthropology lexicon), we should apply for funding to develop a plan that would outline how we would create a standardized anthropology lexicon. That plan would then be used to draft another grant proposal for implementation. Either scenario will require a substantial time commitment on behalf of the Lexicon Committee. In order to address the “two entangled sets of issues” identified earlier, the Lexicon Committee will need to pull together a diverse team of constituents (i.e. collections management, curatorial, library and information science, technology, and Indigenous community representatives). A planning or research grant would focus on these key activities:

1. Articulation of the problem and why a standardized anthropology lexicon is the solution and how this will benefit current practice.
2. Development of a collaborative framework that incorporates expertise from a mix of professional and cultural domains.
3. Implementation of pilot activities that analyze, evaluate, and identify intellectual control
and technical requirements.

4. Application of outcomes and research findings.

**Funding Options for Solution 2**

There are two viable funding sources for Solution 2; National Endowment for the Humanities (NEH) and IMLS. The National Endowment for the Humanities, Research and Development grant is a viable funding source. The Research and Development program supports projects that address major challenges in preserving or providing access to humanities collections and resources. These challenges include the need to develop advanced modes of organizing, searching, discovering, and using such humanities materials. This program recognizes that finding solutions to complex problems often requires forming interdisciplinary project teams, bringing together participants with expertise in the humanities; in preservation; and in information, computer, and natural science. All projects must demonstrate how advances in preservation and access would benefit the cultural heritage community in supporting humanities research, teaching, or public programming.

Research and Development offers two funding tiers in order to address projects at all stages of development and implementation.

- **Tier I: Planning and Basic Research**
  - Tier I grants support the following activities: planning and preliminary work for large-scale research and development projects and stand-alone basic research projects, such as case studies, experiments, or the development of iterative tools. Proposals for planning work designed to culminate in large-scale projects must identify one or more project deliverables, such as the creation of an action agenda, work plan, published report, draft standard, or software prototype. Proposals to conduct preliminary testing or stand-alone basic research must indicate how they will address research issues or problems in the cultural heritage field. When possible, grantees must make research data publicly accessible in a format inviting additional analysis or reuse.

- **Tier II: Advanced Implementation**
  - Tier II grants support projects at a more advanced stage of implementation for the following activities: the development of standards, practices, methodologies, or workflows for preserving and creating access to humanities
collections; and applied research addressing preservation and access issues concerning humanities collections. Applications for Advanced Implementation must demonstrate significant planning or prior research in one or more relevant fields.

For Tier I projects, the maximum award is $75,000 for up to two years. For Tier II projects, the maximum award is $350,000 for up to three years. Although cost sharing is not required, this program is rarely able to support the full costs of projects approved for funding. In most cases, NEH Research and Development grants cover no more than 80 percent of project costs. For more information please see https://www.neh.gov/files/grants/research-development-june-7-2018.pdf.

A successful NEH grant proposal will require a Lexicon Committee to think in terms of the project’s significance to the humanities. We would need to clearly address how a standardized anthropological lexicon would benefit the cultural heritage community, specifically by supporting humanities research, teaching, or public programming. The key argument is that increased accessibility through standardization will create more opportunities for discoverability, which will lead to greater access benefiting more diverse communities.

Another option to fund a planning grant for Solution 2 is the Institute of Museum and Library Services, National Leadership Grants for Museums (NLG for Museums). National Leadership Grants for Museums support projects that address critical needs of the museum field and that have the potential to advance practice in the profession so that museums can improve services for the American public. National Leadership Grants for Museums has three project categories: learning experiences, community anchors, and collections stewardship. The Lexicon Committee project would fall under collections stewardship.

Collections Stewardship and Public Access

From the FY2019 Notice of Funding Opportunity: “IMLS supports the role of museums of all types and sizes as trusted stewards of museum collections as the natural, cultural, artistic, historical, and scientific foundations of our shared heritage and knowledge. Through the careful and responsible management of collections and their associated documentation,
museums facilitate access to information, ideas, and connections for people of all ages, backgrounds, and interests. We welcome applications for projects designed to maximize the long-term preservation of collections as well as those that seek to strengthen a museum’s ability to manage and shape its collections through curatorial proficiency, the development of well-grounded policies, and project-based technical training for museum staff, volunteers, and interns. We encourage museums to contribute to shared, sustainable systems and networks to make their collections and associated resources more accessible, to facilitate discovery of collections and related information, and to deepen engagement with those collections.”

There are three levels of funding for this program:

- **Non-research grant**, $50,000–$1,000,000 with 1:1 cost share required. Projects of one to three years that address critical needs of the museum field and that have the potential to advance practice in the profession so that museums can improve services for the American public.

- **Research grant**, $50,000–$1,000,000 with no cost share required. Research projects of one to three years that investigate key questions important to museum practice and that have the potential to advance the profession so that museums can improve services for the American public.

- **Rapid prototyping grant**, $5,000–$50,000 with no cost share required. Projects of one year that prototype and evaluate specific innovations in the ways museums operate and the services they provide. Project results, both successful and unsuccessful, should offer valuable information to the museum field and the potential for improvement in the ways museums serve their communities.

Successful NLG for Museums projects have the following indicators (characteristics):

- **Broad Impact**: The project has the potential for far-reaching impact beyond the institution and for influencing practice across one or more disciplines or specific fields within the museum profession.

- **In-depth Knowledge**: The proposal reflects a thorough understanding of current practice and knowledge about the subject matter and an awareness and support of current strategic initiatives and agendas in the field.
● **Innovative Approach:** The project employs novel approaches or techniques new to the project area to strengthen and improve museum services to benefit the audiences and communities being served.

● **Collaborative Process:** The project incorporates audience, stakeholders, and/or other partners to demonstrate broad need, field-wide buy-in and input, access to appropriate expertise, and sharing of resources.

● **Shared Results:** The project generates results such as models, new tools, research findings, services, practices, and/or alliances that can be widely used, adapted, scaled, or replicated to extend and leverage the benefits of federal investment.

For more information please see [https://www.imls.gov/sites/default/files/fy19-oms-mfa-nofo.pdf](https://www.imls.gov/sites/default/files/fy19-oms-mfa-nofo.pdf)

**Solution 3: Anthropology Lexica Linked Open Data Portal**

If the Lexicon Committee decides the task of creating a new standardized anthropology lexicon is unrealistic, they could opt to develop a portal by which existing anthropology lexica, some of which have already been collected, could be shared via linked open data (LOD). A linked data portal initiative would be a deliverable that would serve as a bridge between disparate lexica, enabling users to expand their network of classification terms.

**Funding Options for Solution 3**

Funding for Solution 3 could be supported by the NEH and IMLS programs discussed under Solution 2.

**Final Thoughts**

Grant writing is extremely time consuming and difficult to accomplish successfully by committee, especially when the committee is composed of individuals working in institutions spread across the country. And of course, there is no guarantee of funding. If the Committee decides to seek funding, they need to be prepared for a failed proposal and the prospect of resubmitting or be prepared with an alternative plan. In addition, they must be cognizant that all current members of the committee have full-time responsibilities to their home institutions.
Grant writing may require the regular recruitment of new members who have the time and expertise to prepare proposals.
Appendix A. Standards and Practices for Ethnographic Names, Classification Systems, and Controlled Vocabularies

This appendix offers a more technical discussion of the underlying standards and approaches discussed in the document. This is not intended to be an exhaustive list of relevant standards, but includes those identified as important by the Task Force and referenced by survey instruments sent to participants. In some cases, we point to contemporary digital equivalents of earlier print-based vocabularies.

From the responses to survey and interviews, there are significant opportunities to improve professional understanding of contemporary methods for knowledge organization. These methods create alternatives to one-dimensional lexicons or strict structured classification hierarchies. With inclusive governance processes, there is potential to reimagine how museums and descendant communities can work together.

Like any culture, technical communities of practice exist in historical (and ever evolving) contexts, bring their own understandings of the world to problems (both epistemological and ontological), and often represent compromises that enable their broad adoption. As an introduction to these challenges, we present the following core technical challenges that underlie the task at hand:

- What are we trying to represent?
- How do we store the representation in ways that computers can use?
- How can we use the represented information?

What are we modeling?

Within the responses to surveys and interviews, a number of technical terms are used interchangeably. For the practical purposes of many CMS the differences may also be unimportant. In order to develop a better understanding of the problems, we’d like to draw some distinctions between the function and purposes of these different knowledge
organization systems (KOS), while also acknowledging that the lines between them can be blurry.\textsuperscript{18} The relationships between these KOS is often presented as a continuum from simple term lists through formal ontologies.

![Figure 1: Increasing structural complexity in controlled vocabularies.\textsuperscript{19}](image)

1. **Classification Systems:** a method of organizing classes of materials based on common attributes or properties. The purpose of classification system is to establish the attributes and properties by which things are distinguished so that objects or concepts can be placed within the dimensions of the classification system. Because of this, classification systems often define a hierarchy and notation system that organize the classes (e.g. an alphanumeric system such as the Dewey Decimal System, the Library of Congress Classification, or Universal Decimal Classification, or Linnean classification of biological organisms).\textsuperscript{20} However, many of these existing standards struggle with correcting their colonialist worldviews. When the principles are well tested, these standards can be adapted to better reflect community needs.\textsuperscript{21}

2. **Controlled Vocabularies:** Controlled vocabularies often encompass a family of approaches that range in sophistication. At its most basic, a controlled vocabulary is explicitly enumerated list of terms with non-redundant definitions (e.g. common terms

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\textsuperscript{20} Ibid.

with different meanings must be qualified to avoid ambiguity). In this sense, a lexicon functions as a controlled vocabulary by presenting available terms. As a vocabulary grows in sophistication, taxonomies introduce hierarchical relationships (broader/narrower terms) while thesauri introduce between-term relationships (use, use for, etc.). Thesauri, such as Getty’s AAT, may also introduce organizing concepts that create complementary hierarchies of terms (e.g. materials vs. techniques). Fully developed ontologies present a network of concepts with defined relationships, not limited to terminological hierarchies. Increased sophistication allows maintainers to attach multi-lingual terms to a concept that may participate in polyhierarchies.

3. **Authorities:** Authorities are a kind of controlled vocabulary that are built around the management of names and references to a particular entity type. Common authorities disambiguate between a person and the names the person is known by, a work and the various titles, or a geographic location’s various names across time, culture, and language.

4. **Representation & Data Encoding Standards:** standards that define high-level ontologies, data models and dictionaries, and storage formats for encoded data. (See *How do we represent the model in digital systems?* below).

5. **Content Standards:** standards and best practices that offer guidance on constructing descriptions of cultural objects. Initially these guidelines were often tied closely to a particular data encoding standard, but recently, the distinction between content and encoding has become sharper as new technologies offer multiple ways of accomplishing the goals of content standards.

---


How do we represent the model in digital systems?

Many of the knowledge organization systems discussed in interviews and surveys have their foundations in pre-digital methods of representation. The standards for representing classifications and controlled vocabularies were as much about the production of static editions of these systems that were independent from their application to individual descriptions. Contemporary technical standards move away from those limitations towards the development of dynamic systems that are directly integrated with individual descriptions. In the descriptions of available standards that follow, we identify the following technical components related to how a knowledge organization system is represented:

- **Modeling method:** Depending on the underlying technology, there are different ways of modeling a knowledge organization system. As computer systems advanced, relatively flat document-like record structures gave way to entity-relationship (ER) modeling. New Linked Open Data methods rely on network-like ontologies such as the Resource Description Framework (RDF) and Web Ontology Language (OWL).

- **Encoding standards:** A system developed using different modeling techniques may be encoded and stored according to an encoding standard that is optimized for different functions in the lifecycle of the information. Information may be stored in a relational database management system (RDBMS) for quick retrieval and then translated into an eXtensible Markup Language (XML) representation for exchange with other systems. Linked Open Data (LOD) approaches allow for information to easily move across different encoding standards and formats, especially standards such as Javascript Object Notation (JSON) that allow for application development on the Web.

How do we make use of the information?

The ultimate goal of a knowledge organization system is to meet the information needs of users by allowing them to retrieve the information (or the objects) that are relevant. Traditionally, classification systems and controlled vocabularies worked together to provide physical access (an object can only be in one location within a classification structure, e.g. a book on a shelf), and intellectual access (multiple terms may apply to the same item). In the
responses to the surveys and interviews, participants acknowledge the difficulties in navigating the cultural and linguistic challenges of representing ethnographic materials.

Moving forward, the group that takes up these challenges will need to make a fundamental commitment to determine:

- Whether the goal of the Committee is the production of a knowledge organization system or systems
- What kind of KOS (or set of coordinated systems) should be used
- What the intended function of the KOS is across different types of organizations, within specific collection management systems, and in online and open data environments.
- How the KOS will interact with or contribute to other vocabularies and standards. (i.e. if a goal is to contribute to shared vocabularies such as Getty AAT or Nomenclature).

We must also acknowledge that the development of a knowledge organization systems is both social and technical. In order to develop a sustainable KOS, a Lexicon Committee will need to establish a governance structure to define the conditions that allow concepts and terms to be added to the classification or vocabulary (i.e. concepts of warrant), how changes will be handled, and what the technical specifications are for digital representations. With the advent of Linked Open Data (LOD) approaches this also means situating a particular system within the constellation of other existing standards.

**Organization of this Appendix**

To help organize the existing classification standards, vocabularies, modeling/encoding frameworks, and content guidelines, the following organization was used:

<table>
<thead>
<tr>
<th>Name</th>
<th>The name or title of the standard/best practice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Organization</td>
<td>What organization or professional body is responsible for maintaining the standard/best practice.</td>
</tr>
<tr>
<td>URL</td>
<td></td>
</tr>
<tr>
<td>Scope</td>
<td>What is the focus of the standard/best practice.</td>
</tr>
</tbody>
</table>
Collections Stewardship: Lexicon Task Force Report 2018

Type
To make some distinctions between the different components of a KOS,

Governance Model
How is the standard/content guideline maintained?

Encoding
If applicable, what formats the standard the maintenance organization has made it available.

Comment
Other comments in relation to the discussion, survey/interviews in the document.

Classification Systems

Name
Library of Congress Classification (LCC)

Maintenance Organization
Library of Congress

URL
https://www.loc.gov/catdir/cpso/lcc.html

Scope
Bibliographic material in LOC and other academic libraries.

Type
Classification

Governance Model
Maintained by the LOC Policy and Standard Division (PSD)

Encoding
The Library of Congress makes classification records available in a variety of formats, including MARC, XML, and various RDF encodings (XML, JSON, N3, etc.)

Comment
Given that the LC conceptual framework is geared to bibliographic works but not object cataloguing, this schema may have limited applicability for object collections. Efforts to link cultural objects with bibliographic works and archival collections may find these tools of value.

Name
Xwi7xwa Classification
(formerly Brian Deer Classification)

Maintenance Organization
Xwi7xwa Library at the University of British Columbia

URL
http://xwi7xwa.library.ubc.ca/files/2015/03/Xwi7xwaClassification-04March2013P.pdf
**Scope**
Materials created by Aboriginal scholars, and materials produced by First Nations, First Nations organizations, tribal councils, schools, publishers, researchers, and writers, as well as materials respectful of First Nations perspectives

**Type**
Classification

**Governance Model**
Maintained by librarians at the Xwi7xwa Library at the University of British Columbia. Doyle, et al. document adaptations of the schema in use by other libraries and tribal organizations.

**Encoding**
The Xwi7xwa Classification scheme is intended for encoding in an enhanced MARC21 format. 24

**Comment**
The Xwi7xwa Classification scheme is the contemporary incarnation of an Indigenous knowledge organization scheme developed by Brian Deer. Unsatisfied with the dominant Library of Congress Subject headings, Deer adapted the format in order to produce an original classification scheme. This scheme has since been maintained and modified by the Xwi7xwa Library at the University of British Columbia. 25

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**Name**
Ethnographic Bibliography of North America

**Maintenance Organization**
Human Relation Area Files

**URL**
http://hraf.yale.edu/

**Scope**
Bibliography

**Type**
Classification

**Governance Model**
HRAF is a not-for-profit membership consortium of universities, colleges, and research institutions. Its mission is to encourage and facilitate the cross-cultural study of human culture, society and behavior in the past and present.

**Encoding**
n/a

**Comment**
Published by Human Relations Area Files (HRAF), this publication was written by George Peter Murdock in 1975. This older classification scheme divides up North America into 15 arbitrary geographic areas and includes 5

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25 Ibid.
subject bibliographies. While extremely out of date, it is still used by some institutions through legacy systems and incorporated into in-house developed classification systems.

<table>
<thead>
<tr>
<th>Name</th>
<th>The Info-Muse classification system for ethnology, history and historical archaeology museums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Organization</td>
<td>Société des musées québécois (SMQ) and Espace Courbe</td>
</tr>
<tr>
<td>Scope</td>
<td>Ethnology, history and historical archaeology museum collections</td>
</tr>
<tr>
<td>Type</td>
<td>Classification</td>
</tr>
<tr>
<td>Governance Model</td>
<td>n/a</td>
</tr>
<tr>
<td>Encoding</td>
<td>n/a</td>
</tr>
<tr>
<td>Comment</td>
<td>The Info-Muse classification system is based on the Revised Nomenclature for Museum Cataloging with terms coming from Parks Canada, the Musée de la civilisation, and the Société des musées québécois. For Ethnology/History the “Culture” field is part of the “Origin” field set that includes geographic elements, religion and Geographic Cultural Area. It recommends creating an authority list and using adjectival forms, although several of the examples are nouns. (See <a href="http://www.musees.qc.ca/fr/professionnel/guidesel/doccoll/en/ethno-art-techno/cu.htm">http://www.musees.qc.ca/fr/professionnel/guidesel/doccoll/en/ethno-art-techno/cu.htm</a>)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Nomenclature 4.0 for Museum Cataloging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Organization</td>
<td>American Association of State and Local History (AASLH)</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://community.aaslh.org/nomenclature/">http://community.aaslh.org/nomenclature/</a></td>
</tr>
<tr>
<td>Scope</td>
<td>Human-made Objects</td>
</tr>
<tr>
<td>Type</td>
<td>Classification/Lexicon</td>
</tr>
</tbody>
</table>
**Governance Model**

Nomenclature is managed by a Task Group of the AALSH

**Encodings**

Nomenclature is often built into the RDBMS structure of a CMS. It is not publicly available as a dataset.

**Comment**

The current version of *Nomenclature* builds on Robert G. Chenhall’s system for classifying human-made objects, originally published in 1978. Trained as an anthropologist, Chenhall based the organization of nomenclature terms on functional uses of objects. As an early pioneer of museum computerization, Chenhall optimized Nomenclature for computer systems that may feature it as a core vocabulary for description.

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**Controlled Vocabularies**

<table>
<thead>
<tr>
<th>Name</th>
<th>Getty Art and Architecture Thesaurus (AAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintenance</strong></td>
<td>The Getty Research Institute</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://www.getty.edu/research/tools/vocabularies/aat/">http://www.getty.edu/research/tools/vocabularies/aat/</a></td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>Art, architecture, decorative arts, material culture, and archival materials</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Thesaurus (ISO/NISO standards compliant)</td>
</tr>
<tr>
<td><strong>Governance Model</strong></td>
<td>AAT is managed by staff at The Getty Research Institute. Communities may make contributions to the AAT provided they comply with the Editorial Policies. See <a href="http://www.getty.edu/research/tools/vocabularies/aat/">Contributing to the Getty Vocabularies</a></td>
</tr>
<tr>
<td><strong>Encoding</strong></td>
<td>As a long-standing project, the AAT is available in multiple formats. AAT is available to be incorporated into CMS systems as a database or as XML. The AAT is available through a Linked Open Data service. The thesaurus is modeled using the Resource Description Format (RDF) and available in multiple formats (JSON, n3, Turtle, etc.)</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>“The AAT is a structured vocabulary containing terms and other information about concepts. Terms in AAT may be used to describe art, architecture, decorative arts, material culture, and archival materials.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>National Museum of the American Indian (NMAI) Reference Lists</th>
</tr>
</thead>
</table>
Maintenance Organization  National Museum of the American Indian


Scope  People/Cultures, Object types, Techniques, and Materials

Type  Thesaurus

Governance Model  n/a

Encoding  Available online as HTML (extracted from KE EMu CMS?)

Comment  The online portal may be a representation of underlying data drawn from NMAI’s KE Emu system. The NMAI’s Cultural Thesaurus focuses on North, Central and South America and is inclusive of ethnographic and archaeological objects. It does not cover Asia, Africa, Europe or Pacific Islands (Oceania). At relevant levels archaeological terms are followed by round brackets to indicate (archaeological) or (archaeological culture). In some cases, place names are included in the lower levels in square brackets and it appears that historic cultural terms are also included in round brackets.

Authorities

Name  Cultural Objects Name Authority (CONA)

Maintenance Organization  The Getty Research Institute

URL  http://www.getty.edu/research/tools/vocabularies/cona/index.html

Scope  Works of art or architecture

Type  Authority

Governance Model  CONA is managed by staff at The Getty Research Institute. Communities may make contributions to the AAT provided they comply with the Editorial Policies. See Contributing to the Getty Vocabularies

Encoding  CONA is available in multiple formats.

- AAT is available to be incorporated into CMS systems as a database or as XML.
- The AAT is available through a Linked Open Data service. The thesaurus is modeled using the Resource Description Format (RDF) and available in multiple formats (JSON, n3, Turtle, etc.)

Comment  At the time of this report, CONA is still under development, so its portal has only limited accessibility to various anthropological collections. Based on their stated description and goals, it seems to have a great deal of promise
for sharing anthropological collections. Once it has linked to more data from participating institutions, it will be easier to determine the usefulness and the true applicability of this online data portal as a means of sharing data amongst institutions and with the public.

<table>
<thead>
<tr>
<th>Name</th>
<th>Library of Congress Name Authority File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Organization</td>
<td>Library of Congress</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://id.loc.gov/authorities/names.html">http://id.loc.gov/authorities/names.html</a></td>
</tr>
<tr>
<td>Scope</td>
<td>Personal or corporate names of authors or creators.</td>
</tr>
<tr>
<td>Type</td>
<td>To make some distinctions between the different components of a KOS,</td>
</tr>
<tr>
<td>Governance Model</td>
<td>Maintenance of the LCNAF is managed by the Policy and Standards Division in collaboration with qualified organizations (Name Authority Cooperative - NACO) based on bibliographic cataloging rules for establishing new names.</td>
</tr>
<tr>
<td>Encoding</td>
<td>LCNAF records are available in multiple formats (MARC, XML, JSON, etc.) via <a href="http://id.loc.gov">http://id.loc.gov</a></td>
</tr>
<tr>
<td>Comment</td>
<td>The rules for adding a LCNAF (either a person or corporate body) limit inclusion to published authors or corporations. This has lead to the development of complementary name authorities by other organizations, such as Getty’s Union List of Artist Names (ULAN) or Social Networks and Archival Context (SNAC). See also: Virtual International Authority File (VIAF), which provides name authorities from multiple national libraries.</td>
</tr>
</tbody>
</table>

### Data Modeling and Encoding

<table>
<thead>
<tr>
<th>Name</th>
<th>CIDOC Conceptual Reference Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Organization</td>
<td>ICOM-CIDOC Documentation Standard Working Group</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://www.cidoc-crm.org/">http://www.cidoc-crm.org/</a></td>
</tr>
<tr>
<td>Scope</td>
<td>Definitions and a formal structure for describing the implicit and explicit concepts and relationships used in cultural heritage documentation.</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Ontology</td>
</tr>
<tr>
<td><strong>Governance Model</strong></td>
<td>Working Groups are open to all CIDOC members, and we encourage your participation.</td>
</tr>
</tbody>
</table>
|**Encodings** | Resource Description Framework Schema (RDF/RDFs)  
Web Ontology Language (OWL) |
|**Comment** | The CIDOC Conceptual Reference Model (CRM) provides definitions and a formal structure for describing the implicit and explicit concepts and relationships used in cultural heritage documentation. The result of more than fifteen years of work, CIDOC CRM is firmly grounded in formal ontology engineering methods. See also CIDOC CRM-based standards:  
- Europeana Data Model (EDM) |

| **Name** | Categories for the Description of Works of Art (CDWA) |
|**Maintenance Organization** | Getty Research Institute |
|**URL** | http://www.getty.edu/research/publications/electronic_publications/cdwa/ |
|**Scope** | Art, architecture, and other cultural works. |
|**Type** | Content Standard/Entity-Relationship Model |
|**Governance Model** | CDWA is maintained by the Getty Vocabulary Program |
|**Encoding** | CDWA Lite (XML) |
|**Comment** | CDWA emerged from the Getty Information Institute at a time there were few shared content or data standards for art collections. Because of this, CDWA mixes both guidance for data entry and a basic entity-relationship model. This model was later adapted to create the CDWA Lite XML schema. CDWA’s content guidance became a cornerstone for the later Cataloging Cultural Objects (CCO), developed in collaboration with the Visual Resources Association. Because CDWA’s scope is on fine art collections, it has seen limited use for anthropological collections. None of the institutions interviewed had any specific remarks regarding this data structure. See also:  
- Visual Resources Association VRA Core  
- Lightweight Information Describing Objects (LIDO) |
<table>
<thead>
<tr>
<th>Name</th>
<th>Canadian Heritage Information Network (CHIN) Data Dictionaries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintenance Organization</strong></td>
<td>Canadian Heritage Information Network (CHIN)</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>The data dictionaries are divided into several scopes. Ethnographic collections may fall into either the Humanities or Natural Sciences scopes.</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Data Dictionary</td>
</tr>
<tr>
<td><strong>Governance Model</strong></td>
<td>CHIN Standards Working Group</td>
</tr>
<tr>
<td><strong>Encoding</strong></td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>The CHIN data dictionaries provide a guide for data fields, but do not enforce a specific data model or encoding of information.</td>
</tr>
</tbody>
</table>

### Content Standards and Best Practices

<table>
<thead>
<tr>
<th>Name</th>
<th>Cataloging Cultural Objects: A Guide to Describing Cultural Works and Their Images (CCO)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>Getty/Visual Resources Association</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://cco.vrafoundation.org/">http://cco.vrafoundation.org/</a></td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Content Standard</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>CCO grew out of the need for a shared set of content guidelines identified by the Getty (see CDWA above) and the Visual Resources Association (VRA). Building on the format and organization of existing standards, such as the Anglo-American Cataloging Rules (AACR), while CCO encourages the use of established vocabularies and name authorities, it also provides guidance for the creation of non-standardized terms.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>SPECTRUM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintenance Organization</strong></td>
<td>Collections Trust</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="https://collectionstrust.org.uk/spectrum/">https://collectionstrust.org.uk/spectrum/</a></td>
</tr>
</tbody>
</table>
### Scope
What is the focus of the standard/best practice.

### Type
Best Practice

### Governance Model
SPECTRUM is maintained by the Collections Trust through an editor and professional working groups that contribute to its development.

### Encoding
n/a

### Comment
SPECTRUM defines basic requirements twenty-one types of procedures that constitute common collection stewardship practices. Included in the definition of standards are basic information requirements for a procedure, for example the inclusion of tribal or linguistic information in the description of an object. However, SPECTRUM does not mandate a specific data structure or vocabulary necessary to satisfy the requirement.
## Appendix B: Survey and Interview Questions

Ethnographic Terminology Survey Conducted via Survey Monkey April 2015

**Q1: What Type of Museum do you work for?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>History or Historic House</td>
<td>11.43%</td>
</tr>
<tr>
<td>Art</td>
<td>12.86%</td>
</tr>
<tr>
<td>Anthropology and/or Archaeology</td>
<td>20.06%</td>
</tr>
<tr>
<td>Science</td>
<td>0.00%</td>
</tr>
<tr>
<td>Natural History</td>
<td>14.29%</td>
</tr>
<tr>
<td>Children's Museum</td>
<td>4.29%</td>
</tr>
<tr>
<td>Culturally Specific</td>
<td>10.06%</td>
</tr>
<tr>
<td>General</td>
<td>12.86%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>14.29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Q2: Museum Collection Size**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 10,000</td>
<td>21.43%</td>
</tr>
<tr>
<td>10,000 to 100,000</td>
<td>32.86%</td>
</tr>
<tr>
<td>More than 100,000</td>
<td>45.71%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Q3: Museum Budget Size**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $250,000</td>
<td>31.34%</td>
</tr>
<tr>
<td>$250,000 to $1 million</td>
<td>23.88%</td>
</tr>
<tr>
<td>More than $1 million</td>
<td>44.78%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>
Q4: What is your museum’s governance type?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private non-profit</td>
<td>24.29%</td>
</tr>
<tr>
<td>Government - run by a City, County or State</td>
<td>18.57%</td>
</tr>
<tr>
<td>University or College Owned</td>
<td>50.00%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>7.14%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
</tr>
</tbody>
</table>

Q5: Do you have ARCHAEOLOGICAL collections from the following areas? (Divided by geographic region)

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>91.67%</td>
</tr>
<tr>
<td>Central/South America</td>
<td>55.00%</td>
</tr>
<tr>
<td>Africa</td>
<td>23.33%</td>
</tr>
<tr>
<td>East Asia</td>
<td>18.33%</td>
</tr>
<tr>
<td>Indian Sub-Continent</td>
<td>15.00%</td>
</tr>
<tr>
<td>Central Asia</td>
<td>15.00%</td>
</tr>
<tr>
<td>Middle East</td>
<td>26.67%</td>
</tr>
<tr>
<td>Oceana</td>
<td>15.00%</td>
</tr>
<tr>
<td>Europe</td>
<td>31.67%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1.67%</td>
</tr>
<tr>
<td><strong>Total Respondents</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>
Q6: Do you have ETHNOLOGICAL materials from the following areas?

<table>
<thead>
<tr>
<th>Answer Choice</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>87.69%</td>
</tr>
<tr>
<td>Central/South America</td>
<td>69.23%</td>
</tr>
<tr>
<td>Africa</td>
<td>52.31%</td>
</tr>
<tr>
<td>East Asia</td>
<td>52.31%</td>
</tr>
<tr>
<td>Indian Sub-Continent</td>
<td>38.46%</td>
</tr>
<tr>
<td>Central Asia</td>
<td>36.92%</td>
</tr>
<tr>
<td>Middle East</td>
<td>41.54%</td>
</tr>
<tr>
<td>Oceania</td>
<td>56.77%</td>
</tr>
<tr>
<td>Europe</td>
<td>40.09%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>3.08%</td>
</tr>
<tr>
<td><strong>Total Respondents:</strong></td>
<td>95</td>
</tr>
</tbody>
</table>

Q7: Do you have a curator or other staff who is knowledgeable about the following areas?

<table>
<thead>
<tr>
<th>Answer Choice</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>72.31%</td>
</tr>
<tr>
<td>Central/South America</td>
<td>36.92%</td>
</tr>
<tr>
<td>Africa</td>
<td>16.92%</td>
</tr>
<tr>
<td>East Asia</td>
<td>18.46%</td>
</tr>
<tr>
<td>Indian Sub-Continent</td>
<td>10.77%</td>
</tr>
<tr>
<td>Central Asia</td>
<td>10.77%</td>
</tr>
<tr>
<td>Middle East</td>
<td>15.38%</td>
</tr>
<tr>
<td>Oceania</td>
<td>18.46%</td>
</tr>
<tr>
<td>Europe</td>
<td>22.08%</td>
</tr>
<tr>
<td>None</td>
<td>12.31%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>10.77%</td>
</tr>
<tr>
<td><strong>Total Respondents:</strong></td>
<td>95</td>
</tr>
</tbody>
</table>
Q8: What Database Management System do you use?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>PastPerfect</td>
<td>32.73%</td>
</tr>
<tr>
<td>TMS</td>
<td>6.00%</td>
</tr>
<tr>
<td>Filemaker Pro</td>
<td>14.55%</td>
</tr>
<tr>
<td>Access</td>
<td>3.64%</td>
</tr>
<tr>
<td>K:Emu</td>
<td>14.55%</td>
</tr>
<tr>
<td>Re:discovery</td>
<td>9.09%</td>
</tr>
<tr>
<td>Argus</td>
<td>5.45%</td>
</tr>
<tr>
<td>Developed In-House</td>
<td>1.82%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>18.18%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
</tr>
</tbody>
</table>

Q9: Which standardized terminology system do you use?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nomenclature</td>
<td>54.65%</td>
</tr>
<tr>
<td>Getty Thesaurus</td>
<td>16.36%</td>
</tr>
<tr>
<td>Library of Congress</td>
<td>5.45%</td>
</tr>
<tr>
<td>National Park Service</td>
<td>7.27%</td>
</tr>
<tr>
<td>Developed In-House</td>
<td>34.55%</td>
</tr>
<tr>
<td>None</td>
<td>16.36%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>12.73%</td>
</tr>
<tr>
<td>Total Respondents: 55</td>
<td></td>
</tr>
</tbody>
</table>

Q10: Have you developed your own set of terms for any of the following:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Places (i.e., country or site names)</td>
<td>42.50%</td>
</tr>
<tr>
<td>Cultural groups</td>
<td>57.50%</td>
</tr>
<tr>
<td>Object names</td>
<td>67.50%</td>
</tr>
<tr>
<td>Comment</td>
<td>25.00%</td>
</tr>
<tr>
<td>Total Respondents: 40</td>
<td></td>
</tr>
</tbody>
</table>
Q11: Do you share your set of standardized terms with other museums?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12.00%</td>
</tr>
<tr>
<td>No</td>
<td>88.00%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

Q12: Do you want to help with this project?

Q13: Contact Information

[insert the results into the final pdf report]

Phase II Interview Questions. Interviews Conducted June-December 2016

OBJECT NAMES

1. Can you walk through the process of how you develop an Object name for your system?

2. Have you modified an existing standard to support local use or collection emphasis?

   3. Has your institution designated any object types as culturally sensitive? Are these designations reflected in your classification scheme?

   4. How do you address alternative terms or multiple terms for a single object?

CULTURAL TERMS

5. For cultural terms, do you conform to an existing standard (e.g. eHRAF WORLD CULTURES, others)? Have you modified a standard to support local use or collection emphasis?

6. Does your database reflect Indigenous community names? If you are not affiliated with an Indigenous or tribal archive or cultural center, have you worked with the originating communities represented in your collection to name or classify collections?

7. Other than yourself, were there any other participants in developing vocabulary lists? (Examples: curators, content specialists)
FINAL THOUGHTS

8. Would you be willing to share your terminology schemas, existing terms or hierarchies for research purposes anonymously, if you would otherwise not want to share data you consider in need of cleanup? [It is the goal of this Task Force to develop alternative suggestions for problematic terms. Seeing what is currently in use will help us immensely.]

9. Are there any thoughts you would care to share regarding your current classification system, such as the pros and cons of its lexicon methods.
Appendix C: Readings/Bibliography/Additional Resources

This appendix provides a list of relevant readings as identified by Lexicon Task Force members and based on feedback from interviewees. The readings reflect both collections management practice specifically, and writings from Indigenous perspectives relevant to collections management or museum practice, more generally.


Bosum, Annie and Ashley Dunne. “Implementing the Brian Deer Classification Scheme for Aanischaaumakikw Cree Cultural Institute”. Collections Management 42, no. 3-4 (2017): 280-293.


Matilpi, Maxine Hayman. “This is my house on display; this is my law,” *Curious Quarterly Journal* 001 (2017). [https://curious.royalbcmuseum.bc.ca/this-is-my-house-on-display/](https://curious.royalbcmuseum.bc.ca/this-is-my-house-on-display/)


Rogers, Janet. “It is good to feel things,” *Curious Quarterly Journal* 001 (2017). [https://curious.royalbcmuseum.bc.ca/it-is-good-to-feel-things/](https://curious.royalbcmuseum.bc.ca/it-is-good-to-feel-things/)
https://curious.royalbcmuseum.bc.ca/the-curiosity-4/

https://curious.royalbcmuseum.bc.ca/permanent-remand/

http://www.jstor.org/stable/43855568


https://curious.royalbcmuseum.bc.ca/awakening-memory/

DOI:10.1080/01639374.2015.1010112


Download: ko_44_2017_7_b-2
http://www.refworld.org/docid/471355a82.html


https://doi.org/10.1111/muan.12129

https://curious.royalbcmuseum.bc.ca/way-tansi/