# VOICES OF SOUTHERN PATAGONIA: DIGITAL PRESERVATION OF SOUND MATERIAL

Gustavo Navarro, Universidad Nacional de la Patagonia Austral, Unidad Académica San Julián, Argentina

#### I. Introduction

Currently, both information and artistic output are carried out mainly in digital forms. The preservation of this material sets out new problems to keep it usable and available, since technologies for storing it are replaced by new generations that are more powerful and often incompatible with their predecessors. These discussions about developments for the preservation of digital heritage have taken place in certain regions in the world, mostly English-speaking areas, for some years while developments in Latin America are still scarce.

My work lies in the elaboration of strategies aimed at preserving the sound digital heritage of the Patagonia Argentina region, taking into account the degree of urgency, local circumstances, available resources, and future predictions.

This work in collaboration with Municipal Archives of the province of Santa Cruz provides, in addition to knowledge obtained in the exchange, potential benefits from sustainability on the basis of inter-institutional agreements, and the setting up of shared standards, either to achieve interoperability between programs or to engender a common understanding of practices that help to achieve the desired objectives of preservation.

The discussion of nodal topics included:

- The definition of processes in the management of heritage preservation and the selection of what deserves to be preserved.
- Establishing control of materials, i.e., their identification and description, as well as the aspects of the management of rights.
- Data protection.
- Methods to provide and maintain access to collections.

The methodological proposal of collaborative work was based on the combination of an analytical-descriptive perspective and a normative-of application perspective. The actions proposed for the project were of three types:

- Research and exchange of knowledge to consolidate a critical unit of knowledge on the topic from the analysis of policies and strategies. A handbook of good practices was written.
- **2.** Exchange of experiences on technological aspects of the preservation of digital sound objects from the analysis of available technologies.
- 3. Transfer to the community. Reuse of the material was facilitated for academic tasks and teaching research in an attempt to encourage technological innovation and to enable such material not only to be displayed but also to be mobilized.

As a result of interviewing 25 former inhabitants of the province, 30 hours of recordings were generated during the project. Also, work on the definition of quality control systems for the archive was carried out, making sure that the recorded material contain all required fields based on the requirements of OAI-PMH<sup>174</sup> and that the metadata are correct.

Work was done thanks to IASA's financing support.

# 2. South Patagonia Region

The South Patagonian region has a particular social structure. In the early decades of the 20th century, it was the destination of various groups of immigrants, including Welsh, English, Spanish and Italian, and later, Polish, Bulgarian, Lithuanian, Yugoslavian, Ukrainian, and Arabian. Today and since the end of the 20th century, there is increased Bolivian and Paraguayan immigration, mostly because of opportunities for work in mines and in the petroleum industry.

Its inhabitants offer histories of conflicts, domination and resistance, genocides, and union struggles, which have often been silenced by national and foreign media. These stories began to be recovered some decades ago by those who undertook the generation of just memory policy. In recent years, the link between history and memory has occupied a central place, with regard to the central axes where the recovery of subjectivity was articulated, that is, the assessment of the subject's viewpoint and the consideration of popular sectors as agents of historical processes, and the concept of history as speech or narrative. This means that the recovery of subjectivity implies a fragmentation of totalitarian speeches and the construction of counterhegemonic interpretations in political and cultural aspects.

Human Rights, from the viewpoint of social actors' collective memory are a current subject in education and a pending challenge, since they are the struggling strategy against any kind of authoritarianism, exploitation, and discrimination, still present in geographically isolated and socially peripheral towns, such as those in the Patagonian east central region. A preservation policy of the historical heritage is missing there.

On one hand, local municipal libraries count on documentary material, most of which is going through a deterioration process on account of a lack of funding for the maintenance and sustainability of preservation projects. On the other hand, many of the existing documentary sources, such as the local press, cater to the "official history," being insufficient without the testimony from protagonists (oral recordings) and the material from private recordings. It is through the written support that the history and culture of victors and domineering people prevail, ignoring the voice of the defeated and silenced, which rarely goes beyond production scope. The oral tradition acts as the only mechanism for generation-to-generation transmission of a huge historical and cultural heritage, made up by individual and group ideas, testimonies and experiences. Due to its value, oral tradition is increasingly regarded as an intangible cultural heritage, which includes diversity, minorities and threatened voices.

#### 3. Project objectives

The objective of this project is the collective construction by the different actors of local communities of an open access database enabling the recovery and preservation of social memory and the diffusion of this memory through integration in knowledge networks using open software technologies. Therefore, the project intends to boost the educational system's capacities for democratic formation by providing reflection and training tools.

This project will help to add discussions about how to design a memory pedagogy that is able to contribute to the formation of critical citizens capable of thinking about their past in order to think about their present and imagine a fairer future for themselves. The promotion of teaching the past and the recent past lies in the idea that Human Rights are a social conquest, a result of human actions and, therefore, when transmitting them, notions of responsibility, participation, and inclusion get reinforced. It is through education —understood as a provision of the past in permanent dialogue with the present and the future — that it is possible to invite the young to think, discuss, release new questions, and look for new answers to be able to take a stand in front of their reality. In this sense an education, supported in memory and Human Rights, constitutes an essential contribution for the construction of a fair, equitable nation.

Furthermore, the project is enshrined in the principles proposed by UNESCO:

- i. Strengthen the contribution of culture to sustainable development
- ii. Promote the role of culture in development policies for social cohesion
- iii. Improve access to information and knowledge

The objectives of the project are:

- To build a memory-supported pedagogy from developing a recovery and preservation program of digital recording (testimonies, audio support) with the participation of community institutions and entities.
- To familiarize the social actors of towns with methodologies which allow them to be self-managed and responsible protagonists of digital recording construction.
- To collaborate in the management and development of recompilation and digitization of sound material projects in local public libraries.
- To create a "word fund" fostering the output of testimonial work and oral history through competitions, seminars, workshops, and other similar events.
- To develop situations for training and assistance to lecturers in the Instituto Provincial de Formación Docente (IPES) [Provincial Institute for Teacher Education] and educational centers specialized in Human Rights teaching.

### 4. Participating groups

Direct beneficiaries of the project are third-level and second-level students of the provincial education system in the communities of Puerto San Julián, Puerto Deseado, Comandante Luis Piedra Buena, and Puerto Santa Cruz (east central region of Santa Cruz province, Argentina) and the overall community through the institutions and organizations taking part in it, including:

- Polimodal School N° 24"17 de Agosto", Puerto Deseado
- Salesian Polimodal Institute, Puerto Deseado
- Historical Archive Palmiro Pedemonte, Puerto Deseado
- Historical Archive Adolfo Oroz, Puerto Santa Cruz
- Private Archive of 'Estancias' "Monte León"

The final result of this project was the construction of an open-access e-infrastructure for the preservation and distribution of differently supported documentary material —testimonial audio, sound archiving — of the towns in the east central region of Santa Cruz province, aiming at materializing its availability to be used in the education system and the overall community. The collective construction of this digital archive creates a significant device for citizen participation, being an innovative resource for classroom work. Documentary material constitutes an important input for curriculum spaces regarding Human Rights teaching.

## 5. Background

The project was born in 2010, when the project "Archive Memories of the Patagonia Austral Koluel" <sup>175</sup> was created, which began efforts to move and organize sets of documents, from their digitization to specific treatment for their public consultation. The plan served as a guiding document for Koluel work by helping Municipal Archives to build and keep unique digital collections and to provide online access to them. Koluel also provides a varied curriculum of workshops focused on digital conversion, metadata for digital collections, software of management fo digital collections, and related areas of emerging technologies for the Archives.

### 6. Choosing Omeka

One of the first decisions we had to make was what management system we would use for building and delivering the directory on the web. Aiming at highlighting the archive collections and the software trials that could be used for the future construction of the collection, three possibilities were evaluated: Plone, Fedora, and Omeka. Each of these systems was appraised against our expectations for digital collections management systems:

- Attractive visual design, easily customizable (topics)
- Easy installation
- Extensible design approach that enables the alteration of existing functionalities and the addition of new functionalities
- Flexible approach to metadata
- Support for web standards (CSS, XHTML, RSS)
- Functions of import and export that use standardized data formats (CSV, XML, ISON)

Plone is a content manger and cannot solve the metadata issue plainly; it requires deep knowledge of programming.

The second system under exam is Fedora, but we found it to be too sturdy for updating purposes.

Our interest in the implementation of a digital exposition tool, rich in functions, led us to consider Omeka, <sup>176</sup> a relatively new open-source collection management system that was created by the Centro para la Historia y Nuevos Medios (CHNM) [Center for History and the New Media] at George Mason University in the US. Omeka developers describe their platform as a next generation web publication platform for museums, historical societies, scholars, enthusiasts, and educators.

Another feature that the staff of Koluel found attractive was the strong and flexible approach of Omeka to metadata representation. In Omeka, archives can work either with the Dublin Core standard, the imports of other metadata sets of their choice, or by creating their own vocabulary of customized metadata. Omeka is designed to meet the requirements of institutions that lack technical personnel and large budgets.

## 7. Scope and specifications of the project

The digital collection directory project (Koluel) that we executed using Omeka established a collection policy based on the desire of representing as many collections as possible in light of our limited personnel and time. A collection can be included in the Koluel directory provided that:

- The owner of these resources is authorized to allow free online access.
- The collection includes at least 30 resources, e.g., images, audio files, means of localization
- The collection is not a small exhibition that offers only a handful of digitized resources.

#### 8. Expositions

Omeka was developed based on the specific needs of museums, historians, and archives. The origins of the software in the field of cultural institutions can explain why, based on the standards of archives, there are limited options for intellectual control in the management site. However, its development in the Centro de George Mason de Historia Social y Nuevos Medios [George Mason's Center for Social History and the New Media] also led directly to

one of the greatest strengths of Omeka: exhibition building. Once users have created records within the system, they can easily arrange expositions. A site editor fills out a web form to determine the first level data such as title, slug, and topic; then assigns a metadata section; and finally adds individual records to the section. A given exposition may have several sections thus enabling more complex relationships among digital objects. Some templates give priority to images, while others allow a greater extension of the didactic text-specific exposition.

The Oral History<sup>177</sup> collection offers a good example of how the exposition feature<sup>178</sup> can be used for educational purposes. This exposition brings together interviews from former inhabitants with issues relating to the Patagonia Austral. The strength of the exposition feature lies in its ability to transmit a curatorial perspective in a dynamic and interactive environment that guides the users of an object and also provides contextual information from experts with standardized metadata and social labeling.

#### 9. Conclusions

Omeka has great potential to support the creation of online small and medium-sized digital collections for archives. The software is suitable for archivists and curators to work effectively in the context of their disciplines. The architectural core and design of Omeka software are suitable to allow the software to be improved as the user community increases. It is also a good way of allowing institutions to reuse existing digital collections in new modern web frameworks with the availability of an option of robust CSV import that can bring both metadata 179 and the media into the system.

The continued improvement to Omeka's administrative interface within this architecture will help it to become a more viable solution for creating digital collections of archives. In spite of these limitations, Omeka is very well positioned in its target market of small and medium-sized institutions that need an easy-to-implement, effective, professional tool in order to make digital archive and museum content available on the Web. It is important to measure the functionality, features, and limitations of Omeka against some of the same functions, features, and limitations of a proprietary system. We hope that our experience can help other institutions to assess Omeka as a possible management system for providing access to the results of their digitization projects, as well as to anticipate and to overcome some of the obstacles that we faced.

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<sup>177</sup> http://www.koluel.org/collections/show/19.

<sup>178</sup> http://www.koluel.org/exhibits/show/testimonios-orales.

<sup>179</sup> Directrices para la producción y preservación de objetos digitales de audio, IASA-TC 04.