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Le IASA Journal est publié deux fois l'an et distribué à tous les membres. Veuillez envoyer vos demandes d'adhésion au secrétaire dont vous trouverez l'adresse ci-dessous. Les cotisations anuelles sont en ce moment de 25GBP pour les membres individuels et 100GBP pour les membres institutionnels. Les numéros précédentes (à partir de 1971) du IASA Journal sont disponibles sur demande. Ceux qui ne sont pas membres de l'Association peuvent obtenir un abonnement du IASA Journal pour l'année courante au coût de 35GBP.

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So, I have finally had my first experience of a digital mass storage system. A state-of-the-art sound archive such as the IASA Board were privileged to see at the premises of Südwestfunk (SR) in Baden-Baden last month is like an inversion of the traditional sound archive experience. Twenty years ago when I was taken on my first conducted tours of sound archives (the School of Scottish Studies in Edinburgh was the first) you could see all the recordings regimented along archivally approved shelving but you couldn't listen to them—"We never play our 78 rpm stock: only tape copies" (the guide points to an acreage of grey-painted utility units containing neatly labelled white cardboard boxes); meanwhile some of the visiting party are getting visibly excited by some of the names and colourful designs which emerge from the acid-free record bags that the guide's assistant has reached down from a 'favourite' shelf. Now in the digitised archive you can listen to the recordings on demand at any networked workstation, but you don't get to see them (the large, shiny, digital archive cabinet with its canyons of files accessed by an impossibly acrobatic robotised arm is no substitute). The guide now delivers an explanation in which every sixth word is recognisable as conversational language, the rest comes as a rush of proprietary software labels and numerals. The sounds, captured as we watched and then summoned from the SR's digital store were, perhaps predictably, by The Beatles, and, yes, the sounds were true and doubly nostalgic due to the hi-fi quality of the PC's diminutive demonstration speakers whose input closely resembled the tinny sound of the 1960s Dansettes on which some of us used to play the original singles. I was convinced.

No nostalgia in IASA, however. You may have just noticed that the IASA Journal has changed its appearance, adopting the new house style which was introduced with our publicity leaflet last year. The new layout provides a more attractive read, more flexibility with regard to page content and a more presentable product all round. I would like to thank Kathrine Whatley of the British Library Corporate Design Office for her clever design ideas and patient advice.

 Appropriately for such a new venture, issue no. 13 showcases almost the full range of cultural material collected by IASA institutions, the model for which was already established in the foundation of the Phonogrammarchiv in Vienna, whose centenary we are about to celebrate at our Vienna Conference in September. In view of that illustrious venue, I am not going to fall into the trap of claiming any firsts here but there have not been many precedents for the articles here on linguistic recordings (by Tjeerd de Graaf) and on soundscapes (by Justin Winkler) which were considered highlights of the Paris Conference sessions. Two articles on oral history draw attention to the increasing importance of reminiscence material for preserving the older ways of speaking as well as their value for illuminating historical fact and draw attention to the vital proactive role of the sound archivist in creating or commissioning new sounds in addition to the customary role as passive recipient of routine deposits from the recording industry or radio production departments.

Recorded music, as usual, is accorded some space and again it seemed appropriate with this new-look issue to introduce a new feature (which all editors fall back on sooner or later when copy looks as though it will be scarce). From the archives is intended to remind
ourselves as we approach IASA's 30th anniversary of important or significant material that the association has published or which has been published by one of its member institutions. With the recent death of Patrick Saul, founder of the British Institute of Recorded Sound (BIRS) and an important figure in the early history of IASA, it seemed like a good idea to re-publish his account of what led him to establish a national sound archive in the U.K. and to re-consider some of the ways and means of coping with the obstacles which are inevitably encountered in the pursuance of such an initiative. A recent book on management theory (Leadership: sharing the passion by Jan R. Jonassen, Management Pocketbooks) maintains that the model leader is the orchestral conductor, driven by conviction and a passion for the business of directing a hundred talented and opinionated individuals who may be among the most expert, internationally, in their field.

There was something of the impassioned orchestral conductor in Patrick Saul's handling of the initial establishment of the BIRS, though I believe his preferred way of making music was the piano. One of the ideas which motivated his passion was the realisation (shared by many in the 1920s and 1930s) that, with a few notable exceptions, the new generation of pianists were not in the same legendary class as their predecessors and that to preserve the sound recordings of Godowsky, Paderewski, Busoni and their like would provide an essential link, a path, for future generations to follow. And in the past couple of decades it is clear that these paths have been rediscovered as research into performance practice increases in importance in university and academy curricula, as you can read in Gianfranco Vinay's survey of the new tools of musicology.

Once again, the acquisitions section of the National Sound Archive has unearthed an audiovisual gem for review in this issue. Nick Bougas Presents Celebrities at their worst (in two volumes) may not be the most edifying audiovisual document ever produced and I doubt it will be nominated for inclusion in the Memory of the World but it does draw attention to the revelatory power of the medium when the editorial hand of the producer is absent. This is particularly the case also with some of the very early recordings of celebrities where either the subject is nervous about the experience or the technology is not up to the task: the poet Browning forgetting the lines of his own verse, Brahms' piano playing misrepresented as a jangling incoherence. The latest early celebrity recording to pass my way comes from the Tchaikovsky Archives in Klin who claim to have discovered recently in the Pushkin House in St Petersburg a recording of Tchaikovsky speaking. This is now available on the Koch-Schwann label as part of a 3-CD set presenting authentic performances of some of his orchestral works with piano. Evidently, in 1890 a man named Block who had visited Edison in America, invited several of Russia's most eminent musicians to join him in trying to persuade Anton Rubinstein to record his piano playing. This was unsuccessful but the disjointed dialogue during their attempts was recorded on a wax cylinder. Tchaikovsky's contributions (inasmuch as they are decipherable at all) are, in translation: "This trill could be better"...."Block is good but Edison is even better"...."Who just spoke? It seems to have been Safonov". Rather meagre as historical source material, but if this recording really is genuine, then the mere notion that is the voice of someone so enormously famous
worldwide and whose voice has not been heard by anyone since his death in 1893 has an uncanny allure.

No Board charts again (but Patrick Saul's article prefigured the idea). Expect a new round of charts beginning with the next issue.

Finally an erratum in IASA Journal 12. Several of you wrote to me asking who had written the letter on pages 76-79. It was not intended as an anonymous contribution: I just overlooked the inclusion of the author's name which was that of our Secretary-General, Albrecht Haefner.
The present Board of IASA has as one of its general aims to increase and encourage co-operation not only between our members but also with other organisations. In the Philosophy of AV-archiving (now available on the web and in French) Ray Edmondson has provided a solid theoretical basis for the profession of AV-archiving. It shows clearly that whatever our speciality may be, sound, video or film, we have a lot of common interests as AV-archivists. Today, there are several international associations working in this field. The acronyms of FIAT, FIAF, AMIA, SEAPAVAA etc. are familiar to many of us. I firmly believe that co-operation between these AV-archival organisations is essential. Especially since digitisation and media convergence will make the borderlines unclear which may result in overlap in areas of responsibility and membership. If there is no co-ordination between the associations, this will no doubt mean unnecessary duplication of work, which we can not afford. It will also give us much stronger influence if the audiovisual archives could speak with one voice for instance in UNESCO and other international fora.

On a smaller scale FIAT and IASA have started to work together on specific projects e.g. joint seminars on matters concerning broadcast archives. From IASA’s point of view this cooperation has so far been handled mainly by the Radio Sound Archives Committee.

On another level IASA has been one of the most active participants at the Round Table of Audiovisual Records, a group consisting of all the major international organisations which meets once a year. During the last four or five years this rather informal body, which earlier produced a lot of valuable work, has been functioning less and less well. The agenda has been unclear and there has been a lack of continuity on representation. At this year’s meeting which took place in Brussels in March, IASA made a proposal for restructuring and strengthening the Round Table and I am happy to say that this proposal was accepted almost unanimously.

In order to mark that this should be the beginning of something new, the name of the group was changed to the Coordinating Council of Audiovisual Archives, CCAA (another exciting acronym). Among the approved aims are: to function as a forum for co-ordination, communication and exchange of information between the member organisations; to initiate, install and carry out projects of common interest for more than one organisation; and to organise every third year a joint conference to highlight progress in the various fields of AV-archiving, technology, cataloguing, copyright etc. Representation should be by the President and the Secretary General of the member associations but to ensure continuity the Council should appoint a convener and a rapporteur for a period of three years.

IASA hopes that this new organisation could vitalise and bring more dynamism into the existing co-operation. But the success of this new umbrella organisation is of course dependent on the energy, capability and dedication of the representatives of the different organisations. This will be one of the many challenging duties for the incoming President and Secretary General of IASA. You have all received the nominations and the ballot papers to the IASA Board Elections 1999. Please take advantage of your democratic right to vote.
time there are several capable candidates for the various offices and the announcement of the results will no doubt be a thrilling event at the General Assembly in Vienna. This is one of many good reasons to register for the Vienna conference. Don’t miss it!

Finally, this is the first issue of the IASA Journal with the new design and I hope you like the new look as much as I do. The Editor and the Corporate Design Office of the British Library have in my opinion done an excellent job.

I look forward to seeing you all in Vienna in September.

Sven Allerstrand
Soundscape studies: outlines of a growing research field

Paper presented by Justin Winker, President Forum für Klanglandschaften, at the IASA/IAFAS Annual Conference, Paris, 1998

When talking about soundscapes, defined as environments cultivated by man, it is hard, if not impossible, to talk of well-defined archives. Every person active in this field has a personal sound archive. My hypothesis is that this is due to the particular structure of research on soundscapes and the impossibility of a consistent classification of environmental sounds at large.

Centres of research

In order to comment on this situation I have to make some defining statements. In the last twenty years a growing awareness about sonic environments has been observed which goes beyond bioacoustics. It is accompanied by new or renewed attempts to integrate sense experience into scientific approaches, such as phenomenology and aesthetics, and thereby to oppose conventional reductionism.

Some single precursors of soundscape research in the 19th century, but especially, up to the 1930s, by German psychologist Willy Hellpach and Finnish geographer Johan Gabriel Granö, have tried to consider the sonic environment within the larger scope of a scientific environmental interest. Their work has partly been remembered in the second half of this century.

So far the most focused activities that led to systematic scientific approaches go back to the 1960s and 1970s. While teaching at the Simon Fraser University in British Columbia newly founded in 1965) composer and musicologist R. Murray Schafer started the World Soundscape Project (Wsp) (1970-1975). Then, in 1979, the Centre de recherche sur l'espace sonore (CRESSON) was created in Grenoble by philosopher and urbanist Jean-François Augoyard.

Activities with less institutional continuity are recorded in 1968-69 in the planning and architecture department at the Massachusetts Institute for Technology MIT (ref. Michael Southworth). in 1984 in Espaces Nouveaux (ref. Louis Dandrel). since 1987 at the Laboratoire d'acoustique et musique urbaines (Lamu) (ref. Pierre Mariétan) in Paris, and since 1990 at the planning department of the Universitat/Gesamthochschule Kassel (ref. Detlev Ipsen). In the 1990s research has been carried out at the Folk Studies Department of the University of Tampere (ref. Helmi Jarviiluoma), the Geography Department of University of Basel (ref. Justin Winkler), and in the interdisciplinary research programme Mensch-Umwelt-Beziehungen of the University of Oldenburg (ref. August Schick, Wolfgang Nitsch et al.).
Parallel with these attempts to create systematic approaches a number of specific initiatives can be traced occupying the zone between science, arts and broadcasting. Despite efforts to create sonological curricula, musicological and musical institutions are practically absent. A great number of graduate, master and doctoral theses have been written in various disciplines which did not find their way into the public sphere.

**Tools: technology and terminology**

Visual and sonic environments have their respective documentary technologies: photography and recording. As always, technology and representation, e.g. the ways and habits of looking and listening, shape the technology and are in turn shaped by it. Although recording technology is in principle well developed and has become very mobile compared with the situation forty years ago, it is less easy to handle and therefore less popular than photographic technology. Paradigmatically the associations of audio amateurs, which are usually very centred on technological aspects, are about to transform into video-audio associations. Moreover, the use of recording devices for documentaries about the wider sonic environment is in the extreme minority, music and speech being the predominant topics. No wonder that, compared with documents about speech and music, no systematic corpus of soundscape recordings has so far emerged.

But what does systematic mean in this respect? In order to answer this question I have to examine terms and notions of sonic environments and to ask if approaches to their documentation exhibit a particular structure.

The term *soundscape*, as used in this context, excludes all kinds of artistic and commercial connotations which are extremely widespread. As a *terminus technicus* soundscape has been coined and used in the late 1960s independently by R. Murray Schafer (1986/1967) at the WSP and Michael Southworth (1969) at MIT. Soundscape is an artificial word which plays on the similitude of sound and land. In French it has been translated as *paysage sonore*, in German as *Klanglandschaft*. In the given context it denotes the overall sonic environment, natural and humanised as well, the physical presence of sounds and their connotation beyond the present – for instance sound memories (ref.Winkler 1997-1). The limits, the horizons of a soundscape differ in fundamental ways from those of a visual landscape, since sound is related to time, movement and meaning which together create a notion of space which is characteristicly different from the visual one (ref.Winkler 1997-2).

In order to document a soundscape one has to investigate both the physical appearance – the one which one can actually record – and the cultural presence – the one which one has to work out by interviewing people who live in it and contribute to it. In short, one is compelled to consider both the outer, physical, objective appearance, and the inner, subjective, cultural manifestation of it.
Approaching soundscape from two opposite directions means that any systematic documentation has to cope from the start with enormous complexity and has to spend considerable time in order to achieve an adequate representation of the sequences and cycles which constitute it. This is also why recording a soundscape, and not merely producing acoustic postcards, is so rarely achieved, and why archiving single sound events is far from documenting soundscapes.

**Aesthetic barriers**

Often a preference for single, acoustically isolated events represents a fundamental aesthetic obstacle for systematic soundscape documentaries. I call it, polemically, a *sound engineer's aesthetics*, but it is a widespread attitude in all naive sound hunting: the world imagined as a studio where all sounds occur unmixed. In folksong field research I became aware how acoustic *dirt* around the recorded songs prevented researchers from accepting a given situation without prejudice. In the 1950s it was not only the difficulty of handling the recorders which led to recordings in acoustically as well as socially isolated backrooms, but also an idea of staging the acoustic expression by isolating it. In the meantime individual or solo singing has been relieved by choral singing which realises exactly this ideal of a purged medium, of an acoustically clean space between disciplined singers and equally disciplined listeners.

In June 1992, during a presentation of folksong recordings from the early 1940s in the Val d'Hérens in the Alps of Valais (Switzerland) we were allowed to record the talking and singing of the people present. The joyful singing had no regard for cleanliness, neither in intonation nor with respect to surrounding noises. One can hear the noises of wine-bottles and glasses, steps, chairs, chat, laughter. There is acoustic competition: several attempts to start a new song are drowned in the general drone. This recording exhibits a human soundscape, it is music as environment.

Music as environment (ref. Westerkamp 1988, 1990) is the inversion of Schafer's and others' concept of *environment as music*. Early this century futurist painter Luigi Russolo called for an active treatment of environmental sound as a symphony. However, in his treatise *Arte dei Rumori* (1916) the word *symphony* occurs mainly in the glorification of the sounds of war, the one exception being the *symphony* of the sounds of the sea. There were high expectations on the composer's tools as for the description and transformation of a noisy environment into a composition. Unfortunately environmental and social aesthetics of this kind have been best achieved in the Third Reich and remind us substantially of their dangerous potential.

Whilst the recording of social singing would be relatively easy to classify within conventional categories such as *folksong*, it becomes much more difficult with respect to its soundscape aspect. Not only does the description or transcription become increasingly difficult if not impossible, but also questions concerning the reasons for this gathering are raised: why were people interested in listening to old recordings from their valley? How does the noisy
situation of the gathering relate to the perception of the world outdoors, the mountains and their silence? What has it to do with the tourism on which this valley depends for a living, and in turn for its identity?

Focusing concepts

The question of the acoustic identity of a place has been one of the main strands of research in soundscape studies. The results of the Canadian team was the concept of soundmark and keynote sound of a soundscape (ref. Schafer 1977, Truax 1978). Soundmark, denoting the outstanding acoustic features of a place, is an analogy to landmark and can be translated as emblème sonore or Klangwahrzeichen. Keynote sound is derived from musical terminology and presupposes that a soundscape has a kind of fundamental. It describes the overall acoustic character of a place, in particular the relation of background and signal sounds. In order to avoid too strong a musical connotation it has to be translated as tonalité or Tonalität (ref. Faust et al. 1995). The World Soundscape Project has realised the first collection of soundmarks, published on the disk accompanying its Vancouver Soundscape study of 1973. The juxtaposition of the characteristic signal sounds of Vancouver in a 3-minute-composition (Schafer 1978/1974, LP 1977/CD 1997) The music of horns and whistles exhibits a sonic bestiary of the harbour metropole.

Bells are the European counterpart of the whistles and horns of the Pacific coast. Despite the different acoustic appearance of blown and struck sounds these have a common function in the respective Western and Eastern soundscapes as time indicators and pacemakers. The local ear adapts to the apparent quality of a sound, to the timbre of a whistle or bell. It is not dependent on the distance of the listener from the church or office tower nor on the wind distorting the sound as it travels, but creates this distance in perception. Sound creates space.

Moreover a blowing whistle or ringing bell is sending a message whose content is encoded and decoded by the local or regional culture, mostly referring to the normal temporal order and its exceptions, like alerts. Sound creates time.

What I call the local ear is therefore a cultural, not a natural fact. The local ear integrates the objective and the subjective side of environmental sounds. The physical and the cultural aspects of a sound are always connected by human action and there is always the possibility that sounds can disappear, can be created, can be approved or disapproved. This is precisely the interconnection that has been approached by the CRESSON in Grenoble. Their attention is directed towards the acoustic world in situ instead of in a laboratory simulation, and their credo is strictly interdisciplinary, conducting all research by connecting physical sciences with social sciences and psychology.
Temporal reframing

Recording technology compels us to choose a time frame for every setting, but it also enables us to reframe different and distant temporal settings and to juxtapose them. This implements interactive methods in social soundscape research like the écoute réactivée (ref. Augoyard 1978, Somers 1997). Soundscape archaeology would be of no interest if there was not an application for investigations in the quality and handling of present-time situations. Some recordings by the WSP preserve sounds of West Coast foghorns which have since disappeared. In the case of Point Atkinson's diaphone, the publication of Vancouver Soundscape might at last have had a result: in 1996 North Vancouver district council decided to retain the foghorn and Edwardian fittings of the Point Atkinson lightstation, “in order that future generations are not severed from their past” (ref. Graham 1996).

Maintaining a soundmark for the sake of local identity is one possibility. But recorded documents enable us also to listen to the extent of change of a soundscape's tonality in the course of time. The Vancouver study was redone in 1996, twenty-three years after the original research. A Finnish research group is about to redo a documentation of five European villages from 1975 (ref. Vancouver Soundscape 1996, Schafer 1977/1975). Here I would also cite the case of Liverpool Street Station in London. I was able to redo a 1975 recording by the WSP in 1992, when the renovations and restructuring of the station building had been completed. The tonality of the 1970s, with their hustling-bustling noises, bangs of carriage doors and a reverberating p.a. voice is strikingly different from that of the early 1990s, where steady-state sounds of transformators fill the acoustic space and represent a strong filter for all sounds of human presence. Even the p.a. voice, focused to the platforms, is drowned. Apart from the changes in the structure of the building the railway technology has changed, giving train movements a different acoustic shape. This sensible aspect of the transformation of our technical environment has impacts on other domains of our lives, imported by household machines deep into the private sphere.

Listening to juxtapositions of past and present like this produce an aesthetic shock. By making audible discontinuities, electroacoustic technology enables us to unveil everyday aesthetic attitudes and assumptions. The gap between the two states has to be filled by explanations and interpretations. The case of the railway station could illustrate the on/off modulations of the electronic era with its steady-state sounds, in contrast to the preceding mechanical era with a variety of sound related to acceleration or slowing down. Of course the term variety already leads to a value judgement which might be questionable.

Cyclical structures

Not only historical, long-gone sounds are of interest. Different landscapes or cityscapes exhibit characteristic modulations between minimum and maximum acoustic activity during a day or through the seasons. First attempts to represent acoustic days were made in the 1970s by the WSP in Mission B.C. and Cembra (Italy). In a research project we have also
been interested in making them audible in order to compare different sites. Notice that the dB(A) SPL-figures are highly reductive and do not reproduce the actual acoustical richness of these soundscapes. I call the result sound cartography: sound files which miniaturise every 24 hour cycle into 9 minutes. The results encourage us to deepen our knowledge about these rhythms in another research project.

For every final nine-minute document, the archive consists of an average of 4:30 hours of recordings. These enormous amounts are quite typical for genuine soundscape documentaries and cause also considerable problems for storage and conservation.

**Conclusion**

In conclusion I want to redirect our attention to the essential complexity of soundscape issues which emerges (1) from the combination of natural and cultural elements and (2) from the necessity to consider it objectively and subjectively at the same time. The aim to document soundscapes adequately is reflected by the synthetic rather than analytic character of terms like soundscape and tonality. Soundscape studies have still to develop their interdisciplinary methodological tools in order to be able to capture more than the equivalents of acoustic postcards. It is only within this improvement that new perspectives for storage and use of soundscape documents can evolve.

**References**


Graham, Don 1996: “Coast guard is the only one blowing its own horn”, *The Vancouver Sun* May 1996.


In Lander & Lexier (eds), *Sound by artists,* 227-233. Banff


Le Département des collections audiovisuelles du Centre historique des Archives nationales

Paper given by Agnès Callu, Conservateur du Patrimoniaux Archives nationales, at the IASA/AFAS Annual Conference, Paris

Abstract
The paper describes recent developments in French oral history coordinated by the Archives nationales in Paris which has a key policy of encouraging cooperation between curators and researchers. These developments have centred on particular research institutions and research initiatives concerned with recent French history. Notable examples described include the work of the Commission d'histoire de l'Occupation et de la Libération de la France (which has conducted more than 3,500 interviews with Resistance fighters, prisoners of war and deportees), the Comité d'histoire de la Sécurité sociale and various institutions involved in political science. Special collections described include: interviews with all ranks and duties connected with the French Air Force; recordings of presidential speeches and press conferences; recordings of political trials, notably of Klaus Barbie.

A programme of digitisation was initiated in 1998 and new chronological-thematic indexes are being developed at the Archives to complement the traditional catalogues and interview summaries.

Historique du Département

Le Département des collections audiovisuelles du Centre historique des Archives nationales ne constitue pas, en soi, une structure autonome.

Intimement lié au fonctionnement de la Section du XXème siècle à laquelle il appartient, il en épouse de facto les missions. Cette Section est chargée de recueillir et de conserver le patrimoine archivistique de la Nation pour la période 1914-1958 ainsi que les fonds présidentiels depuis 1870 jusqu’en 1995, date d'achèvement du second mandat de François Mitterrand. Aussi ce Département devient-il le réceptacle naturel des archives publiques, mais aussi de certains fonds privés de la période, dès lors qu'ils se trouvent conservés sur un support audiovisuel.

Mais, à partir de 1981, à l'initiative de Mme Chantal de Tourtier-Bonazzi, alors responsable de la Section du XXème siècle, il dépasse et double cette action “passive” en initiant un programme raisonné d’enquêtes orales. Cette politique volontaire s’attache plus particulièrement au monde politique contemporain. Élitiste, elle s’emploie à réunir les souvenirs de ministres et hauts fonctionnaires de l'époque sans omettre pour autant certains “oubliés de l'histoire” au rang desquels figurent principalement des résistants, des déportés et des prisonniers de guerre.
Le nouveau Département assure sans mal sa première mission, c'est-à-dire offrir un lieu de conservation pour les archives audiovisuelles des administrations publiques ou de certaines structures et personnes privées, la législation française en vigueur lui accordant la légitimité nécessaire à l'exercice de ses nouvelles prérogatives. La loi fondatrice du 3 janvier 1979 est en effet très claire sur ce point. En son article premier, elle définit les archives comme "l'ensemble des documents, quels que soient leur date, leur forme et leur support, produits ou reçus par toute personne physique ou morale et par tout service ou organisme public ou privé dans l'exercice de leur activité". Par cette incise, un sort est ainsi fait aux archives sonores et visuelles.

La mise en œuvre de la seconde est plus complexe. C'est pourquoi, avant de s'engager dans l'histoire orale, discipline alors encore obscure et très largement critiquée, les Archives nationales examinent et prennent à leur compte, en les personnalisant, les expériences tentées à l'étranger et en France.

Pour l'étranger, deux influences sont déterminantes: aux États-Unis, celle du très précurseur Columbia oral history office d'Allan Nevin dans les années 1950; en Angleterre, celle du Department of sound records (Département des enregistrements sonores) du Musée Impérial de la Guerre à Londres ouvert en 1972 et celle, contemporaine, des programmes conduits par l'Université d'Essex.

Les modèles français sont de deux natures : l'élan de certaines structures de recherche et les orientations originales choisies par des institutions patrimoniales.

L’apport des institutions patrimoniales est à inscrire au singulier car l’initiative du Service historique de l’Armée de l’Air est alors pionnière. Cette section entreprend, en effet, des campagnes d’entretiens à partir de 1974 pour établir un corpus homogène et très ouvert de témoins sur les forces aériennes françaises : cohabitent pilotes, mécaniciens, ingénieurs, hommes politiques, officiers, appelés, infirmières. Une dynamique se profile en amont ainsi qu’une réflexion conduite sur la réalisation, la conservation et l’exploitation de ce type de documents nouveaux que l’on craint encore d’appeler « archives » à part entière.

Fort des enseignements retirés, tant du point de vue de la méthodologie historique que de l’organisation concrète des enquêtes, ce Département s’enracine entre archives audiovisuelles et témoignages. Les chiffres parlent d’eux-mêmes : de mille deux cent documents en 1988, il en compte, dix ans plus tard, plus de quatre mille cinq cent.

Présentation des collections

L’enrichissement des collections procède donc d’une action passive de conservation de documents audiovisuels, lesquels, souvent insérés dans des collections écrites, sont un fidèle miroir, grâce au son et à l’image, des grands événements du siècle. Mais il participe aussi d’une démarche historienne dans la création d’archives susceptibles d’étayer un programme de recherche.

Organique, l’accroissement des archives audiovisuelles se fait au gré des versements d’archives publiques et des dons, dépôts et prêt d’archives privées.

Dans cette première catégorie figurent ainsi de très intéressants corpus : ce sont, pour ne parler que des ensembles les plus importants et les plus aboutis, les collections de discours, de déclarations et de conférences de presse enregistrées des présidents de Gaulle, Pompidou et Giscard d’Estaing. Mais aussi, sur un autre versant, en vertu des lois régissant la conservation des archives audiovisuelles de la justice, les audiences filmées sur vidéocassettes des procès de Klaus Barbie, de Paul Touvier et de Maurice Papon et encore les bandes sonores des procédures portées devant les tribunaux lors des événements de Nouvelle-Calédonie en 1986 ou de “l’affaire” du sang contaminé. Mais les fonds d’origine privée, également, recèlent des documents audiovisuels en ménageant de fort belles découvertes. Qu’il suffise de citer le fonds du colonel de La Rocque, qui rassemble des discours du Colonel lors de conseils ou congrès du Parti social français ; celui de René Cassin qui comprend certains discours et interviews du président à la Commission des Droits de l’homme de l’ONU : celui d’Edgard Pisani qui réunit des allocutions, des entretiens, des conférences et des réunions de travail de l’ancien ministre ou celui de Michel Jobert qui propose un ensemble similaire. Mais il faudrait encore parler des fonds d’Edgard Faure, de Pierre Lefranc, d’Édouard Depreux et de bien d’autres.

Collection à la Prévert, sans dénominateur commun, sinon que de rapporter autrement certains moments du temps présent, ces fonds sont des sources primaires au même titre que
les archives écrites et n’invitent pas le conservateur à réfléchir à de nouvelles méthodes d’investigation.

Pour l’histoire orale, le choix est tout autre et le questionnement préalable, constitutif même de la démarche.

À la Section du XXème siècle, les témoignages ont deux origines. Ils sont de la responsabilité des conservateurs; ils résultent aussi du don ou dépôt d’une enquête réalisée par un chercheur isolé ou un centre de recherche spécialisé.

Apports de l’oralité sur l’histoire politique et institutionnelle de la Seconde Guerre mondiale et des Quatrième et Cinquième Républiques, ces témoignages collectés directement répondent à deux demandes distinctes.

Ils sont d’abord ancrés autour d’une personnalité et par conséquent empruntent le mode du récit d’une vie ou plutôt celui d’une carrière entée sur une vie.

Cette recherche d’une parole spontanée, ou du moins délivrée le plus possible des contraintes de la censure, s’est faite sur la base d’un raisonnement classique qui est l’écriture de l’histoire par les textes. On ne remplace nullement l’écrit par l’oral, mais on ‘provoque’ des archives, comme se plaisent à le dire Jacques Ozouf et Jean-Jacques Becker, pour donner de l’âme et du coeur au discours officiel. Une connaissance approfondie des ressources écrites, avec leurs forces et leurs faiblesses, doit donc ‘donner le la’ pour la mise en œuvre d’une politique des archives orales. Écho doté de sensibilité, le témoignage sait, en effet, parfois dépasser, de façon impalpable, ce que l’analyse critique des documents traditionnels ne peut offrir. L’historien dispose ainsi, dans l’idéal, de la documentation primaire et d’une autre, secondaire celle-là, qui, bien que créée a posteriori sur le terrain dangereux d’une reconstitution de la mémoire et d’une réhéarcharisation des données, n’en est pas moins déterminante pour le contemporanéiste qu’il est. C’est pourquoi la pratique à la Section du XXème siècle fut souvent, lorsque l’opportunité se présentait, de lier collecte d’archives privées et collecte de témoignages.

Dans l’esprit et dans la continuité du recensement des papiers de ministres et hauts fonctionnaires pour la période s’étendant de 1871 à 1974 – enquête d’ailleurs entreprise au sein-même de la Section – des personnalités de premier ordre furent interrogées.

Sur la France de Vichy, ce furent André Lavagne, chef du cabinet civil du maréchal Pétain, Georges Lamirand, secrétaire général A la Jeunesse de 1940 à 1943 ou François Lehideux, délégué général à l’Équipement national en 1941 puis secrétaire d’État à la Production industrielle de 1941 à 1942. Tous jettent un delairage nouveau et varié sur l’actualité d’alors, complétant heureusement, par exemple, les papiers du chef de l’État français. Du côté de la France libre, citons les quelques trente-quatre heures d’entretiens de Daniel Cordier qui s’exprime sur sa mission d’officier des Forces françaises libres et sur Jean Moulin, dont il fut


Les témoins secondaires, enfin, ne sont pas boudés: à preuve, Pierre de Saint-Prix, petit-fils du président Émile Loubet qui, tout en apportant le témoignage du cœur sur son grand-père, ne néglige pas le sien propre comme préfet de la Drôme en 1944 ou Simone Mittre qui délivre un message passionnant sur l’ancien patron du groupe Collaboration, membre du Comité France-Allemagne, Femand de Brinon.


Mais la Section, consciente de ne pouvoir assurer à elle seule ce devoir de mémoire et soucieuse de jouer un rôle fédérateur en ce domaine, recueille aussi, grâce à des dons et dépôts, de nombreuses enquêtes réalisées à l’extérieur.

La nature même des témoignages en est immédiatement, sinon détournée et pervertie, au moins légèrement déviée. On passe de la source brute où à supposer que cela fût possible, le conservateur s’est interdit toute subjectivité, à un matériau constitué quasiment à part égale par le témoin et son interlocuteur. Ce dernier, travaillant pour un objet précis de recherche, attend des réponses qui ne le sont pas moins et oriente la conversation dans un
sens et une logique qui lui sont propres. Certains historiens répugnent d’ailleurs parfois à déposer dans une institution publique des entretiens auxquels ils affectent volontiers le label de ‘documentation personnelle’, imaginant qu’en dehors d’eux-mêmes, nul ne peut l’exploiter.

La Section dépasse, sans la nier, cette difficulté et n’ésite pas à conserver certains corpus constitués par des historiens pour leurs travaux universitaires. Deux pôles sont aujourd’hui privilégiés : d’abord, sur le modèle du Comité d’histoire de la Deuxième guerre mondiale, des témoignages sur la résistance, la déportation et les prisonniers de guerre, ensuite, d’autres, plus généralistes, sur la vie politique française de 1945 à nos jours.

Dans la première catégorie, un effort particulier s’est porté sur l’histoire des mouvements et réseaux de résistance avec les corpus d’Alya Aglan sur le réseau Jade Fitzroy, d’Olivier Wieviorka sur le mouvement ‘Défense de la France’ ou bien de Laurent Douzou sur le mouvement Libération-Sud. Pour une recherche approfondie sur l’un des camps de la mort le plus tristement célèbre, on dispose de l’étude sur Mauthausen de Michel Fabréguet étayée de nombreux témoignages d’anciens déportés. Sur le sort des prisonniers de guerre et de leurs épouses sont conservés les entretiens de l’historienne américaine Sarah Fishman.

Plus largement, une vision des forces politiques en présence depuis la guerre sort, entre autres, de la collecte entreprise par Olivier Wieviorka pour son livre intitulé Nous entrerons dans la carrière ; il y analyse le destin de personnalités évoluant sur l’échiquier politique du pays : René Pleven, Maurice Schumann, François Mitterrand, Daniel Mayer. On prend de même en compte celle de William Guéraiche sur les femmes et leur engagement en politique depuis la Libération jusqu’aux années 1970. Nous y sont livrées les voix de Gilberte Brossolette, d’Yvette Roudy, d’Huguette Bouchardeau ou de Françoise Giroud.

Ces dépôts, résultats de contacts suivis entre les chercheurs et les conservateurs, prennent parfois une tournure plus officielle lorsque de véritables conventions sont signées avec des institutions extérieures.

Pour l’histoire du Second Conflit Mondial, on dispose ainsi des témoignages oraux réunis, par exemple, par l’Amicale d’Oranienbourg-Sachsenhausen, par le Centre d’études et de recherches sur l’Allemagne contemporaine, le CERAC de Jacques Bariety à l’Université Paris ou par l’Association pour l’étude et la présentation de l’histoire de la résistance et de Blagnac, animée par Serge Ravel. Parfois, le témoignage est aussi filmé, ce qui dans un domaine aussi sensible que celui de la Déportation, renforce la perception de la souffrance. C’est le très intéressant corpus des survivants de la Shoah tel qu’il a été réuni par l’association Témoignages pour mémoire, l’antenne française des Fortunoff video archives for Holocaust testimonies de l’Université Yale.

Les enjeux de la vie politique contemporaine sont, pour leur part, perceptibles au travers de grandes enquêtes thématiques. On citera l’action de l’Institut Pierre Renouvin de l’Université Paris qui a recueilli et continue de recueillir les témoignages d’acteurs de la construction
européenne (Pierre Uri, René Pleven ou Guillaume Guindey) ou celle de l'Association Georges Pompidou qui interroge hommes et femmes ayant un regard personnel sur l'ancien président : ce sont Simonne Servais, Maurice Druon, Julien Gracq, Olivier Guichard, Jacques Foccard, François Bloch-Lainé, Robert Bordaz et bien d'autres.

**Conservation et valorisation des collections**

Ces collections, ensemble hétérogène de documents sonores (disques, bandes ou cassettes) et de documents audiovisuels sur vidéocassettes – les quelques films précédemment détenus par la Section ayant été remis au Centre national de la Cinématographie – sont conservées avec vigilance et un local répondant aux normes internationales leur est réservé.

Les témoignages collectés par la Section ont toujours été réalisés pour résister, le mieux possible, à l'épreuve du temps : d'abord sur bandes analogiques, puis aujourd'hui sur cassettes DAT numériques, immédiatement transférées sur disques compacts audio. Il en est tout autrement des collectes effectuées à l'extérieur qui n'ont que rarement pris en compte cette dimension. Les raisons économiques sont évidentes, mais il faut faire face. En effet, la Section détiennent plus de mille cassettes, support ô combien périssolable! Depuis le début de l'année 1998, un programme raisonné de copie de ces documents sur disque numérique, aujourd'hui garanti de pérennité, est entrepris. Les corpus consacrés à la Résistance font l'objet de la première tranche de travaux.

La valorisation de ces collections passe par une mise à disposition du public d'un certain nombre d'instruments de recherche, en l'occurrence trois. Premièrement, une table générale des collections est accessible pour les chercheurs en salle des Inventaires du Centre d'accueil et de recherches des Archives nationales : celle-ci présente l'existant en respectant la classification par type de support préconisée par la Direction des Archives de France en 1986. Deuxièmement, il existe depuis 1996 un état général des fonds, régulièrement mis à jour, qui apporte une analyse sommaire des documents. Enfin, depuis 1981, les enquêtes réalisées par les conservateurs de la Section sont très précisément inventoriées au moyen de 'conducteurs' offrant au chercheur la possibilité d'entrer à sa guise dans le document. Ces inventaires, baptisés 'relevés-chrono-thématiques', proposaient auparavant une concordance entre sujets abordés et temps réel. Ils sont aujourd'hui abandonnés au bénéfice d'inventaires-repères dressés en fonction des points d'indexation posés directement sur le disque grâce au numérique. Un catalogue global, quelque soit la méthode qui a été employée, est en cours d'élaboration. Il sera doté d'un index général des noms de personnes, lieux et matières.

Les avancées d'une telle structure sont incontestables. Combinant un enrichissement raisonnable des fonds et une réflexion sur leur valorisation et leur exploitation par un public toujours plus présent, ce Département suit avec détermination le chemin ascendant ouvert presque vingt ans plus tôt.
Bringing new life to archives: oral history, sound archives and accessibility


Paper presented at the IASA/AFAS Annual Conference, Paris

Things move slowly in the archive world but over the last thirty years oral history has come to have a major impact on archives. The recorded memories, opinions and reflections of people from many backgrounds, classes and communities, are now accepted by most historians and archivists as a valuable historical source. Oral history has demonstrated that it can fill gaps in archival collections and provide a wealth of rich detail, particularly about the lives of those people who have been 'hidden from history' and about marginalised groups in society. It has matured and expanded beyond its radical, 'alternative' origins into the historical mainstream. Oral history is increasingly being adopted as a routine technique by, amongst others, business, art and medical historians. In a growing number of countries it has been enshrined in school curricula for history, and in higher education oral history and life story-based research and teaching has mushroomed. Outside academic study, in the professional care of older people, it has emerged as a valued therapeutic technique of 'life review' or reminiscence. It is used in reminiscence theatre, in art galleries, in museum displays, in literacy work, and in self-advocacy and aid work in developing countries. At the end of the millennium more people than ever are eager to capture the memories of their own family members, and are picking up tape and video recorders to do it.

What is perhaps puzzling about all this oral history recording activity is why so much of it has flourished outside sound archives, and in many cases without the active involvement of sound archivists, or any other kind of archivist or professional. In Britain the vast majority of collections of oral history recordings are held outside established archives and record offices, often by museums, in libraries or radio stations or in private hands. In the whole country there are only three full-time oral history curators based in an archive or records office, one at the British Library National Sound Archive (BLNSA) which only created a curatorship in 1988. The picture around the world is similar: archivists abound but few have an oral history specialism. This no doubt reflects the fact that until recently many traditional archivists in the developed world (and I would include some sound archivists in this category) have tended to be suspicious of oral history material. But what is it that lies at the root of this mistrust? Why have oral historians had a troubled relationship with archivists?

Theoretical challenges

The first problem has been that oral history challenges the traditional view that archival records accrue: that they emerge naturally and cannot be – should not be – created. This view
sees the archivist as an essentially passive creature, selecting, cataloguing and preserving documents as they are presented. The active creation of records, it is argued, threatens to undermine the concept of a document’s organic spontaneity and impartiality.

By contrast, oral history demands dynamism from archivists: to advise on what archival gaps exist, on what type of material might be gathered, even to venture into oral history fieldwork themselves. This subverts the archival culture and in the past many archivists have retreated to their ancient manuscripts, pleading lack of resources or time. And in the world of sound archives music, not spoken word, predominates.

The second aspect of this troubled relationship has largely been one of perception amongst oral historians. Emerging as it did in many countries as a radical, often socialist, alternative to traditional, male elite approaches to the study of history, the proponents of oral history tended to view archives as bastions of the state. In Britain for example, the History Workshop movement, which was very active in the development of oral history in the 1970s, strove to establish new centres for working people’s history which were rooted in the community and run by the people themselves. Other groups gathering oral histories, such as gay/lesbian, ethnic communities and women’s organisations, lobbied hard to keep control of their archives in ‘sympathetic’ hands and out of the grasp of established archives of the predominant culture. Whether this was always through a political imperative or because they encountered unsympathetic archivists, or simply because they saw archives as alienating institutions for ‘ordinary’ people, was not always clear, but much of this type of material has only recently begun to turn up in established archives.

In certain parts of the world, of course, this wariness towards state archives has assumed even greater political significance, particularly in the totalitarian regimes of Eastern Europe and Latin America. Here oral history is emerging as a corrective to politically-cleansed records held in archives, and in many cases oral testimonies are the only means of reconstructing a past where no archives have survived at all.

**Practical challenges**

Oral history has not only posed theoretical challenges for sound archivists. As more and more oral history recordings are offered to archives they have raised very practical problems, many of them linked to issues of accessibility.

Firstly, oral history recordings are sometimes of erratic technical quality: many are adequate but some are awful. This has often been a result of inadequate funding for professional equipment and the unavailability of affordable tape recorders, but also through lack of expert archival advice and training. Fortunately, as equipment prices continue to tumble and high-quality recordings become achievable at ever-lower costs, this is a problem that is starting to recede in the developed world. However in developing countries, including Eastern Europe, professional audio recorders are still outside the pocket of many oral history projects.
A second difficulty facing archivists is that oral history recordings can sometimes be complicated ethically and legally. Copyright, privacy and confidentiality legislation varies bewilderingly across the world, and music recordings, of course, also present archivists with similar problems. However an oral history interview may be subject to anonymity, public closure, and selective use by third parties; it might be potentially defamatory or it might contain information about undisclosed illegal activities. This demands archival systems that are sensitive enough the deal with a myriad of different access requirements.

Thirdly, as sound documents go, oral history interviews tend to be long. The average interview in the oral history collections at the British Library National Sound Archive is between four and five hours long. And its content is likely to be extremely detailed and complex, particularly if it is a life story interview spanning many decades and many topics; or if it is an interview about a highly technical subject. It might also be in more than one language, and it might include, for example in the case of interviews with Jewish Holocaust survivors, place names that have long since disappeared. Contrast this to a typical music recording of perhaps one hour duration, with an identifiable title and performer.

The complexity of content inherent in oral history recordings poses problems for the archivist if no explanatory documentation is provided with the recording, which it sometimes is not. The academic community in most developed countries has been notoriously cavalier about this and efforts are only now, belatedly, being made by archivists to encourage the adoption of professional recording and documentation standards. For community-based oral history projects insecurity and lack of funding has tended to mean that verbatim transcripts rarely exist and tape collections have frequently been offered to archives with little more than a general description of the collection, or at best a content summary. In Britain large numbers of recordings collected during the 1980s under temporary government-funded schemes for the unemployed have simply disappeared or remain undocumented and inaccessible.

For all these reasons oral history interviews have often been a headache for archivists. If the recordings are to be made accessible to users they must be catalogued and this takes many times longer to do meaningfully than most commercial music recordings. Nor has the task been made any easier by the lack of consensus amongst archivists about what standards should be followed, although the recent publication by Marion Matters for the Society of American Archivists has moved us forward significantly. Another innovation has been the availability and relative cheapness of quite powerful software packages which allow free text search facilities without the need for over-complex name and subject authorities. These are encouraging smaller projects and organisations to develop their own catalogues.

At the British Library a new on-line catalogue is now in place which offers fast free-text search facilities but large backlogs exist which mean that much oral history material remains inaccessible. Unless the archivist can provide detailed subject-level access to the richness of oral history recordings, users will be deterred from accessing the recordings.
Major progress needs to be made not only in providing users with information about recordings themselves. Mass digitisation linked to catalogue entries seems to be the way forward, but costs are high and even Stephen Spielberg's Shoah Holocaust project, with its huge resources, has yet to demonstrate that a user interface is workable on any scale.

What is perhaps most interesting to note is that few of the pioneers of advanced access have sought to present audio alone: many have taken a multimedia approach (whether via Internet or CD-ROM), synthesising the audio-visual recordings with maps, photographs, documents, transcripts and commentary. This means, of course, that sound archivists can no longer work alone. We are facing a future where archives will be available not only remotely but interactively; and where users, rather than being merely passive consumers, will be able to add their own memories and opinions. This has the potential to open archives to those people who are not naturally inclined to visit archives and libraries, or who are more comfortable with oral and visual, rather than written, forms of memory and narrative, as oral historians have found working with Aboriginal people because it is directly relevant to their lives. It is about people like them: it speaks their language and doesn't rely on special skills to be understood. Oral history can thus be in the forefront of democratising and popularising archives for the next generation.

Moving Forward: Accessibility and an Untroubled Relationship

How, therefore, should sound archivists and the creators of oral history recordings work together in a better way that might benefit future users through improved accessibility?

Firstly, sound archivists are realising that they need to be pro-active at an early stage in the oral history research process, regardless of who is creating the recordings. Ideally, of course, the archive itself should initiate and run its own projects, and this is increasingly the pattern in Britain, Australia and the United States. The archive knows its collections and its users' needs best, and is in a position to ensure high quality recordings and documentation. However if resources are insufficient, archivists can often take a direct role in external projects. Realistic professional advice and training about technical and documentation standards should be offered before an oral history project begins; advice that reflects budgetary and organisational constraints. The archivist needs to conclude a formal deposit agreement which clearly indicates how recordings should be labelled, copied, documented and made ready for immediate transfer to the archive in publicly-accessible form. This should save enormous amounts of time and effort for the archivist and encourage the project to deposit self-selectively and wisely.

Public funding bodies should make it a condition of funding that applicants have made adequate provision for the permanent preservation of recordings in a recognised public archive, and that they have followed recognised technical and ethical standards. In Britain, after years of pressure, the main funding body for social science research, the Economic and Social Research Council (ESRC), and the Heritage Lottery Fund (HLF) which supports community-based oral history work, all expect these to be in place.
Secondly sound archivists must be more interactive with leading producers of sound archive materials, such as broadcasters, by identifying ways of working collaboratively. A recent example of this in Britain has been the Millennium Oral History Project (MOHP), a joint initiative between the British Library National Sound Archive and BBC Local Radio. Arising out of a mutual interest in recording a ‘snapshot’ of Britain at a key moment in its history the project has appointed eighty staff (forty producers and forty researchers) in local radio stations throughout the four countries that make up the UK. Over the next nine months they will each gather around 200 oral history interviews from which they will make sixteen themed half-hour programmes about their geographical area. The themes were suggested by the National Sound Archive, where all the recordings will be archived, together with a catalogue entry for each interview, completed by the oral history producer using a customised MSAccess template supplied by the British Library which is compatible with its own on-line catalogue.

The benefits? The archive fills gaps in its collections and receives well-recorded, well-documented and immediately accessible recordings. The broadcaster has the prestige of working alongside the national library, which attracts participants, and can forgo any worries about what to do with the recordings afterwards, giving the project a durable life beyond the broadcasts. In this way the archive can ensure a managed selection and acquisition process, though no doubt haphazard and unpredictable deposits will continue!

Notes


8. At Essex University in Britain, a survey of academics in 1994 by the Economic and Social Research Council’s Qualidata found that “at least 80% of qualitative datasets... were either already lost or at risk, and even of those archived, half had gone to totally unsuitable archives, some without cataloguing or public access... material lost or at risk would, at present costs, have taken £20 million to create” (internal report, 1997).


Linguistic databases: a link between archives and users

Paper presented by Tjeerd de Graaf (Department of Linguistics, Groningen University) to the IASA/AFAS Annual Conference, Paris, 1998

Introduction

In the summer of 1990 I had the opportunity to take part in a field work expedition with Japanese linguists. We visited the last speakers of the Sakhalin Ainu language in Japan, looked for traces of the Ainu culture on Sakhalin, and made recordings of the Nivkh language and other aboriginal languages on this island in the Far East of Russia, North of Japan.

Until then this region has been practically unaccessible to the outside world, but afterwards all kinds of interesting contacts with Russian colleagues have been realized. In particular, my collaboration with the University of St. Petersburg became more and more intensive and with my work in phonetics and linguistics I got involved in projects related to the study of minority languages and the use of linguistic databases, which were applied to the recording, cultivation and reconstruction of minority languages.

In my presentation of today I should like to tell you something about the work we started in 1995 with projects on language change and the use of acoustic databases in the study of ethnic minorities, particularly those on both sides of the North Pacific Rim. This work is financially supported by the organisation INTAS of the European Community in Brussels. The Ainu, Nivkh and other ethnic communities are small minorities in the Eastern part of Asia. Their languages belong to the Paleo-Asiatic group and are spoken by the original populations in that part of the world. During the last few centuries, these groups have been dominated by much more numerous peoples, and their language and culture have become endangered by the Russian and Japanese influences. The last speaker of Sakhalin Ainu died on Hokkaido in 1994, and following her death this old culture is no longer represented in an existing language community. This is the fate of many aboriginal languages all over the world, and one can state that the world culture is becoming poorer with this irretrievable loss of valuable and important human knowledge. Many recordings of the Sakahlin Ainu speech could, however, be made and these data on the language of the Ainu people are stored in linguistic databases in Japan and remind the world of their culture.

As estimated by Michael Krauss and others, in the next fifty years many of the six thousand languages which are at present spoken in the world will disappear. At the moment between 20 and 50% of these languages are no longer used by children, which makes their survival very uncertain. In my lecture I should like to indicate the measures one could take to put an end to this process of degradation and dying out of languages and the ways linguists and ethnologists could work together with representatives of endangered languages in order to find solutions to these problems.
I should like to describe the role of linguistic databases, how they are made, where they are situated and how they can be used. This will be illustrated by specific examples of databases for aboriginal languages in Russia and North-America and we shall see that for these language communities and, in general for the sake of world culture, these linguistic databases can play an important role.

The construction and use of sound archives

Prior to 1890, linguistic and ethnological fieldwork was based on contacts with representatives of cultures, in which the investigator took notes by hand after many repetitions of tales and songs during recording sessions. This was a laborious process for both the investigator and the performer or informant. At the end of the previous century, the great invention of the phonograph by Thomas Edison changed all this. For the first time in human history, people could store and rehear acoustic data, in particular speech. With this new method, collectors were able to do their work instantaneously and to obtain an accurate and objective record of a single performance. It became possible to capture all the nuances and subtleties of the spoken word, songs and music. Furthermore, duplicates could be played repeatedly for transcription and analysis, and the original recordings could be preserved for future use.

Expeditions, often financed by philanthropists, were sent to various parts of the world to gather data, which were then returned to the archives for preservation and study. In 1897, for instance, on the initiative of the famous anthropologist and linguist Franz Boas, the Jesup Expedition set out from the American Museum of Natural History to examine the evidence of similarities among the peoples of Siberia and the Northwest Coast of America, and thereby to investigate the origins of the Native American peoples. Recordings of this expedition were made in Siberia by Waldemar Bogoras and Waldemar Jokhelson. Many of these recordings are stored in the archives of the Pushkinsky Dom in St Petersburg and form one of the basic collections used in our INTAS projects. The first of these projects started in 1995 and was successfully completed in 1998. We were able to reconstruct part of the many recordings in the Pushkinsky Dom and to make them available for further research, which is not only important for historical and cultural reasons, but also for the direct possible evidence of language change.

Sound archives in the Russian Federation

The sound archives in St. Petersburg contain about 10,000 wax cylinders of the Edison phonograph type and more than 500 old wax discs. In addition, extensive holdings of gramophone records exist and one of the largest collections of tape recordings on the folklore of Russia. This represents the history of Russian ethnography and contains a wide range of materials. Important collections are, for instance, those of Yakhelson on Yakut, Aleut and Kamchadal, of Sternberg on Nivkh and Tungus, of Gippius on Hanti, Mansi and many others representing most of the peoples of Russia. In our INTAS project we have started to
copy part of this collection onto modern sound carriers in order to make them available for further research. First, we completed this task with the Zhirmunsky collection. Zhirmunsky was a famous linguist who worked in St Petersburg/Leningrad in the first half of this century. One of his main interests was the study of German dialects spoken in the territory of Russia. In the period between 1927 and 1930 he recorded many songs and texts of German colonists on old gramophone discs. In the framework of our INTAS project most of these discs have been copied on tape and I should like to mention the very important role the Phonogrammarchiv in Vienna has played in this work and the help we got from Dr. Schuller and his staff. On behalf of my Russian colleagues I express our great appreciation for this.

Zhirmunsky could continue his study on German dialectology until the thirties, but in 1933 all research work concerning Germans and the German dialects in the USSR was stopped for obvious political reasons. His famous book on German dialectology was published in 1956, but for similar reasons it only contains information on the German dialects West of the Oder-Neisse line, the present-day border between Germany and Poland. Over the last ten years it has again become possible to study the German dialects in Russia with the aid of existing linguistic databases and new fieldwork. In this field, we have just finished an interesting study on the language and culture of the Siberian Mennonites. This ethno-religious community in Russia has strong historical, cultural and linguistic links with the Netherlands.

The sound archives in St. Petersburg also contain very interesting data on Yiddish, the language of the Jews in Eastern Europe, which at the beginning of this century was used by millions of speakers. In the archives we found an unpublished manuscript by Sofia Magid on *The Ballad in Jewish Folklore*, together with many corresponding wax cylinders. The manuscript is dated 1938, which explains why at that time it could not be published. Together with specialists in St. Petersburg we are now preparing further explorations of these data in the sound archive and an edition of the book. This will take place in the framework of a new project with the title: *Voices from the Shtetl, the Past and Present of the Yiddish Language in Russia*, for which we hope to find financial support.

Important activities related to linguistic databases in St. Petersburg concern the many recordings of Russian dialects and minority languages in the Russian Federation, such as Nivkh, Tungus, Yakut and others which I indicated before. One of our aims is the construction of a phonetic database of the languages of Russia which shall have many scientific, cultural and technical applications.

I should like to mention one example of the use we made of old recordings of the same group of native speakers we visited on Sakhalin in 1990. In the particular case of Nivkh, the wax cylinder recordings made by Sternberg around the year 1910, were copied on cassette tape. Last year, I was able to show this to a representative of the Nivkh ethnic community, who still knows the language. She translated part of the Nivkh text into Russian and there she found a story which contains important information. Not only the earlier stage of the
Nivkh language is interesting, but also the contents of the story. It describes the visit of the Russian explorer Nevelskoi to the Far East of Russia around 1850. Then, for the first time, the Nivkh people came into contact with the Russian authorities who started to explore the region. These data are relevant for the history of the Eastern parts of the Russian Federation and we hope to use these possibilities in our further analysis of the sound archives in St. Petersburg with the aid of local informants who still know the language. The information on the wax cylinders and other sound carriers can also be important for the language itself and for the speakers of that language as the following examples related to the Californian linguistic databases will show.

**Sound archives in the USA**

In the USA large sound collections can be found in the archives of the Library of Congress in Washington, the Museum of Natural History in New York and the Archives of Traditional Music at Indiana University. The collection of field recordings in the Hearst Museum of Anthropology at the University of California, Berkeley, includes songs and spoken texts collected among Indian tribal groups all over California, and the core of the collection consists of more than 2700 wax cylinders, recorded between 1900 and 1938 as part of a systematic programme to document aboriginal cultures of the region. This collection is the largest one that focuses on a single cultural area, and it is illuminated by an extensive body of published writings and manuscripts.

I should now like to describe the use of these facilities in Berkeley where I worked during the first half of this year. I will show a concrete example of how linguistic databases can be used, in particular for the purpose of language revitalisation and the study of the history of Californian native peoples. It can provide a model for similar activities related to the languages and cultures of the ethnic minorities in the Russian Federation and elsewhere.

The Department of Linguistics at the University of California in Berkeley has a long tradition of work in the area of Native American languages, which was in fact its main focus in its first decades of existence. Dozens of dissertations and hundreds of publications on American Indian languages have been produced by students and faculty and have been stored in the archives, together with numerous field work recordings.

**The use of archives in the case of language revitalisation**

At the University of California in Berkeley (UC Berkeley) a unique project is being undertaken by Professor Leanne Hinton. In the *Breath of Life/Silent No More* workshops data from the local linguistic databases are used in order to help the native peoples of California to study the language of their heritage. Once a year, groups of Indian people meet in the Linguistic Department where they work together with staff members in the archives, museum collections and libraries on campus. From publications, fieldnotes and audiotapes made in the past by fieldworkers, these tribe members reconstruct short phrases, texts and
speech acts which might have been used by their grandparents. In some cases, old people who still know the language can act as masters and can help the apprentices in their communities to learn how this language was used. In many cases, living speakers can no longer be found, but nevertheless workshop participants make an effort to start using the language again.

For example, one of them, Linda Yamane was inspired by the Breath of Life/Silent No More workshop at Berkeley. She belongs to the Indian community of the Ohlones who lived around the Bay of San Francisco in early times. There are no more living speakers of the Rumsien Ohlone language, but years of listening to tapes and study of field notes have brought her to an understanding of the language that she would not have believed possible when she began. During one of the workshop sessions she was able to sing two songs in Rumsien and speak a few words in the language.

In this way, the material in sound archives, museum collections and libraries is used to bring the language back to the memory of tribe members. This is of great psychological and emotional importance for them: it stimulates the well-being of the ethnic community and gives them self-respect and self-esteem.

In a more favourable situation where the language is still in everyday use by many members of the community, a growing wish exists to pass it onto the next generation through educational programs in the schools. In that case, good and effective teaching methods are needed. The data in linguistic archives can be used for the preparation of grammars, dictionaries, and other educational resources.

In California, the Master-Apprentice Language Learning Program has been set up in order to train native speakers and tribal members who want to learn the language and to work together in an immersion situation. In this way, over the six years of its existence, some forty to fifty young adults throughout California have become second-language speakers of their language of heritage.

One should take into account that most of the Native American cultures have never had a tradition of writing, but that the information was passed from generation to generation orally and is now stored in sound archives. This oral tradition is represented in the acoustic recordings which have been made by field workers, and they play a central role in the teaching of these languages and cultures. In this respect, linguistic databases will also be very important.

The case of Kashaya Pomo

I give you some examples of the minority groups in North America because of the possible links which exist on both sides of the North Pacific Rim. Over the years, Russian explorers representing the Russian-American Company have played an important role in this part of the world. They had settlements in Alaska and Northern California until the second half of
the 19th Century. Then they left North America, and the border areas with Japan on Sakahalin and the Kurile islands became new places of interest where they started to explore and where they collected important data on the local aboriginal peoples. The Indian tribes in the region where the Russian settlement of Fort Ross, north of San Francisco, was situated until 1850 were the Kashaya Pomo Indians. At that time they lived there together with a few hundred people from Russia, many of them not Russians, but representatives of peoples from Siberia and Alaska, like the Aleuts and Yakuts. During this period, the local Kashaya Pomo language was influenced by Russian and it adapted quite a few loanwords from Russian.

In November 1997 I took part in a unique workshop at Fort Ross attended by Russian, American and European scholars, and by representatives of native cultures from Siberia, Alaska, and northern California. This workshop was sponsored by the Society of Living Traditions, and the Program on Tradition and Community. Members of the Kashaya Pomo community were honored guests at this workshop, and it was there that I first met them, and heard their views on their own language and culture (as well as the views of Siberian and Alaskan native representatives). Part of the reason I returned to California in 1998 was to develop further the work begun at this workshop.

During the workshop on Language Revitalisation at UC Berkeley in June 1998, I had the opportunity to work with a young representative of the Kashaya Pomo community who was strongly motivated to learn about the language and history of his ancestors. Together, we studied the linguistic databases and the documents on this history in the Bancroft Library and the Hearst Museum and we listened to the sound recordings which were made by field workers. At Fort Ross, we also met the elderly speakers and the teacher of Kashaya Pomo and it was fascinating to learn about the Russian influences and about other phonetic and linguistic details on this language.

Language endangerment in California

According to Michael Krauss, only twenty of the one hundred and seventy five (175) Indian languages in the United States belong to the category of non-endangered languages which are still learned in the traditional way by children from their parents. In California, the situation is still more dramatic: at the beginning of the 19th century there were about three hundred thousand (300,000) speakers of about one hundred different languages. Half of them have disappeared and most of the other half are on the brink of extinction. There is not a single California Indian language that is learned by children as the primary language of their household. Even those people who know the language rarely use it; they may have nobody to talk to. When the elders who still speak it will die, the language with its culture will vanish from the face of the earth, as it happened in the case of the Sakhalin Ainu language in 1994. Because of this, the world’s culture will again become poorer.

In her book *Flutes of Fire*, Leanne Hinton gives a description of all the measures which are taken to prevent this from happening. Her survey of the numbers of speakers of the many
California Indian languages shows that in most cases very few or no more people use their language actively. Nevertheless, in the last few years there has been a growing awareness of the importance to prevent the further extinction of this rich cultural heritage. All kinds of community based activities are taking place, such as:

- revival of singing and language use based on anthropological field work notes and sound recordings;
- summer immersion camps for young tribe members;
- preparation of dictionaries and teaching material, together with linguists.

Several organisations in California are concerned with these problems, and there is a growing awareness that many things can be done. One of these organisations is the Program on Tradition and Community, now an established unit within International Area Studies at the University of California at Berkeley. It brings scholars together from different disciplines and different countries and creates the framework whereby the scholars and the traditional communities work together. I am also participating in this and in the case of language endangerment, for instance, we are planning to bring together members of different native communities – from Siberia, Alaska and northern California – to consult with each other and with scholars. The construction and use of linguistic databases will be one of the issues.

Conclusions

In the Russian Federation, on the other side of the North Pacific Rim, we find various language groups which are in a situation similar to the American Indians. I mentioned the case of the Nivkh where out of a total number of about four thousand only 10% of the people still have a certain command of the language. Also many other languages are endangered and nearly extinct.

It will be important to establish links between the communities on both sides of the North Pacific Rim in order to exchange experience in the field of language revitalisation and to regain the links which were created in the past. With colleagues from Russia, the USA and Japan we shall continue the construction of linguistic databases and the study of historical acoustic data from sound archives.

Similar to the way we started our INTAS projects, we shall work together on a larger scale in order to study the endangered languages in the world. First of all, a further description of the language situation in all its details is necessary. Use will be made of the existing linguistic databases and modern technologies of phonetic and linguistic research and new fieldwork expeditions will be organised in order to collect new data.

I assume that Dutch universities will be further involved in these projects and that we shall be able to collaborate further with other European institutions. Our active participation can be motivated by the fact that my country is a member of the Council of Europe and has
ratified the European Charter for Regional or Minority Languages. This charter took effect on the 1st of March 1998 and it aims at protecting the historical regional or minority languages of Europe. I think that it is appropriate to conclude my lecture with the following quote from one of the texts in the publication on this Charter which could well be applied to regional and minority languages in other parts of the world:

"The aim of the Council of Europe is to achieve a greater unity between its members in order to promote their common heritage and ideals. Linguistic diversity is one of the most precious elements of this European cultural heritage. The cultural identity of Europe cannot be constructed on the basis of linguistic standardisation. On the contrary, the protection and strengthening of its traditional regional and minority languages represents a contribution to the building of Europe, which, according to the ideals of the members of the Council of Europe, can be founded on pluralist principles of democracy."

I hope that my lecture has made it clear that linguistic databases can be a very important link between archives and users who are working for the benefit of minority languages and cultures. This is a central issue for one of the most important aspects of world culture, namely its linguistic diversity.
Projects VOCS and SIRANAU:
when culture and technique collaborate to improve access to
the audio(visual) heritage of Switzerland

Françoise Simonet Chatton, Memoriav, Switzerland

Abstract

Project VOCS (Voices of Swiss Culture – Voix de la culture suisse) aims at securing the
preservation and communication of audio, written and visual documents relating to key
figures of Swiss culture.

SIRANAU (Integrated radio system for digital radio archiving – Système intégré
radiophonique pour l’archivage numérique audio) is a system of storage and retrieval
of digital sound that operates within the context of a radio production system.

The co-operation between these two projects led to an innovative way of linking an
audio collection to a collection of manuscripts, thus providing an access to a selection
of audio recordings in digitized form in the premises of the Swiss National Library.

VOCS

Introduction

The pilot project VOCS results from a partnership of three institutions: Memoriav, Radio
Suisse romande and the Swiss Literary Archives.

Memoriav (Association for the preservation of the audiovisual heritage of Switzerland
founded in 1995) aims at promoting the collection, preservation and distribution of
audiovisual material of cultural value. Founding members are producing and archiving
institutions that decided to co-operate closely for this purpose. Besides participating in
numerous projects, Memoriav is also collaborating on defining a policy for the archiving of
the nation’s printed and audiovisual cultural heritage.

Radio suisse romande (RSR) is the public radio network from the French-speaking part of
Switzerland. Its sound archives include a collection of about 250,000 documents. To better
fulfil an increasing number of external requests originating from researchers, historians,
publishers, universities, etc., RSR began co-operating with institutions devoted to
conservation and access, such as libraries.

The Swiss Literary Archives are one of the special collections of the Swiss National Library.
and are located in Berne. They collect documents related to Swiss literature (in German, French, Italian and Romansch) and manage about seventy collections such as those of Friedrich Dürrenmatt and Blaise Cendrars.

**Scope of the project**

Project VOCS has been instituted in the framework of the celebrations that marked the 150th anniversary of the establishment of the Swiss Federal Constitution and the 200th anniversary of the Helvetic Republic. It is a constituent of the *Preserve our memories* project undertaken by the Federal Archives and Memoriav with the aim of safeguarding, promoting and creating access to the treasures of Switzerland's cultural heritage.

The VOCS pilot project focused on a selection of 200 hours of original sound recordings consisting of interviews, readings, portraits and tributes from 1936 up to the present. These recordings are from the archives of Radio suisse romande and are supplemented by written and pictorial material.

Two main goals were targeted:

- to create and facilitate access to a selection of audio recordings from Radio suisse romande;

- to gather in the same place information stored on all kinds of carriers. A researcher who studies Blaise Cendrars, to name one of the VOCS participants, can go to the Swiss National Library and have access not only to their books and manuscripts, but also to audio material. Furthermore, while consulting the database of the Swiss National Library, this researcher will have direct access to the primary information, i.e. be able to listen to the sound and to look at the picture attached to it directly from the bibliographic record, without having to worry about original carrier or listening device.

**Methodology**

**Selection**

A first selection of sound recordings was based on a list of personalities active in the fields of popular and scientific literature, poetry, the stage and literary criticism who are represented both in the archives of Radio suisse romande and in the Swiss Literary Archives. Specialists in Swiss literature took part in the final selection of the audio documents in the course of a series of listening sessions. These experts also helped us to evaluate the potential importance of radio archives for researchers. We were the first to be surprised: these listening sessions were a demonstration of the considerable value of these documents from radio archives. We discovered, among other things, that the experts hardly knew the existence of any of these audio documents, and that some of the specialists had never even heard the voice of the subject of their expertise.
The result of this selection process consists in about 500 sound recordings from 1936 to the present relating to 21 personalities.

In addition, about 80 pictures and journal articles connected with specific sound recordings or broadcast series were selected. These documents were digitized and catalogued to ensure their accessibility (Figure 1).

**Copyright**

A contract was established between Radio suisse romande and the Swiss National Library, regarding the use of and access to the sound documents. Among other points, it was agreed that:

- use of the documents is to be restricted to the premises of the Swiss National Library in Berne;
- lending and reproducing are not allowed;
- Radio suisse romande remains owner of the rights in its possession.

The contributors (or their heirs) and the journalists participating in the interviews were contacted and informed about the project. As of today, none of them denied permission to access these documents under the conditions described above.

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Figure 1

**Blaise Cendrars**

interviewed by

Roger Nordmann, 1949

Source: Le Radio, no.42, 1949, p.1559
Documentation

The next phase of the project involved the cataloguing and documentation of the selected recordings. It was decided to make use of the database of the Swiss National Library, Helveticat, as the documents were to be accessible in the premises of this institution. Helveticat is a database from VTLS Inc. using USMARC format and ISBD rules. In order to catalogue these sound recordings, we adopted accordingly the International Standard Bibliographic Description for Non-Book Materials (ISBD(NBM)) and the International Standard Bibliographic Description for Electronic Resources (ISBD(ER)) rules, as well as the draft of the IASA Cataloguing Rules for Audiovisual Media (Figure 2).

Access

To ensure that presentation of those documents was also technically more innovative, the project was connected with SIRANAU (see below). The recordings, written and pictorial material were digitized to facilitate their use by the partner organizations, either in the production of radio programs at Radio suisse romande or for consultation by researchers, teachers, students and the general public at the Swiss National Library.

From the Helveticat database of the Swiss National Library, two types of access are being proposed:

• access to the bibliographic data in the Helveticat database of the Swiss National Library locally or remotely from everywhere in the world through the Internet (http://www.snl.ch);

• electronic access to the recordings and written and pictorial material from computers located at the Swiss National Library and the Swiss Literary Archives (as part of the project SIRANAU).

Future perspectives

Although project VOCS officially ended in December 1998, the access to the digitized documents has yet to be finalised. Nevertheless, the initial feedback from users proves the high research value of audio documents from radio archives which had been inaccessible up to now. Memoria is therefore considering the extension of the project to include all four linguistic regions of Switzerland.
**Bibliographic record**

Source: Helveticat, database of the Swiss National Library

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Figure 2

Click on icon for associated image or other media files:

www.srnru.ch
SIRANAU

Introduction

The technical evolution in radio production has led to the disappearance of traditional sound carriers and recording techniques. These have been progressively replaced by computerized techniques of production and distribution, in which sounds are kept on a server. However, because of the limited capacity and rapid obsolescence of these systems, the issue of long-term storage has to be addressed.

SIRANAU (Système intégré radiophonique pour l’archivage numérique audio – Integrated Radio System for Digital Audio Archiving) was born from the cooperation of Radio suisse romande with the Swiss Federal Institute of Technology (EPF Lausanne – DI-LBD), the Hewlett Packard Company and the Swiss National Sound Archive in Lugano. The study, developed and tested between 1996 and 1998, had the financial backing of the Commission for Technology and Innovation (CTI) of the Swiss Confederation.

The objectives of SIRANAU were as followings:

• to develop a prototype of a digital mass storage system independent from proprietary formats and using modular and evolving techniques;
• to explore different technical solutions (audio files formats, storage media, etc.) to offer long-term storage conditions;
• to verify the feasibility of the integration of SIRANAU and the broadcast production systems, by making the exchange of sound files possible;
• to communicate with the already existing retrieval databases (and not to replace them).

Architecture

The prototype of SIRANAU consists of a UNIX HP 9000 server, a database (currently PostgreSQL), and different storage media. The storage of sounds and of annexed documents (texts and images) is achieved near-line in a mass storage device (Figure 3).
Sound Coding

The sounds, entered through a workstation or directly by transferring the files from the production systems, are encoded in different formats:

- linear (44.1 or 48 kHz), for radio production or CD mastering;
- compressed (MPEG Layer 3, 56 kbits/s);
- heavily compressed (MPEG Layer 3, 8 kbits/s), for distribution on the Internet;
- in some cases, the original files, coded in specialized formats, can also be archived.

Storage

The tests have been completed using the system’s robot, used for the retrieval of the MODs (Magnetic-Optical Disks) (a HP Sure Store 600 FX managed by the digital library management software AMASS which provides security features for the control of the consistency of audio files). Three categories of media were tested: disk RAID for fast access, Magnetic-Optical Disk for middle access and Digital Tape DLT for slow access.
Integration and User interface

The integration of the existing databases (one for music and one for spoken word – ID BASIS documentary system in Radio suisse romande and VTLS Library System in the Swiss National Library) was achieved through an ODBC interface that connects the databases. The searching and retrieval of a sound is made possible through a HTTP server and a standard Web audio player software.

Developments

The following developments are foreseen:

• streaming (listening during data transfer);
• improvement of security features;
• connection with production systems.

Figure 4
Siranau sound screen
Source: Emmanuel Buff, Swiss Federal Institute of Technology

Integration of VOCS / SIRANAU

In order to provide access to the sound documents stored in SIRANAU from the database Helveticat of the Swiss National Library, it was necessary to develop a user interface for sound retrieval.
The bibliographic record screen of Helveticat includes a multimedia icon that, when activated, sends the user to an URL, in that case to various SIRANAU windows developed for VOCS:

- an introductory screen, which contains information such as names of and links to the partner institutions, title and duration of the sound, and links to the sound and/or the image (Figure 4);
- the sound screen displays the different sound formats (linear or compressed) and allows the user to listen to the sound. A plug-in controls the playback of the recordings;
- the image screen gives information on the source of the picture or article and links to the picture itself.

In conclusion, we have demonstrated the feasibility of the study: both projects are now functional. It is still too early to decide whether SIRANAU is the solution of choice to archive and communicate audio documents. Although at this stage SIRANAU is still to be considered as a prototype, it has proved to be an adequate solution for the archiving of the radio production. The co-operation with the project VOCS has shown that SIRANAU can also meet the needs of the preservation and communication of the audio heritage. We will now need the feedback of the professionals and the users of audio documents to verify if our hypotheses were accurate and our choices appropriate.

On the basis of the experiences and findings gathered with this prototype, Radio suisse romande is now planning the realization of a full-scale digital mass storage archiving system for the year 2000.

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Additional information on these projects is available on the Internet at the following URLs:
- [http://lbdsun.epfl.ch/f/research/siranau/](http://lbdsun.epfl.ch/f/research/siranau/) (French) and
- [http://lbdsun.epfl.ch/e/research/siranau/](http://lbdsun.epfl.ch/e/research/siranau/) (English)
Musicologie, analyse et enregistrement sonore

Revised version of the paper given by Gianfranco Vinay (University of Turin) at the IASA/AFAS Annual Conference, Paris, 1998

Abstract

Until the late 1970s, musicological research was concerned almost exclusively with written texts. During the last twenty years sound recordings have begun to be considered as indispensable to musicologists. A number of instances are cited: the work of José Bowen at Southampton University (and CHARM), the work of Peter Szendy and various European workshops and periodical publications. A significant turning point in attitudes to sound recordings evolved from German literary theory, notably Rezeptionstheorie: in which a key figure was Hans Robert Jauss. Three approaches to sound recordings are identified (though elements of all three are usually mixed): taxonomic (the study of performance traditions or styles); hermeneutic (the psychology of listening to recorded performances); analytical/historic (the transformation in performance practice as applied to a given piece of music or repertoire over a period of time). The results of this research are bringing about a change in musical perception and appreciation; interpretations as different colouristic shadings of the original conception; an increased emphasis on the temporal and dynamic elements of music; the relationship to oral traditions; the history of musical taste.

Jusqu’à la fin des années soixante-dix, les sources sonores intéressaient quasi uniquement les domaines de la musicologie dédiées à l’étude des expressions musicales basées sur la tradition orale, comme le folklore ou le jazz. Bien entendu, il y avait aussi des musicologues qui s’occupaient du catalogage scientifique des sources sonores de la tradition savante occidentale ou qui rédigeaient des comptes rendus critiques et détaillés des nouveautés discographiques pour les revues musicales, mais les deux principaux domaines de la musicologie, le domaine historique et le domaine systématique, concernaient surtout les sources écrites. L’histoire de la musique et l’analyse musicale étaient plutôt l’histoire et l’analyse des partitions musicales.

Jusqu’aux années soixante-soixante-dix, la recherche musicologique s’appuyait sur deux modèles épistémologiques principaux: le modèle philologique et le modèle scientifique. Comme pour le philologue dans le domaine littéraire, le rôle principal du musicologue était de réconstituer un texte musical aussi fidèle que possible au texte originel de l’auteur, d’une manière analogue, le rôle principal de l’historien était de réconstituer le contexte de la production de l’œuvre musicale. L’histoire de la musique consistait donc dans l’histoire de la production des œuvres musicales.

De même que les scientifiques partent d’une hypothèse à vérifier, en essayant de trouver des constantes sur lesquelles formuler des règles, les analystes de la musique partent d’une
méthode plus ou moins codifiée et essaient de trouver de constantes à l’intérieur d’un corpus choisi. Tout comme les musicologues philologues ou les musicologues historiens, les musicologues analystes, jusqu’aux années soixante-soixante-dix, s’appuyaient presque uniquement sur les sources écrites. Même si les musicologues étaient conscients des limites de l’écriture musicale face à la restitution sonore, à l’exécution d’une œuvre, la partition demeurait une source relativement stable, et donc universelle.

Cet état des choses a commencé à changer au cours des années quatre-vingt et, d’une manière encore plus rapide, au cours des années quatre-vingt-dix. Durant ces deux dernières décennies tous les aspects de la musique liés à l’écoute, à la réception, en un mot, à l’esthétique, ont été de plus en plus explorés. Dans le vaste territoire de la recherche scientifique appliquée à la musique, le cognitivisme musical et la psychologie de la musique sont devenues disciplines centrales. L’interprétation musicale n’appartient plus seulement au domaine de la critique journalistique, mais elle est devenue aussi un sujet privilégié des études des analystes et des historiens de la musique. Dans tous ces nouveaux champs de recherche, les sources sonores et en particulier les sources discographiques, sont devenues des outils de travail indispensables.

D’abord, je voudrais mettre en évidence quelques étapes de la recherche musicologique basée sur l’enregistrement sonore des interprétations musicales au cours de la dernière décennie.

- Une séance dédiée à trois analyses de trois différentes interprétations de la scène de la folie de Lucia di Lammermoor de G. Donizetti (ref 1) ouvre le deuxième colloque européen d’analyse musicale qui s’est tenu à Trento en octobre 1991. Deux séances, l’une dédiée à l’analyse des relations entre musique et narration cinématographique, l’autre à l’analyse de la musique électroacoustique, confirment une attention particulière des musicologues analystes à l’égard des moyens audio-visuels et des expériences musicales non fixées par l’écriture.

- En 1993, le sujet du 11ème Colloque international de la Gesellschaft für Musikforschung est Musik als Text. Particulièrement important pour le développement de ce nouveaux domaine de recherche est l’exposé de José Antonio Bowen intitulé Can a Symphony Change? Establishing Methodology for the Historical Study of Performance Styles (une version élargie sera publiée trois ans après dans une revue musicologique) (ref 2). Au cours de la même année (1993), Bowen publie un autre article très important intitulé The History of Remembered Innovation: Tradition and Its Role in the Relationship between Musical Works and Their Performances (ref 3). En septembre, moi même, à l’occasion d’un colloque sur la praxis musicale organisé par la Société Française de Musicologie, présente une communication intitulée L’interprétation comme analyse : les Variations Goldberg (ref 4), basée sur la confrontation entre les tempi utilisés par huit interprètes célèbres.

- La revue Musiktheorie (ref 5) consacre entièrement le premier numéro de l’année 1996 à la Musikalische Interpretation, un sujet encore peu exploré par la musicologie allemande.
Au cours de la même année José Antonio Bowen, à l'Université de Southampton, crée le CHARM (Centre for the History and Analysis of Recorded Music) et lance une nouvelle revue intitulée *Music in performance*. Dans un article publié par le *Journal of New Music Research*, Gerhard Widmer, chercheur au Département d'intelligence artificielle à l'Université de Vienne, divulgue les résultats de ses recherches sur l'élaboration de programmes informatiques permettant la reproduction d'exécutions expressives (ref 6) à partir de l'analyse de l'interprétation de pianistes célèbres. Les bases théoriques de cette recherche conjuguent les principes élaborés par l'école de Stockholm sur l'analyse de l'expression musicale, et d'autres principes concernant l'analyse de la mélodie.

- En 1997 Peter Szendy publie un recueil d'articles sur les transformations de la réception musicale par rapport à l'évolution de la phonographie (ref 7).
- Le numéro du *Journal of New Music Research* de juin 1998, dédié au cinquantième anniversaire de la naissance de la musique concrete, débute par une analyse de François Delalande de Sommel, œuvre acousmatique de Pierre Henry extraite des *Variations pour une porte et un soupir*. L'analyse se base sur les différentes stratégies d'écoute élaborés par un group restreint d'auditeurs (ref 8).
- Dès le début des années quatre-vingt-dix, les chercheurs qui travaillent dans les domaines du cognitivisme musical, de la psychologie de la musique et de l'analyse de l'expression musicale, utilisent de plus en plus les enregistrements des interprétations comme textes sonores de leurs analyses et de leurs réflexions théoriques. Je ne mentionnerai que trois exemples : les recherches de Bruno Repp sur les interprétations d'un menuet de Beethoven (19 interprétations) et de Träumerei de Schumann (28 interprétations) (ref 9) ; l'étude de Caroline Palmer sur l'interprétation de la Sonate K.282 de Mozart jouée par Philippe Entremont dont les résultats sont publiés dans l'article "Anatomy of a performance source : Sources of musical expression" (ref 10) ; les recherches de Michel Imberty sur la psychologie de l'écoute musical (ref 11).

Cette énumération ne prétend aucunement être complète. Elle veut tout simplement mettre en évidence quelques tendances de la recherche musicologique contemporaine utilisant les enregistrements des interprétations musicales historiques comme sources sonores, comme textes. Par rapport à cette utilisation, on peut reconnaître plusieurs conduites héuristiques et épistémologiques.

1) **Une conduite taxinomique.** Le but prioritaire de ces chercheurs est de déconstruire, de segmenter l'enregistrement sonore, l'interprétation, afin de pouvoir identifier un (ou plusieurs) style(s) interprétatif(s) d'une part, et d'autre part, d'expérimenter une technologie permettant de bâti une méthode analytique. On peut placer dans cette catégorie les études de Bruno Repp, de Gerhard Widmer, de Caroline Palmer, ou celui d'Andranick Tanguiane sur les trois interprétations de la scène de la folie de Lucia de Lammermoor (ref 12).
2) Une conduite herméneutique. Le but prioritaire de ces chercheurs est d’analyser les attitudes d’écoute de plusieurs sujets à l’intérieur d’un groupe choisi, afin d’étudier les différentes manières de recevoir l’œuvre, et d’identifier les différentes conduites psychologiques. On peut placer dans cette catégorie les recherches de Michel Imberty et de François Delalande.

3) Une conduite analytique-historique. Le but prioritaire des chercheurs est d’analyser plusieurs interprétations d’une œuvre afin d’en identifier les différents styles interprétatifs par rapport aux transformations de l’œuvre musicale et du goût. Les recherches de José Antonio Bowen et de moi-même appartiennent à cette catégorie.

J’ai préféré utiliser le mot conduite au lieu du mot méthode, parce que aucune de ces conduites n’est pure. Par exemple, même dans les analyses les plus objectives et technologiques des chercheurs qui appartiennent à la tendance taxinomique, la programmation de l’ordinateur et le choix des données à comparer dérive d’un sujet, et donc contient fatalement quelques grammes de conduite herméneutique. Mais cela vaut pour tout recherche scientifique. Également, la recherche historique se base sur des analyses taxinomiques interprétées selon des principes mélangeant des éléments historiques et des éléments herméneutiques.

Cela dit, comment expliquer ce foisonnement de recherches musicologiques sur l’interprétation à partir des sources sonores et discographiques ? L’essor de nouvelles techniques et la numérisation du son en premier, ont certainement renouvelé d’une manière radicale non seulement l’écoute musicale, mais aussi l’analyse des sources sonores (ref 13). Les nouveaux programmes informatiques élaborés par plusieurs centres de recherche sont en train de transformer les interprétations enregistrées en de véritables partitions sonores, qui peuvent déjà être analysées dans les moindres détails. Mais l’évolution des techniques est toujours complémentaire d’une transformation plus vaste, qui concerne les systèmes de pensée.

Vers la fin des années soixante-dix, le sentiment de stabilité d’une musicologie basée sur les modèles philologiques, historiques et scientifiques, fut mis en cause par des théories philosophiques et philologiques relativistes, et particulièrement par l’herméneutique et par la théorie de la réception. La Rezeptionstheorie allemande appliquée à la musicologie est une filiation de la Rezeptionstheorie littéraire. Les musicologues les plus importants de l’école de Constance (Dahlhaus, Kropfinger et Zenck) se réfèrent de façons différentes à Hans Robert Jauss. À la base de la Rezeptionstheorie de Jauss il y a l’idée que l’œuvre littéraire n’est pas une réalité factuelle, mais événementielle et que, par conséquent, la littérature est un ensemble d’événements (Ereigniszusammenhang) et non d’œuvres factuelles. Le déplacement de l’accent de la poiesis (= poiesis : la production de l’œuvre) à l’aistesis (= aistesis : la réception de l’œuvre en tant qu’événement) transforme le concept de tradition. La tradition ne dérive pas d’un acte d’autorité du passé sur le présent, mais d’un acte responsable du présent par rapport au passé. Les potentialités expressives de l’œuvre littéraire, sa Wirkung, se déploient au cours du temps historique (Wirkungsgeschichte) selon le changement constant de l’horizon d’attente (Erwartungshorizon).
La Rezeptionstheorie de Jauss recueille l'héritage de toutes les tendances de rénouvellement du texte à partir des interprétations et des rééditions qui ont été pratiquées au cours de l'histoire universelle: de l'exégèse biblique et de la tradition homérique jusqu'à la thèse de Paul Valéry selon laquelle seule "l'exécution du poème est le poème", thèse qui a particulièrement influencé la spéculation jaussienne.

Le chemin vers l'application de la Rezeptionstheorie à la musique est ainsi ouvert par une simple équivalence et substitution de mots: seule "l'exécution de la musique est la musique". Tandis que dans le cas de la poésie (ou de la littérature en général) l'exécution de l'œuvre n'est qu'une métaphore (qui devient une réalité dans le cas de la lecture à haute voix ou de la récitation), dans le cas de la musique elle est toujours une réalité. Le déplacement de l'accent de la poiesis (= poiesis) à l'aistesis (= aistesis), qui dans le cas de la musique pose d'une façon encore plus inquiétante qu'en littérature le problème de l'identification de l'œuvre, n'a pas seulement ouvert le chemin à toute une série d'études sur les rapports entre l'œuvre exécutée et les récepteurs (publiques, critiques, musicologues), mais elle a même ré-orientée dans le sens de la réception l'analyse et l'interprétation des œuvres musicales.

Une des conséquences de la théorie de la réception est, d'une part, la mise en cause de l'équivalence partition = œuvre, et d'autre part, la mise en cause de la notion même d'œuvre musicale. Si chaque "bonne" exécution d'une partition est l'actualisation de l'œuvre musicale, il n'existe pas de prototype unique de cette œuvre, plus ou moins fixé par la partition, mais toutes les bonnes exécutions d'une œuvre musicale constituent l'œuvre au cours d'un temps historique ouvert et progressif. Il est évident que dans cette perspective, par rapport au passé, les enregistrements d'interprétations historiques assurent une toute autre importance pour le musicologue: elles ne sont plus des "annexes" de la partition, des "événements", de simples épiphenomènes, mais acquièrent elles mêmes le statut de partitions sonores.

Cependant, comme l'explique Roman Ingarden dans son étude fondamentale Qu’est-ce qu’une œuvre musicale?, conçu il y a soixante-dix ans, mais qui n’a déployé complètement sa Wirkung qu’au cours des quinze dernières années (ref 14), l’interprétation d’une œuvre musicale, même si jouée (ou dirigée) par le compositeur, n’est pas l’œuvre musicale : celle-ci n’est pas un objet réel (partition écrite ou partition sonore), mais un objet purement intentionnel.

L'émergence de la partition sonore dans l'horizon de la musicologie internationale est en train de changer profondément le statut épistémologique de cette discipline. Pour conclure, je voudrais considérer quelques conséquences de cette transformation.

1) L'application de différentes méthodes et conduites analytiques à une même partition écrite a créé le sentiment que l'œuvre musicale est comme un costume d'arlequin juxtaposant des détails de toutes couleurs. Par contre, l'analyse de différentes partitions sonores (à savoir: interprétations) d'une même œuvre crée le sentiment que l'œuvre est
plutôt comme une couleur fondamentale et chaque interprétation une nuance différente de cette couleur. Soustrayant les pigments rajoutés à la couleur fondamentale, nous pouvons avoir l’intuition (mais non la perception) de cette couleur de base, de l’œuvre musicale en tant qu’objet purement intentionnel.

2) L’analyse de la partition sonore stimule le chercheur à focaliser l’attention sur les composantes dynamiques-rythmiques-temporels de la musique et à transposer les composantes topiques-spatiales de la partition écrite à l’intérieur de la dimension temporelle.

3) L’étude phylogénétique-historique des partitions sonores stimule le chercheur à réinsérer l’œuvre musicale à l’intérieur de l’important contexte de tradition orale qui est partie essentiel de la transmission de l’interprétation de l’œuvre et de la tradition musicale tout court, au-delà des distinctions et des particularités des différents genres et traditions musicales (ref 15).

4) Étant donné les relations strictes et complexes entre styles des interprètes et goûts musicaux prédominants au cours des différentes époques et civilisations, la comparaison entre plusieurs interprétations historiques d’une même œuvre est en train de devenir un outil heuristique indispensable non seulement pour l’histoire de la réception de l’œuvre, mais aussi pour l’histoire du goût musical.

Il est fort possible que dans les années à venir, l’application de ces principes changera profondément le statut épistémologique de la musicologie. Stimulé par les nouvelles technologies informatiques, mais plus spécialement par la tendance phénoménologique et réceptionniste du Zeitgeist contemporain, elle est en train de découvrir l’immense patrimoine de sources sonores accumulé au cours du XXème siècle qui attendent d’être valorisées à titre égal des sources écrites.

Notes


15. cfr., sur ce sujet, l’article "The History of Remembered Innovation: Tradition and Its Role in the Relationship between Musical Works and Their Performances", cit. [voir note 3].
We begin this new section of the *Journal* with a reprint of the late Patrick Saul’s account of the foundation of one of the world’s major audiovisual archives, the British Institute of Recorded Sound, which subsequently became the British Library National Sound Archive. First published in *Recorded Sound* 52 (October 1973) and reproduced here by kind permission of Patrick Saul’s widow, Diana Hull.

**A note on the Institute’s pre-history**

*Lecture given at a joint meeting of the International Federation of Sound Archives and the International Association of Music Libraries at the British Institute of Recorded Sound, London, on 29 July 1973 by Patrick Saul (founder and first Director of the British Institute of Recorded Sound)*

I am afraid the beginning of this history – that is to say the Institute’s pre-history – is going to be rather personal but I hope you will understand how both what I say and what I play relate to the idea and the reality of a comprehensive sound archive.

I have often racked my brains to try to remember when and why I became interested in music. I had piano lessons from about the age of six but I (and everyone in the vicinity) loathed them; they fired me with no ambition to become a pianist and completely failed to interest me in music. My family seem to have been almost entirely unmusical though we had a good Bechstein piano and my mother would occasionally sing things like Gounod’s *There is a green hill far away*, to her own accompaniment. I was also put off music by military bands which played Gilbert and Sullivan, Edward German and stuff like that in a bandstand immediately below our balcony at the seashore at Dover. (I claim to be the only person who has learned to follow a score through a telescope.)

I went to a tough public school with a poor academic record where only games and the officers’ training corps were taken seriously, and any intellectual or artistic interests were considered effeminate. There was however an excellent school organist who played for the services in the school chapel but I had no contact with him and took no part in the little musical activity that he was able to organise.

One or two of the boys at school led rather dashing lives (their homes were in London and they had been to musical comedies); one of them had a portable gramophone and received supplies of up to date records of dance music and things like this. (That was not a rare cylinder of a duet played by Liszt and Cosima but a piece entitled *Wagneriana* composed and recorded in about 1926 by Clément Doucet, a marvellous pianist who played duets with Jean Wiener at the nightclub in Paris called *Le Bœuf sur le toit*) (Columbia 4636).

I became fascinated by these glimpses of a life away from provincial gloom and even managed to go to London to see the Gershwin show *Funny Face*, with Leslie Hanson, Sydney Howard...
and Fred and Adele Astaire in the cast. This enthusiasm lasted a year or so but, fortunately, since reaching the age of ten, I had read *The Times* every day and for some reason took an interest in criticisms of concerts, then written by Fuller-Maitland or H. C. Colles; this was in a sense a purely intellectual exercise; since it would almost be true to say that up to that time I had never heard a note of good music; I had certainly never consciously listened to any classical music and what I had heard had been overheard; and I had never been to a concert. Indeed in Dover there were no concerts to go to and no musical public; it was said that just after the 1914-18 war Cortot had given a recital in the Town Hall at which only about twenty people turned up.

It was now 1929-1930 and there was a great deal in *The Times* about the first visit to London of Toscanini and the Philharmonic-Symphony Orchestra of New York, an event which was even mentioned on the front page. I was able at school to hear the two concerts broadcast by the BBC and in spite of my almost complete lack of musical background, and dreadful listening conditions (a poor quality radio and a lot of static, interference and atmospherics) they made an indelible impression on me, particularly — for some reason — the depth of bass sonority in Respighi’s arrangement of Bach’s *Passacaglia*.

As a result of this experience I bought a portable gramophone (a £3.10s Columbia because I could not afford a £7 HMV) and my first record was Stokowski’s record of Bach’s *Toccata and Fugue in D Minor* — not an unusual choice for a beginner. My next acquisition — spread over six months because my pocket money allowed me to buy only one 6/6d record per month and there were six in the set — was much less to be expected and I don’t remember how I happened to make such a fortunate choice: it was Brahms’s *Fourth Symphony* played by the London Symphony Orchestra under Hermann Abendroth. This I listened to over and over again and I was delighted to discover that it gradually began to make sense to me, rather as some years before I suddenly found myself able to read and, some years later, to understand people who spoke French. I was able to comprehend the *musical* significance, entirely in musical terms, of what Brahms had written and why the conductor interpreted it as he did.

I had still not been to a concert but when I heard that Artur Rubinstein was to play the *Concerto in B flat minor* by Tchaikovsky with the Municipal Orchestra at the nearby town of Folkestone I persuaded my mother to take me. Rubinstein was then, as now, in his prime, and I received an overwhelming impression. I think for a very young male he was an ideal musical initiator because to his sensitivity and intellectual perspicacity he adds an enormous animal exuberance, as you can hear in his record of Albéniz’s *Navarra* which he recorded about 1929 (HMV DB1257).

Fortunately I had the sense not to acquire any personal musical ambitions but from the moment I first heard Rubinstein music became the most important element in my life, as it has remained ever since.
Apart from records, the most widespread musical influence on people at that time was broadcasting: so far as the BBC was concerned I remember that I received a deep impression, which left a lasting influence on my musical tastes and interests, from series of broadcasts by Wanda Landowska (particularly Bach's *Italian Concerto* and Martin Peerson's *the Fall of the Leafe*), Marcel Dupré (various works by Bach including the *Passacaglia and Fugue in C minor* and *Toccata and Fugue in D minor* and César Franck's *Chorale No. 3 in A minor*) and Elena Gerhardt (*Lieder* by Schubert and Brahms).

But one could have heard broadcasts not only from the BBC but from continental radios as well. Although my father did not like music he was interested in radio purely from a technical point of view – having even been the owner of a transmitter which he had been compelled to dismantle on the outbreak of the Great War in 1914 under the Defence of the Realm Act – and at the time of which I am speaking had a receiver which could pick up stations from all over Europe; the radio thus became a kind of musical university for me and every week I searched through *World Radio*, an invaluable guide published by the BBC which gave details of foreign radio programmes. In those years one could hear every week performances broadcast by the greatest artists: among outstanding experiences I can remember a broadcast from Hamburg by Karl Muck (oddly enough Brahms – not Wagner from that great Bayreuth conductor); Schubert *Lieder* broadcast from Leipzig by Karl Erb; Karol Szymanowski's *Symphonie concertante* broadcast from Warsaw by the composer and Grzegorz Fitelberg; and the first performance, by Paul Kochanski, of the same composer's *Second Violin Concerto* – also from Warsaw; Bartók's *Second Piano Concerto* played by the composer from Paris; and many Sunday afternoon concerts from the Amsterdam Concertgebouw where every year Mengelberg conducted all the Beethoven symphonies; there were also innumerable broadcasts by my hero Rubinstein from all over Europe (I made a list of twenty-one such broadcasts by him that I was able to hear in a two-year period).

And of course there were Toscanini's broadcasts from Salzburg: *Falstaff, Die Meistersinger, Fidelio* and *The Magic Flute* from which I will now play the last few pages.

The listening quality of long-distance AM transmissions was often appalling, with distortion, fading and interference (as you heard in Toscanini's *Magic Flute*), but somehow the essential musical significance of what the artist is trying to convey reaches the receptive listener, however incomplete the message that he actually hears. Here is another such broadcast, which has the added interest that it is by a great artist who made practically no readily available commercial records – this is Carl Flesch playing a short excerpt from a *Fantasia* by Josef Suk, conducted by Georg Szell.

Occasionally something far more tiresome than interference would occur. By accident one would tune in to a distant station and hear some fabulous performance and be unable to discover who was giving it. Here for example is what seems to me to be an extraordinary performance of a Liszt *Transcendental Study*. Wouldn't you like to know who the player was?
There were of course no record libraries to speak of in the early thirties [1930s] but the part which access to a well-stocked book library has played in so many young people's literary development was in my case, in relation to music, to some extent played by a London record shop kept by two knowledgeable and enthusiastic partners — Mr. Wilfred Van Wyck, later a well-known concert agent — and Mr. W. Rimington. They were I am sure good businessmen but they did not try to sell records so much as to interest people in what was on them; their influence was educative and they were genuinely anxious to broaden people's musical experience by introducing them to new or unusual works, and to deepen it by subjecting them to the interpretations of outstanding performers. They imported records from all over the world and when I was about sixteen Mr. Rimington sold me the record of Bartók's Second Bagatelle, played by the composer, thus making me aware for the first time that there were records of their own works performed by some of the best composers of our century from which one could discover exactly how the music was supposed to sound (Hungarian HMV AM2262).

Now let me play you part of another composer's performance — the end of Richard Strauss's Burleske for piano and orchestra played by Alfred Blumen with the Philharmonia Orchestra conducted by Strauss himself and broadcast from London on 19 October 1947: this is not of course a published record but an example of the kind of invaluable document, sometimes recorded by amateurs, which I hope you will all agree a national sound archive ought to be entitled to preserve.

Mr. Rimington also introduced me to Haydn, via the incomparable performances of the quartets recorded for the Haydn Quartet Society by the Pro Arte Quartet; to Beethoven's Sonatas, played by Schnabel; and to Hugo Wolf, the means in this case being Der Feuerreiter, sung by Heinrich Rehkemper accompanied by Michael Raucheisen (Polydor 27186) and the first volume published by the Hugo Wolf Society, containing songs sung by Elena Gerhardt and accompanied by Coenraad V. Bus. of which I was lucky enough to get the very last set in an edition limited to only five hundred.

But I think the most valuable influence which I encountered during this period was that of French music of the twentieth century, for which I discovered I had a special affinity: I had heard Claire Croiza sing Debussy and Fauré, accompanied by Harold Bauer and George Reeves, at a Max Mossell concert in Liverpool about 1930, but I was then too young and musically inexperienced for music as subtle as this to make much impression. I was now persuaded to buy the French Columbia records which Croiza had made (to accompaniments played by the composers) of songs by Pierre de Bréville, Roussel, Honegger and Poulenc and other records of French music by various artists: Duparc's Chanson triste sung by Charles Panzéra accompanied by his wife Magdeleine Panzéra-Baillot (HMV DA 4808); Fauré's Sonata in A Op. 13 (HMV DB 1080-2) and Franck's Violin Sonata (DB 1347-50) both played by Thibaud and Cortot; Debussy's Nocturnes conducted by Désiré Inghelbrecht (four French Pathé's); Ravel's Septet played (as I cannot believe anyone else has ever played it) by Lily Laskine with the Calvet Quartet and two eminent French wind players (HMV K 8168-9);
and three songs from the same composer’s cycle *Histoires naturelles* recorded by Jane Bathori to her own accompaniment in 1929 (French Columbia D 15179). Bathori gave the first performance of this cycle, accompanied by the composer, in 1906, so her record is an important musico-historical document of a type which could make whole musicological libraries superfluous; scholars need not argue with one another about ornaments or tempi if there is an authentic recording kept in some archive - authentic because it is by the composer himself or by an artist with the stamp of his approval. One must however be careful: nowadays tape editing and other technical devices can turn the most apparently valid sound document into something spurious; in the days of 78s there were other dangers. Let me play you Bathori’s *Le Paon*, which I think beautiful, but hear also what she herself had to say when she gave an illustrated lecture for the Institute in 1961: “The *Paon* which I recorded disappointed me when I heard it because the records in those days were not long enough, and I had to sing too fast. As it is dedicated to me, I am now going to put it back in its true tempo…”.

In addition to twentieth century music I became interested in the early thirties in ‘exotic’ music, chiefly as a result of reading in *The Gramophone* an interview with Szigeti, who described a visit that he had paid while in the Dutch East Indies to the eminent ethnomusicologist Jaap Kunst, who played him records of oriental music from various regions. I bought the Parlophone *Music of the Orient* series (edited by Hornbostel) and became enthralled by the examples from Bali. I also acquired this famous record (Peteneras) by the great flamenco singer, La Niña de los Peines - which was the foundation of a good collection of her records which I made during visits to Seville, and of a lasting enthusiasm for Flamenco (Spanish Columbia RS 551).

Inexperienced but enthusiastic young people are easily led astray by well-written nonsense and it is purely good luck that I became consumed with the idea of establishing an institution such as the one you are now sitting in; instead I might easily have become a lifelong champion of Dohnányi, for somewhere or other I read a piece about that composer which implied that he was the greatest neglected master of the twentieth century and that his *Violin Sonata* (as recorded in a transcription for viola by Lionel Tertis) was his magnum opus.

So I asked Mr. Rimington for this and was amazed and indeed outraged to hear that it could not be supplied because it was ‘out of print’. This was an entirely new idea to me, and a horrible one (rather like a child’s first awareness of mortality) and I decided to hear the record, even if I could not buy it to keep. So I went to the British Museum and asked the commissionaire to direct me to the record department. After a little misunderstanding about what I meant by ‘record’ had been cleared up I was told that the museum did not have a record department. I remember the commissionaire looked at me with disfavour; not only was I an untidy youth but I was asking for something which the museum had not got and which he no doubt thought was a new fangled idea. I gave the commissionaire a short lecture and he told me to sit down and wait while he arranged for me to see someone superior, returning in a moment or two to say that the Director would see me. The idea of an
interview with the Director of the British Museum filled me with consternation and I made
some excuse and shot out of the museum like a bullet from a gun. To recover I went into a
Lyons teashop and drank some coffee and decided that I would ring the museum up, which
seemed preferable to a face to face encounter. I did so and was put through to the Director,
who was then Sir George Hill. I harangued him for some time from the safety of my
telephone box and he said quite kindly: "You have got a good idea but you sound to me like
a very young man: I think you should go away now but come back when you are older and
more experienced."

I did not go back – and incidentally I have never heard that Sonata by Dohnányi – but in 1932
I began to have piano lessons from a well-known accompanist named Norman Franklin with
whom I kept in touch until he died, sadly enough, in early middle age. He encouraged me to
persist in trying to win support for the idea of a national collection of recorded sound and
during the war introduced me to Frank Howes, who was then President of the Royal Musical
Association and Music Critic of The Times. Frank Howes agreed that something ought to be
done and (unwisely I think) I decided to give up my safe job and devote myself to trying to
get the Institute established.

Among other activities I made a search for information about foreign sound archives (to see
if this country could not be persuaded to imitate the example of what I was sure was already
being well done abroad) and in doing so came in contact with Dr. Maud Karpeles, the
founder of the International Folk Music Council, who has given consistent support and
encouragement to the Institute from that day to this. In my search for information I also
approached a library organisation known as Aslib, and they decided in 1947 to call a public
conference to consider the desirability and feasibility of setting the Institute up.

Frank Howes presided at this conference, which was held at Church House, Westminster
and attended by about fifty people including Sir Compton Mackenzie (who as an enthusiastic
gramophile had founded The Gramophone magazine in 1923 and was always a generous-
minded supporter of the Institute) and – among present members of the governing body –
Desmond Shawe-Taylor and Professor Denis Fry, Professor of Experimental Phonetics at
University College, London. The conference set up a Working Committee with Frank Howes
and Chairman and representatives from organisations such as the BBC and the British
Council. Michael Rubinstein (now senior partner in a leading firm of solicitors) became
Honorary Solicitor and I became Honorary Secretary.

I myself was astonished to discover soon after being launched on this little rivulet of public
life that ambition and competition are as common among academics and scholars as in
business; that important sounding people in important sounding jobs are not necessarily
more sensible or more honourable than ordinary mortals; that commonsense, judgement
and sticking to principles are rare even at exalted levels. Those early days were the worst,
and I owe much to Frank Howes and Lord Esher, who would have nothing to do with the
intrigues you often get on committees (though not so much on those running impoverished
bodies). I remember Frank Howes, seeing that I was over-sensitive to criticism, saying: "You must develop a skin; anyone who tries to do something for the public’s good must expect nothing but brickbats"; and on one occasion Lord Esher said to me: "Mr. Saul, you must never defend yourself."

We had no money apart from a few hundred pounds which Mr. Howes had persuaded EMI and Decca to provide and there seemed little hope of ever getting the Institute off the ground; but many meetings were held over a period of years, during which a constitution was drawn up and a policy threshed out.

We decided that to get some backing for the idea of a national sound archive, which the Institute was to embody, we should seek the moral (though not the financial) support of a number of established bodies by inviting them to nominate official representatives on the eventual governing body.

Frank Howes had known the late Lord Esher in another connection and persuaded him to become President of the embryo Institute; this was very fortunate since Lord Esher had a deep interest in the theatre, literature and music and was a man of great influence in the arts. He had done as much as anybody to get the National Theatre founded by making Sir Stafford Cripps, when Chancellor of the Exchequer, promise to make a grant of a million pounds, which Lord Esher suggested because he thought it 'a good round sum'. I was asked to take some invitations for Lord Esher to sign addressed to Oxford University, Cambridge University, the Royal Society and about four dozen other august bodies. Lord Esher, whom I had not met before, had I think expected to sign about half a dozen letters and when he was given fifty he said to me: "It is very fortunate that my name is Esher and not Lord Cholmondeley of Ashby-de-la-Zouche."

The appeal to these bodies was surprisingly successful: Oxford turned us down and we never heard from London University. A technical body said that they would only enter into relations with us if we would alter our title to the British Institution of Recorded Sound; Frank Howes said he would "not be taught English by engineers", so that was the end of that. But we ended up with a most imposing list of supporting bodies, which led Edward Hutchinson - until recently Secretary of the National Institute of Adult Education and for many years one of the Institute's principal supporters - to say that he had never heard of any organisation with so much high level support and so little actual cash.

As it happened however we were about to receive some financial help: one of my jobs was to write innumerable letters to charitable trusts and one day we received a positive response - an offer of £2,500 from the Charles Henry Foyle Trust - a Quaker trust in Birmingham. We also received a promise of a three year grant of £500 a year from the Arts Council, and our new Honorary Treasurer, the well-known musical philanthropist Sir Robert Mayer, persuaded the London County Council - as it then was - to make a similar promise.
With these rather tenuous possibilities we decided to launch a public appeal for people to enrol as Friends of the Institute (paying an annual subscription of one guinea) and to give us records.

You will understand from what I said earlier why we attached such importance to recordings of broadcasts: as a by-product of broadcasting the radios produce valuable archive material. At the time of which I am speaking the situation was particularly serious because the BBC then preserved few of its musical broadcasts in recorded form.

So Frank Howes saw Sir William Haley (then Director-General of the BBC), who agreed that subject to the approval in each case of the broadcasters concerned, copyright organisations, Equity and the Musicians’ Union (which have always been sympathetic to the Institute’s aims and satisfied of its integrity) the Institute should be allowed to acquire recordings made by the BBC and also to record broadcasts which the BBC did not record.

This agreement was subsequently confirmed in discussions with Lord Esher and with the late Lord Cadogan, then Chairman of the BBC’s Board of Governors.

We had meanwhile decided on a step which (on looking back) I think was probably right, though foolhardy. The Board of Trade in 1951 set up a Departmental Committee under the late Lord Reading to consider revision of the Copyright Act and we gave evidence in favour of compulsory deposit for records. Lord Reading typified the low esteem in which records were held by the establishment with his opening remark: “What is the point of this? Anyone who wants to hear a record goes into a shop”. Our application was turned down and we antagonised the record industry, thus making it difficult to build up a national collection by voluntary deposit.

An unexpected obstacle which in any case would have prevented our making an appeal to industry for gifts of records was Purchase Tax, which to our amazement we discovered would be payable on records given by the record companies to the Institute for archive purposes. Various efforts were made to persuade the Government of the day to exempt the Institute from this tax, without success – including a visit by Lord Esher to Enoch Powell, who was then Financial Secretary to the Treasury and who said that there was no legal means by which an exemption of this kind could be made, and that Parliamentary time could not be found for amending the law.

Fortunately however I discovered that there already existed a law which permitted museums approved for the purpose by the Treasury to be exempted from paying Import Duty or Purchase Tax on objects imported as exhibits or specimens. An application to be added to this approved list was successful and having thus cleared the hurdle for foreign records we drew up a suitably worded clause giving similar exemption to approved bodies for British products and were able to persuade the Treasury to include the clause in the Finance Act for 1962.
In a previous job I had had experience in organising London University Extension Lectures and it occurred to me that we could demonstrate the cultural potentialities of records in general and of the Institute as a national sound archive in particular if we were to arrange talks on various subjects by eminent speakers, illustrated by records. M. Jourdan, then the Director of the Institut Français in South Kensington, allowed us to use his theatre, and talks by Esme Percy, Elena Gerhardt, Maggie Teyte, Leon Goossens, Yehudi Menuhin and many others drew audiences of several hundred. The scheme was made possible by the encouragement which it received from the University Extra-Mural Department, and in particular from Mr. John Burrows, at then in charge of the Department's lectures on the arts.

Thus, in 1953, started an activity which predated our establishment in premises by two years and which has continued ever since, providing useful archive material and reaching not only the audiences in the hall but also a wider public through the re-prints of lecture texts in our Bulletin (founded in 1956) and the quarterly journal Recorded Sound which succeeded it. Mr. Hyatt King succeeded Frank Howes as Chairman and he agreed to ask the British Museum if any spare accommodation in museum territory could be made available to the Institute. As it happened part of a house in Russell Square which belonged to the Trustees of the British Museum had become vacant and, with the help of Sir Robert Mayer (who guaranteed the rent and rates for three years), we signed a short lease (unfortunately on purely commercial terms) and moved in in 1955.

We had enrolled a few hundred Friends of the Institute and the appeal for gifts of records was proving successful; indeed the average monthly intake into the collection since that date from all sources has been one thousand discs.

When the Institute was originally being discussed Frank Howes wisely sought an interview at the Treasury and agreed that it should seek to establish itself by private means before applying for a Government grant. By 1961 we thought that we had made sufficient progress to warrant an appeal to the Treasury and Sir Adrian Boult (who had become Chairman) led a deputation which was received by Sir Edward Boyle (as he then was) as Financial Secretary.

After we had put our case we were told, to our surprise and delight, that the Institute would be given what was described as a 'recognition grant' for three years, of £10,000, £12,500 and £15,000. After we emerged from the Treasury Professor Fry took us to the nearest Whitehall pub and stood us a bottle of champagne, to the astonishment of the other customers on that bitter winter morning.

From that moment I think that everyone who for so long had been concerned with what seemed the hopeless task of establishing the Institute felt that our long campaign would be won; there would undoubtedly be many more battles but we no longer doubted that we should eventually succeed. We were successful because a number of people were willing to take a great deal of trouble over a long period in spite of other, prior loyalties. Frank Howes, for example, devoted hours to the Institute although (as he put it to me) "the English Folk
Dance and Song Society is really my first love." The Institute was exceptionally fortunate in having him as its first Chairman, Lord Esher as its President and Sir Robert Mayer as its Treasurer. It also owes much to two eminent musicians, Dame Myra Hess - who, by her great influence, virtually saved it from financial collapse at one critical point - and Sir Adrian Boult, a Vice-President throughout its history and, during a difficult period, its Chairman: Sir Denis Rickett, then a Second Secretary in the Treasury and now Vice-President of the World Bank, who was a member of the Committee, exerted great influence on behalf of the Institute: I suppose its survival depended more on him than on any other individual.

Continuity was maintained by the presence on the governing body almost throughout its history of Denis Fry, Edward Hutchinson and Desmond Shawe-Taylor. Indeed, looking back on those early days, I think that our success came from unconsciously following what I believe is the motto of the Rothschild family: persistence and continuity.

Dennis Brain, arguably the most celebrated horn player of the 20th century, was a typical London orchestral musician in the respect that his professional life was a constant hustle from recording session to rehearsal and vice versa, and in one case even from one concert to another in the course of a single evening, as Robert Marshall, the compiler of this extensive discography, tells us in his informative introduction. In between these innumerable commitments within a relatively brief period of some fourteen years, Brain created a unique and smooth style of horn playing which has become legendary and which is, owing to Brain’s industriousness, extremely well documented on some 1,600 recordings.

Marshall’s book is not just a compilation of various previous discographies, including the one in Stephen J. Pettitt’s Brain biography, but it also includes film scores and sound tracks recorded by orchestras in which Brain participated. Most of the session work covers his contributions as horn player in any orchestral score that requires one and which was played by any of the London orchestras he worked for (mainly the Philharmonia Orchestra and the Royal Philharmonic Orchestra). As in many cases exact personnel sheets do not survive, quite a number of recordings listed simply assume Brain’s participation. The compiler, however, discusses the implications of this in his introduction to the discography and adds also a listing of recordings by the two mentioned orchestras in which Brain was definitely substituted by other horn players. Due to the wide range of repertoire listed, it would have been a helpful feature, had the compiler marked those recordings which involve elaborate soloist passages.

Like several other discographic enterprises, this book is not much more than an essentially unedited, though well-produced, print-out of a data file. The data (composer, work title, conductor, orchestra, soloists, final date of recording, label, collaborators, additional dates, and remarks) are arranged in several listings (by composer, in chronological order, by conductors, by pianists, other instrumental soloists, and vocalists). This discography is certainly a useful reference tool for sound archival work and should be acquired by archives that specialise in classical music recordings.

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**Nick Bougas Presents Celebrities at their worst**

*Vol. 1:* 2 1/2 hours of flubbed lines, cussing and out take hilarity, bad acting, bad comedy, DEC 5;

*Vol. 2:* 2 1/2 hours of bad acting, bad comedy bad rock’n’roll bad everything DEC 7.

**Mad Deadly Worldwide Communist Gangster Computer God Records**

PO Box 420464, San Francisco, CA 94142 USA

This set of two double CDs completely lives up to its title insofar as it presents recordings sometimes made accidentally, sometimes as the detritus from the cutting room floor of any commercial voice-over sound studio, sometimes maliciously by mischievous sound engineers who just happen to have left the tapes rolling or, as in the famous and alas, widely circulated Linda McCartney tape, by an engineer cunning enough to isolate Linda’s vocal contribution to a live performance of Hey Jude! Although it was kept out of the live PA mix, deliberately isolated like this it makes an amusingly toe-curling experience.

In Britain there is a television series (no doubt parallels exist elsewhere) entitled *It'll be Alright on the Night* in which out-takes of mistakes, false starts and fluffed lines are broadcast. These shows command a huge audience. Why? Partly because a lot of them are genuinely funny but also possibly because what we are allowed to see is the obverse of the virtual reality chimera presented as the finished product on television, (almost all of which is pre-recorded); a crack in the over-glazed facade that is the normal face of screen entertainment. It allows the audience the vicarious enjoyment and possibly the reassurance of seeing the scaffolding of the looking-glass world beyond the screen.

This is perhaps the key to the appeal of this sort of material: the *Schadenfreude* evoked by hearing the famous, the infamous and the notorious either slipping on metaphorical banana skins or being revealed as the decidedly unpleasant characters most of them almost certainly are: not being an ego-maniac never helped anyone’s showbusiness career.

In *Nick Bougas Presents Celebrities* at their worst we are presented with a genuine rogues’ gallery (albeit very much from an American standpoint: many of those included here mean little if anything outside the USA) of actors, great and small (John Wayne, Orson Welles, William Shatner, et al.) voice-over artistes, singers (Elvis Presley, Barbra Streisand, Bing Crosby, Julie London, Barry White) sports commentators, a couple of rock bands: the famous ten-minute tape of the Troggs bickering and arguing in a studio (surely the blueprint for a similar scene in the film *This is Spinal Tap*, a spoof ‘rockumentary’ about a fictional British Rock band who were big in the 1960’s and less so now). Such a notorious item usefully fills a gap in any archival collection.

Isolated and taken out of context, some of these incidents (Orson Welles losing a sense of perspective while recording a voice-over for a fish-finger commercial, Elvis Presley protesting to his audience beyond the absolutely necessary about allegations in the press about his drug use) take on an absurdity that is almost bathetic. We hear figures whose public persona is whiter than white such as Big Crosby fall into various elephant traps of live and recorded
performance invariably followed by a volley of Anglo-Saxon vituperation quite at odds with their popular image. We are treated to a text-book example of a Heavy Metal band leader’s on-stage banter with the audience from some MTV technician who has neatly snipped out all the musical material leaving simply the ludicrous twixt-song banter thereby revealing the exchange as the usual monstrous codswallop peculiar to the genre. I suppose you had to be there, and here my previous comments about context apply but nevertheless like a lot of this material its interest is not least socio/anthropological: in this case tribal communication behaviour centering on a cathartic performance event.

In some cases creative or underworked studio engineers will edit together their raw materials to create something which transcends its source to create something not recognizable as an audio collage with a life of its own. Sometimes this can be exhilarating (Tommy Lasorda, a football team manager, recorded on a fading battery-driven tape recorder so that when replayed at the correct speed his stream of manic profanity and psychotic laughter sounds like the ravings of a disturbed idiot-savant); sometimes it can be hilarious (ABC network announcers, beautiful voices and diction delivering an un-hinged edited-down stream of profanity, or Barbra Streisand’s prima donna character having to tolerate a malfunctioning pair of earphones during a recording session, or Colonel Sanders of Kentucky Fried Chicken fame demonstrating complete incompetence when required to deliver an advertising jingle); sometimes both and occasionally moving (Richard Prior, dosed with cocaine, wilfully not co-operating with an interviewer and revealing the while a bitter, unhappy (if very wealthy) inner man.

It would have been useful to have had dates for the recordings although some of them can be dated from subject or context. The transfers are reasonably clean but the source material, probably unavoidably, often leaves much to be desired. One or two of these pieces can only just be understood. However, as with all historical material, a few moments adjustment by the ear usually renders the excerpts comprehensible. From a sound archive point of view this sort of compilation is invaluable: it neatly brings together many notorious industry-circulated recordings for easy access. I know that the National Sound Archive has been asked for several of these recordings over the years.

Finally if you have the chance, listen to my own pick of the compilation: Elton John’s radio advert made for a New York station advertising a gay and trans-sexual specialist shop in Soho NY.

Noel Sidebottom, The British Library National Sound Archive
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