

**Workshop: “Music in Digital Libraries and Archives”  
Stuttgart Media University, 3-8 May 2010**

Report by Suzette Lombard  
Principal Music Librarian  
SABC Music Library  
Johannesburg  
South Africa

My visit to Germany to attend the workshop “Music in Digital Libraries and Archives” was made possible by **Bibliothek & Information International (BII)** which is the standing committee of **Bibliothek & Information Deutschland**. I would like to extend my sincere thanks to them as well as the following people who organised the workshop and attended to our every need while in Stuttgart: Professor Ingeborg Simon, course manager of the M.A. Course Library and Information Management and Ms Katrin Sauermann, Coordinator of International Affairs, Department of Library and Information Management, both from the **Stuttgart Hochschule der Medien**. I am also grateful to my employer, the **South African Broadcasting Corporation**, and my manager, Ms Ilse Assmann for giving me the chance to attend this workshop.

My expectations for this course were mainly to gather information about the latest programs and working methods in safeguarding and digitally preserving sheet music for the future. The SABC Music Library where I work is a fairly small library which was started as supporting library for the National Symphony Orchestra of South Africa. We house approximately 24 000 different music scores which include orchestral scores and vocal scores as well as choral music and chamber music. At present we have no permanent orchestra at the SABC and the scores and orchestral instruments are hired out to professional orchestras and musicians.

Some of these unique and valuable scores are becoming very old and worn and the ideal would be to digitally scan and preserve them for the future. A digitisation development program is in progress at the SABC and I felt sure that I would obtain some valuable information regarding the subject at this course.

On the first day of the workshop I met some of the university personnel, the two teachers, Jürgen Diet from the Bayerische Staatsbibliothek and Silke Sewing from the Deutsches Musikarchiv of the Deutsche Nationalbibliothek and my fellow students. We were 9 course attendants from 9 different countries – Canada, Dominican Republic, Poland, Estonia, Croatia, Finland, Germany, Kenya and South Africa. Because the workshop was presented in English, language didn’t present a problem and we got along easily from the start. With all of us coming from music, library or information science backgrounds, it was soon apparent that we had similar interests, problems and questions regarding the digitising of print and sound collections.

Within the first couple of days’ classes I came to realize that, even in today’s technological environment, the safest way to preserve information is probably to have a properly published and preserved hard copy or book which is stored in ideal conditions. Similarly, vinyl or shellac discs or records in a pristine state and kept under ideal conditions still seem to be the best way to preserve

sound recordings. The current problem is similar in all mediums - software incompatibility and the speed with which computer and other technology is developing are becoming their own enemy, as equipment and media become obsolete or unusable. Jürgen Diet quoted the following tongue-in-the-cheek saying from the digital library environment: *“Digital documents last for five years or forever, whichever comes first.”*

Herr Diet presented the first few days’ classes. Because he comes from a computer science background and is a musician himself, he was well qualified to introduce us to MusicXML, Parsons code, SharpEye software (making use of OMR – Optical Mark Recognition) and composition and notation programs such as Finale and Sibelius. He dealt with digital music formats including uncompressed audio formats such as AIFF, WAV and BWF, and compressed audio formats such as mp3, AAC and WMA as well as image formats for sheet music and music manuscripts. Entity-relationship modelling, FRBR (Functional Requirements for Bibliographic Records) and digital projects such as Probedo and Variations2 and Variations3 were discussed in detail.

We were given practical exercises for every chapter of work finished, which meant that we could immediately obtain experience in working with some of the concepts and programs introduced. He also presented lectures on the Bavarian State Library, the audio material in Europeana, ViFaMusik and mentioned the plans to integrate RISM (Repertoire International des Sources Musicales) and Probedo with ViFaMusik, and the Nestor competence (**Network of Expertise in long-term STORAGE of digital Resources**).

After Wednesday morning’s classes, we strolled through the Schlossgarten and down the ‘Culture Mile’ of Stuttgart, past the Opera House to the impressive and modern State University of Music and Performing Arts where we enjoyed a hearty lunch before tackling the Stadtbücherei Stuttgart.



Shelves in the Stuttgart City Library

What I found interesting at the City Library is the fact that music scores, books and cd’s are not separated, but actually kept right next to each other, as can be seen from the photograph above. This makes it easier to find for example a music score together with sound recordings of the same work, as well as books about the same work or composer. Their on-line catalogue is supported by

Bond Library systems and software. Members can take out up to fifty items at a time for a very reasonable annual membership fee. Their collection is at present already too big for the current accommodation but a new library is being built (close to the Stuttgart Media University) and should be completed by 2011. The library personnel members are excited and very involved in planning the layout of the new library.

Next on our list was the Württembergische Landesbibliothek or State Library Stuttgart, also on Konrad Adenauerstrasse. This is a legal deposit library which means that by law, the library must receive two copies of every work that is published or released in Baden-Württemberg. Legal deposit libraries therefore receive a large amount of material every week which needs to be classified and catalogued.

In this library we were not only impressed by the sheer size of the collection, but also fascinated by the impressive apparatus used to make digital copies of the books. The first consists of a machine designed by Hensel StudioTechnik which allows the pages to be perfectly photographed by a normal camera while the book is not completely opened. This prevents damage to the spine of the book, which would be a risk when using a normal flatbed scanner. Physical handling is kept to a minimum. The photographs are then edited and stored on computer. The program used for this storage is called Goobi digital library modules. Goobi stands for Göttingen online-objects binaries.



The pages are photographed ...



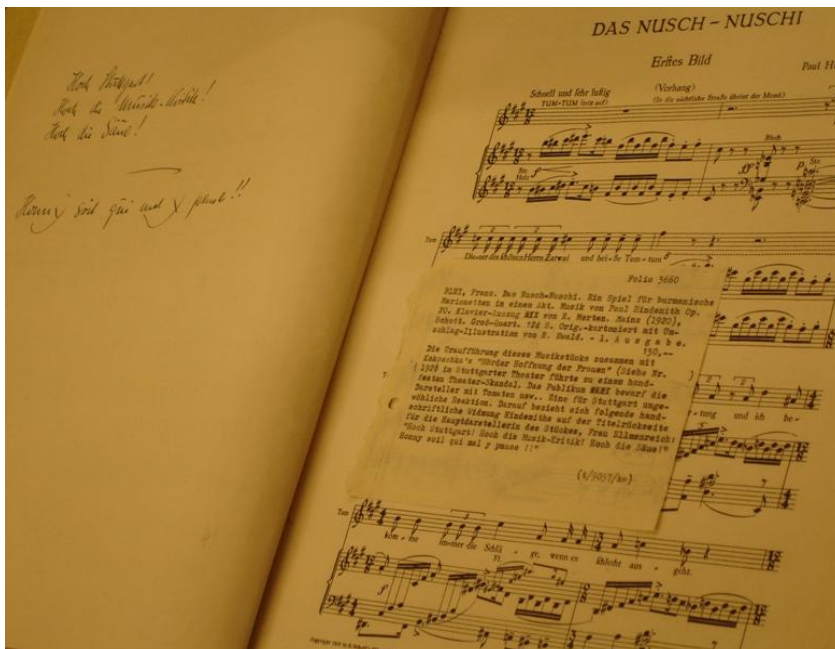
and saved to computer.

Another fascinating machine is the line scanner below, called a "Grazer Kameratisch", which automatically turns the pages of the book once they have been scanned, thus also minimising physical handling and the risk of damage to old and delicate books.



Scanner at the State Library

We also visited the music library section in the State Library, where the personnel went out of their way to show us some valuable original scores from their collection, ranging from works by Carl Phillip Emmanuel Bach to an opera score by Paul Hindemith.



Conductor's score of a Paul Hindemith opera with remarks handwritten by the composer

Silke Sewing started with her presentations on Thursday. She dealt with the difficulties in digitising and preserving sound, discussing Edison cylinders, Berliner discs, shellac and vinyl discs and the problematic cd-family (including DVD-Audio and Blu-ray discs). A part of the work program consisted of studying and discussing the IASA guidelines. Other subjects presented by Ms Sewing included long-term preservation, metadata and persistent identifiers, PREMIS and Dublin Core, the Theseus-Projects Contentus and Alexandria as well as a license model from Denmark. Also the XML Schema METS (Metadata Encoding and Transmission Standard)

An interesting aspect for me was the project being developed in Switzerland called **VisualAudio** whereby audio discs can be photographed by a special camera. The films/photos can then be stored as digitised images which could be transformed back into sound.

Shellac discs can also be played with a laser beam, but the playback equipment is very expensive and the sound is very bad, as the laser picks up dust and every little imperfection.

Ms Sewing also gave two of our colleagues a chance to tell us something about their work and projects – Tiina Tollonen from the Oulu University of Applied Sciences in Finland talked about the university's digital score library "Notelibrary" and "eConcerthouse", and Polina Proutskova who is completing her doctorate in ethnomusicology in England spoke about her field research into rural Russian folk-music.

On Thursday evening I was privileged to attend an amazing Meisterkonzert in the Beethoven-Saal of the Liederhalle, Stuttgart. The Dresden Staatskapelle conducted by the Estonian maestro Neeme Järvi performed a stunning Richard Strauss programme, opening with "Walzerfolge Nr 1" from "Der Rosenkavalier", followed by five songs – *Rosenband* op.36 nr 1, *Ständchen* op.17 nr. 2, *Waldseligkeit* op.49 nr.1, *Morgen* op.27 nr.4 and *Allerseelen* op.10 nr.8, all beautifully sung by soprano Christiane Oelze. After the interval the orchestra performed "Also sprach Zarathustra" Op. 30 and both at the end of Ms Oelze's lieder and the end of the concert the audience were on their feet demanding encores. It was definitely one of the highlights of my week in Germany!



Symphony concert at the Liederhalle, Stuttgart

The workshop was not all work and no play, however. Amongst other memorable occasions we went out to a Schwäbische restaurant in Stuttgart to have typical Maultaschen, Rostbraten and Käsespätzle. We also met at a lovely small Greek restaurant to enjoy some superb Greek food and good company. This gave us time to get to know each other, to share some experiences and for some lively discussions!

The best outing was on the Friday night –we were invited by Professor Simon to a cheese and wine farewell party at her house, and we went up the mountain by zahnrad (an electric rack railway). This railway, which is affectionately called **Zacke** by Stuttgart residents, runs from the Marienplatz in town up to Degerloch, along the Alte Weinsteige. It climbs a height of 205 m and afforded us a lovely view of Stuttgart by night.

There was also just enough time to visit the Frühlingsfest at Cannstadt and for a quick walk and lunch in Leinfelden-Echterdingen. My visit to Germany was complete with a visit to the nearby university town of Tübingen with its little shops and the lovely Neckar river.



Neckar river in Tübingen

When I arrived at Stuttgart airport to return to South Africa, my flight to Paris had been cancelled because of the Eyjafjallajökull volcano in Iceland! I therefore had an extra night in Stuttgart and was fortunate to fly back to South Africa via Schiphol and landed in Johannesburg only 12 hours later than originally planned. I was totally overwhelmed by all I experienced but very grateful for the chance to have been in Stuttgart to attend this workshop.

Please find some useful links below:

Stuttgart Media University <http://www.hdm-stuttgart.de/bi/startseite>

Probado <http://www.probado.de/en/home.do.htm>

ViFaMusik <http://www.vifamusik.de/>

Nestor <http://www.langzeitarchivierung.de/eng/>

Europeana <http://www.europeana.eu/portal/>

Theseus <http://www.theseus-programm.de/en-us/about-thesues/default.aspx>

Münchener Digitalisierungszentrum <http://www.digital-collections.de/index.html>

VisualAudio <http://visualaudio.project.eia-fr.ch/publications/IASAjourn.pdf>

IASA <http://www.iasa-web.org/tc04/audio-preservation>

Goobi <http://www.goobi.org/>