

Phono-Post Project case study

The Phono-Post Project, the first-ever archive of a once widespread global phenomenon of individually recorded gramophonic messages sent as acoustic letters via the postal system between the mid-1920s and the early 1960s, was envisaged from the start as both a professionally-curated collection of unique historical artefacts and also a state-of-the-art digital research resource. Launched in 2010, the project also sought to investigate the contrast between the needs of scholarly research using digital methods – the specificity and heterogeneity of metadata and reliance on crowd and collaborative contribution – and the relatively general-purpose nature of sustainable metadata descriptions available at the time. Given the imperative of long-term sustainability for digital project infrastructures, which increasingly demands that technical investment be shared among multiple projects, contributor workflows and collection management have to be based on common tools. This had been demonstrated clearly by Heidelberg's Tamboti¹ – a single standards-based collection ecosystem and research environment which successfully supports almost 50 very different research activities. Phono-Post is however an ambitious project which tests this approach because of its extensive use of transcription and annotation which were unsupported by usable standards at the time the project commenced, making the possibility of future evolution of data structures essential.

A new area of research

The standard account of the media-historical transition from the 19th-century phonograph cylinder to the flat “Berliner” gramophone disc is as a shift from a “read/write” technology (cylinders could not only play pre-recorded music but could also be recorded at home) to a “playback” technology (the flat discs finally made it possible to reproduce comparatively high-quality recordings in large quantities). The gramophone record thus marked the birth of the music-industry as we know it today. Largely occluded by this admittedly important development, however, is the fact that parallel with the rise of the market for pre-recorded records there was also a smaller but nonetheless not insignificant and worldwide practice of individual or personal gramophonic recording. In both domestic settings (using devices that could be attached to home record players) and in commercial “Voice-o-Graph” booths found at touristic locations (World’s Fairs, Times Square, the Empire State Building, etc.), people were making personal “instantaneous recordings” in huge numbers starting in the late 1920s and continuing up through the early 1960s. These audio equivalents of the polaroid snapshot were recorded

¹ <http://hra.uni-hd.de/>

directly onto small-format coated cardboard or metal discs that allowed for no post-production alterations or editing during their two-minute duration. Robust enough to be sent through the mail in special envelopes, they were used by musicians to make cheap demo records, by poets to hear how their works sounded, by actors and speechmakers to practice their delivery, and above all by amateurs of all sorts to send to a loved one or friend an audio-letter, a Recordio-Gram, a “personally recorded message for you.”

Such audio epistles – recorded by soldiers at USO bases, by visitors to amusement parks and arcades, by travellers in train and bus stations, and by families at home – were sent by the hundreds of thousands in the 1930s, 1940s and 1950s in the USA but also throughout Western and Eastern Europe, in many countries in South America, in Australia and in Asia. Yet, curiously, this significant chapter of media practice is almost completely ignored by the canonical literature of media history nor are there more than a handful of isolated gramophonic voice letters included as oddities in the collections of military, postal and technology museums around the world. How to explain the complete absence of this widespread cultural phenomenon from the standard accounts of media history? For vast numbers of people it represented their first encounter with audio recording, an initiation into the media culture of modernity, and for the illiterate (and pre-literate, i.e. children, as well as for the blind) their first-ever access to the possibility of epistolary correspondence. For cultural historians the recorded letter raises interesting questions about the epistolary form as such: what happens to the character of the letter when it is spoken rather than written, when pauses and hesitations take on signifying character, when the latent mellifluousness of language suddenly comes into its own as people break into song in the middle of their audio letters? What are the consequences for the construction of modern subjectivities of being able for the first time, as one slogan put it so aptly, to “hear yourself as others hear you”? For historical linguists an archive of audio letters represents a mother lode of quotidian speech patterns with regional variations in dialect, intonation, etc. For cultural theorists it is a laboratory in which one can explore, for example, what happens when the voice, that paradigmatic marker of presence, is not only separated from the body (as in telephony) but can be heard again and again, long after the speaker has passed away. These and numerous other important media-historical and cultural-theoretical questions formed the research impetus driving the creation of the The Phono-Post Project, the first systematic documentation of this important yet completely unknown chapter of 20th-century media culture. A brief eleven-minute documentary about the project is available at Vimeo.

Project organization

The Phono-Post Project began in 2010 when Professor Thomas Y. Levin of Princeton University was awarded a two-year Einstein Prize fellowship (the European equivalent of the MacArthur Prize) by the Berlin-based Einstein Foundation, which was then renewed for an additional two years in 2012. Having already amassed a modest collection of gramophonic episto-

lary, Levin now began to expand the archive internationally, acquiring these unique artifacts one by one at flea markets, from specialized dealers and collectors and through a range of on-line auction sites throughout the world. The heterogenous character of the archival collection (discs, sleeves, envelopes, gramophonic needles), the many variants of media composition and recording equipment employed, and the range of associated hand-written and printed materials (instruction sheets, letters, pictures, etc.) associated with Levin's ever-growing collection posed substantial challenges for the creation of a digital collection. Discussion with the University of Westminster's Institute for Modern and Contemporary Culture (IMCC) in 2011 led to development by IMCC's Data Futures laboratory of a preliminary workflow for management of the collection and supporting the research of an initially small group of contributors. Three important areas were identified for the Phono-Post workflow:

- the range of disk sub-types and products and the scope of content of disk, paper and packaging materials was difficult to estimate at the outset of the project: only preliminary classifications could be made and would have to be subsequently revised on multiple occasions;
- contributors with many different skill-sets would be required to document the materials: from native language speakers on multiple continents essential to transcribe speech in local accents, often from very poor audio reproduction; to audio engineering professionals able to obtain the best possible playout quality from media using long-obsolete stylus and groove types; and student assistants tasked with entering handwritten and ad-hoc printed information – and all these activities had to be managed securely and flexibly to accommodate part-time contributions by personnel in multiple geographies while still maintaining centralized curatorial control and standardized input protocols (gradually evolving into controlled vocabularies);
- the size of the collection - expanding greatly as the project developed over the initial four year period, when several other significant existing collections opted to join the project; sub-collections had to be created within a rapidly expanding Phono-Post workflow, and bulk accession tools and large-scale temporary, as well as permanent asset storage had to be made available to address conservation-quality audio and image master files as well as noise-reduced and color-balanced derivatives and compressed presentation versions.

An evolutionary approach was necessary to structure such a digital collection, which had to be capable of serving a large and constantly changing community of contributors and, eventually, students and scholars (with all of the security and access controls essential to contemporary internet-based projects), and also to address preservation and presentation needs, as well as research. From time-to-time, new discoveries as well as specific research and teaching projects (for example a Freshman Seminar on “Media Archaeology” taught at Princeton University in

Fall 2012 the principle focus of which was the Phono-Post Archive) also required additional facilities and evolution of metadata structure. Some of these were event-based and transitory; others contributed to longer term collection architecture. While this process was driven by contributor workflow requirements, the need for early public internet access to a small subset of the collection produced orthogonal requirements of interaction design (for example accommodating different levels of user familiarity and viewing goals) including intuitive search of the collection. In turn, this fed back into the design of metadata creation interfaces for the use of temporary communities of student and crowd contributors, with growing emphasis on expanding controlled metadata vocabularies and careful separation of annotation compared with object metadata. Data Futures *freizo* workflow development tools enabled this to be accomplished by curators without recourse to software development activities.

Most significant of all, deployment of the collection had to enable the work done by contributors to be sustainable – for it to be portable to new browser interfaces and collection infrastructures as technologies evolved. In the long term it was also essential for the collection to be able to adopt emerging metadata standards, and for both binary files (digitized images, audio and movies) and metadata to be moveable between institutional and commercial ICT services (where operating costs could be clearly identified). However, the lack of complete and stable standards for representation of a collection of this complexity at the outset demanded the flexibility to transform the collection itself as standards became applicable, in addition to adopting new interface and deployment technologies.

Workflow evolution

During the first phase of the project, contributors in Berlin focused on creating a sample of the Levin Collection as well as surveying other collections for examples of epistolary voice recordings. Preliminary work using shared documents and ad-hoc internet-based storage such as Dropbox™ was imported by Data Futures and used to inform design of an initial metadata structure and web-based workflow with contributor access controls to prevent unintentional or unauthorized modification by temporary assistants.

By mid 2011, with greater numbers of personnel becoming active, a second phase of contributor management was introduced, which enabled curators to be able to specify and update individuals' access permissions – providing automated 'lost password' and account suspension and expiry services. Bulk data transfer was added for digitization and audio conservation contractors to upload batches of media files, and identification by curators of metadata elements significant for investigation allowed dynamic search narrowing when browsing the growing collection.

A documentation facility, with independent access controls was implemented so that agreed-upon metadata conventions, tutorials and guides could be communicated easily to temporary

contributors. This implementation enabled transformation of multiple large groups of metadata terms into controlled vocabularies, enabling ongoing contributor activity to build a sustainable digital collection. Although considerably expanded in functionality and now containing over two-thousand assets, phono-post.org has remained in service –and supporting constantly changing groups of contributors– without interruption since 2011.

In response to growing scholarly interest in the archive, a selection of some fifty assets from Phono-Post were made openly available online, with the remainder of the archive’s holdings currently accessible to credentialed scholars on a case-by-case basis. Looking forward, however, once Levin has completed a series of monographic studies of Phono-Post in South America (Argentina/Brazil), United States and Europe (focusing largely on Germany, the Netherlands and the United Kingdom), the entire archive will be made accessible to the public.

Expansion

As word spread in 2013 and 2014 that an archive had been developed for these materials, with professional management, digitization and a remarkable online component focused on research into this neglected subject, specialized collectors began to inquire about the possibility of having their collections hosted at Phono-Post. In some cases, this led to important assets in private European collections –for example an extremely rare group of Soviet gramophonic letters from the Antonio Popp archive, one of world’s leading picture-disk collectors–being made available through the Phono-Post Project. In a number of cases the stability, flexibility and longevity of the online component of the Phono-Post archive was so compelling that it led to donations or acquisitions of sizeable collections of gramophonic epistolary, including the Colin David Collection (over one-hundred early Voice-o-Graph discs), the David Giovannoni Collection (circa 750 discs of largely American home-recordings ranging from letters to speeches to music) and most recently, the William Bollman Collection, almost certainly the most important private archive of nearly fourteen-hundred Voice-o-Graph discs, donated by the renowned expert and restorer of Voice-o-Graph booths. All these collections are either already incorporated in Phono-Post or are currently in the process of being catalogued and processed. Simultaneously, in an extraordinary vote of confidence in the project, the undisputed top collector and authority on gramophonic home recordings, Phil Nohl, was so impressed by the Phono-Post Project that he was willing to part with his unique archive of over three-thousand gramophonic home recordings, an astonishing treasure trove documenting American vernacular musical practice from the 1940s through the early 1960s. While this major collection still awaits cataloguing, it is a concrete index of the exponential growth that the Phono-Post Project is currently enjoying.