The "Data" of Ethnomusicology Research: Recent Developments and Challenges
<1. TITLE SLIDE>

Introduction

I would like to begin this talk by quoting Janet Topp Fargion, on the role of preservation in modern day ethnomusicology, which she refers to more broadly as holistic preservation. <2. HOLISTIC PRESERVATION SLIDE> Topp Fargion defines holistic preservation, as QUOTE:

the facilitation of the continuation of tradition. Continuation is facilitated through a range of activities including: research - fieldwork to gather data and knowledge; education - teaching in schools and universities; dissemination - publication, media journalism, books, internet, exhibitions; and archiving - engaging in all of the above and ensuring it does not all disappear and that it is available to all. These activities create an environment in which performance of tradition can continue to thrive" (76) **END QUOTE**

Topp Fargion believes that through *holistic preservation*, ethnomusicology can move towards what Jeff Titon refers to as a "sustainable music." This talk will narrow in on one aspect of holistic preservation - the gathering of data and knowledge, and its eventual archiving. As participants in the weekly Canadian Centre for Ethnomusicology (CCE)/folkwaysAlive! meetings you are all research data creators or curators in one way or another: the performances you record or create, and the data you gather for your theses and dissertations and publications, all contain varying amounts of research data. Through your performances, research, collecting, and exhibiting, you are all participating in the creation of a sustainable music. I would like this talk to make further connections between the idea of *holistic preservation* as an aspect of sustainable music, and the role research data management in this effort. I hope that this talk will

shed some light on some of the theoretical issues surrounding research data management in ethnomusicology, the challenges and opportunities available to us, and some possible next steps for folkwaysAlive in the management of your rich collection of ethnomusicological research data.

Research Data Management & the Library

<3. RESEARCH DATA MANAGEMENT AND THE LIBRARY SLIDE>

Over the past year, the University of Alberta Libraries have placed a growing emphasis on research data management support services and infrastructure as being key elements of the suite of collections and services we offer to the UofA community. This builds on over 25 years of work and expertise of staff at the data library at the UofA, but now expands this responsibility to nearly all librarians in the UAL system. On this slide are some of the research data management services currently offered, which I would encourage you to take advantage of! Subject librarians such as myself are being encouraged to conceptualize research data management within the context of the disciplines we support (in my case, music and anthropology), and to think about ways to encourage our constituents to think about the management, curation, and stewardship of the research data they create and use. This development is not unique to the University of Alberta Libraries.

In fact, as a number of reports and initiatives of library associations indicate <4. **DEVELOPMENTS IN ACADEMIC LIBRARIES SLIDE>**, research data management is one of the key growth areas in academic libraries, and just one example of the type of

work that academic librarians should specialize in to support users further "upstream" in the research process.

Reports call for the "upskilling" of academic librarians in order to allow them to become full partners in the creation, curation, and preservation of research data, and for academic libraries to create robust research data management services for their users. The Council on Library Information & Resources (or 'CLIR')'s 2008 report, "No Brief Candle: Reconceiving Research Libraries in the 21st Century" emphasises that **QUOTE** "Preserving knowledge is one of the most vital and rapidly changing fundamental roles of the research library. [BUT] For libraries that are now positioning themselves to support eResearch, preserving knowledge entails at least four key challenges <5. **FOUR KEY CHALLENGES SLIDE>. <The four key challenges are listed here on** the slide -READ THEM>. But when I read reports such as this one, I'm left wondering if these challenges are as straightforward as this for ethnomusicological research data, and if it is even possible (let alone productive) to make wide ranging claims about research data outside of particular disciplinary contexts. Also, it is evident from reviewing the literature that what many of these reports *mean* when they talk about research data, is scientific data. There is a notable gap in the literature regarding humanities research data, and very little about ethnomusicology, or music at all for that matter. Most concerning is that nobody seems to be talking about sound as research data.

Thinking About Research Data Management

Given the rapid expansion of research data management services here at the University of Alberta Libraries, I've been asking myself: What does research data management mean for music? Rather than attempt to develop an all- encompassing (and inevitably flawed) definition of "research data management in the humanities and social sciences", or even "research data management in the music disciplines," it is perhaps more productive to narrow in on some key questions about what this means for ethnomusicology. <6. QUESTIONS FOR ETHNOMUSICOLOGY SLIDE>. What is "research data" in ethnomusicology? What has the role of research data been historically in ethnomusicology? What does the future hold for research data in ethnomusicology? This paper is the beginning of my growing research interest in the connections between the digital humanities, library and information studies/documentation science, informatics, and the music disciplines. I'm looking forward to the discussion following this talk for any insights you may have on how this research could be further developed.

Memory Institutions and Information Workers

Before going further, it is necessary to take a brief detour to talk about the memory institutions and information workers who are intimately involved in the collection and curation of research data, that is--librarians and archivists, and the philosophies of information underlying their work. Traditionally, librarians have concerned themselves primarily with the end results of scholarly research: papers, book chapters, editions of music, commercially produced sound recordings, etc., and focused

their efforts on serving the immediate needs of their users. Librarians deal mostly with published, secondary source materials. Archivists on the other hand, have a long history of preserving and providing access to mostly unpublished materials--primary source materials that document the historical record: manuscripts, personal papers, institutional records, etc. As compared to librarians, archivists are much less focused on serving immediate needs. They argue that if only materials that served immediate research needs were collected, we would not have some of the materials that document events and developments in history that were only after the fact determined to be significant. Museums traditionally have dealt primarily with three dimensional objects, referred in library and information studies as realia, and more commonly known as artifacts. But again, like archives, museums have focused more attention on prospective needs, rather than immediate ones. On a preservation to access continuum, libraries have tended to lean towards more access at the sake of preservation, whereas archives and museums have leaned towards more preservation at the sake of access.

<7. MEMORY INSTITUTIONS AND INFORMATION WORKERS SLIDE>.

Furthermore, archives organize information into groups of records from the same source, the *fonds*. The archival principle of *respect des fonds* is an extremely important one in archives, whereby provenance and original order are paramount, and it is from there that creator based-authenticity derives from. Archival documents are said to hold authority. Libraries on the other hand, tend to organize information into individual items, and do not respect original order, and information organization is not creator based. The difference between the aggregate vs. atomized philosophies of information works fine in

a siloed world of physical items. This distinction becomes crucial when we move to the digital repository, where everything is in essence, atomised. But, it is possible to simultaneously both atomize and aggregate 'virtually' in a digital repository, to take advantage of the competing perspectives that each philosophy offers. It could also be said that the opposing poles of library and archival theories of knowledge represent what Anders Orom (2007) the difference between a **QUOTE** "general, abstract theory of information...a nomothetic theory"--in library and information studies--vs. a "a theory based on the historical development of document types and their social functions...an idiographic theory." **END QUOTE**, evident in the distinction between library and information studies and documentation science.

In addition to the virtual convergence of library and archival perspectives that is possible in digital repositories, there has also been a trend towards actual convergence. The convergence of libraries, archives, and museums (known collectively as LAMs), has been recently subject to what has been termed LAM convergence, or as the Australians call it, "the Canadian disease." LAM convergence has its share of supporters and detractors. Supporters argue that from the users' perspective, it doesn't really matter if it is an archives, library, or museum where they obtain their information from, they are only interested in fulfilling their immediate information need. However, as Braden Cannon argues: **QUOTE**

It is true that the general public may not understand the differences between what a librarian, curator, and archivist do. The differences between a registered nurse, nurse practitioner, and a licensed practical nurse are perplexing to many. Should these professions be re-organized based on that ignorance?...why is the same argument taken seriously when applied to the information sector?" **END QUOTE** (Cannon, 71).

Cannon's criticism is quite apt: top down management styles, and the corporatization of memory institutions is extremely damaging to not only the professionals working in these organizations, but it also does a disservice to the users of these institutions by ignoring the unique perspectives that these disciplines offer. Part of what I take from LAM convergence, is that each of the institutions at opposing poles of the preservation and access continuum have much to learn from one another, and in the digital world there is large benefit to "virtual" convergence, but probably not institutional convergence. Archival perspectives are crucial in balancing conceptions of research data for ethnomusicology, as it is the archive that has played such a major role in the development of ethnomusicological research data, and not as much the library. As Bruno Nettl writes, QUOTE "Archives are, in a sense, equivalent to libraries in other disciplines insofar as their importance in research is concerned." END QUOTE (Quoted in Spear p. 61; Nettl, Theory and Method in Ethnomusicology, 1964).

Concepts of "Data" in Ethnomusicology

<8. CONCEPTS OF DATA IN ETHNOMUSICOLOGY SLIDE>.

In defining what research data is and what it means for ethnomusicology, it seems that a natural starting place for discussion is the field recording. By understanding how the ethnomusicological field recording operates within the context of research data management, it is possible to then move towards a better understanding of "sound as data.". <9. THE FIELD RECORDING/SOUND AS DATA SLIDE>.Although the field recording is a prime example of research data in ethnomusicology, it is worth

nothing that other examples (ethnographies, interview transcripts, etc.) deserve just as much attention, but will require separate treatment.

Comparative Roots

Comparative Musicology, one of the founding disciplines of modern day ethnomusicology, provides an important historical precedent for how field recordings would be theorized and used by ethnomusicologists today. It has been widely stated that had the technologies of sound reproduction not been developed when they were, ethnomusicology would likely not exist as it does today. <10. COMPARATIVE ROOTS SLIDE>.As Jonathan Stock writes: QUOTE

The invention of the phonograph in 1877 was almost a *precondition* for the discipline of comparative musicology as devised by European scholars in the final decades of the nineteenth century...the new technology of sound recording made two crucial contributions to the new discipline: first, it allowed researchers to assemble for comparative analysis extensive collections of musical material from all around the world; second, repeated playback permitted the detailed study (and hence the transcription in modified staff notation) of non - Western musical sounds." (Stock, 15 OR 16 - check print). **END QUOTE**

The comparativist musicologists were highly focused on preservation, but also on discovering **QUOTE** 'universal truths' about music that could be analyzed and compared using scientific methods.

In the formative years of ethnomusicology as a discipline, the majority of field recordings were deposited in large institutional archives such as the Berliner Phonogramm Archiv, and the British Library Sound Archive (Wood 2) awaiting their use by scholars. Scholars (not necessarily always music scholars) went on **QUOTE** 'salvage missions', to collect the music and languages of cultures deemed to be susceptible to the ravages of Western expansion, and at threat of disappearing forever. At that time, it

was not common for ethnomusicologists to create their own field recordings, and many drew their sole research materials from established archives such as the Phonogramm Archiv. The recordings in these archives were considered to be **QUOTE** *authentic* representations of *untouched* musical cultures.

Ethnomusicology on Its Own

When ethnomusicology broke away from its comparative roots, and adopted the participant-observation model from anthropology (this was in many ways due to Alan P. Merriam's influential 1964 work, *The Anthropology of Music*), ethnomusicologists began actively creating field recordings, and challenged the idea of authenticity as being crystallized in the field recording, because as we know, many musical traditions are subject to constant revision and adaptation. The comparativist approaches that had been so widely criticized in the 1950s for being colonialist, reductionist, and the work of so called "armchair musicologists" were replaced with a much richer field, but one in which the role of the archive as the first stop, and final resting place of scholarly materials was arguably not maintained (See Seeger, various).

Anthony Seeger has argued that for the most part, ethnomusicologists have had quite an ambivalent attitude towards field recordings and their value as research data. On the one hand, field recordings have provided the raw materials for many groundbreaking ethnomusicological works, yet ethnomusicologists have not been eager to deposit their recordings in archives, or make them available more widely in other ways. Multiple studies also confirm that very few field recordings exist in institutional archives, and are mostly found in the private collections of the researchers themselves

ethnomusicologists' intentions of what their field recordings are to be used for, and the potential benefit that these recordings could offer to various future generations of scholars, listeners, and musical communities that these recordings document. Seeger even goes as far to claim that **QUOTE**: "Contrary to every indication in the short time cycles of scholars today, it may be that we will be best remembered for our recordings rather than our laboured theories" **END QUOTE** (Seeger, 266-7). For Seeger, it is the data of ethnomusicology--the documentation of performance via the field recording, that has the potential for long lasting impact, not the research based on them.

At the beginning of this talk I referred to Jeff Titon's idea of a "sustainable music", which Janet Topp Fargion has argued can be achieved through *holistic preservation*. I'd like to now move into discussions of how digital repositories, and metadata offer the possibility of achieving *holistic preservation*, and a sustainable music.

<11. DIGITAL REPOSITORIES AS BOUNDARY OBJECTS SLIDE>.

Digital Repositories as Boundary Objects

As I mentioned earlier, digital repositories offer the potential to bridge the gap between understandings of knowledge creation and organization from the opposing poles of archival and library and information studies - understandings that can be beneficial to . Digital repositories can also serve as what Star and Griesemer (1989) refer to as "boundary objects" for the

<12. DIGITAL REPOSITORIES SLIDE>.

Digital Repository Overview

- Institutional e.g. UofAs ERA. Store the academic output of UofA community
- Disciplinary e.g. arXiv Open access to 1,006,505 e-prints in Physics,
 Mathematics, Computer Science, Quantitative Biology, Quantitative Finance and
 Statistics. Submitted through self-archiving. Many other examples
- Digital Libraries and Archives
- Oxford Text Archive (OTA) considered to be the first digital archive of academic textual resources
- EVIA Digital Archive Project
- Ethnographic Multimedia Network Ostachewski, Frishkopf

Metadata/Documentation/Classification

- Standards
- Linked Data

Conclusion

Questions

<8. Questions SLIDE>.

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