# Enrichment of accesible LD and visualization for Humanities: MPOC model and prototype

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# Museology and social integration: the diffusion of the artistic and cultural heritage of the Spanish Prado Museum to groups with special accessibility (S2015/HUM3494)

The **MUSACCES Consortium** was born with the purpose of bringing the artistic and cultural heritage of the Spanish Prado Museum to blind, deaf and those who, because they are incarcerated in penitentiary institutions, can not go directly to the Collection.

#### http://www.musacces.es







https://www.facebook.com/musacces



https://twitter.com/musacces



https://www.youtube.com/channel/UCQaEUzVMiS9zw5PJIw2nFfw

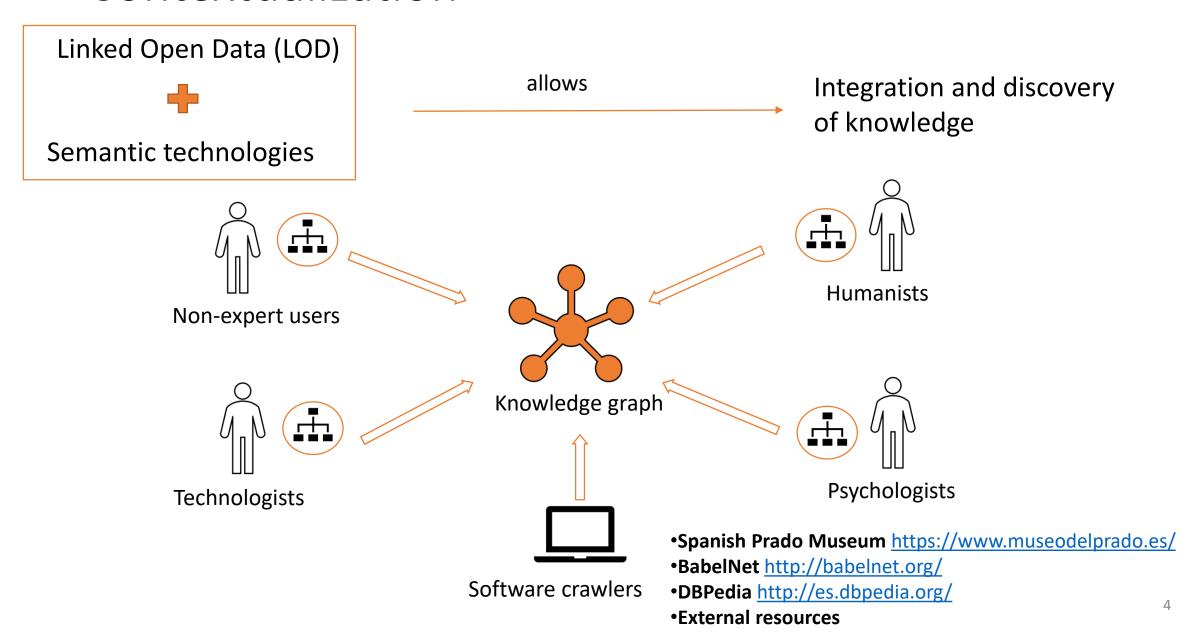
# Contextualization

**Main aim** Work with semantic technologies in two ways:

- 1. Management of available data from different resources
- 2. The use of a semantic graph that can assist the experts (humanists, psycologists, ...)

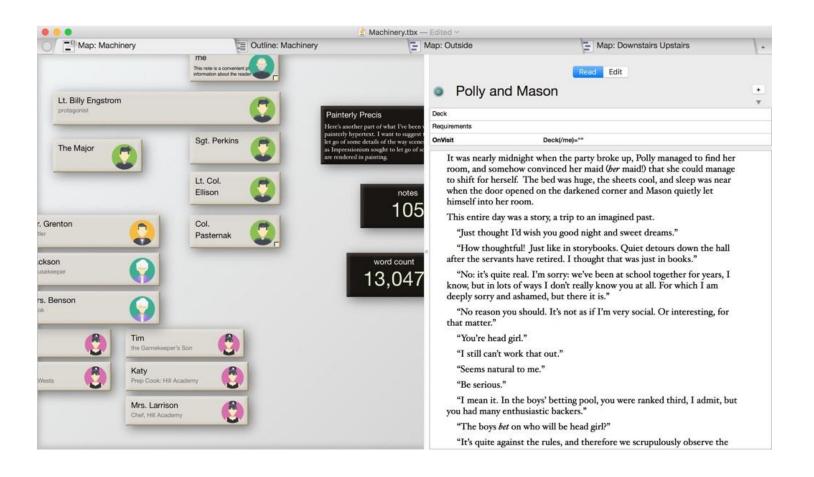
Create a narrative model to interact with Semantic objects

## Contextualization



## Existing tools for creating and editing narratives: StorySpace

- Structure of narration with hyperlinks: Does not use standards, metadata or narrative elements
- Created for museum workers who manually create narratives
- Available for IOS: It is not multiplatform



## Existing tools for creating and editing narratives: StoryScope

- Web-based information system
- Includes model, methodology and collections of artworks
- The narration is manually written on the artwork
- The narrative elements are separated from the narrative, but associated with the work.
- There are no relationships between the narrative elements.

HIGHLIGHTS OF THE NATIONAL GALLERY OF IRELAND

#### Highlights of the National Gallery of Ireland

Explore the highlights of the National Gallery of Ireland. The artworks included here are on display in the 'Masterpieces of the National Gallery' exhibition and in the Irish rooms, unless otherwise stated.

The National Gallery of Ireland (Irish: Gailearaí Náisiúnta na hÉireann) houses the Irish national collection of Irish and European art. It is located in the centre of Dublin with one entrance on Merrion Square, beside Leinster House, and another on Clare Street. Due to ongoing renovations, the Clare Street entrance is the only one currently open. It was founded in 1854 and opened its doors ten years later. The Gallery has an extensive, representative collection of Irish painting and is also notable for its Italian Baroque and Dutch masters painting. The current director of the gallery is Sean Rainbird. Entry to the gallery is free.

Added by Claire Crowley on August 23, 2013

#### Narratives

Highlights of the Irish Masterpieces at the National Gallery of Ireland

This Narrative is illustrated by key works chosen from the Irish collection of the National Gallery of Ireland.

View Microsite

view all

Highlights of the European Masterpieces at the National Gallery of Ireland

This Narrative is illustrated by key works chosen from the European collection of the National Gallery of Ireland.

View Microsite

#### Stories



A rare group portrait by Giovanni Battista Moroni.

This is a very intimate portrait

showing a father protectively embracing his two children.



Lavery's grand family portrait

Born in Belfast and trained in Glasgow, London and Paris, John Lavery settled i



Influences & Innovation on Palmezzano.

Palmezzano was a pupil o

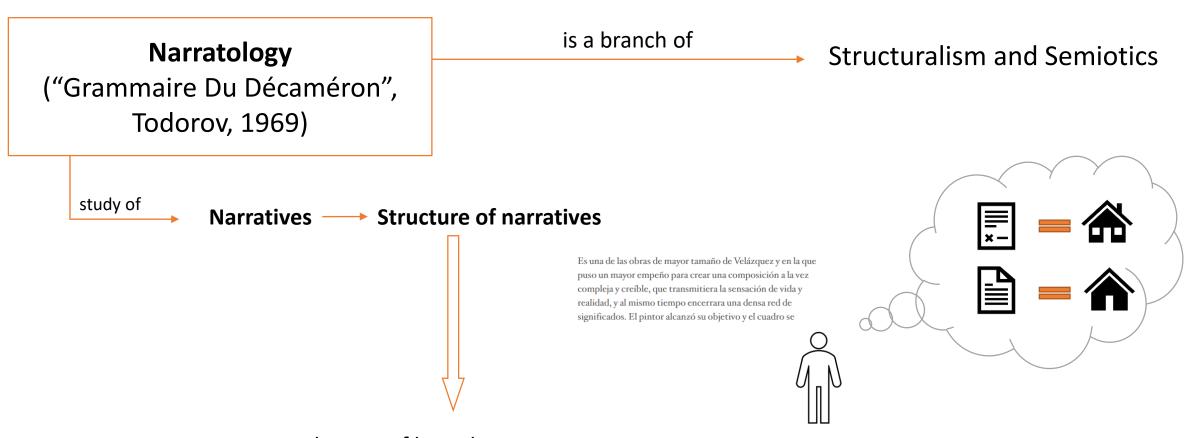
Melozzo da Forlí, and for a long period he collaborated with and imitat



The influence of 17th-century Dutch painting in the work of Courbet.

Artistically and politically, Courbet was one of the most important and most controversial figure

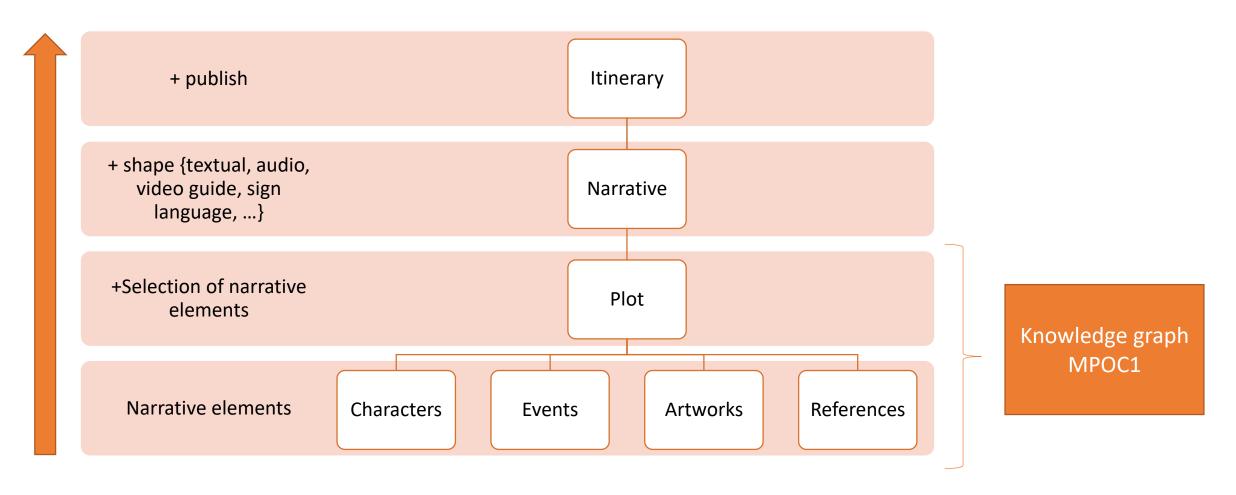
# A proposal for Narrative Modeling



The way of how the structure has an effect in our **perception** of narratives

## Narrative model

The creation of a new narrative model allows users to take advantage of existing information and significantly improves the reach of current narrative creation tools.



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77e4-4597-a962-ef47304d930d/70dcbd0d-aae0-48

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Adoptó el apellido de su madre, según us " Diego Velá zquez" o " Diego Estudió y practicó el arte de la pintura e veinticuatro añ os, cuando se trasladó c al rey desde entonce ...

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<strong class="subtitulo">1656. Óleo sobre lienzo



VELANDEZ, DIEDO RODINSKEZ DE SILVA Y Avilla, 1990 MAN, 1880

Las meninas

1646. Óleo sobre lienzo, 318 x 276 cm.

Es una de las obras de mayor tamaño de Velárquez y en la que



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# Information in the Spanish Prado Museum: CIDOC-CRM

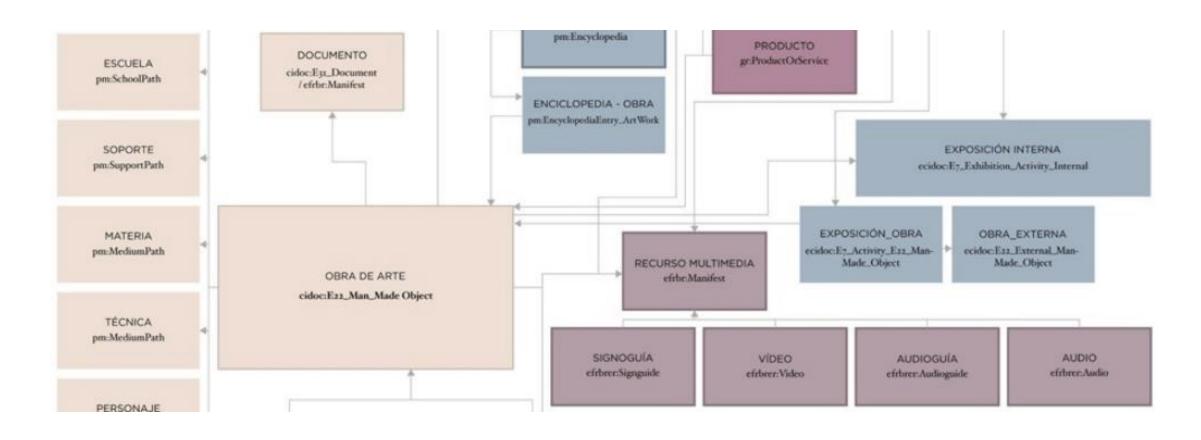
"The CIDOC Conceptual Reference Model (CRM) provides definitions and a formal structure for describing the implicit and explicit concepts and relationships used in cultural heritage documentation."

http://www.cidoc-crm.org/

Standard documentation is available:

http://www.cidoc-crm.org/html/5.0.4/cidoc-crm.html

# CIDOC-CRM in Spanish Prado Museum



# MPOC1: Web information system for the management of museum narratives.

OGIN REGISTRO

#### http://catedra.lsi.uned.es/metadata/

The system currently allows:

- Visualize and edit data of works and characters
- Create new metadata



# Musacces

Using metadata stardards and ontologies for museums:

CIDOC-CRM FRBR rNnews SIOC PPROC Museología e integración social: la difusión del patrimonio artístico y cultural del Museo del Prado a colectivos con especial accesibilidad (invidentes, sordos y reclusos)

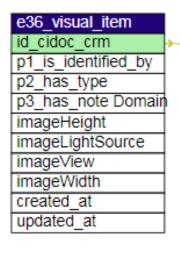




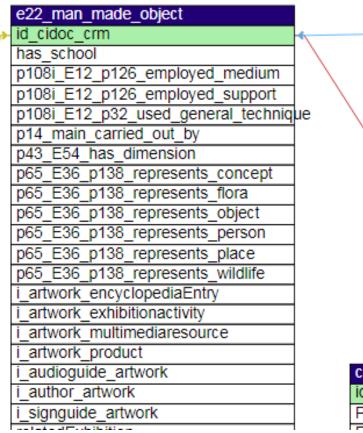


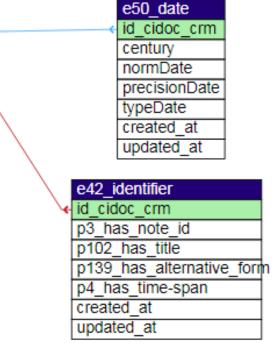


# Information storage in MPOC1



# e54\_dimension id\_cidoc\_crm p2\_E55\_has\_type p90\_E60\_has\_value p91\_E58\_has\_unit conversion\_factor created\_at updated\_at



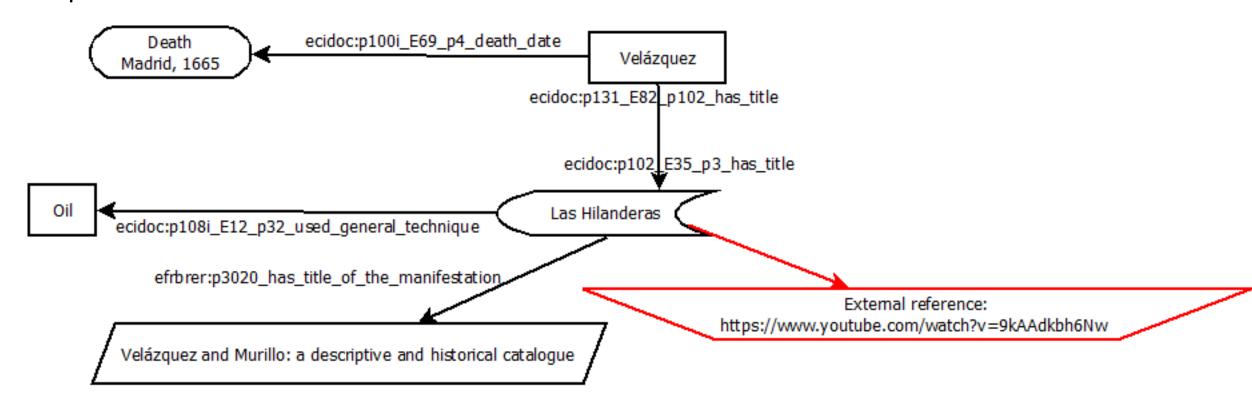


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p4_has_time-span
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p96_E67_p4_gave_birth_year
p96_E67_p7_gave_birth_place
created_at
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## Future work

 Enrich the knowledge graphs from existing data (LOD) with information manually added by experts



# Future work

 Add gamification elements (that allow to model different types of games)

 Add interactive elements that increments the value to the narrative (modeling of visual, olfactory objects, etc.)

 Integrate a Human-Computer Interaction (HCI) model to create a discourse-based system

# Future work: Design and implementation of MPOC2

Añadir evento

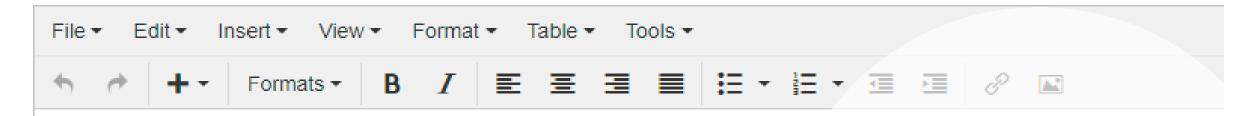
Añadir personaje

Añadir obra

Añadir acción externa

Añadir referencia

El cuadro de Las Meninas desde el punto de vista de Nicolasito



Hola, soy [personaje id='4'] Nicolasito Pertusato [/personaje] y voy a contaros la historia del cuadro de [obra id='6'] Las Meninas [/obra] tal y como la cuentan en el libro [referencia id='2'] "El Misterio Velázquez" de Eliacer Cansino [/referencia].

Editing narratives and adding narrative elements

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**Guardar cambios** 

# Thanks for your attention!

Any questions?

