Koninklijke Bibliotheek van België
Bibliothèque royale de Belgique
DIGITIZING SOUND ARCHIVES AT ROYAL LIBRARY OF BELGIUM

CHALLENGES AND DIFFICULTIES ENCOUNTERED WITHIN A HUGE DIGITIZATION PROJECT

IAML ANNUAL CONFERENCE, RIGA, 19.06.2017

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HEAD OF DIGITIZATION, KBR
A HERITAGE IN ITS OWN

- **Wax Cylinders** (1893-1912; 1929)
  - Material: wax or celluloid
  - Format: L: 9.5-11cm; Ø: 5.5cm
  - Recording technique: acoustic by vertical etching
  - Speed: 160rpm
  - Duration: 2-3 minutes

- **Black Shellac Discs** (1890-1950)
  - Material: shellac
  - Format: Ø: 17-25-30-35cm
  - Recording technique:
    - Acoustic by vertical or lateral etching (<1925)
    - Electric by lateral etching (>1925)
  - Speed: 78rpm (60-120rpm)
  - Duration: 3-5 min by side

- **Long Playing Microgroove** (1948-)
  - Material: vinyl
  - Format: Ø: 17-25-30cm
  - Recording technique: electric by lateral etching
  - Speed: 33rpm or 45rpm
  - Duration: 20-30 min par face

- **Magnetic Tape** (1950-), **Mini Tape** (1963-)
- **Compact Disc** (1982-), **Mini-Disc** (1992-2011), etc.
READING SOUND RECORDINGS

**ACOUSTIC (<1925)**
- **Phonograph**

**ANALOGUE (1950-1982)**
- **Record Player**
- **Tape Recorder / Player**
- **Hifi Stereo**
READING SOUND RECORDINGS

DIGITAL AUDIO (1982-)

- DIGITAL PLAYER
  - CD
  - DVD
  - MD
  - DAD

+ HI-FI STEREO
DIGITAL REVOLUTION (2000-)

- **Sound Extraction**: Towards Audio Files
- **Playing with Laptops & Mobile Devices**
- **Online Music & Download Platforms**
- **Wireless Sound Systems**
100,000 RECORDINGS AT KBR

- **Collections from private collectors (Becko, Danval, Dailly...)**
  - The product of a collector’s life
  - A mirror of its author’s musical interests and tastes
  - Dedicated to a special musical genre nor a specific period of the sound recording history

- **Sound recordings subcollections as part of private archives (composers, artists)**
  - Related to other kinds of musical sources: autographs, correspondence, etc.

- **Sound recordings, as part of a publication (printed books, periodicals)**
  - Audio-tapes, CD, DVD...
100,000 RECORDINGS AT KBR

• Official collection (20,000 – 33rpm ; CD)
  • Belgian Legal Deposit excludes phonograms
  • Purchasing policy of the Belgian phonographic production and recordings of Belgian music and artists around the world (1965-)

• 20 special music collections (80,000 sound recordings)
  • Donations, legacies & deposits (King Baudouin Foundation)
    • 65 cylinders et 30,000 78rpm discs
    • 60,000 discs 33 & 45rpm
    • +1,000 magnetic tapes
    • CD…
WHICH TARGET AUDIENCES?

- **SCIENTIFIC RESEARCH IN THE HUMANITIES**
  - Ethnomusicology
  - Study of the musical life since the end of the 19th century (genres, repertoires, artistic influence, evolution of musical practices…)
    - Need to access to a wide range of sources
    - Need for scientific credibility of online digitized sources => risk of false artistic / historical
  
  ➔ Focus on the oldest and rarest sources (before 1950)

- **DISCOVERY LISTENING IN A LEISURE SETTING**
  - Importance of listening comfort (sound signal quality)
  - Easy access to sources (online download platforms)
  - Reuse of these sources, shares, social networks, etc.
  
  ➔ Focus on the post-1950 repertoire
CRITERIA FOR SELECTION / JUSTIFICATION

- **Fragility of original supports (preservation)**
- **Make available inaccessible sources**
- **Focus on heritage in relation to the history of our regions**
- **Copyright and neighboring rights**
  - Priority to out-of-copyright material (Public Domain)
- **Possibility of generating basic metadata during the project**

→ **No listening to originals**

→ **Missions of the institution**
→ **No available budget for dissemination rights clearance**
→ **To be provisioned for the digitization of 33 & 45rpm**

→ **Phonographic edition**
→ complexity of sources
fixed on magnetic tapes
THE « DIGIT-03 » PROGRAMME
LOT 8 (2016-2020)

- 2 collections of 78rpm
  - Collections BECKO (opera) et DANVAL (jazz)
  - Perhaps : all sub-collections of 78rpm

- Duration: 54 months (→2020)

- Quantity : 4,000 hours ; 60,000 sides (30,000 discs 30cm)

- Staff:
  - 4 FTE at DIGIT department + support from Music department
    - Preparation of the lots, scan of discs centers
    - Coordination of monthly deliveries to the subcontractor
    - Metadata creation
    - Quality Control, Storage & Online publication

- Subcontractor for technical operations :
  - MEMNONON Archiving Systems
SCAN, STORE, DISSEMINATE

- **Dematerialization of the musical recording**
- **Storage & Long term preservation of files & metadata**
- **Valorization of the digitized collections**
- **Ultimate reading of the original**
- **Entering metadata (DC)**
- **Creating a master file (WAVE) and broadcast files (MP3)**
- **Sound restoration (?)**
- **IT management**
- **Online publication: in situ/ex situ**
- **Online commercial offer?**
- **Publication of anthologies (CD’s)**
- **Re-using the collections**
SCAN, STORE, DISSEMINATE
PROBLEMATICS

• IMPORTANCE OF ULTIMATE READING OF PHYSICAL MEDIA
  • 3 options :
    • Recording of the sound of a phonogram played on a phonograph
    • **Analogue reading**
    • Optical reading
  • Choice of the most appropriate reading needle
  • Issue of reading speeds
  • Impact of amplification curves

  ➔ Implications on the length of the tracks, the timbre of instruments and voices, the color of the interpretation ...

  ➔ DIFFICULTIES IN PROPERLY DOCUMENTING THE HISTORICAL CONDITIONS OF SOUND RECORDING
TOTAL OR PARTIAL SUPPRESSION OF PARASITIC NOISE

- Types of noise
  - Recording conditions on the time
  - Degree of wear of the digitized phonogram
  - Technical conditions of the digitization

- Sound Restoration Required
  - Respect of the material history of the recorded work and that of the medium used

PRODUCTION OF QUALITATIVE METADATA

- Catalog sheet: composer, librettist, performers, record label, commercial reference, matrix number, date
EXAMPLES ONLINE

WWW.KBR.BE
THANK YOU FOR YOUR ATTENTION

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