



Beyond the Frame

Building a Virtual Poster Wall with Linked Open Data

Linking Cinema Context with with the EYE film poster collection

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UNIVERSITY OF AMSTERDAM
Faculty of Humanities



creative
Amsterdam
an E-Humanities
perspective

Introduction

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Cinema Context



About

- Encyclopedia of Dutch film culture
- History of cinema exhibition and distribution
 - 'New Cinema History': moviegoing as a social and cultural phenomenon

Content

- Films, Venues, Screenings, Persons, Companies
- Outgoing links to other datasets (IMDb)

Statistics

- 108k+ screenings
- 45k+ films
- 1.6k+ cinemas

www.cinemacontext.nl

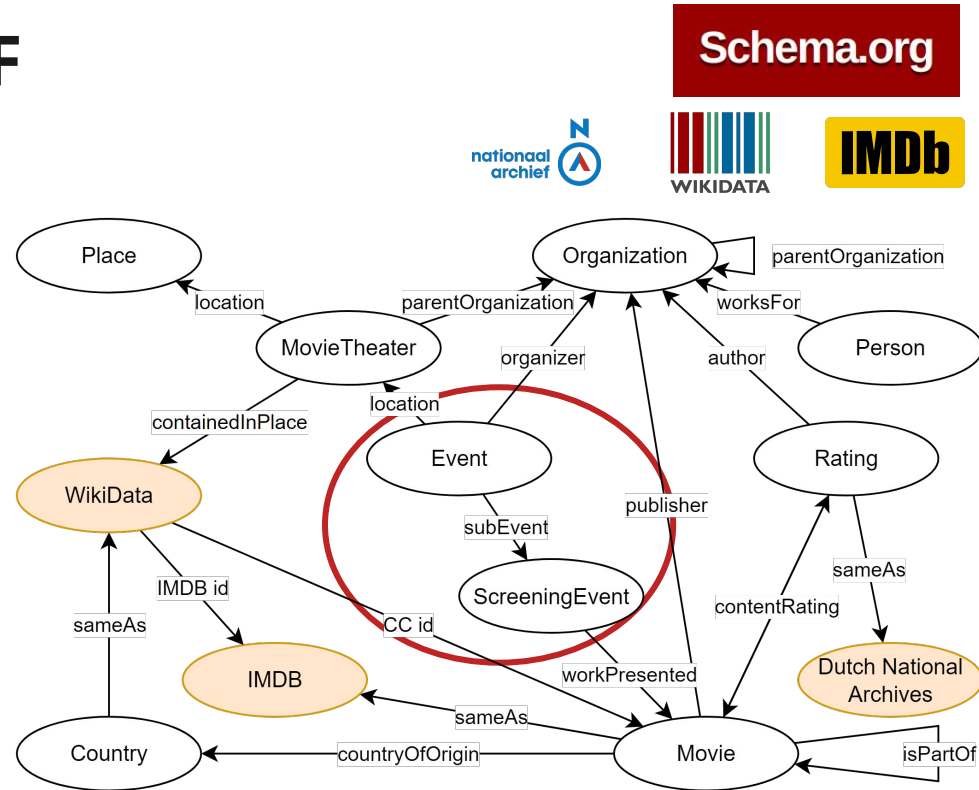
Cinema Context in RDF

Linked Open Data (LOD)

Gaining momentum in digital cultural heritage

- Each *thing* has a URI as unique identifier
 - We use its permalink (e.g. <http://www.cinemacontext.nl/id/F020802>)
- Statements about these *things* are stored in 'triples' in a graph database
- External relations

With these URIs we (and others!) can use the web to describe our data





Cinema Context



Browser



Table



SPARQL



Graphs

2



Services

1



Assets

0



Insights

>



Cinema Context

by [Cinema Context](#)

Created 9 months ago

3.442.725 statements

Cinema Context is an online film encyclopaedia with more than 100,000 film screenings since 1895. It provides insight into the DNA of Dutch film and cinema culture and is praised by film historians worldwide. With a DANS Small Data Project grant, this dataset has been converted to a Linked Data format (RDF). For more information, see: <https://uvacreate.gitlab.io/cinema-context/cinema-context-rdf/>

Graphs

[default](#)

3.442.680

[metadata](#)

45

Example resources

[Tuschinski](#) [Jean C.F.Th. Desmet](#) [Jonge harten \(1936\)](#)

Dependent queries

[Cinemas per city](#)[Programmes per city](#)[20 most popular films per city \(variable\)](#)[Show all 6 queries...](#)

Dependent stories

[Introduction to Cinema Context](#)

Linked Data on the web

Our *specialised* Cinema Context dataset can add to this:

- Programmes and Events
- Reviews and censorships
- Companies and Theaters



The screenshot shows the IMDb page for the movie 'Casablanca'. At the top, there are several movie posters and a 'More images' button. Below the posters, the title 'Casablanca' is displayed in a large font, followed by the year '1942', the genre 'Romance/Drama', and the runtime '1h 42m'. There is a 'Play trailer on YouTube' button. Below that, there are three buttons: 'Watch now From €2.99', 'Watched it?' (with a checkmark), and 'Watchlist'. A dropdown menu for 'All watch options' is visible. At the bottom, there are three columns for ratings: '8.5/10 IMDb', '99% Rotten Tomatoes', and '100% Metacritic'. The page also shows '86% liked this film' and a 'Google users' button.

IMDb

Rotten
Tomatoes

Metacritic

86% liked this film

Google users

During WWII, Rick, a nightclub owner in Casablanca, agrees to help his former lover Ilsa and her husband. Soon, Ilsa's feelings for Rick resurface and she finds herself renewing her love for him.

Release date: April 4, 1947 (Netherlands)

Director: Michael Curtiz

Featured song: As Time Goes By

Awards: Academy Award for Best Picture, MORE

Languages: French, German, Italian, English

Cast

View 15+ more



Humphrey
Bogart
Rick Blaine



Ingrid
Bergman
Ilsa Lund



Claude
Rains
Captain
Louis
Renault



Paul
Henreid
Victor Laszlo

Idea for a *hackathon*

**Can we create a virtual
poster wall?**



A visual source: The Memory

The Memory Database (<https://geheugen.delpher.nl/>)

Online heritage collections – paintings, drawings, stamps, posters and photographs

- EYE Museum Collection
 - Poster Project: <https://geheugen.delpher.nl/en/geheugen/pages/collectie/Afficheproject/Collectie+EYE>
 - But, not yet Linked Open Data...



"The earliest poster dates back to 1896 and the collection is still being expanded on a daily basis with contemporary material. The 6000 posters on the website The Memory constitute the main part of the film posters designed in the Netherlands."



Surprise me


Eye AND afficheproject



51.701 results for: Eye AND afficheproject

Sort by: Relevance

1 2 3 To page: 1437 Go



Filmkunst
 Creator: Otto Treumann
 Collection: Poster project




Screenplay: Harold Pinter
 Collection: Poster project



Late night movie
 Collection: Poster project



Film en opera
 Collection: Poster project



Metasound
 Collection: Poster project



Wereldmuziek (Film)festival



Standvastige tinsol-daat, de



Time bandits
 Collection: Poster project



Internationaal Meidenfilmfestival



Amsterdams stad-sjournaal projecteert!



Step 1: Obtain the data from The Memory

- Search on "Eye AND afficheproject"
 - <https://geheugen.delpher.nl/nl/geheugen/results?query=Eye+AND+afficheproject&maxperpage=36&coll=ngvn&page=1>
- Scrape/harvest the page's source
 - Get all meta-data for every tile

<https://gitlab.com/uvacreate/cinema-context/hackalod-2020>

JSON

```
"urn:gvn:NAGO02:EYE-A33169": {  
  "title": "Tartuffe",  
  "caption": " ",  
  "volumeRemark": " ",  
  "seq": " ",  
  "alternative": "Tartuffe",  
  "subtitle": " ",  
  "creator": "Frans Bosen",  
  "ppn": null,  
  "objectlevelId": "NAGO02:EYE-A33169",  
  "thumbnail":  
    "https://imageviewer.kb.nl/ImagingService/imagingService?useresolver=false&id=http%3A%2F%2Fresolver.kb.nl%2Fresolve%3Furn%3Durn%3Agn%3ANAGO02%3AEYE-A33169%26size%3Dlarge&maxw=294",  
  "collectionStringNL": "Afficheproject",  
  "collectionStringEN": "Poster project",  
  "created": false,  
  "originalStartDate": "Fri Jan 01 00:19:32 CET 1926",  
  "startDate": "1926.01.01"  
}
```

URI

<https://resolver.kb.nl/resolve?urn=urn:gvn:NAGO02:EYE-A33169>

JSON data example of a single resource in The Memory



Step 2: Transform the data to RDF

<https://schema.org/Poster>

JSON

```
"urn:gvn:NAG002:EYE-A33169": {
  "title": "Tartuffe",
  "creator": "Frans Bosen",
  "thumbnail":
    "https://imageviewer.kb.nl/ImagingService/imagingService?userresolver=false&id=http%3A%2F%2Fresolver.kb.nl%2Fresolve%3Furn%3Durn%3Agvn%3ANAG002%3AEYE-A33169%26size%3Dlarge&maxw=294",
  "startDate": "1926.01.01"
}
```

Turtle

```
<https://resolver.kb.nl/resolve?urn=urn:gvn:NAG002:EYE-A33169> a schema:Poster ;
  schema:name "Tartuffe" ;
  schema:creator "Frans Bosen" ;
  schema:image
    <https://imageviewer.kb.nl/ImagingService/imagingService?userresolver=false&id=http%3A%2F%2Fresolver.kb.nl%2Fresolve%3Furn%3Durn%3Agvn%3ANAG002%3AEYE-A33169%26size%3Dlarge&maxw=294> ;
  schema:dateCreated "1926"^^xsd:gYear ;
  schema:additionalType <http://vocab.getty.edu/aat/300027221> .
```

Schema.org

Poster

A Schema.org Type

Thing > CreativeWork > Poster

A large, usually printed placard, bill, or announcement, often illustrated, that is posted to advertise or publicize something.



Getty Vocabularies: LOD

SPA

posters

Source:<http://vocab.getty.edu/aat/300027221>

Once loaded in our own *triplestore*, let's take a look at the Poster dataset:

- [Poster query](#)
- [Poster gallery query](#)

Spoor-weg



Date: 2006

Liefdesbekenentissen



Date: 1967

Ontsnapping uit Istanboel



Date: 1967

Terra in due, la



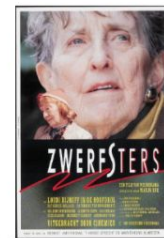
Date: 1985

Mieren, de



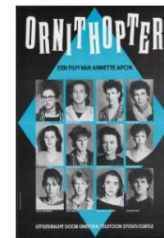
Date: 1989

Zwerfsters



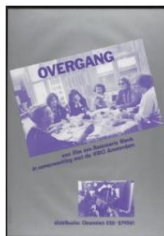
Date: 1989

Ornithopter



Date: 1985

Overgang



Date: 1980

Ongeschreven geschiedenis, een



Date: 1988

Vrouwen aller landen



Date: 1981

Dochters van de Nijl



Date: 1982

Cannot run away



Date: 1988

Gezocht: Lieve vader en moeder



Date: 1987

International Gay and Lesbian Filmfestival Holland



Date: 1986

Step 3: Link the data

We now have two independent datasets.

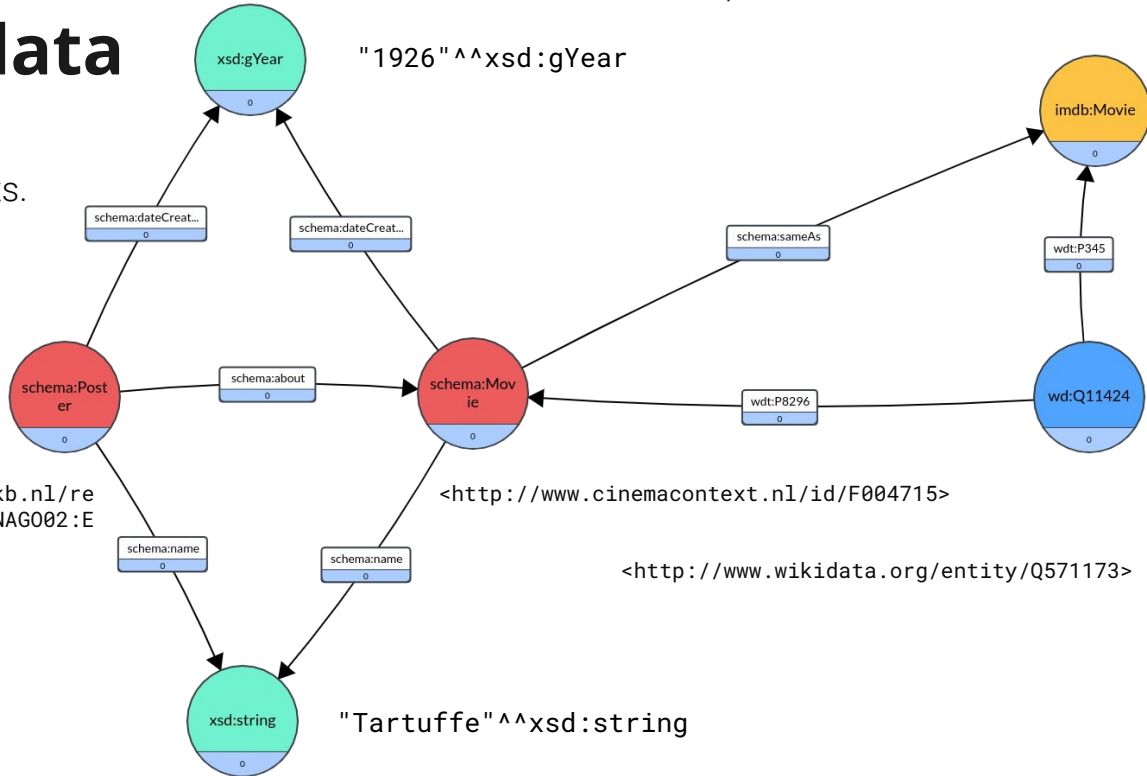
These are not yet linked!

We can do so with a **linkset** with the property:

- `schema:about`

By matching on:

- Name
- Date



Matching

- Pre-processing:
 - Removing determiners
 - Removing parenthesis
- Very certain:
 - Both name + date are exactly the same
- Somewhat certain:
 - Name + date have a fuzzy match
- Manual check:
 - Name is not unique and gives multiple options
 - Date is too far apart

poster_ uri	poster_ name	poster_ date	diff_ days	cc_date	cc_names	cc_uri
https://resolver.kb.nl/resolve?urn=urn:gvn:NAGO02:EYE-A33155	Als ik koning was	1930-01-01	-1461	1934-01-01	['Wenn ich König wär', 'Als ik Koning was', 'Als ik koning was']	http://www.cinemacontext.nl/id/F002281
https://resolver.kb.nl/resolve?urn=urn:gvn:NAGO02:EYE-A36907	Jericho	1946-01-01	0	1946-01-01	['Jericho']	http://www.cinemacontext.nl/id/F015227
https://resolver.kb.nl/resolve?urn=urn:gvn:NAGO02:EYE-A40553	Monsieur Verdoux	1948-01-01	365	1947-01-01	['Monsieur Verdoux']	http://www.cinemacontext.nl/id/F015495

Building a poster wall

Website with user input (e.g. as filter or parameter in your query):

- Date
- Cinema (optional)

Query:

- Give me every instance of type **schema:Movie** that is screened on a **xsd:date** in a **schema:MovieTheater** .
- Give me the **schema:image** value (thumbnail) of every instance of type **schema:Poster** that is *about* that same **schema:Movie** instance .

See query: [Query](#)



1928 ▾ Weeknummer ▾ Stad ▾ Bioscoop ▾ Laat zien wat er draaide!

NB: Hoewel je een week kunt selecteren, is er voor sommige steden en sommige bioscopen te weinig informatie beschikbaar om filmposters te tonen. De programmeringsdata zijn afkomstig uit [Cinema Context](#). Meer informatie over de data van Cinema Context in RDF vind je in deze [handleiding](#).

Result: <https://www.hicsuntleones.nl/plakmuur/eye/>

See also: <https://uvacreate.gitlab.io/cinema-context/cinema-context-rdf/events/hackalod2020/>

Thanks to Thunnis van Oort (RU) and Menno den Engelse (<http://islandsofmeaning.nl/>) for building this together.

Advice

Open Data

- Provide URIs and pids to *any* object in your data
- Provide endpoints and APIs
 - IIIF for images
 - SPARQL for RDF
- Publish your data under a permissive license (e.g. CC licenses or PD)

Sharing / working together

- Team up with other archives and researchers!



Contact

Example of LOD: what are the possibilities?

Bringing data together in the same model and querying multiple datasets (incl. Wikidata) at once:

<https://uvacreate.gitlab.io/cinema-context/cinema-context-lod-workshop-homer-2022/>

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