



Archiving for the Future Past

Multimodality and AI

Challenges and Opportunities

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2025, June 17-20, Göttingen



Storyline

- Needs of communities to archive
 - The Case of the ShareMusic repository
- Showcasing and the technology behind (Combining standard archival solutions with new AI opportunities)
 - Support multimodality and accessibility in archival solutions
 - Create a Knowledge Base for Art and Inclusion for data curation
 - Local AI solutions - pilot
- Summary
 - Opportunities and challenges

For everyone's right to experience, participate and create

ShareMusic & Performing Arts is a national knowledge centre for artistic development and inclusion. We work for everyone's right to experience, participate in and practise artistic and cultural activities.

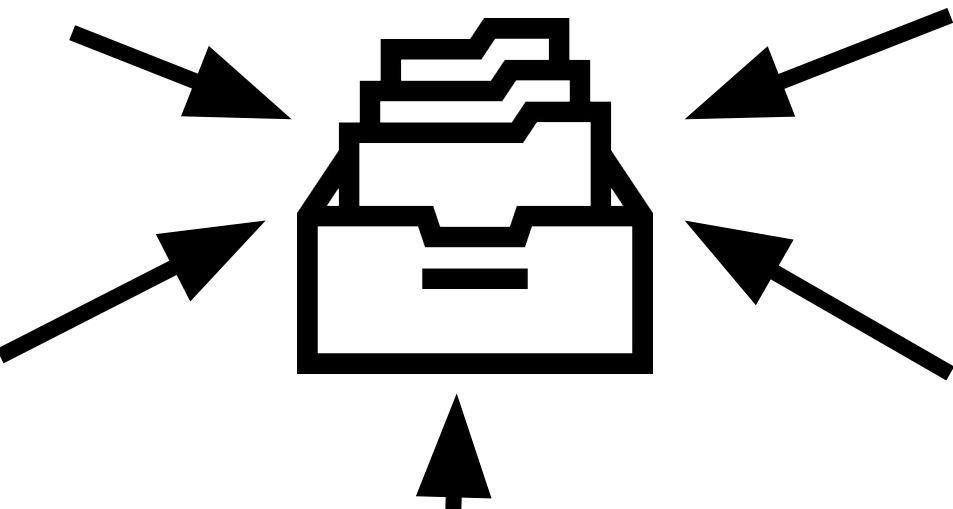
Needs of communities to archive

Needs of communities to archive

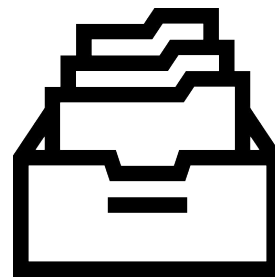
Cultural heritage
archive for storing
multisensory
representation
metadata [ShMu]

One of the key outcomes of MuseIT is the content repository capable of indexing, storing and retrieving multisensory, multi-layered representation of cultural assets and historical archive. The knowledge formalisation of new forms of data representations will be supported for long-term preservation of CH assets. TRL: 3 → TRL 5

PLATFORM



SHAREMUSIC
& **PERFORMING ARTS**



Needs of communities to archive ii



Open software community

Used in the Netherlands

- <https://dataverse.nl/>
- <https://dans.knaw.nl/en/data-stations/>


Experiences with implementation
([Archive in a box](#), [SSHOC.EU](#))


Needs of communities to archive iii


The ShareMusic Collection:

<https://database.sharemusic.se/dataverse/root?q=&types=dataverses%3Adatasets&sort=dateSort&order=desc&page=1>

Articles, Reports, Recordings,

☒  **Dataverses (15)**

☒  **Datasets (65)**

☐  **Files (102)**

Dataverse Category

Research Project (8)

Laboratory (3)

Department (1)

Organization or Institution (1)

Teaching Course (1)

Publication Year

2025 (61)

2024 (19)


License

CC BY-NC-ND 4.0 (51)


CC BY 4.0 (14)

1 to 10 of 65 Results


Flowers by Eva-Britt Andreasson

 Jul 5, 2024 - Report from Constant Isolation
Eva-Britt Andreasson, 2024, "Flowers by Eva-Britt Andreasson", <https://doi.org/10.5072/FK2/LUMEAR>, Root, V2
Image of flowers taken by Eva-Britt Andreasson within the project RFI (Report from (constant) isolation) Report from (constant) isolation is the result of a project which was aimed at adults who due to disability or illness been isolated during the corona pandemic. The aim of the project Report from (constant) isolation was to offer a place to meet...


Untitled

 Jul 5, 2024 - Report from Constant Isolation
Linda Åkesson, 2024, "Untitled", <https://doi.org/10.5072/FK2/NB11BV>, Root, V1
Report from (constant) isolation is the result of a project which was aimed at adults who due to disability or illness been isolated during the corona pandemic. The aim of the project Report from (constant) isolation was to offer a place to meet and give room to one's creativity as a contrast to the boredom and mental illness that isolation can ent...


The Eye

 Jul 8, 2024 - Report from Constant Isolation
Gustaf Löwenstein, 2024, "The Eye", <https://doi.org/10.5072/FK2/SSMGET>, Root, V1
Video of a moving glass eye filmed by Gustaf Löwenstein within the project RFI (Report from (constant) isolation) Report from (constant) isolation is the result of a project which was aimed at adults who due to disability or illness been isolated during the corona pandemic. The aim of the project Report from (constant) isolation was to offer a place...

The Inclusive Co-creative Ensemble


 Jul 8, 2024 - Music Development
Karen Power; Zofia Åsertöf, 2024, "The Inclusive Co-creative Ensemble", <https://doi.org/10.5072/FK2/KOLNB>, Root, V1
The Inclusive Co-Creative Ensemble, offers you a starting point for realising your inclusive work within music. The study can be used as an advisor, a toolkit, springboard or just a friendly hand to hold on to when stepping into the creative world of inclusive artistic work. The study is based on approaches used at ShareMusic & Performing Arts, wit...

Jämlik Scen Bakom Verket


 Jul 8, 2024 - Mentorsprogrammet
ShareMusic & Performing Arts, 2024, "Jämlik Scen Bakom Verket", <https://doi.org/10.5072/FK2/SG1S23>, Root, V1
ShareMusic & Performing Arts want to achieve a stage of equal opportunities and a greater artistic breadth, where people with different backgrounds, experience and abilities are also authors. That's why in 2018 ShareMusic launched a mentoring programme to support people with disabilities who want to create their own work. In the first phase of the...

1 to 10 of 65 Results


Gryning i Galamanta Karin and Jonas

 May 27, 2025 - The Stage in Transformation
Peter Lloyd, 2025, "Gryning i Galamanta Karin and Jonas", <https://doi.org/10.5072/FK2/UBX356>, Root, V4
Gryning i Galamanta Karin and Jonas Photo, recorded audio description, and written description from the performance Gryning i Galamanta featuring the artists Karin and Jonas. Gryning i Galamanta is a stage production created by composer and trombonist Christian Lindberg in collaboration with ShareMusic & Performing Arts and choreographer Helene Kar...

The end of the Earth Josefine

 May 27, 2025 - The Stage in Transformation
Peter Lloyd, 2025, "The end of the Earth Josefine", <https://doi.org/10.5072/FK2/2EPE4E>, Root, V4
Photo, recorded audio description, and written description from the performance The end of the Earth featuring the artist Josefine. The end of the Earth was the result of a week-long course held in Vara and performed at the Vara Concert Hall. Each course is designed to allow everyone to participate on equal terms. The starting point is always the L...

Gryning i Galamanta Publik

 May 22, 2025 - The Stage in Transformation
Peter Lloyd, 2025, "Gryning i Galamanta Publik", <https://doi.org/10.5072/FK2/UEDECTO>, Root, V3
Gryning i Galamanta Publik Photo, recorded audio description, and written description from the performance Gryning i Galamanta showing an stage with artists and a large crowd. Gryning i Galamanta is a stage production created by composer and trombonist Christian Lindberg in collaboration with ShareMusic & Performing Arts and choreographer Helene Ka...

Storyline ii

- Needs of communities to archive
 - The Case of the ShareMusic repository
- **Showcasing and the technology behind:** Combining standard archival solutions with new AI opportunities
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Showcasing and the technology behind - tailored additional metadata fields - multimodality and accessibility



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Gryning i Galamanta Karin and Jonas

Photo, recorded audio description, and written description from the performance *Gryning i Galamanta* featuring the artists Karin and Jonas.

Gryning i Galamanta is a stage production created by composer and trombonist Christian Lindberg in collaboration with ShareMusic & Performing Arts and choreographer Helene Karabuda.

The performance featured the ShareMusic ensemble together with the Wind Symphony Orchestra.

The world premiere took place in August 2009 at **Stockholm Central Station**.

Subject ⓘ

Arts and Humanities

Keyword ⓘ

Multimodality
Inclusive performing arts

Depositor ⓘ

Genberg, Frida

Deposit Date ⓘ

2025-05-13

Time Period ⓘ

Start Date: 2009

Modalities

in which the asset is described

How

A way to experience the asset

Art Form

The way in which the asset was
originally created

Modalities metadata ^

Modalities ⓘ

Textual; Audio; Visual

How ⓘ

Read; Listen; Look

Art form ⓘ

Stage Performance; Photograph; Dance

Contributor ⓘ

Peter Lloyd Photographer

Copyright information ⓘ

Peter Lloyd ShareMusic has the right to display the images until 2030.

Owner information ⓘ

Peter Lloyd

Topic ⓘ

Gryning i Galamanta Project

Data type ⓘ

Artistic image/photography

File ⓘ

Audio Gryning i Galamanta Karin and Jonas - audio description <https://soundcloud.com/sharemusic-sweden/bild-8-eng> Recorded audio description of an image of the two artists Karin and Jonas in the production Gryning i Galamanta

Easy to read description ⓘ

This includes a photo, a recorded audio description, and a written description of the two artists Karin and Jonas in the production Gryning i Galamanta.

Showcasing and the technology behind - A Knowledge Base for content curation

Curated Collections

Explore our collections based on different themes.

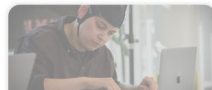
Explore Collections



MuseIT



The Stage in Transformation



Remote Performance Platform

All resources

Read

Listen

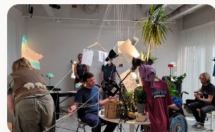
Look

Feel

Experience

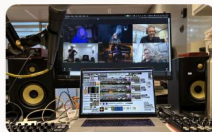
Documentation of project/performance

TechLab residency part 1



Documentation of project/performance

Cross-Atlantic improvisation session showcasing Somax2



Scientific article/paper

Listening with Elephant Ears: Contesting Exclusion at the Intersection of Virtuosity and Ableism



Manual/Best Practise

Guideline on Copyright and Creative common licenses

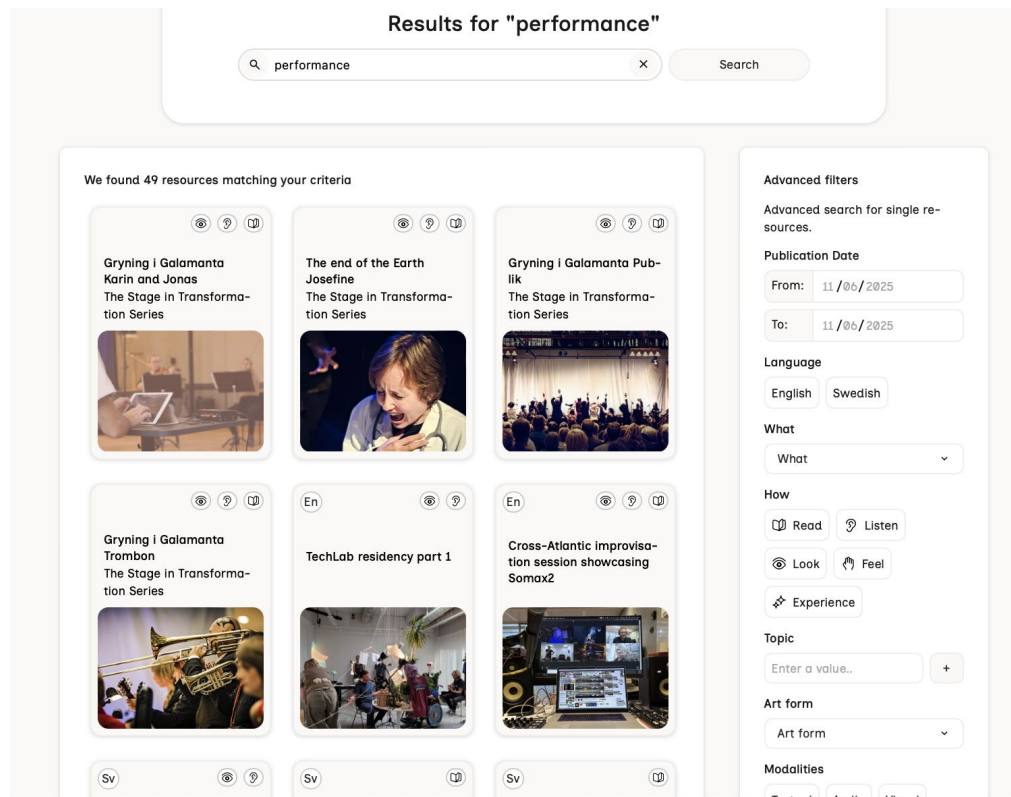
Scientific article/paper

Curating for accessibility

Scientific article/paper

Impact of Performing Arts on Individual and Health Management

Showcasing and the technology behind - A Knowledge Base for content curation cont.



Metadata scheme
emerged from collection
(domain analytic approach
Smiraglia) and comparison
with existing ontologies
about
multimodality/accessibility/

...

[illegible]

Showcasing and the technology behind - local AI solutions - chatting with a collection

SHAREMUSIC & PERFORMING ARTS

Add New Collection

Available Collections

Select collection to explore

ShareMusic

Collection Details

Vectors: 2,501

Vector Size: 384

Distance: Cosine

🤔 Ask Questions

Example: What is ShareMusic? What they do?

Enter your question:

which performances does the collection contain?



Ask

Answer

Based on the provided information, the collection contains at least two performances:

1. "Listening with Elephant Ears: A Score for Multichannel Audio Recording, Voice, Guitar and Piano" - This performance took place during the SMC – Sound and Music Computing Conference at the Royal College of Music in Stockholm.
2. "Hi-Hat Expres Charleston" - This performance was presented in various contexts between 2013 and 2015.

Additionally, there are mentions of other performances, such as the premiere of the commissioned piece "Beats, Sounds and Strings" by composer Hans Ek, which took place at Tryckeriet in Helsingborg. However, these are not explicitly stated to be part of the collection.

Sources

Title	Relevance	Source URL
Elephant Ears on the Brain: Live hybrid performance at the SMC - Remote Performance Platform	49.8%	https://database.sharemusic.se/dataset.xhtml?persistentId=doi:10.5072/FK2/NDAWPA
Listening with Elephant Ears @ ShareMusic & Performing Arts	43.7%	https://sharemusic.se/resources-and-inspiration/listening-elephant-ears-en
Listening with Elephant Ears @ ShareMusic & Performing Arts	43.7%	https://sharemusic.se/news-and-inspiration/elephant-ears

Natural language based
search interface retrieves
lists of documents plus a
summary description

<https://ask.sharemusic.se/>

SHAREMUSIC & PERFORMING ARTS

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Available Collections

Select collection to explore

ShareMusic

Collection Details

Vectors: 2,501

Vector Size: 384

Distance: Cosine

Ask Questions

Example: What is ShareMusic? What they do?

Enter your question:

What art form is 'Listening with Elephant Ears'

Ask

Answer

According to the provided text, "Listening with Elephant Ears" is a contemporary music composition and performance created by Hugo Boothby together with the Elefantöra ensemble.

Sources

Title	Relevance	Source URL
Listening with Elephant Ears: - Assorted Scientific Resources	66.6%	https://database.sharemusic.se/dataset.xhtml?persistentId=doi:10.5072/FK2/S5JJKP
Konsert med Elefantöra på Freja Funkfestival i Jönköping ShareMusic & Performing Arts	66.3%	https://sharemusic.se/resurser-och-inspiration/konsert-elefantora-freja-funk
Listening with Elephant Ears: Contesting Exclusion at the Intersection of Virtuosity and Ableism ShareMusic & Performing Arts	65.9%	https://sharemusic.se/resources-and-inspiration/listening-with-elephant-ears-resonance
ShareMusic	62.8%	https://sharemusic.se/en-kategori-vad/resource
Listening with Elephant Ears ShareMusic & Performing Arts	61.5%	https://sharemusic.se/resurser-och-inspiration/elephant-ears
Listening with Elephant Ears ShareMusic & Performing Arts	60.7%	https://sharemusic.se/resources-and-inspiration/listening-elephant-ears-en
Titta Resurser och inspiration ShareMusic & Performing Arts	57.7%	https://sharemusic.se/typ-av-resurs/titta
Ny vetenskaplig artikel publicerad om samverkan med Elefantöra ShareMusic & Performing Arts	56.6%	https://sharemusic.se/resurser-och-inspiration/artikel-resonance-elefantora

The chat-bot interface
allows iterative questions

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Opportunities and challenges

- Re-use Open Science efforts - Dataverse
 - Create tailored solutions hosted by institutions (CHI/GLAM sector) -> DANS Data Stations / ODISSEI portal <https://odissei-data.nl/>
 - State-of-art FAIRification (semantic artefacts, cross-walks, licences)
 - Enhance inclusion by creating new practices
-
- Each implementation is a new puzzle to be solved - technology is generic/implementation is not
 - Testing/evaluating remains a challenge
 - Lack of funding to make best practices diffuse into the RI landscape

References

Marion Wittenberg, Vyacheslav Tykhonov, Eko Indarto, Wilko Steinhoff, Laura Huis in 't Veld, Stefan Kasberger, Philipp Conzett, Cesare Concordia, Peter Kiraly, & Tomasz Parkoła. (2022). D5.5 'Archive in a Box' repository software and proof of concept of centralised installation in the cloud. Zenodo. <https://doi.org/10.5281/zenodo.6676391>

Tykhonov, V., Olson, N., Johansson, M., Ferguson, K., Jain, N., May, L., & Scharnhorst, A. (2024, June 19). Guarding accessibility - AI supported ontology engineering in the context of the MuselT repository design. DARIAH Annual Event 2024 (DARIAH AE 2024), Lisbon, Portugal. Zenodo. <https://doi.org/10.5281/zenodo.12533424>

Tykhonov, V., Yang, H., Mayr, P., Touber, J., Scharnhorst, A. (2025) Chatting with Papers: A Hybrid Approach Using LLMs and Knowledge Graphs, preprint: arXiv.org 2505.11633 <https://arxiv.org/abs/2505.11633> Accepted for the EEKE workshop 20205

Tykhonov, V., F. van Rijsselberg, E. Endarto, The next generation of data management with artificial intelligence (2024). doi:10.5281/zenodo.14507120 <https://zenodo.org/records/14507120> Presentation .

Johansson, M., V. Tykhonov, S. Alexandersson, K. Ferguson, J. Hanlon, A. Scharnhorst, N. Osborne (2025) A knowledge base for arts and inclusion—the dataverse data archival platform as a knowledge base management system enabling multimodal accessibility, arXiv:2504.05976 (2025) <https://arxiv.org/abs/2504.05976> Accepted for the HCI 2025



Thank you very much for your attention!