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OPEN SOURCE FOLKLORE ARCHIVES - DISSEMINATING SMALL MEMORY BOXES

Abstract: The article presents an alternative solution to the long term preservation of the documents from the Folklore Archive of the Romanian Academy. This solution can be viewed from several organic perspectives: on of the zoo, one of the seed-bank and, finally, the guerrilla gardening perspective. The first one insists on the importance of returning into the wild what was once captured on the field of research, the second one is about the seed-bank as a live database for future generations and the last one offers a way of adopting the seed bombing method to the problem of disappearing immaterial cultural heritage. This article is trying to describe a conceptual model, rather than technical details.

Keywords: open source folklore archive, cultural heritage, digital archives, intangible culture, Romanian folklore

The concept of open folklore is more deeply related to the structure of the research field than one might think initially. Folklore is open source, as Dorothy Noyes explains in "From Homeric Epic to Open-Source Software: Towards a Network Model of Invention"[1] and we should treat it like that. Inspired by the links between open source and folklore I explore the idea of an alternative method of preserving the digitized content from the folklore archives.

Although the process of digitization became an unavoidable necessity in the past decade, the archives were not the fastest to join. Perhaps due to a more frequent and direct contact with the general public, libraries became aware of the need to provide a digital copy of their items. Archives, on the other hand, are offering specialized resources that are more attractive to researchers, but that doesn't mean that they are not facing the same demand for allowing access to a digital version of the content. Folklore archives, in particular, are in possession of documents and recordings that can easily be accessed not only by researchers, but by a wider public, a public passionate about songs and stories from older times. And then there are those who can identify and establish an emotional connection with a folklore archive due to the direct or indirect involvement with the creation of the recording. The question is: what is the best use of the digital version of the items from a folklore archive?

The content of the folklore archive has particularities that are raising a number of issues, but also opening a variety of opportunities. The records from a folklore archive have multiple authors. First there is the actor or the informant, the person who sings or tells a story to the researcher. Not once, there are several persons performing a song. But the songs or the story they are expressing to be recorded is not their own, it is part of a collective heritage and nobody can claim the ownership. Then you have the researcher that went to the village or brought the informant into a studio and recorded the folklore piece. She/He is not engaged in a purely personal endeavor, but part of a research project initiated and planned by an institu-

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[1] Noyes, Dorothy "From Homeric Epic to Open-Source Software: Towards a Network Model of Invention." Con/texts of Invention. Society for Critical Exchange. Case Western Reserve University, Cleveland, 2006

tion. After recording the folklore pieces, the researcher adds the material in the archive. Later, the material can be used for elaborating a scientific publication, either by the researcher or by somebody else. To determine who, in what percentage and for how long has the copyright is quite a challenge that is still to be taken. Especially in Romania's case, the decision tree is quite complex, as can be seen in the schema available on the outofcopyright.eu site[2].

It is of great importance if the records from a folklore archive can be made publicly accessible not only from a cultural heritage point of view, but also from a personal and emotional point of view. We could see different facets of a folklore archive by using different metaphors for it. First, we can view the archive from the point of view of the zoo. During a certain time, some researchers went into the "wild" and gathered certain "folklore species" from their "natural environment" - the traditional villages, for example. Many of the informants left behind very few traces of their existence, and even fewer kept in a public institution. It might even happen that they were the last ones to know a particular song or story. Once that folklore piece was "captured" / recorded on tape or paper, its survival is assured for an indefinite time. It seems only fair to "repopulate" the former natural habitat with long gone folklore species in case of need. Sending the records from the archive back to the places they were taken from might be a gesture of courtesy, but the emotional impact on the informants or their offsprings might be surprising.
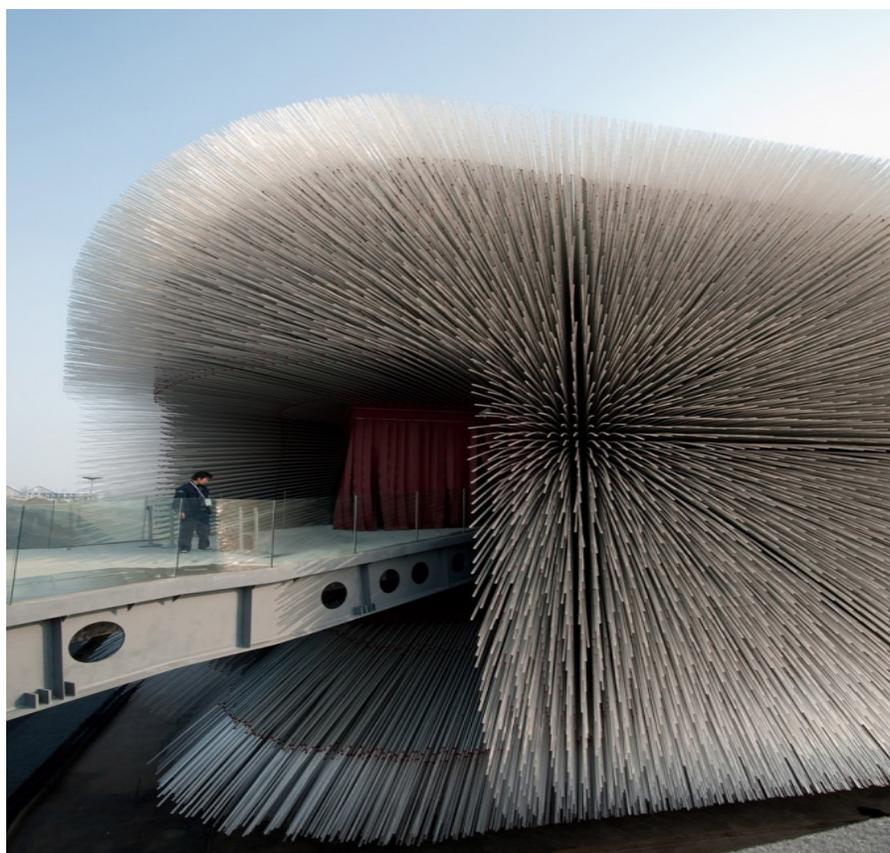
Seed Cathedral - UK Pavilion - Shanghai 2010 Expo

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[2] Christina Angelopoulos, Bogdan Manolea, *Decision tree for Romania to answer the question whether a certain work or other subject matter vested with copyright or neighbouring rights has fallen into the public domain.*, available at http://outofcopyright.eu/research/Romania.pdf, visited on 14 October 2014.

Another analogy is to the seed-bank as an archive. The seed banks are a contemporary effort to preserve the biodiversity of plants, due to the danger of many species to be totally eradicated from their natural habitat. This is especially urgent as "today, 60,000 to 100,000 species of plant are faced with the threat of extinction."[3] There are several such initiatives, the best known being the *Norwegian Svalbard Global Seed Vault*[4] and the *Millennium Seed Bank Project*[5] by the Kew Royal Botanical Gardens[6]. Both these initiatives have a long term approach to the issue of preserving valuable seeds as an effort to ignite, in case of emergency, future biodiversity in different parts of the world. This long term approach is what interests us most, the mind-frame for planning long term preservation of immaterial culture. Although a vault at the Arctic Circle might seem to be a solution, in the case of the folklore archive the seeds need to be planted now, hoping that they will bloom, make flowers, grow seeds and reproduce for many generations. Giving the communities access to the seeds is the most important step.
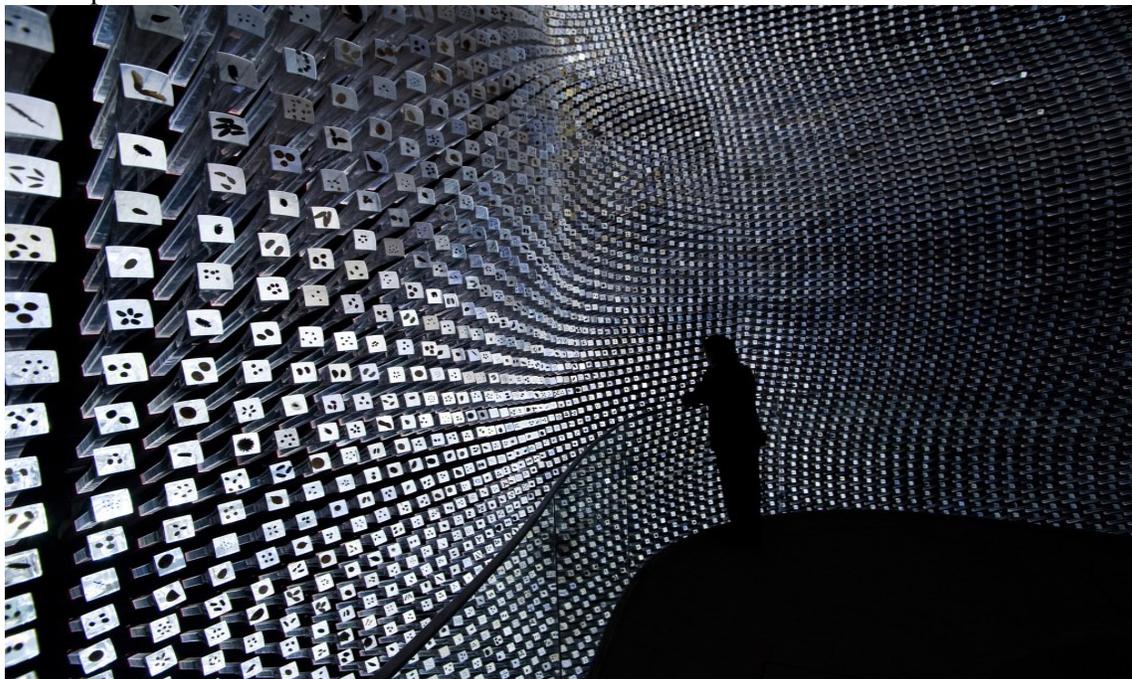
Seed Cathedral - UK Pavilion - Shanghai 2010 Expo

There is another reason why it is worth sending back to the original places the records from the archive. Planning a long term digital repository is a hit and miss process. Although one

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[3] *About the Millennium Seed Bank Partnership*, available at http://www.kew.org/science-conservation/millennium-seed-bank-partnership/about-millennium-seed-bank-partnership, visited on 14 October 2014.

[4] *Arctic Seed Vault Opens Doors for 100 Million Seeds* available at http://www.regjeringen.no/en/dep/lmd/campain/svalbard-global-seed-vault/news/arctic-seed-vault-opens-doors-for-100-mi.html?id=501721, visited on 14 October 2014.

[5] Maria Popova, *The Story of the Millennium Seed Bank Project + Gorgeous Vintage Seed Catalog Cover Artwork*, available at http://www.brainpickings.org/2011/09/22/the-last-great-plant-hunt-millennium-seed-bank-project/, visited on 14 October 2014.

[6] *Collecting seeds to save plants*, available at http://www.kew.org/science-conservation/millennium-seed-bank/collecting, visited on 14 October 2014.

could use the OAIS model[7] and try to guide by it in planning the digital repository, the fact is that the digital archive needs active and constant care, unlike its analogue ancestor. Paper or the magnetic tape managed to preserve the content without necessarily having to pay too much attention to the support on which the information was recorded. If the conditions for storing the documents were proper, a check from time to time, sometimes several years apart, was quite enough. But the digital version of the same content needs to be checked for integrity regularly, to create and maintain several backups, to create from a master copy an access file, to migrate, convert or emulate those files when there is no other way to access them, and in the end to accept the obsolescence due to newer, better, higher quality technical standards that will become available.

Creating a network of communities that have direct access to partial or full copies of the archive might be an interesting backup solution for the long future. I believe that having direct access to the documents of one's ancestors or valuable cultural heritage will present a high interest among the inhabitants of rural areas. This can be done not only by creating an website and offering them access to the archive, but by placing a physical object in a public space that has a particular significance for their collective memory and where they could interact with it. Such objects can be called Small Memory Boxes (SMB) and we can imagine them being miniservers that could act also as kiosks[8]. The hardware platform that could power those SMBs could be Raspberry Pi. The latest version has just enough processing power and memory (a 900MHz quad-core ARM Cortex-A7 CPU and 1GB RAM[9]) Adding a WiFi extension might enable the younger members of the community to access the archive via their mobile or laptops, while the older generations could interact directly with the archive via the kiosk. The software that would allow both of those function is Omeka, a "free, flexible, and open source web-publishing platform for the display of library, museum, archives, and scholarly collections and exhibitions."[10] Even more, it might be possible to create specific mini FM radio stations, that could broadcast on a restricted area, with audio materials from the archive playing in loop. The lower the technology barrier, the greater the accessibility.

The way the SMBs will be spread across rural areas is an effort that resembles a seed bombing campaign. Seed bombing[11] is a guerrilla gardening approach to revitalize patches of dirt from the cities were nothing grows. Various seeds are mixed with soil and fertilizer and made into small balls. After they dry, they can be taken on a trip along the city and thrown in different places, in hope that something will grow. Sometimes this happens, sometimes it doesn't, depending on the weather, pedestrians, the quality of the soil. We can expect to have similar results with the spreading of SMBs in rural areas: some will be used by the members of the community, some will remain untouched, some will grow roots, some might even make fruits. Thus, an imperfect, unequal, approximate copy of the archive will emerge, an alive archive, that will modify itself according to the people interacting with it. This might be viewed more alongside the lines of an artistic attempt to create an open source folklore archive, than a technical attempt to have a backup of the digital version of the archive.

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[7] Reference Model For An Open Archival Information System (OAIS) Recommended Practice Ccsds 650.0-M-2, available at http://public.ccsds.org/publications/archive/650x0m2.pdf, visited on 14 October 2014.

[8] There is a solution for this already: Raspberry WebKiosk, available at http://www.binaryemotions.com/raspberry-webkiosk/index.html, visited on 14 October 2014.

[9] Specification of the Raspberry Pi 2 Model B, available at https://www.raspberrypi.org/products/raspberry-pi-2-model-b/, visited on 14 April 2015.

[10] *About Omeka*, available at http://omeka.org/about/, visited on 14 October 2014.

[11] *Seed Bombs - A guide to their various forms and functions*, available at http://www.guerrillagardening.org/ggseedbombs.html, visited on 14 October 2014.
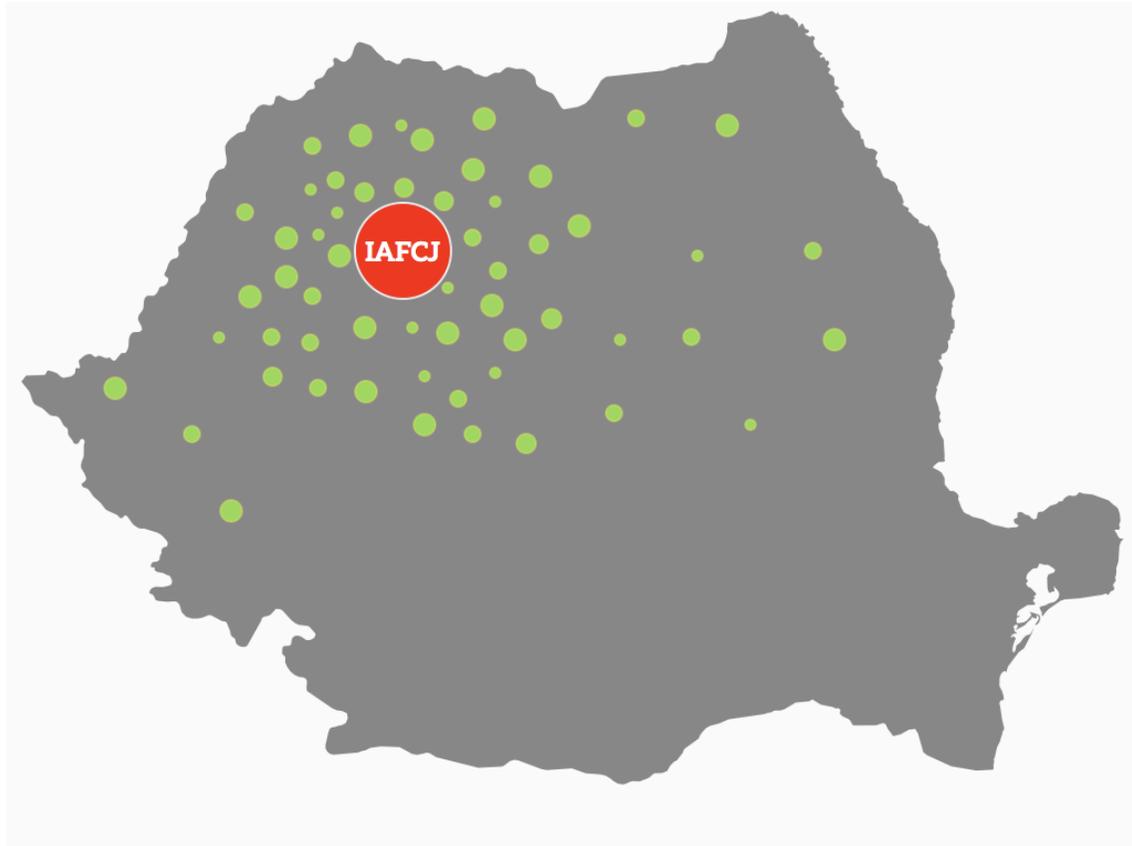
Alternative live archive

This sketch for creating a network of SMBs was planned for the Institute "Folklore Archive of the Romanian Academy" (IAFCJ) as a future possible backup copy of the content from the archive. digital. The *Institute* is the oldest research institute of the Romanian Academy, founded in Cluj, in 1930, by Ion Muşlea[12] (1899-1966). It contains one of the biggest research archives of Romanian folklore, dwarfed only by the mammoth archive of the Institute of Ethnography and Folklore „Constantin Brăiloiu" from Bucharest (IEF), also part of the Romanian Academy. An instance of Omeka was installed on a Raspberry Pi, obtaining a functional webserver based on the *nginx*[13] engine. In the future I hope to create a pilot project and to install it in a village, trying to document the reactions and to see if it is accepted by the community or if it remains an alien object. Selecting some items from the chosen village and allowing the inhabitants to freely interact with the kiosk and the webserver in order to access them will provide some evidence to whether the solution is viable or not.

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[12] For more details, see Ion Muşlea, *Arhiva de Folclor a Academiei Române. Studii, memorii ale întemeierii, rapoarte de activitate, chestionare 1930-1948*, Ediţie critică, note, cronologie, comentarii şi bibliografie de Ion Cuceu şi Maria Cuceu, Cluj-Napoca, Editura Fundaţiei pentru Studii Europene, 2003, available at http://folkarchivecluj.ro/_/wp-content/uploads/2014/01/Arhiva_de_Folclor_Ioan_Muslea_web.pdf
[13] Nginx uses less resources than the standard Apache webserver recomended for Omeka. A configuration for Omeka is available on the Nginx website at http://wiki.nginx.org/Omeka, visited on 14 April 2015.

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