DOing REusable MUSical data

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Agenda

Morning:
- Project objectives
- Describing music
  - Describing a music score
  - Describing a concert program
  - Describing a concert
  - Describing a CD
- Focus on FRBRoo/DOREMUS data model

Afternoon:
- Controlled vocabularies
- Data conversion
- Data linking
- Data exploration
Project objectives (1/3)

• Improve music description to foster data exchange and reuse
  – We enrich existing data model (ontology): FRBRoo
  – We select and recommend existing controlled vocabularies to describe music
  – We create missing controlled vocabularies
Project objectives (2/3)

- Make main French musical catalogs available and reusable into the Linked Open Data
  - We publish interoperable musical catalogs from BnF, Radio France and Philharmonie de Paris
  - We publish pedagogical material to help publication and reuse of musical data
Project objectives (3/3)

• Study usages, develop application
  – We study music consumption usages
  – We develop a musical recommendation application using the richness and interconnections of the catalogs
Project scope

• Musical work
• Musical performance
• Musical publication
• Musical recording

• All type of musical genres with a focus on traditional and classical music to validate the data model
DESCRIBING MUSIC
Event, Work, Expression

- Event
  - Actors
  - Place
  - Time

- Work
  - Abstract
  - is realized in

- Expression
  - created
  - created a realization of

- Title
  - Identification
  - Categorization
  - Intention

Diagram shows the relationship between Event, Work, and Expression.
Describing a music score

Beethoven concerto no 5 op 73
Background

Beethoven concerto
no 5 op 73
Fünftes Concert
für das Pianoforte

Created in Vienna, November 11th, 1811, by Czerny at piano, dedicated to Archduke Rudolf of Austria (1788–1831)
FRBRoo/Doremus representation

- Work
- Individual Work
- Expression
- Self-Contained Expression
- Event
- Expression Creation
- Performance Work
- Performance Plan
- Work
- Complex Work
- has components
- has member
- Event
- Expression Creation
- Self-Contained Expression
- Work
- Individual Work
- Expression
- Self-Contained Expression
- Event
- Expression Creation
- Performance Work
- Performance Plan
- Work
- Complex Work
- has components
- has member
- Event
- Expression Creation
- Self-Contained Expression
- Work
- Individual Work
- Expression
- Self-Contained Expression
- Event
- Expression Creation
- Performance Work
- Performance Plan
Describing a concert program

Samedi 22 janvier - 20h
Salle des concerts

Ludwig van Beethoven (1770-1827)
Concerto pour piano n° 5 en mi bémol majeur, op. 73
“L'Empereur”
Allegro
Adagio un poco mosso. Attacca.
Rondo. Allegro
43’

entreacte

Dmitri Chostakovitch (1906-1975)
Symphonie n°12 en ré mineur, op. 112 « L'Année 1917 »
Petrograd révolutionnaire. Moderato-Allegro. Attacca
Razliv. Allegro (L'istesso tempo)-Adagio. Attacca
«Aurora ». L'istesso tempo-Allegro. Attacca
Aube de l'Humanité. L'istesso tempo-Allegretto
40’

Dezső Ránki, piano
Orchestre Symphonique de Budapest
János Fürst, direction

Ce concert est enregistré par France Musiques, partenaire de la Cité de la musique, et sera diffusé le 1er mars à 10h.

Durée totale du concert (entreacte compris) : 1h55
Background
FRBRoo/Doremus representation

Ludwig van Beethoven (1770-1827)
Concerto pour piano n° 5 en mi bémol majeur, op. 73 “L’Empereur”

Dmitri Chostakovitch (1906-1975)
Symphonie n°12 en ré mineur, op. 112 “L’Année 1917”
Razliv. Allegro (L’isness tempo)-Adagio

Budapest Symphony Orchestra
Describing a concert
Background

Janos Fürst

Deszö Ranki

Piano Concerto No. 5 in E-flat Major, Op. 73, "Emperor" (1809)

Cité de la Musique Philharmonie de Paris

Budapest Symphony Orchestra
FRBRoo/Doremus representation

Piano Concerto No. 5 in E-flat Major, Op. 73, “Emperor”

Event
Expression Creation
Self-Contained Expression

Event
Performance Plan

Event
Performance

Event
Performance
Individual Performance

Event
Performance
Individual Performance

Event
Performance
Budapest Symphony Orchestra
Describing a concert
Background

October 29th 2004
Catalog a CD

https://open.spotify.com/track/7bbl74EcM4utHpt9jV716f
Background
Describing a CD

https://open.spotify.com/album/3iiuwkeXJZrxmlCqZn9oJP
Background

The First Free Africans in America
Spaniards introduced kidnapped African slaves in South America through the Magdalena River Valley. Its mouth is close to the important port of Cartagena de Indias where ships full of Africans arrived. Some Africans escaped and set up Palenque de San Basilio, a town close to Cartagena. …

History of Oriki Tabala
The group was born in December 1980 in the community of San Basilio de Palenque. In the beginning the Oriki Tabala performed songs that were put into practice at funerals in Palenque and was taken to the dance in order to continue to retain all their cultural potential.
Songs of sisterhood, funeral music

- Work: Individual Work
- Expression: Creation
- Performance: Plan
- Recording: Event
- Editing: Event
- Publication: Event
- Event: Performance
- Track: Event
- Event: Individual Performance
- Event: Individual Performance

Consist of:

- Incorporates:
  - Work: Recorded Event
  - Work: Edited Event
  - Work: Published Event
  - Event: Recording
  - Event: Editing
  - Event: Publication

Performed:

- Incorporates:
  - Performance: Event

Edited:

- Incorporates:
  - Event: Recording

Published:

- Incorporates:
  - Event: Recording
LINKING MUSIC DESCRIPTIONS
Multiple RDF descriptions in the LOD

**Musical score**

*BEETHOVEN*

*Adagio in G minor (op) 32*  
L. Allegro  
E. Adagio un poco mosso (allegro)

**Concert**

*CITY OF MUSICAL PARIS*  
*PHILHARMONIC OF PARIS*

*Concert*  
*Performance*  
*Individual Performance*  
*Budapest Symphony Orchestra*

**Program**

*PHILHARMONIC OF PARIS*  
*CITY OF MUSICAL PARIS*

*Program*  
*Performance*  
*Event*  
*Individual Performance*  
*Budapest Symphony Orchestra*
Connect descriptions to build a knowledge graph