

Milestone Report



Share 3D

ACTIVITY 3

M6 - SELECTED CASE STUDIES STORYBOARDED

Indicated
31/05/2019

Completion

date:



CONNECTING EUROPE FACILITY (CEF) – TELECOMMUNICATIONS SECTOR

Grant Agreement INEA/CEF/ICT/A2017/1568597

Table of Contents

Introducion	5
Case studies: Education	6
Hotspots: The medieval watermill	6
Slides: The medieval ferryboat	11
Timeline: The Rūpintojēlis	16
Case studies: Creative industries	23
Hotspots: Rural Inn - 17th century	23
Timeline: The carillon - a story about telling the time	33
Slideshow: A 17th century bakery	42
Case studies: Tourism	46
Hotspots: Hill of Tara	46
Slides: Dwarf figurines of Wroclaw	51
Timeline: Early Frisian cog	57
Case studies: Research	60
Hotspots: A 17th century school	60
Slides: Glendalough	75
Napoleon and the Battle of Waterloo	80
Case studies: Cultural heritage institutions	86
Hotspots: Irish High Crosses	86
Slides: The 17th century pass glass	90
Timeline: 10000 years of cats in art	97
Summary	104

Disclaimer

This document contains a description of the Share3D project findings, work and products. Certain parts of it might be under partner Intellectual Property Right (IPR) rules so, prior to using its content please contact the consortium head for approval.

In case you believe that this document harms in any way IPR held by you as a person or as a representative of an entity, please do notify us immediately.

The authors of this document have taken any available measure in order for its content to be accurate, consistent and lawful. However, neither the project consortium as a whole nor the individual partners that implicitly or explicitly participated in the creation and publication of this document hold any sort of responsibility that might occur as a result of using its content.

This publication has been produced with the assistance of the European Union. The content of this publication is the sole responsibility of the Share3D consortium and can in no way be taken to reflect the views of the European Union.

Share3D is a project funded by the European Union
(Grant Agreement INEA/CEF/ICT/A2017/1568597).



Acronyms

1. INTRODUCCION

This milestone is a collection of selected case studies storyboarded, so that they can be explainable, clear and user friendly to readers. The stories are formed by using Sketchfab 3D models of cultural heritage importance, material and images from valid resources (museums, organizations, academies, libraries, etc.), information from scientific resources and books.

Following the activity 3 goals to inform and encourage users of the Share3D dashboard and storytelling tools, the stories can be a first approach to users that can benefit from Share3D tools.

It can be noted that this document can complement and support the detailed user guides of the Share3D project and introduce the case studies of activity 4. The latter is achieved by the categorization of the use case stories of this document into 4 main (same) categories defined in activity 4: education, creative industries, tourism, research and cultural heritage institutions.

2. CASE STUDIES: EDUCATION

2.1. Hotspots: The medieval watermill

Scenario: Virtual visit to the medieval watermill with detailed explanations about the watermill structure and a practical illustration of how it works.

Story type: Storytelling tool - hotspots

Intended audience: school children, archaeologists, people interested in medieval history and technology

Addressed need: understanding of medieval technology

Duration: 5 minutes

Sources: Sketchfab (all images of the hotspots are from the same 3D model)

Introduction

Animated medieval watermill 3D model is a part of INRAP (Institut national de recherches archéologiques preventives / French National Institute for Preventive Archaeological Research) project. INRAP conducts diagnostic operations and preventive archaeological excavations. It “ensures the scientific study of preventive archaeology operations and the diffusion of their results. It participates in teaching, cultural transmission, and public outreach and development in archaeology” (more information <https://www.inrap.fr/en>).

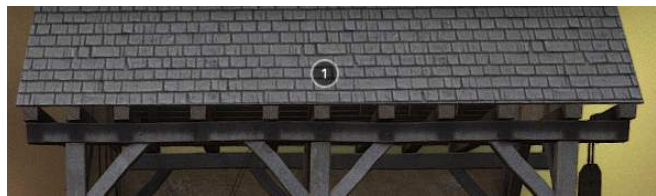


Sketchfab (<https://sketchfab.com/3d-models/animated-medieval-watermill-d0b9ec06669a430fb972ef35a425f5c8>)

Hotspot 1

Medieval watermill

This medieval watermill is based upon an excavation and interpretation by INRAP (France) and has been built as an operational mill by the Guédelon team



Hotspot 2

Mill pond

The water for the mill comes from a brook and is stored in an artificial pond that is used also to raise fish



Hotspot 3

Sluice gate

The amount of water going to the water wheel is controlled by a sluice gate



Hotspot 4

Overflow

While excess water leaves through this overflow when the pond is full



Hotspot 5

Water wheel

The water running through the channel hits the wheel paddles below the wheel to make it turn. This is called an undershot water mill.



Hotspot 6

Lantern gear

This slow rotation is transferred to the lantern gear that rotates much faster.



Hotspot 7

Millstones

It makes the upper millstone or runner stone turn, on top of the lower millstone or bedstone.



Hotspot 8

Hopper

The hopper, that contains the wheat, is stirred by a wooden stick touching the mill stone and feeds the wheat in a central hole in the upper millstone



Hotspot 9

Flour

The wheat is ground between the stones and falls into the casing surrounding the bedstone, where it can be collected by the miller.



Hotspot 10

Sack of flour

When the grinding is finished, the flour sacks are lowered...



Hotspot 11

Medieval chariot

and transported back to the farm



2.2. Slides: The medieval ferryboat

Scenario: This story gives a visual illustration which medieval technology to cross rivers was developed with practical examples of how such ferry boats were used in different places and times.

Story type: Slideshow

Intended audience: school children, archaeologists, people interested in medieval history and technology

Addressed need: understanding of medieval technology

Duration: 5 minutes

Sources: Sketchfab, Europeana, Gallica, Visual Dimension bvba

Introduction

Today, we cross rivers easily, sometimes even without knowing, over the many bridges that we have today. From Roman times onwards to less than 100 years ago, there were regular ferry services to help you cross a river.



Sketchfab (<https://sketchfab.com/3d-models/medieval-ferry-boat-34f42656475e40b5b27aaead02ab01a5>)

When there is no bridge

In medieval times, it was difficult to build a bridge over water that was wider than a wooden beam could support (maximum 8 to 10 m), otherwise, support structures had to be built in the river, on the riverbed.

(3D scene & image: Visual Dimension bvba)



FerryBoats

Instead, ferryboats were used frequently, and major rivers had such ferry crossings every 4 to 5 km.



Europeana
(https://www.europeana.eu/portal/en/record/90402/SK_C_1698.html)

What goes on the road...

Hence, ferryboats could be quite full and busy.



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_C_1632.html)

(https://www.europeana.eu/portal/en/record/90402/SK_C_1632.html)

... gets in the boat

A medieval ferryboat did not only transport people but also cattle, people on horseback and horse-drawn chariots.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_OB_60_024.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_OB_60_024.html)

A drive-through service

This means that ferryboats had to be constructed in such a way that you entered the boat on one side and left it on the other side.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/RP_P_1898_A_20531.html)

(https://www.europeana.eu/portal/nl/record/90402/RP_P_1898_A_20531.html)

...still used today

This concept has continued to exist until today, with modern ferryboats for crossing rivers by car.



[Europeana](https://www.europeana.eu/portal/en/record/2021648/0244_F0639.html)

(https://www.europeana.eu/portal/en/record/2021648/0244_F0639.html)

...all around the world

The same system was and is applied also in other parts of the world.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1956_807.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1956_807.html)

Poling...

Such ferryboats were not rowed but poled, by one or more people.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_OB_61_902.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_OB_61_902.html)

...to get across the river

This allowed to deal more easily with the current of the river while crossing it.



[Europeana](https://www.europeana.eu/portal/en/record/9200122/BibliographicResource_1000056114302.html)

(https://www.europeana.eu/portal/en/record/9200122/BibliographicResource_1000056114302.html)

The ferry chain

Short crossings used a metal chain or wire to keep the boat in the right direction on the flowing river.

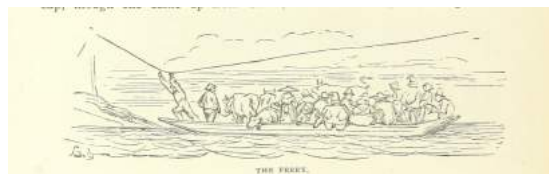


[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1907_2050.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1907_2050.html)

Passing ships

Such chains or wires were obstacles for passing ships.



[Europeana](https://www.europeana.eu/portal/en/record/9200122/BibliographicResource_1000056114302.html)

(https://www.europeana.eu/portal/en/record/9200122/BibliographicResource_1000056114302.html)

Toll collection

Hence, ferry crossings were sometimes combined with toll collection. The chain prevented boats to pass without paying the required toll. Boats could continue their way by lowering the chain into the water.



(3D scene & image: Visual Dimension bvba)

Medieval river toll

There are many medieval trial cases where ships were running into such toll chains to escape the payment.



image: Gallica, Le Chevalier errant, f. 101v

<https://gallica.bnf.fr/ark:/12148/btv1b10509668g/f206.image.r=Fr?lang=EN>

2.3. Timeline: The Rūpintojėlis

Scenario: Teacher for students from abroad prepares a presentation about important Lithuanian symbols, in particular case about the Rūpintojėlis (The Pensive Christ). The Storytelling tool can be used to present the historical artefacts in an attractive and interactive way. Prepared material can be displayed on mobile devices, such as smartphones, tablets, readers, etc.

Story type: Storytelling tool – timeline.

Intended audience: pupils and students.

Addressed need: visual presentation of historical artefacts, possibility to learn about Lithuanian history, culture and society.

Duration: 10-15 minutes

Sources: Sketchfab, Europeana and other sources

Introduction

Rūpintojėlis (The Pensive Christ) is a subject in Christian iconography depicting a contemplating Jesus, sitting with his head supported by his hand with the crown of thorns.

Although the image first appeared in northern Germany, it is now most commonly associated with Lithuania, where the figure is called Rūpintojėlis (pronounced roo-pinto-YAY-lis): “the One Who Worries,” or “the Brooding One.” (“The Pensive Christ” is not a strict translation, but that is the name that has gained favor in the English-speaking world; “Christ in Distress” is another.) As Christianity spread throughout Lithuania in the sixteenth and seventeenth centuries, so did images of Rūpintojėlis, as the wandering woodcarvers (dievdirbiai) of native folk culture carved him into hollowed-out tree trunks wherever they went. Today he is found not only at crossroads and in forests but in churches, homes and cemeteries.



[Sketchfab / Rupintojėlis \(The Pensive Christ\)](https://sketchfab.com/3d-models/rupintojelis-xix-a-vid-5655c8e1f70c4d31925503826bd54d5a)
(<https://sketchfab.com/3d-models/rupintojelis-xix-a-vid-5655c8e1f70c4d31925503826bd54d5a>)

Slide 1

Today Rūpintojėlis (The Pensive Christ) is one of the most popular objects of Lithuanian fine and folk art and one of the symbols of the Lithuanian nation.



[Sketchfab / Rupintojelis \(The Pensive Christ\)](https://sketchfab.com/3d-models/rupintojelis-8cea265b1979482ab9df12f9119f2d91)
(<https://sketchfab.com/3d-models/rupintojelis-8cea265b1979482ab9df12f9119f2d91>)

Slide 2

Lithuanians relate the figure of Jesus to their own passion as a people, especially since having had endured persecution under the Soviet regime, including mass deportations to Siberian labor camps and other remote parts of the Soviet Union in the 1940s and '50s. About 60 percent of the roughly 130,000 Lithuanian deportees either died in the camps or were never able to return to their homeland—a tragedy still mourned by Lithuanians each year on June 14, the date of the first major deportation (in 1941).



[Europeana / Rūpintojėlis. M. K. Čiurlionis National Museum of Art. 1800.](https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000012880318.html?q=R%C5%ABpintoj%C4%97lis#dcId=1573078638204&p=1)
(https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000012880318.html?q=R%C5%ABpintoj%C4%97lis#dcId=1573078638204&p=1)

Slide 3

For these victims of repression, Rūpintojėlis (The Pensive Christ) represents a God who identifies with the suffering of humanity. Perhaps he contemplates not only his own unjust treatment and death but also the countless injustices waged against others throughout time.



Rūpintojėlis. M. K. Čiurlionis National Museum of Art. 1825

(https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000013127943.html?q=rupintoje
[lis#dclid=1574751311943&p=1](#))

Slide 4

Rūpintojėlis (The Pensive Christ) sculpture is carved from wood, but there are also stone works of art.



Rūpintojėlis. Sculptor Albertas Danilevičius. (<http://www.neringart.com/albertas/dideles/nuotrauka10.jpg>)

Slide 5



Rūpintojēlis. M. K. Čiurlionis National Museum of Art. 1862

(https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000013366290.html?q=rupintojelis#dclid=1574751311943&p=1)

Slide 6

Rūpintojēlis (The Pensive Christ) is much more common in sculpture than in painting, where the similar Man of Sorrows is more often depicted.



Europeana / Christus als Schmerzensmann. Staatliche Kunsthalle, Karlsruhe. 1493.
(https://www.europeana.eu/portal/en/record/2064137/Museu_ProvidedCHO_Bildarchiv_Foto_Marburg_obj00052909.html?q=Man+of+Sorrows#dclid=1573078819551&p=1)

Slide 7

Various motifs of Rūpintojėlis (The Pensive Christ) can be found in artworks of many Lithuanian painters and sculptors.



[Karalių pasaka \(Tale of Kings\) by M. K. Čiurlionis.](http://ciurlionis.eu/paveikslas/pasaka-karaliu-pasaka/)
[Tempera on canvas. 1909](http://ciurlionis.eu/paveikslas/pasaka-karaliu-pasaka/)
[\(http://ciurlionis.eu/paveikslas/pasaka-karaliu-pasaka/\)](http://ciurlionis.eu/paveikslas/pasaka-karaliu-pasaka/)

Slide 8



[Rūpintojėlis. Sculptor Vytautas Kašuba. 1955.](http://www.marisc.lt/img/modules/marsclt/1524123767_99049.jpg)
[\(http://www.marisc.lt/img/modules/marsclt/1524123767_99049.jpg\)](http://www.marisc.lt/img/modules/marsclt/1524123767_99049.jpg)

Slide 9

In the painting Vytautas Ignas depicted the glowing, slightly inclined Jesus Christ in a decorative, stylized and detailed manner. Around his figure there are seven pictures depicting Lithuanian symbols - the sun, a farmhouse with a barn, a shepherd playing a bagpipe, birds, animals, a windmill.



[Europeana / Rūpintojėlis. Vytautas Ignas. 1970. \(https://www.europeana.eu/portal/en/record/2021802/1_923520.html\)](https://www.europeana.eu/portal/en/record/2021802/1_923520.html)

Slide 10



[Rupintojėlis by Dave Matke. Acrylic on wood. 2009. \(https://www.artwanted.com/imageview.cfm?id=902648\)](https://www.artwanted.com/imageview.cfm?id=902648)

Slide 11

Until today on important occasions (such as weddings, baptism, etc.) people get Rūpintojėlis sculptures as a present with an intention and wish that they would be safe and cared for.



[Europeana / Rūpintojėlis. M. K. Čiurlionis National Museum of Art. 1900.](https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000020070881.html?q=rupintoje#dcId=1573143330159&p=1)

[\(https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000020070881.html?q=rupintoje#dcId=1573143330159&p=1\)](https://www.europeana.eu/portal/en/record/2021802/LIMIS_50000020070881.html?q=rupintoje#dcId=1573143330159&p=1)

3. CASE STUDIES: CREATIVE INDUSTRIES

3.1. Hotspots: Rural Inn - 17th century

Scenario: The Swan Inn is a rural inn that is attested in the rural village of Ename, Belgium from early 16th to mid 18th century. It is depicted in detail on a 17th-century map of Ename, that was commissioned by the abbey of Ename. As Ename is a major Flemish heritage project, it has detailed historical and archaeological evidence that helps us to make good virtual 3D reconstructions, that can be linked to outstanding 17th-century iconography and museum objects from Flemish and Dutch museums, that are featured on Europeana. We use the 3D models to make small, interactive stories that not only guide you around but learn you about colourful details of the 17th-century life, that we also see reflected in the paintings, drawings and objects of that time.

Story type: Storytelling tool - hotspots

Intended audience: people interested in history and historical techniques

Addressed need: historical techniques, storytelling

Method: interactivity, exploration

Duration: 10 minutes

Sources: Sketchfab, Visual Dimension

Introduction

Let's visit a rural inn in Flanders and discover the stage of many 17th century paintings, by Flemish artists such as David Teniers and Adriaen Brouwer.



[Sketchfab / 3D representation of a 17th century rural inn by Visual Dimension \(https://sketchfab.com/3d-models/the-swann-inn-of-ename-in-1665-70809dd7e4914a3784ba94d8840d10bf\)](https://sketchfab.com/3d-models/the-swann-inn-of-ename-in-1665-70809dd7e4914a3784ba94d8840d10bf)

Hotspot 1

The Swan Inn

Welcome to Eename, the small village in Flanders where I live. We are in the year 1665. We are at the Swan Inn which was established more than 150 years ago.



[Europeana
\(https://www.europeana.eu/portal/en/record/90402/RP_P_1890_A_15814.html\)](https://www.europeana.eu/portal/en/record/90402/RP_P_1890_A_15814.html)

Hotspot 2

The pub

Come inside and have a beer ...



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1882_A_5924.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1882_A_5924.html)

Hotspot 3

Pass glass

... or maybe you want to buy a round for everybody in the pub!



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_A_3297.html)

(https://www.europeana.eu/portal/en/record/90402/SK_A_3297.html)

Hotspot 4

Pancakes

You're in Flanders, so have a pancake, one of our well known delicacies!



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_O_B_62_104.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_O_B_62_104.html)

Hotspot 5

Fingerfood

They are hot and fresh and so delicious, ...



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1_885_A_9718.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1_885_A_9718.html)

Hotspot 6

Children's chair

... and liked by all adults and children that come to the pub.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_T_1_901_A_4500.html)

(https://www.europeana.eu/portal/en/record/90402/RP_T_1_901_A_4500.html)

Hotspot 7

Smoke and relax

Or enjoy the peacefulness of my new tobacco ...



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1_883_A_6865.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1_883_A_6865.html)

Hotspot 8

The village brewery

... and taste the ale of our local brewery.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1878_A_2818.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1878_A_2818.html)

Hotspot 9

Tally

No money in your purse? Don't worry, we'll put your drink on the tally.



[Rijksmuseum](https://www.rijksmuseum.nl/en/collection/BK-15436) (<https://www.rijksmuseum.nl/en/collection/BK-15436>)

Hotspot 10

Wine glasses

Or do you rather prefer wine?



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1879_A_3474A.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1879_A_3474A.html)

Hotspot 11

Wine cooler

It is ready to be served, cooled by water from the well.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1898_A_20568.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1898_A_20568.html)

Hotspot 12

Soup

If you're hungry, fresh soup is boiling in the kitchen, ...



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_C_200.html)

(https://www.europeana.eu/portal/en/record/90402/SK_C_200.html)

Hotspot 13

Pastries

... and the sparrow meat is tender, ready to make some delicious pastries.



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_A_2962.html)

(https://www.europeana.eu/portal/en/record/90402/SK_A_2962.html)

Hotspot 14

An unsuspected bird trap

Yes, the son of the owners has taken young sparrows ...



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1898_A_20303.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1898_A_20303.html)

Hotspot 15

Sparrow pot

... from the bird pots hanging around his window.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1887_A_11533.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1887_A_11533.html)

Hotspot 16

House of the innkeepers

The owners of the inn are living in this small house ...



[Rijksmuseum](https://www.rijksmuseum.nl/en/collection/RP-P-1890-A-15284) (<https://www.rijksmuseum.nl/en/collection/RP-P-1890-A-15284>)

Hotspot 17

Cow stable

...and have two cows in their stable, for the milk.



Rijksmuseum (<https://www.rijksmuseum.nl/en/collection/SK-C-162>)

Hotspot 18

Skittles

Come on, the day is still long, let's play a game of skittles!



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_A_1763.html)

(https://www.europeana.eu/portal/en/record/90402/SK_A_1763.html)

Hotspot 19

Pergola

After that, I'll buy us a beer and we sit in the shade of the pergola ...



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_OB_61_997.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_OB_61_997.html)

Hotspot 20

Backgammon

... while playing backgammon all afternoon...



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_A_2180.html)

(https://www.europeana.eu/portal/en/record/90402/SK_A_2180.html)

3.2. Timeline: The carillon - a story about telling the time

Scenario: This story is a timeline story about time and how this has resulted in the peculiar combination of a clock and an instrument to play music.

Story type: Storytelling tool - timeline

Intended audience: people interested in history and historical techniques

Addressed need: background information for education on measuring time

Method: interactivity, exploration

Duration: 5 minutes

Sources: Sketchfab, Europeana and Wikipedia

Description

Measuring time and organising daily life always has been a human desire and an economic necessity. We make a journey through time how this has resulted in the carillon, an invention of the Low Countries, that has become Intangible World Heritage in 2014. As an example, we use the carillon of



the abbey of Ennemy in Flanders, that has been excavated and virtually reconstructed.

The origins of time measurement

The water clock was invented by the Egyptians or the Chinese, probably as early as 4000 BC. There were also sundials in ancient Egypt, indicating a day of 12 hours, from sunrise to sunset.

<1500 BC>



Sundials

Greeks and Romans continued to use and improve water clocks and sundials.

<0 AD>



[Sketchfab \(https://sketchfab.com/3d-models/roman-sundial-interamna-lirenas-italy-5fca8e8414984f988656e221acf44e8f \)](https://sketchfab.com/3d-models/roman-sundial-interamna-lirenas-italy-5fca8e8414984f988656e221acf44e8f)

Organising a medieval abbey

For an early medieval abbey community, the day was divided into four parts or “tides” by the five daytime church services, from sunrise to sunset.

<600 AD>



[Sketchfab](https://sketchfab.com/3d-models/kilmalkedar-sundial-greyscale-34f1c93da6304e9287e3c31bb26c085) (<https://sketchfab.com/3d-models/kilmalkedar-sundial-greyscale-34f1c93da6304e9287e3c31bb26c085>)

The Irish and the Roman system

Each tide was divided in two or three hours, resulting in 8 or 12 daytime hours, which is respectively the Irish and the Roman system. There was no time indication for the night.

<650 AD>



[Sketchfab](https://sketchfab.com/3d-models/nendrum-sundial-top-co-down-a84e99b5fcb74e57830ccac8dc5e1c70) (<https://sketchfab.com/3d-models/nendrum-sundial-top-co-down-a84e99b5fcb74e57830ccac8dc5e1c70>)

Benedictine cross with sundial

The Benedictine monks in England and Ireland use a sundial to organise their day from the 7th century onwards, called tide dial. The oldest tide sundial in the UK is preserved on the Bewcastle Cross

<700 AD>



[Sketchfab \(https://sketchfab.com/3d-models/anglo-saxon-cross-shaft-bewcastle-cumbria-uk-b74d4408bc6d49869467190fe0a91e67\)](https://sketchfab.com/3d-models/anglo-saxon-cross-shaft-bewcastle-cumbria-uk-b74d4408bc6d49869467190fe0a91e67)

Christianisation

As Irish monks were instrumental in the Christianisation of the northern part of the West-Europe, the Irish kind of sundials can also be found in for example Germany. Sundials have been spread all over Europe by the Benedictine abbeyes. It was also used on churches, to help the clergy to organise their masses.

<850 AD>



Striking the hour

From the 11th century onwards, the central tower of an abbey, city belfry or village church starts to contain a mechanical clock, indicating the time for the community. Also this invention originated in West-European abbeys and spread quickly throughout their network. Such a clock was only striking the hours, by a mechanism hitting a bell.

<1000 AD>



[Europeana](https://www.europeana.eu/portal/nl/record/2020704/resource_document_rce_beeldbank_837866ec_3f22_11e4_9dc7_3b4bf4a0ed46_5784cf1c_b2de_0673_59e5_05ac37df613a.html)

(https://www.europeana.eu/portal/nl/record/2020704/resource_document_rce_beeldbank_837866ec_3f22_11e4_9dc7_3b4bf4a0ed46_5784cf1c_b2de_0673_59e5_05ac37df613a.html)

Clock dials

In the 14th century, mechanical clocks show the time also on a dial. Clock dials had only one hand (like this one in Tinallinge, Netherlands) because clocks were not so precise yet and needed to be adjusted almost daily. For this purpose, there was a small hole in the south-facing dial which projected an image of the sun on the inside of the tower, where a line indicated when the sun was exactly in the south, at noon.

<1350 AD>



[Europeana](https://www.europeana.eu/portal/nl/record/2020704/resource_document_rce_beeldbank_837866ec_3f22_11e4_9dc7_3b4bf4a0ed46_5784cf1c_b2de_0673_59e5_05ac37df613a.html)

(https://www.europeana.eu/portal/nl/record/2020704/resource_document_rce_beeldbank_837866ec_3f22_11e4_9dc7_3b4bf4a0ed46_5784cf1c_b2de_0673_59e5_05ac37df613a.html)

[f22 11e4 9dc7 3b4bf4a0ed46 2ea0ccc9 3c2d 4da b 1521 4ba80145ebda.html](#))

Mediterranean dials

In South-Europe on the other hand, medieval clocks were used with 24-hour dials, like this clock on the San Marco Square in Venice. This refers more to the original sundial setup.

<1360 AD>



[Europeana](#)

(<https://www.europeana.eu/portal/nl/record/9200369/webclient-DeliveryManager-pid-6334835-custom-att-2-simple-viewer.html>)

Foreplay

The word clock is derived from the medieval Latin word clocca which means bell. At the end of the 14th century, improvements to the mechanical clocks allowed to ring the bell every quarter of an hour to indicate time more precisely. To distinguish between the first quarter, half hour, third quarter and full hour, four small bells provided different chimes (like Big Ben is still doing). The tunes were recorded on a revolving drum, commanded by the clockwork.

<1390 AD>



[Europeana](#)

(<https://www.europeana.eu/portal/nl/record/2020704/resource-document-rce-beeldbank-837866ec-3f22-11e4-9dc7-3b4bf4a0ed46-5f59edf5-ae3a-3dca-ad92-c7fe8791ea69.html>)

Carillon

In 1510 in the town of Oudenaarde, Belgium, there was also a manual way to play these four small bells, as a small instrument, called carillon (derived from the word quadrillon). Bells were cast to play a certain note, but this was only approximate. To turn this early carillon into a real instrument, the bells needed to be in tune, which was impossible to be achieved by casting only.

<1510 AD>



[Europeana](https://www.europeana.eu/portal/nl/record/2058612/object_CHB_071a4e34be0d84cedd9099554b526baa7481bf4b.html)

(https://www.europeana.eu/portal/nl/record/2058612/object_CHB_071a4e34be0d84cedd9099554b526baa7481bf4b.html)

The Hemony brothers

The Hemony brothers developed around 1635 a method to cast and tune a large set of bells (by milling out the inside of the bells), so they were able to make a carillon with a harmonious sound.

<1635 AD>



[Europeana](https://www.europeana.eu/portal/nl/record/2021675/resource_document_museum_klok_en_peel_1275.html)

(https://www.europeana.eu/portal/nl/record/2021675/resource_document_museum_klok_en_peel_1275.html)

The Zutphen carillon

This first harmonious carillon was installed in the Wijnhuistoren in Zutphen, in the Netherlands.

<1640 AD>



[Europeana](https://www.europeana.eu/portal/nl/record/90402/RP_P_OB_60_106.html)

(https://www.europeana.eu/portal/nl/record/90402/RP_P_OB_60_106.html)

Lost in a fire

The first Hemony carillon is unfortunately lost, most of the bells and the clockwork were destroyed by fire in 1920.

<1920 AD>



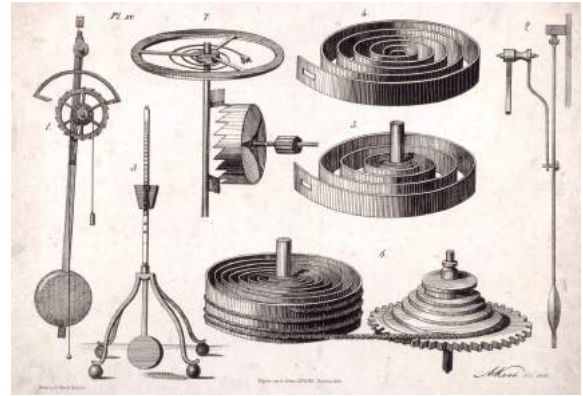
[Europeana](https://www.europeana.eu/portal/nl/record/2021629/memorix_65b4b133_6622_6766_042e_1725e21f5fd6.html)

(https://www.europeana.eu/portal/nl/record/2021629/memorix_65b4b133_6622_6766_042e_1725e21f5fd6.html)

The pendulum clock

Christiaan Huyghens invented in 1656 a better clock mechanism, based on a pendulum, that was more precise and stable. By 1690 and due to this improved time indication, tower clocks were also getting two hands, one for the hours and one for the minutes, like we are used today.

<1656 AD>



[Europeana](https://www.europeana.eu/portal/nl/record/2021657/112342.html)

(<https://www.europeana.eu/portal/nl/record/2021657/112342.html>)

The Ename carillon

As put in evidence in this story, abbeys have played an essential role in the development and practical use of clocks. Hence, this research is crucial in making the virtual reconstruction of the carillon tower, built in 1660 by the abbey of Ename, as the carillon was in the first place the clock for the abbey and village community of Ename, and only in the second place an instrument for playing music compositions.



[Sketchfab / Ename guest quarters and carillon tower](https://sketchfab.com/3d-models/ename-abbey-guest-quarters-and-carillon-tower-1f60850f4ac248b18b6a0c83ed560878)
(<https://sketchfab.com/3d-models/ename-abbey-guest-quarters-and-carillon-tower-1f60850f4ac248b18b6a0c83ed560878>)

Intangible World Heritage

The abbey was destroyed in 1797 and some of its bells have been transferred shortly after to parish churches in France. The abbey has been excavated and studied in the periods 1942-1947 and 1978-2005. This virtual reconstruction combines historical sources, archaeological data, a lot of multidisciplinary knowhow about clocks and carillons, plus some detective work: not only have 10 of the 35 bells of the abbey carillon been traced, but also the keyboard is still preserved in the carillon academy in Mechelen. In 2014, the art of carillon playing was declared Intangible



[Europeana](https://www.europeana.eu/portal/nl/record/2021648/0196_322361.html)

(https://www.europeana.eu/portal/nl/record/2021648/0196_322361.html)

World Heritage. This story celebrates the fifth anniversary of this declaration.

<2014 AD>

3.3. Slideshow: A 17th century bakery

Scenario: This 3D model of a starting bakery in 17th century rural Flanders allows us to tell the story of bread making through the centuries, with a focus on the 17th century.

Story type: Storytelling tool - slideshow

Intended audience: people interested in history and historical techniques, schools, 3D artists, artists, creative studios

Addressed need: understanding of 17th century society, storytelling, game design

Duration: 5 minutes

Sources: Sketchfab, Visual Dimension

Introduction

Bread has always been a major element of human culture, from the time when people start to cultivate the land and growing crops. In the 17th century, bakeries were quite common in cities, but only appearing in the rural areas, where every family was used to bake their own bread.



[Sketchfab \(https://sketchfab.com/3d-models/rural-bakery-17th-century-453ad52b5e24477fb357abd1d5648975\)](https://sketchfab.com/3d-models/rural-bakery-17th-century-453ad52b5e24477fb357abd1d5648975)

Slide 1

Bread has been a major source of food since the start of agriculture. In Roman times, bakeries were common in cities (here the example of Pompeii) and consisted of wheat mills, ovens and a street side shop.



[Europeana \(https://www.europeana.eu/portal/nl/record/90402/RP_F_F01087_AQ.html\)](https://www.europeana.eu/portal/nl/record/90402/RP_F_F01087_AQ.html)

Slide 2

In medieval times, bakeries can be found mostly in abbeys, as not only the monks and servants of the abbey are eating bread – up to one kilogram per person per day – but also the poor are provided with bread on a daily basis.



[Europeana](https://www.europeana.eu/portal/nl/record/9200397/BibliographicResource_3000126275013.html)

(https://www.europeana.eu/portal/nl/record/9200397/BibliographicResource_3000126275013.html)

Slide 3

In medieval cities, bakeries start to appear as most citizens have to focus on their business activities.



[Europeana](https://www.europeana.eu/portal/nl/record/9200122/BibliographicResource_1000056127121.html)

(https://www.europeana.eu/portal/nl/record/9200122/BibliographicResource_1000056127121.html)

Slide 4

Wealthy citizens also organize bread donations for the poor, taking over the role of the abbeys.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/BK_NM_12231_B.html)

(https://www.europeana.eu/portal/nl/record/90402/BK_NM_12231_B.html)

Slide 5

In rural areas however, it takes until the 17th century for bakeries to appear. Bread can be broken (with the typical incisions) or cut (larger loaves of bread). Other typical products in such a bakery are pretzels and muffins.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/BK_NM_12231_B.html)

(https://www.europeana.eu/portal/nl/record/90402/BK_NM_12231_B.html)

[ecord/9200518/ark_12148_btv1b1021_20542.html](https://nla.gov.au/nla:ecord/9200518/ark_12148_btv1b1021_20542.html)

Slide 6

Muffins are used to put juicy food on top, so that they can be eaten without spilling any juice or food.



[Europeana](https://www.europeana.eu/portal/nl/record/2032004/8812.html)

[\(https://www.europeana.eu/portal/nl/record/2032004/8812.html\)](https://www.europeana.eu/portal/nl/record/2032004/8812.html)

Slide 7

A bakery in the city had many other types of bread, for daily meals or festive events.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/SK_A_390.html)

[\(https://www.europeana.eu/portal/nl/record/90402/SK_A_390.html\)](https://www.europeana.eu/portal/nl/record/90402/SK_A_390.html)

Slide 8

The baker was sounding his horn to advertise that a batch of bread was ready, or to announce in the evening that the remaining bread was available at a discounted price.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/SK_A_301.html)

[\(https://www.europeana.eu/portal/nl/record/90402/SK_A_301.html\)](https://www.europeana.eu/portal/nl/record/90402/SK_A_301.html)

Slide 9

As potatoes became a widespread crop only in the 18th century, bread was still the major source of carbs in the 17th century and features on nearly every still life that shows food. Notice the half-peeled lemon that symbolises modesty.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/SK_A_1857.html)

(https://www.europeana.eu/portal/nl/record/90402/SK_A_1857.html)

Slide 10

Being a baker is a hard but rewarding job, serving the local community.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/RP_P_1936_456.html)

(https://www.europeana.eu/portal/nl/record/90402/RP_P_1936_456.html)

Slide 11

Most bakeries are a family business, running the bakery and the shop, and were and still are a hotspot of social life. But bakeries are disappearing from our villages and cities. Will they become heritage in the next 10 years?



[Europeana](https://www.europeana.eu/portal/nl/record/90402/RP_T_1958_20.html)

(https://www.europeana.eu/portal/nl/record/90402/RP_T_1958_20.html)

4. CASE STUDIES: TOURISM

4.1. Hotspots: Hill of Tara

Scenario: The Hill of Tara is a hill and ancient ceremonial and burial site in County Meath, Ireland. According to tradition, it was the inauguration place and seat of the High Kings of Ireland, and it also appears in Irish mythology. Tara consists of numerous monuments and earthworks - from the Neolithic to the Iron Age - including a passage tomb, burial mounds, round enclosures, a standing stone and a ceremonial avenue. The Hill of Tara visitor centre was visited by 166,468 people in 2018.¹ To enrich the offer for the visitors, a number of touchscreens with interactive content could be installed to help the visitors to explore the site up close first before heading on a tour or walk around. The Storytelling tool can be used to create such interactive applications in a visually attractive way.

Story type: Storytelling tool - hotspots

Intended audience: visitors online and onsite

Addressed need: help visitors to see the site and its particular elements 'from above' and understand the layout of the site, to explore the heritage site up close; learn about the Irish Ancient history;

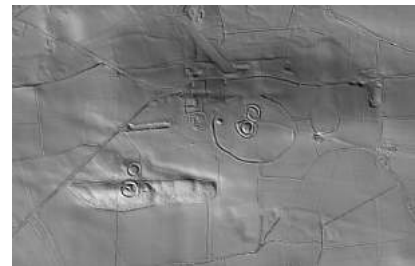
Method: interactivity, exploration

Duration: 10 minutes

Sources: Sketchfab and Europeana; 3D Icons and Discovery Programme²

Introduction

The Hill of Tara is located in the south central part of County Meath, between the towns of Dunshaughlin and Navan. It consists of a limestone ridge, approximately 2km in length, running north-south and rising to 155m above sea level. Its aesthetic value lies in the extensive views that can be seen from its summit over the surrounding countryside which extend from the Mourne Mountains in the north-east to the Dublin/Wicklow mountains in the south. It is part of one of the largest and richest archaeological landscapes in Ireland. The hill is the site of approximately 150 recorded monuments, which span a wide period of usage stretching over five



[Sketchfab | Hill of Tara](https://sketchfab.com/3d-models/hill-of-tara-co-meath-a35bca9af6f745c482d518b362a7cd49)

<https://sketchfab.com/3d-models/hill-of-tara-co-meath-a35bca9af6f745c482d518b362a7cd49>

¹ <https://www.thejournal.ie/opw-sites-visitors-4825474-Sep2019/>

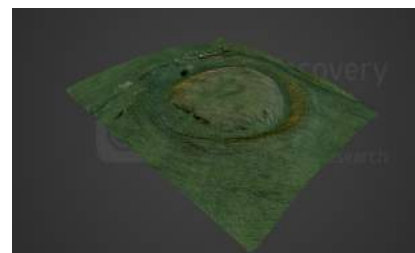
² The descriptions and all visual materials comes from <http://www.3dicons.ie/> and <http://www.discoveryprogramme.ie/research/tara>

thousand years from the Neolithic to the medieval period.

Most of the monuments were used for burial and for religious and communal ceremonies associated with the exceptional kingship of Tara. The surviving monuments include a passage tomb, several barrows, circular and linear earthworks and sacred springs. A fortified church was built on the hill during the late medieval period. The existing Church of Ireland church was erected in 1823. Tara is a place of considerable cultural value and was the setting for many historic events as well as early myths and legends. As the centre of a pre-eminent kingship in Ireland, it has attracted the attention of kings, clerics and historians from the 7th century AD to the present.

Hotspot 1

Ráith Gráinne is named after the legendary princess Gráinne, who fled from Tara and from Fionn mac Cumhaill with her lover Diarmait úa Duibhne. It is a barrow (about 60m in diameter) consisting of a central mound surrounded by a ditch and external bank. In the centre are the remains of what may be another, small barrow. By combining geophysical and topographic data it has been possible to demonstrate that the slight prominence in the north-eastern side is actually the central burial mound of an earlier ring-barrow that was incorporated into Ráith Gráinne. It too encompasses a small barrow into its north-eastern quadrant suggesting that this was an accepted custom at the time.



[Sketchfab | Raith Grainne, Hill of Tara \(Aerial Image\)](https://sketchfab.com/3d-models/raith-grainne-hill-of-tara-aerial-image-73ac383d8eb046eeb35168d49a9e17f5)

<https://sketchfab.com/3d-models/raith-grainne-hill-of-tara-aerial-image-73ac383d8eb046eeb35168d49a9e17f5>

Hotspot 2

Ráith na Rí, the Fort of the Kings, seems to have been given this name in the medieval period because of the royal associations with the monuments enclosed by it. These include Teach Cormaic and the Forradh. The monument is a large ovoid enclosure. Ráith na Rí in medieval descriptions is said to have enclosed three wonders, the Forradh, Teach Cormaic and Múr Tea. The Irish word forradh is likely to mean 'a mound or



[Sketchfab | Raith Na Rig, Hill of Tara \(Aerial Image\)](https://sketchfab.com/3d-models/raith-na-rig-hill-of-tara-aerial-image-73ac383d8eb046eeb35168d49a9e17f5)

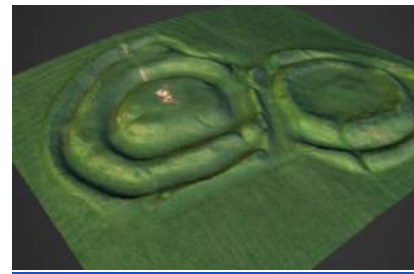
<https://sketchfab.com/3d-models/raith-na-rig-hill-of-tara-aerial-image-73ac383d8eb046eeb35168d49a9e17f5>

platform'. It is possible that the monument functioned as the location for inaugurations of kings of Tara.

[models/raith-na-rig-hill-of-tara-aerial-image-965fc98aeab64116b36474bb97f9259c\)](https://sketchfab.com/3d-models/raith-na-rig-hill-of-tara-aerial-image-965fc98aeab64116b36474bb97f9259c)

Hotspot 3

The Forradh ('Ceremonial Seat') and Teach Cormaic ('Cormac's House') consist of two conjoined earthworks. Teach Cormaic, regarded in the medieval period as being the royal residence of the heroic king of Tara, Cormac mac Airt, may be a ringfort consisting of a circular area (about 70m in diameter) defined by two banks and an intervening ditch.



[Sketchfab | Teach Cormac, Hill of Tara \(Aerial Image\)](https://sketchfab.com/3d-models/teach-cormac-hill-of-tara-aerial-image-e926b08183ff4db69f7956aee648e66e)
(<https://sketchfab.com/3d-models/teach-cormac-hill-of-tara-aerial-image-e926b08183ff4db69f7956aee648e66e>)

Hotspot 4

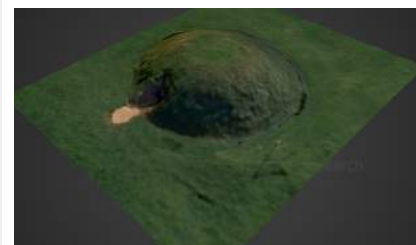
A stone pillar in the centre of the Forradh is said to be the Lia Fáil. Although this identification is unlikely, it is clear from the stone's phallic shape that it is a fertility symbol that may have been associated with an inauguration ceremony. Early literature places the Lia Fáil in a recumbent position near the Mound of the Hostages. The present stone marks the grave of those who fell in the 1798 rebellion and has a small cross and the letters RIP carved into it. It is white granite and may have been quarried from outcrops in the north of Ireland, the nearest source being at Newry, County Down.



[Europeana | Lia Fáil, Tara \(Images\)](https://www.europeana.eu/portal/en/record/2048705/object_HA_1471.html?q=Lia+F%C3%A1il#dclid=1573669277797&p=1)
(https://www.europeana.eu/portal/en/record/2048705/object_HA_1471.html?q=Lia+F%C3%A1il#dclid=1573669277797&p=1)

Hotspot 5

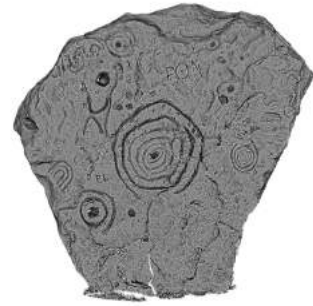
The Mound of the Hostages takes its name from the medieval Irish designation of the monument Duma na nGiall, a name associating the monument with the symbolic exchange of hostages which must have taken place at Tara in the medieval period. It is, however, a passage tomb built around 3000 BC and part of the Boyne Valley culture. The passage is 4m long and was divided by sill-stones into three compartments, the floor of each formed by a large, flat slab. It is orientated roughly east - west with the entrance, which is flanked by two portal stones, facing east. This was a collective burial chamber probably receiving the cremated remains of the dead over many years.



[Sketchfab | Mound of the Hostages, The Hill of Tara](https://sketchfab.com/3d-models/mound-of-the-hostages-the-hill-of-tara-e019378c8ae74b98a7b5ccb2f22d44f8)
(<https://sketchfab.com/3d-models/mound-of-the-hostages-the-hill-of-tara-e019378c8ae74b98a7b5ccb2f22d44f8>)

Hotspot 6

Decorated Orthostat (L2) contained within the Mound of the Hostages passage tomb (Duma na nGiall) on the Hill of Tara, dating to 3000 BC.

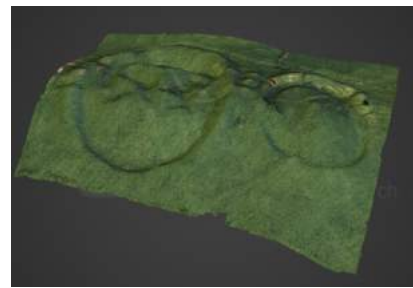


[Europeana | Orthostat, Mound of the Hostages, Tara \(Images\)](https://www.europeana.eu/portal/en/record/2048705/object_HA_113.html?q=mound+hostages#dclid=1573669277797&p=1)

[\(https://www.europeana.eu/portal/en/record/2048705/object_HA_113.html?q=mound+hostages#dclid=1573669277797&p=1\)](https://www.europeana.eu/portal/en/record/2048705/object_HA_113.html?q=mound+hostages#dclid=1573669277797&p=1)

Hotspot 7

The shape of the monuments known as the Cláenfhearta, the 'Sloping Trenches', gave rise to a number of early tales. They were regarded as the remnants of the royal residence which collapsed when the king of Tara, Lugaid mac Con gave a false judgement. A second explanation for the shape of the monument is that it was the burial place of thirty princesses from Leinster slain by the king of Tara in revenge for the actions of the king of Leinster. These two monuments are ring-barrows that have been built on the edge of the steeply sloping western flank of the hill. At over 80m in diameter, the northern site is by far the largest barrow at Tara. The southern site of the Cláenfhearta is about 48m in diameter. There is a small mound on top of the main mound. There are three further mounds tucked in between the northern and southern Cláenfhearta and these too are probably burial monuments.



[Sketchfab | Cloenfhearta, Hill of Tara \(Aerial Image\)](https://sketchfab.com/3d-models/cloenfhearta-hill-of-tara-aerial-image-c08c81f278b84c89aec8854a3a70aa91)

[\(https://sketchfab.com/3d-models/cloenfhearta-hill-of-tara-aerial-image-c08c81f278b84c89aec8854a3a70aa91\)](https://sketchfab.com/3d-models/cloenfhearta-hill-of-tara-aerial-image-c08c81f278b84c89aec8854a3a70aa91)

Hotspot 7

The Tech Míodhchúarta, or Banqueting Hall at Tara so captured the imagination of the medieval learned classes that they composed fanciful descriptions and illustrations of the king's court there. They imagined that the monument consisted of a hall, with seven opposed doorways, at the top of which the king of Tara presided over his court, each member being designated a place according to rank. Its heyday was supposed to have occurred during the reign of the mythical Cormac mac



[Sketchfab | Banquet Hall, Hill of Tara \(Aerial Image\)](https://sketchfab.com/3d-models/banquet-hall-hill-of-tara-aerial-image-c08c81f278b84c89aec8854a3a70aa91)

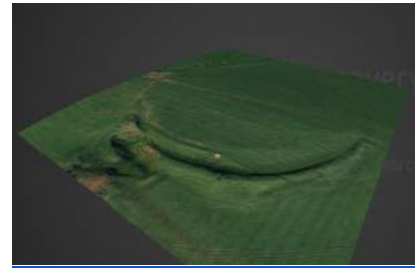
[\(https://sketchfab.com/3d-models/banquet-hall-hill-of-tara-aerial-image-c08c81f278b84c89aec8854a3a70aa91\)](https://sketchfab.com/3d-models/banquet-hall-hill-of-tara-aerial-image-c08c81f278b84c89aec8854a3a70aa91)

Airt, whose court was said to have been surpassed only by that of Solomon, son of David.

[image-614c4975839b40fbacbb8e9d33583c10\)](#)

Hotspot 7

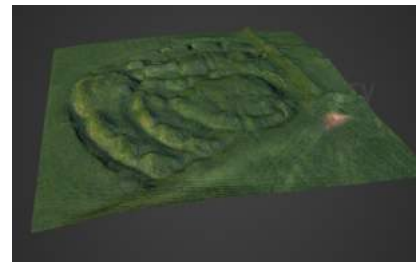
Ráith Laoghaire commemorates in its name the early historic king of Tara, Lóegaire (Mod. Ir. Laoghaire) mac Néill, famous for his reputed clash with Patrick over the Paschal fire. Lóegaire is said to have been buried in the ramparts of Tara, facing his enemies, the Leinstermen. The monument, a circular enclosure about 150m in diameter, is one of the more problematic sites at Tara. The eastern half of the site has been erased by cultivation, but on the West side it is defined by a bank and internal ditch. There are, however, slight traces of an internal bank which, if original, suggest that the monument may have defensive characteristics.



[Sketchfab | Rath Leogaire, Hill of Tara \(https://sketchfab.com/3d-models/rath-leogaire-hill-of-tara-a56b319bd69841a8a7095b8707c218f5\)](#)

Hotspot 9

The Rath of the Synods is named in an 11th-century text to commemorate ecclesiastical synods reputed to have been held at Tara by important Irish saints such as Adomnán, abbot of Iona (died 704) and Brendan. Large parts of the site were destroyed between 1899 and 1902 by the British Israelites whose researchers led them to believe that the Ark of the Covenant had been buried there. Some of the purposes of the site were burial and ceremonial. Direct contact with the Roman world (probably Roman Britain) is also evidenced in the assemblage which includes objects such as a lead seal, a layered glass inset for a ring or brooch and an iron barrel padlock.



[Sketchfab | Raith Na Senad, Hill of Tara \(Aerial Image\) \(https://sketchfab.com/3d-models/raith-na-senad-hill-of-tara-aerial-image-42d38798f8f848df8a794d8c6068ec0e\)](#)

Hotspot 9

Tara is chief among the best known 'royal' sites of Ireland, including Dún Ailinne in Leinster, Crúachain in Connacht and Emain Macha in Ulster. It is at once a landmark and a vantage point. The barrows, mounds, conjoined circular earthworks and buildings, timber henges, linear embankments and sacred springs and marshes at these royal centres together make up prehistoric 'ritual landscapes' that have evolved, in part by accident and in part by design, over many centuries. Hand in hand is the creation of a mythology that is every



[Europeana \(https://www.europeana.eu/portal/en/record/2048705/object_HA_111.html?q=tara+hill#dclid=1573661442106&p=1\)](#)

bit as real and potent as the monuments themselves - nowhere more so than at Tara.	
---	--

4.2. Slides: Dwarf figurines of Wroclaw

Scenario: The city tourism agency is trying to attract more tourists and visitors to the city. Main goal to show the uniqueness of the city and present small figurines (20-30 cm) of dwarfs, which can be found all around the city. The Storytelling tool can be used to present the history and the whole concept behind a sculptures of dwarfs, as well as different examples of charming figurines. The dwarfs nowadays became a symbol of the city and are almost unanimously liked by foreign and Polish tourists, so they can be a great appeal to attract new tourists to the city. Ready material can be presented online on mobile devices.

Story type: Storytelling tool – slideshow.

Intended audience: tourists, potential visitors.

Addressed need: visualise figurines of dwarfs in context; learn about the object's history and nowadays representation; present the uniqueness of the place and arouse the desire to visit the city.

Duration: 12-15 minutes

Sources: Sketchfab and other sources

Introduction

Strolling through the streets of Wroclaw in many places you can find small figurines (20-30 cm) of dwarfs: chefs, shoemakers, librarians, sleeping, riding a motorbike or drinking wine. Some people especially come to Wroclaw to look for them.



[Sketchfab / WrocLover](https://sketchfab.com/3d-models/wroclover-c5dc94144ed84796bfdbef35b7063bac)

<https://sketchfab.com/3d-models/wroclover-c5dc94144ed84796bfdbef35b7063bac>

Slide 1

There are several legends where dwarfs in Wrocław came from. According to the most popular, the first one very malicious dwarf settled in Wrocław and he caused a lot of damage to people. Residents of Wrocław called for help from friendly dwarfs who helped to catch and throw away the pest. From now on, you can walk the streets of Wrocław without fear, and the dwarfs help residents and visitors. As dwarfs have different specialties, you can meet different gnomes in Wrocław.



[Sketchfab / Dwarf Farciarz](https://sketchfab.com/3d-models/farciarz-krasnal-wroclaw-77beff11cfa94b02bb14177a9bc80f25)
(<https://sketchfab.com/3d-models/farciarz-krasnal-wroclaw-77beff11cfa94b02bb14177a9bc80f25>)

Slide 2

They are now one of the symbols of Wrocław.



[Sketchfab / Dwarf Suvenirek](https://sketchfab.com/3d-models/suvenirek-d725c217346b485fa71a0e1f5b4dc4b7)
(<https://sketchfab.com/3d-models/suvenirek-d725c217346b485fa71a0e1f5b4dc4b7>)

Slide 3

However, the genesis of Wrocław's dwarfs also has a more contemporary dimension. In the 80s they became a symbol of anti-communist activities. They were painted on the walls by activists of so-called Orange Alternatives (Pomarańczowa Alternatywa), among others Waldemara "Majora" Fydrycha (first times in 1982).



[Orange Alternative \(Pomarańczowa Alternatywa\)](https://pl.wikipedia.org/wiki/Plik:Orange_Alternatywa_Dwarf_graffiti_on_a_building_wall_in_Wroclaw)
[Dwarf graffiti on a building wall in Wrocław](https://pl.wikipedia.org/wiki/Plik:Orange_Alternatywa_Dwarf_graffiti_on_a_building_wall_in_Wroclaw)
([https://pl.wikipedia.org/wiki/Plik:Orange Alternatywa Dwarf graffiti on a building wall in Wrocław](https://pl.wikipedia.org/wiki/Plik:Orange_Alternatywa_Dwarf_graffiti_on_a_building_wall_in_Wroclaw))

[ative Dwarf Graffiti in Wroc%C5%82aw 2014 P01.jpg\)](#)

Slide 4

Graffiti with gnomes on the walls of Wrocław or on posters announced happenings organized by the movement in this city.



[Polish "Orange Alternative" \("Pomarańczowa Alternatywa", 1987\) poster of happening \(author - Robert Jezierski\)](#)

https://commons.wikimedia.org/wiki/File:Pomarańczowa_alternatywa-dzien_wojska.jpg

Slide 5

The dwarf's first statue was funded by Agora in 2001 as a reminder of the Orange Alternative activities. It depicts the figure of a dwarf standing on a pedestal in the shape of a huge finger - thumb. The dwarf was later named Papa Dwarf.



[Papa Dwarf \(Papa Krasnal\) dwarf from Świdnicka
\(https://pl.wikipedia.org/wiki/Plik:Papa_Krasnal
\(Papa Dwarf\) Wroclaw dwarf 02.JPG\)](https://pl.wikipedia.org/wiki/Plik:Papa_Krasnal_(Papa_Dwarf)_Wroclaw_dwarf_02.JPG)

Slide 6

Some time later, Wrocław city authorities decided that the dwarfs would become part of the city's marketing strategy. The first five, designed by Tomasz Moczek, a graduate of The Academy of Art and Design in Wrocław, were placed in August 2005. These were the Fencer near the University of Wrocław, the Butcher in Stare Jatki arcade, two Sisyphuses on Świdnicka Street and the Odra-Washer-Dwarf, near Piaskowy Bridge.



[Two Sisyphuses \(Syzyfki\)](https://upload.wikimedia.org/wikipedia/commons/6/60/Syzyfki.jpg)

<https://upload.wikimedia.org/wikipedia/commons/6/60/Syzyfki.jpg>

Slide 7

The first "commercial" dwarf was erected in 2007. The number of dwarfs began to increase, and they became a tourist attraction .



Dumplinger (Pieróżnik) dwarf from STP
Restautant on Kuźnicza 10 – the first
"commercial" dwarf

([https://commons.wikimedia.org/wiki/File:Pieroznik_\(Dumplinger\)_Wroclaw_dwarf_01.JPG](https://commons.wikimedia.org/wiki/File:Pieroznik_(Dumplinger)_Wroclaw_dwarf_01.JPG))

Slide 8

Dwarfs promote the city but also individual institutions, famous people, political parties and business enterprises.



Dispensers (Bankomatki) dwarfs from 4th Branch
of Bank Zachodni WBK on Kuźnicza 17-19
([https://pl.wikipedia.org/wiki/Plik:Bankomatki_\(Dispensers\)_Wroclaw_dwarf_05.JPG](https://pl.wikipedia.org/wiki/Plik:Bankomatki_(Dispensers)_Wroclaw_dwarf_05.JPG))

Slide 9

Dwarf firefighters.



Sketchfab / Firemen

Slide 10

Wroclaw zoo dwarf.



[Sketchfab / Zoo dwarf](https://sketchfab.com/3d-models/wrocaw-zoo-krasnal-hipoczysciel-69d465fb8335490ca67bc1564b5bb7d1)
(<https://sketchfab.com/3d-models/wrocaw-zoo-krasnal-hipoczysciel-69d465fb8335490ca67bc1564b5bb7d1>)

Slide 11

Florianek, the first chimney sweeper among the Wroclaw dwarves. The legend says that he makes everyone happy.



[Dwarf Florianek](https://en.wikipedia.org/wiki/Wroc%C5%82aw%27s_dwarfs#/media/File:Florianek.jpg)
(https://en.wikipedia.org/wiki/Wroc%C5%82aw%27s_dwarfs#/media/File:Florianek.jpg)

Slide 12

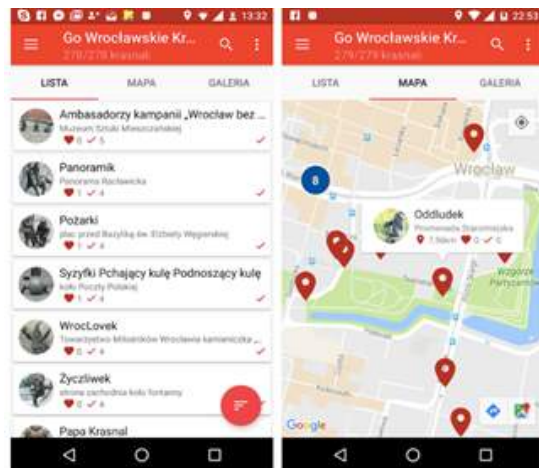
Currently, over 400 monuments of dwarfs can be found in Wrocław.



[Dwarf map of Wrocław
\(http://orfinsklep.pl/en/dwarf-map-of-wroclaw.html\)](http://orfinsklep.pl/en/dwarf-map-of-wroclaw.html)

Slide 13

When you come to Wrocław you can use a special map or application to find more figures of dwarfs.



[Wrocław Dwarves Go: free app
\(https://www.wroclaw.pl/en/wroclaw-dwarves-go-free-app\)](https://www.wroclaw.pl/en/wroclaw-dwarves-go-free-app)

4.3. Timeline: Early Frisian cog

Scenario: The story tells the evolution of the cog, one of the most important medieval ship types and uses 3D visualisations as no early Frisian cog has been excavated yet

Story type: Storytelling tool - timeline

Intended audience: people interested in history and historical techniques

Addressed need: Visualisation and deeper understanding of the frisian cog in the medieval

Method: interactivity, exploration

Duration: 5 minutes

Sources: Sketchfab and Europeana

Introduction

The cog was the popular medieval freight ship for overseas transport. It was developed from a river ship and the Frisians spread its design during the 11th/12th century.



[Sketchfab](https://sketchfab.com/3d-models/early-frisian-cog-98738aa8f4db4e63a195fc1480419d6c) (<https://sketchfab.com/3d-models/early-frisian-cog-98738aa8f4db4e63a195fc1480419d6c>)

11th century

A representation of a cog during the 11th century



[Sketchfab](https://sketchfab.com/3d-models/early-frisian-cog-98738aa8f4db4e63a195fc1480419d6c) (<https://sketchfab.com/3d-models/early-frisian-cog-98738aa8f4db4e63a195fc1480419d6c>)

9th century

The term cog appeared for the first time in written records already in the 9th century. They are probably also depicted on two 9th century coins.



[Europeana](https://www.europeana.eu/portal/en/record/2048087/ProvidedCHO_British_Museum_and_The_Portable_Antiquities_Scheme_NLM_FEA9A8.html?q=cog+coin#dcId=1582623415398&p=1)
([https://www.europeana.eu/portal/en/record/2048087/ProvidedCHO British Museum and The Portable Antiquities Scheme NLM FEA9A8.html?q=cog+coin#dcId=1582623415398&p=1](https://www.europeana.eu/portal/en/record/2048087/ProvidedCHO_British_Museum_and_The_Portable_Antiquities_Scheme_NLM_FEA9A8.html?q=cog+coin#dcId=1582623415398&p=1))

12th Century

A cog is represented on a seal of the town Elblagz from 1242 and similar representations might be found on many North-European town seals (Wismar, Stavoren, Harderwijk, ...)



[Reference](#)

(<https://www.heraldry-wiki.com/heraldrywiki/index.php?title=File:Elblagz1.jpg>)

14th Century

The cogs could have different sizes, between 15 and 25 m in length, 5 to 8 m wide and with a moulded depth of 3-5 m. Most cogs had raised parts that allowed them to defend against attacks. The key to its success lied in the fact that a cog could transport a relatively large amount of cargo with just a small crew.



[Reference](#)

(<https://artsandculture.google.com/asset/miniature-from-the-smithfield-decretals-early-14th-century-british-museum/ogGGqetej5JhNw>)

MINIATURE FROM THE SMITHFIELD DECRETALS,
EARLY 14TH CENTURY, BRITISH LIBRARY

15th Century

The development of Hanseatic commerce and cities and the wealth of the Hanseatic League was built thanks to the trade made in major part with usage of cogs.



[Reference](#)

(<https://www.agefotostock.com/age/en/Stock-Images/Rights-Managed/DAE-11270317/1>)

5. CASE STUDIES: RESEARCH

5.1. Hotspots: A 17th century school

Scenario: In medieval Flanders, schools were private. Most public schools in Flanders only emerged in the 17th century. This story is about how these early public schools looked like during the 17th century and provides several links to iconography and digitised schoolbooks.

Story type: Storytelling tool - hotspots

Intended audience: school children, people interested in history and education, researchers

Addressed need: historical comparison, storytelling

Method: interactivity, exploration

Duration: 10 minutes

Sources: Sketchfab (Visual Dimension bvba) and Europeana

Introduction

This is a local school in the rural village of Ename, Belgium in the year 1665. The school consists of only one room, adjacent to the house of the schoolmaster. In this room, children of all ages, boys and girls, learn how to read, write and calculate.



[Sketchfab](https://sketchfab.com/3d-models/rural-school-17th-century-17c07d41bff34ea7b5b59e4a0eabc7a1) (<https://sketchfab.com/3d-models/rural-school-17th-century-17c07d41bff34ea7b5b59e4a0eabc7a1>)

House of the schoolmaster (1)

The school of Ename was founded in 1629 by the Ename abbey. It was a house for the sexton of the parish church, with the school as an annex, as he was also responsible for the education of the village children. In other words, it was the abbey as owner of the village that organised and financed the school.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_T_1955_225.html)
([https://www.europeana.eu/portal/en/record/90402/RP T
_1955_225.html](https://www.europeana.eu/portal/en/record/90402/RP_T_1955_225.html))



School entrance (2)

From a detailed map made in 1661, we know that the school had a separate entrance and a small playground behind the school.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_T00_1500.html)

(https://www.europeana.eu/portal/en/record/90402/RP_T00_1500.html)



School (3)

The school consisted of one room, sometimes equipped with a fireplace and some furniture, but in many cases the children only had some benches or were sitting on the floor, without any heating.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1885_A_9053.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1885_A_9053.html)



Desk of the schoolmaster (4)

At the end of the room, there was a desk for the schoolmaster, to help children with their tasks one by one.



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_C_174.html)

[\(https://www.europeana.eu/portal/en/record/90402/SK_C_174.html\)](https://www.europeana.eu/portal/en/record/90402/SK_C_174.html)



Satchels (5)

All children had a wooden box to carry their books and belongings. They could use it as a small table for writing if they didn't have furniture.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_OB_30_864X.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_OB_30_864X.html)



Heating (6)

Many schools also didn't have any heating. Hence the children were taking their own brazier (with some burning charcoal in it) to keep warm.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1918_1861.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1918_1861.html)

Educational methods (7)

To punish a child, the schoolmaster was hitting the open hand palm with a wooden whip.



[Europeana](https://www.europeana.eu/portal/en/record/07101/O_3069.html)

(https://www.europeana.eu/portal/en/record/07101/O_3069.html)



The whip (8)

Although this whip (in Dutch: plak) was abolished in 1820, it still is remembered through a lot of Dutch and Flemish proverbs.



[Europeana](https://www.europeana.eu/portal/en/record/90402/BK_KOG_1813.html)

(https://www.europeana.eu/portal/en/record/90402/BK_KOG_1813.html)



Benches and tables (9)

As many schools in the 17th century were local, small initiatives, they sometimes lacked tables. Other schools did have furniture adapted to the children.



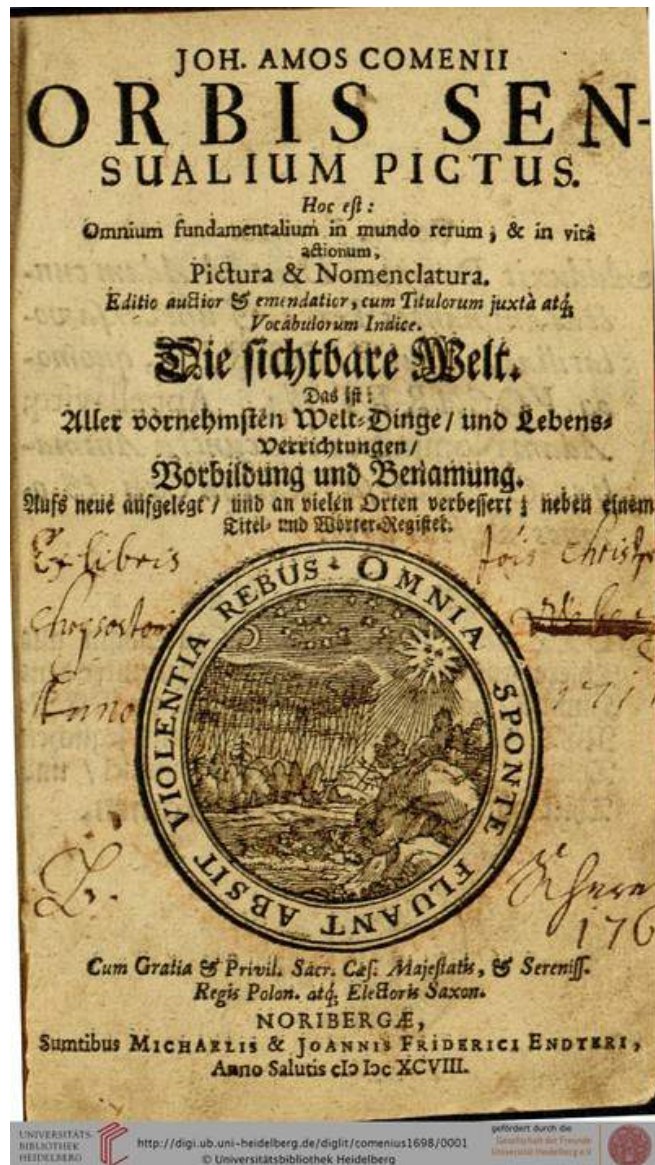
[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1909_143.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1909_143.html)



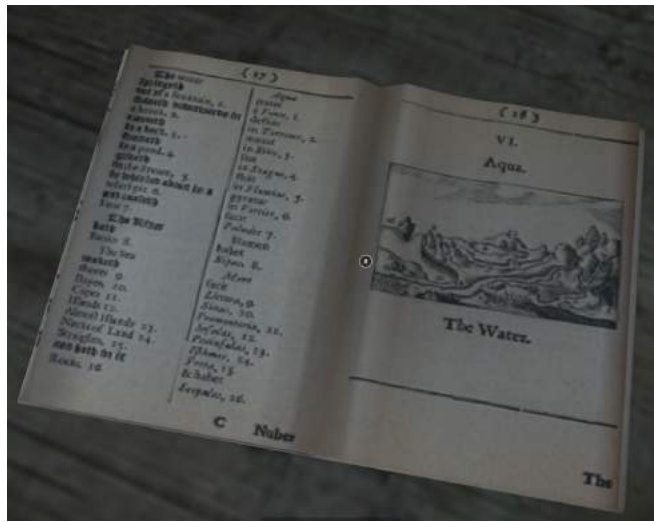
Textbooks (10)

As printed books became a commodity in the 17th century, textbooks for schools also became available for rural schools in several languages. One of the first illustrated schoolbooks was *Orbis Sensualium Pictus*, written in 1658 by Johannes Amos Comenius. He lived in Amsterdam from 1656 until his death in 1670.



[Europeana](http://www.europeana.eu/portal/en/record/07931/diglit-comenius1698.html)

(<http://www.europeana.eu/portal/en/record/07931/diglit-comenius1698.html>)



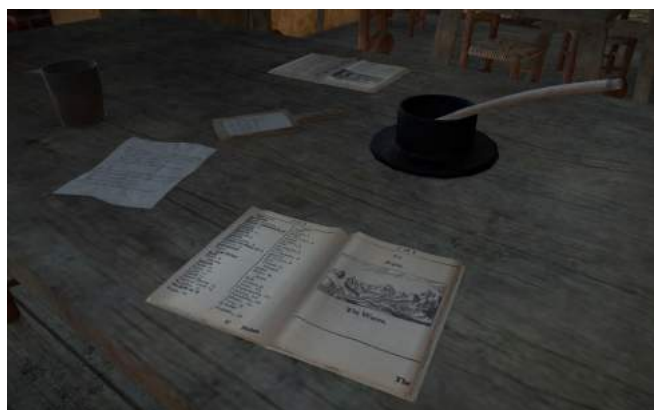
Inkwell (11)

Learning to read and write was one of the major tasks at school. Quill pens were made from moulted flight feathers of a large bird. Inkwells were made of glass, porcelain, brass or pewter.



[Europeana](https://www.europeana.eu/portal/en/record/90402/BK_1980_49_B.html)

(https://www.europeana.eu/portal/en/record/90402/BK_1980_49_B.html)



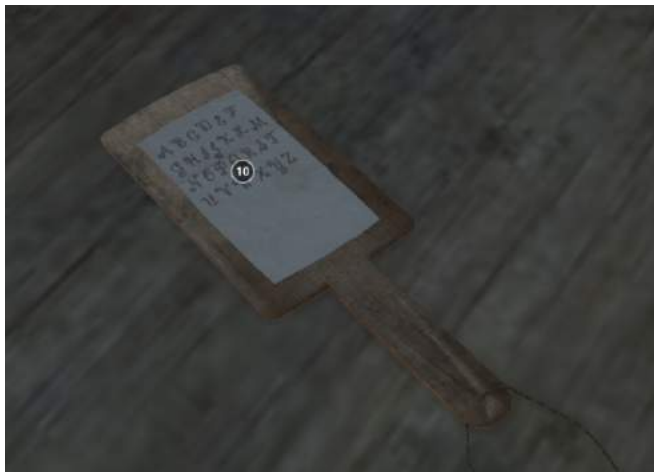
Alphabet (12)

One of the first things to do was learning to write the alphabet. All children had a small tablet with the full alphabet on it.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_1896_A_19368_2888.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_1896_A_19368_2888.html)



Books (13)

A schoolmaster had to pass on the right knowledge, so it was important to have some books at hand. The Ename school depended on a Benedictine abbey, which had a large library and easy access to books.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_OB_44_520.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_OB_44_520.html)



Entrance to the house (14)

This door gives access to the house of the schoolmaster, which is separated from the schoolroom. In most schools however, the schoolroom was the main room of the house, containing the bed of the owners.



[Europeana](https://www.europeana.eu/portal/en/record/90402/RP_P_OB_42_188.html)

(https://www.europeana.eu/portal/en/record/90402/RP_P_OB_42_188.html)



Living room (15)

In this school however, there was a separate living room for the schoolmaster and his family. The bed of the parents was in the living room, close to the fireplace.



[Europeana](https://www.europeana.eu/portal/en/record/90402/SK_A_385.html)

(https://www.europeana.eu/portal/en/record/90402/SK_A_385.html)



5.2. Slides: Glendalough

Scenario: Glendalough, an extensive monastic complex, is located in a glacial valley consisting of two lakes (the Upper and Lower Lakes) which explains the Irish place name Gleann dá Locha 'the valley of the two lakes'. This is an archaeologically and architecturally rich landscape that is matched by a wealth of historical documents. For research purposes, the visual materials on Sketchfab and Europeana can be gathered in one place and discussed further. The Storytelling tool can be used to create such interactive applications in a visually attractive way.

Story type: Storytelling tool - slides

Intended audience: Researchers and students

Addressed need: allow researchers to explore the heritage site up close; learn about the Monastic Ireland; explore and look up close the details of the monuments

Method: interactivity, exploration

Duration: 10 minutes

Sources: Sketchfab and Europeana

Introduction

Glendalough, an extensive monastic complex, is located in a glacial valley consisting of two lakes (the Upper and Lower Lakes) which explains the Irish place name Gleann dá Locha 'the valley of the two lakes'. This is an archaeologically and architecturally rich landscape that is matched by a wealth of historical documents. Evidence for human activity in the valley possibly goes as far back as the Neolithic Period.



[Europeana | Glendalough, Co. Wicklow](https://www.europeana.eu/portal/en/record/9200166/BibliographicResource_3000117225561.html?q=glendalough#dclid=1573648943446&p=1)
(https://www.europeana.eu/portal/en/record/9200166/BibliographicResource_3000117225561.html?q=glendalough#dclid=1573648943446&p=1)

Slide 1

Saint Kevin (died 3 June 618) is an Irish saint, known as the founder and first abbot of Glendalough. The medieval lives of St Kevin portray him as a hermit and a miracle-worker. One of the legends tells a story of a blackbird laying an egg in Kevin's hand when his arms were outstretched in prayer. The saint remained in this position until the baby bird hatched.



[Europeana | Kevin and the blackbird from](#)
[BL Royal 13 B VIII, f. 20](#)

[https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126283716.html?q=kevin#dclid=1573651839901&p=3\)](https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126283716.html?q=kevin#dclid=1573651839901&p=3)

Slide 2

St Kevin's Church is the only stone-roofed building to survive at Glendalough and it incorporates a croft between the barrel-vaulted ceiling and the roof. It was probably built in the eleventh or twelfth century and was originally a small rectangular single-celled church with a miniature round tower belfry.

The photograph here is from 1939.



[Europeana | Glendalough
\(https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000209804.html?q=glendalough#dclid=1573651839901&p=1\)](https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000209804.html?q=glendalough#dclid=1573651839901&p=1)

Slide 3

A later chancel and sacristy were added to the east. The roof of the oratory is steeply pitched and corbelled while the outside of the roof stones are roughly dressed to the slope. The only access to the belfry was through the croft which in turn was accessed through a small square hole in the vault. The belfry was at one stage likened to a chimney and so the church became known as St Kevin's Kitchen.

The existence of a wooden floor is indicated by beam-holes on all the walls at the springing of the arch. This room was lit by a small square-headed window. The foundations of the chancel are visible but the stone-roofed sacristy at the NE angle of the church still stands.



[Sketchfab | St. Kevin's church
\(https://sketchfab.com/3d-models/st-kevins-church-a7e6dbe90825444dab938e2cfb50a932\)](https://sketchfab.com/3d-models/st-kevins-church-a7e6dbe90825444dab938e2cfb50a932)

Slide 4

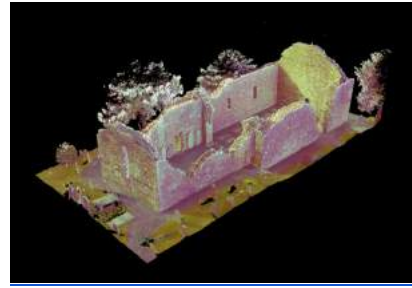
The next building nearby is the cathedral. It is the largest and most imposing structure at Glendalough and is situated in the SE division of the main enclosure on a small plateau overlooking the junction of the Glendasan and Glenealo rivers. It was reputedly dedicated to SS Peter and Paul and ceased to function as a cathedral when the diocese of Glendalough was united with Dublin in 1214.



[Europeana | Glendalough
\(https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162450.html?q=glendalough#dclid=1573651839901&p=1\)](https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162450.html?q=glendalough#dclid=1573651839901&p=1)

Slide 5

The cathedral consists of a multi-period nave and chancel church with a sacristy. The earliest phase is evident in the cyclopean masonry in the nave walls while later rebuilding probably took place around AD1100. The decorated chancel arch, sacristy and north doorway were added towards the end of the twelfth century. The nave has antae (projecting stones) at both E and W. The W door has inclined jambs, simple flat architraves and a round relieving arch above the lintel. There are five cross-slabs placed against the inner N wall of the chancel, one of which may commemorate Muirchertach Ua Cathaláin, king of Clann Fogartaig, slain at the battle of Móin Mór in AD1151.



[Sketchfab | Cathedral, Glendalough
\(https://sketchfab.com/3d-models/cathedral-glendalough-fdd6ebe915104bf2838650c7f789a2cb\)](https://sketchfab.com/3d-models/cathedral-glendalough-fdd6ebe915104bf2838650c7f789a2cb)

Slide 6

The Round Tower is to the NW of the cathedral on slightly higher ground within the main graveyard with its round-headed granite doorway facing the cathedral.



[Europeana | Glendalough
\(https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162448.html?q=glendalough#dclid=1573651839901&p=1\)](https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162448.html?q=glendalough#dclid=1573651839901&p=1)

Slide 7

Built on two offsets, the tower had five floors above the entrance carried on beams set into beam-holes. There are four trabeate windows at various levels and a further four at the cardinal points, just below the reconstructed conical cap. A rectangular channel runs right through the thickness of the wall just below the doorway. Round towers are a typical feature of early medieval Irish monasteries and are likely to have been

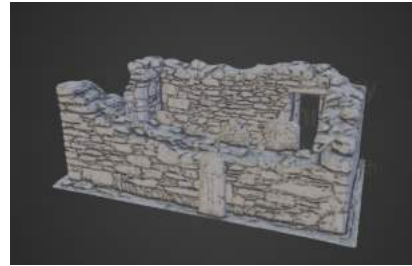


[Sketchfab | Round Tower, Glendalough
\(https://sketchfab.com/3d-models/round-tower-glendalough-340b7ec09c314fe4a8346df632428010\)](https://sketchfab.com/3d-models/round-tower-glendalough-340b7ec09c314fe4a8346df632428010)

built mainly between the eleventh and thirteenth centuries AD. They symbolized a monastery's power and were probably used as bell-towers.

Slide 8

The Priests' House is situated within the main graveyard to the SW of the cathedral. A small rectangular building possibly of twelfth-century date, it has been subjected to considerable reconstruction. The function of this building is uncertain. It may have been a reliquary church. It became known as the 'Priest's House' as priests of the parish were buried there in the 18th century.



[Sketchfab | Priest's house
\(https://sketchfab.com/3d-models/priests-house-99fa2f7d5c5a41e892210fc847558587\)](https://sketchfab.com/3d-models/priests-house-99fa2f7d5c5a41e892210fc847558587)

Slide 9

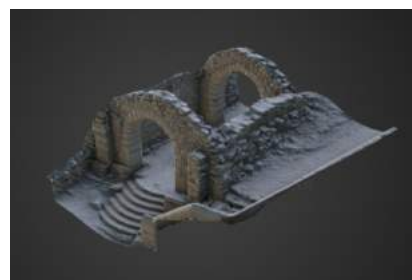
There is a Romanesque arched recess in the exterior of the E wall and a door in the S wall features a fragmentary tympanum with three figures holding a bell, a staff and a book.



[Europeana | Glendalough
\(https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162466.html?q=glendalough#dclid=1573661246322&p=1\)](https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162466.html?q=glendalough#dclid=1573661246322&p=1)

Slide 10

The remains of a two-storied gateway are the only such building to survive in Ireland. It consists of a square building with two round granite arches and antae in the north and south walls. Some of the paving of the causeway through the gatehouse is still intact. A second floor is indicated by the presence of corbels in the interior. A possible section of the enclosure wall adjoins the NE corner. A slab on the W wall is incised with a Latin cross probably marking the entrance to the innermost part of the monastic city.



[Sketchfab | Glendalough Getaway
\(https://sketchfab.com/3d-models/glendalough-gateway-aaa876c39f1a4628bf12948a1ae5fdbf\)](https://sketchfab.com/3d-models/glendalough-gateway-aaa876c39f1a4628bf12948a1ae5fdbf)

Slide 11

The Market Cross is now housed in the Visitor Centre. It was reassembled from fragments found on the site and it may have originally stood in open ground opposite the west doorway of the cathedral.



[Europeana | Market Cross, Glendalough \(https://www.europeana.eu/portal/en/record/2048705/object_HA_211.html?q=market+cross#dcId=1573660506537&p=1\)](https://www.europeana.eu/portal/en/record/2048705/object_HA_211.html?q=market+cross#dcId=1573660506537&p=1)

Slide 12

The cross bears a figure of the crowned Christ wearing a knee-length tunic. Beneath is the figure of an ecclesiastic and at the bottom two further figures. The ornamentation resembles that found on metalwork parallels, including the twelfth-century Cross of Cong, and it is possible that it was inspired by the miraculous 'Speaking Cross', one of the medieval treasures of Christ Church Cathedral, Dublin.



[Sketchfab | Market Cross, Glendalough \(https://sketchfab.com/3d-models/market-cross-glendalough-765a74f2d2e147c7afeb30ac3f6f76ab\)](https://sketchfab.com/3d-models/market-cross-glendalough-765a74f2d2e147c7afeb30ac3f6f76ab)

Slide 13

Reefert high cross was originally located at Reefert's Church at Glendalough, now located in the Visitor Centre. Possibly dates to the 9th or 10th century, with rebated edges.



[Sketchfab | Reefert high cross \(https://sketchfab.com/3d-models/reefert-high-cross-504cf79fbe9c4295baea16beaefe5772\)](https://sketchfab.com/3d-models/reefert-high-cross-504cf79fbe9c4295baea16beaefe5772)

Slide 14

Another cross from the site, the Recumbent ringed cross slab was originally located at the Lower Lake site of Glendalough, now on display at the Visitor Centre.



[Sketchfab | Ringed Cross Slab](https://sketchfab.com/3d-models/ringed-cross-slab-066435f4318d413a9dc60be4d508506b)
(<https://sketchfab.com/3d-models/ringed-cross-slab-066435f4318d413a9dc60be4d508506b>)

Slide 15

Glendalough is one of the most important medieval ecclesiastical landscapes in Ireland and since the nineteenth century one of Ireland's premier tourist attractions. The site was visited by 732,824 people in 2018! It is a truly spectacular heritage site, but also a beautiful nature spot by the river - enjoyed today as it was back in around c. 1850 - c.1880 when this photograph was taken.



[Europeana | Rivier en een brug met drie mensen erbij in Glendalough](https://www.europeana.eu/portal/en/record/90402/RP_F_F05095.html?q=glendalough#dclid=1573648943446&p=1)
(https://www.europeana.eu/portal/en/record/90402/RP_F_F05095.html?q=glendalough#dclid=1573648943446&p=1)

5.3. Napoleon and the Battle of Waterloo

Scenario: The battle of Waterloo on Sunday June 18, 1815 has shaped West-Europe in a decisive way. The French army under the command of Napoleon Bonaparte was defeated, ending the First French Empire.

Story type: Storytelling tool - timeline

Intended audience: history lovers, schools, historians

Addressed need: Visualising and deepening the understanding of an important historical event

Duration: 15 min

Sources: Europeana, Sketchfab

Introduction

After throwing a coup in 1799, general Napoleon Bonaparte became emperor in 1804. He conquered major parts of Europe but failed in 1812 to take Russia. He was exiled to the island of Elba in 1814 but escaped after 9 months and assembled a new army, which was finally defeated at the battle of Waterloo, 100 days after his escape.



[Sketchfab \(https://sketchfab.com/3d-models/bronze-statue-of-napoleon-in-cherbourg-363e92268ff04a6ba8322332004bdaab\)](https://sketchfab.com/3d-models/bronze-statue-of-napoleon-in-cherbourg-363e92268ff04a6ba8322332004bdaab)

The emperor is exiled

After failing to capture Russia, Emperor Napoleon Bonaparte abdicated power in 1814 and was exiled to the island of Elba by Allied forces.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/SK_C_1120.html)

(https://www.europeana.eu/portal/nl/record/90402/SK_C_1120.html)

Return from exile

He stayed there only nine months before escaping with an army of 1000 men. This ornate box contains the remains of a wreath that was sent from Elba by Bonaparte to intimate the season he might escape.



[Europeana](https://www.europeana.eu/portal/nl/record/9200579/kzenanjb.html)

(<https://www.europeana.eu/portal/nl/record/9200579/kzenanjb.html>)

Battle of Ligny

When Napoleon returned to France, the other European countries raised a large army to end his rule. Napoleon had no other choice than quickly attacking his opponents separately, before they could join into one large army. On June 16, he defeated a part of the Prussian army and forced the Allied forces of Wellington to withdraw. It was his last victory. On June 17, there was torrential rain, which severely hampered movement and had a considerable effect the next day, when the battle of Waterloo was fought.



[Europeana](https://www.europeana.eu/portal/nl/record/9200387/BibliographicResource_3000117246549.html)

https://www.europeana.eu/portal/nl/record/9200387/BibliographicResource_3000117246549.html

Duke of Wellington

Arthur Wellesley, First Duke of Wellington, was leading the Anglo-Dutch-German army. He was known for his defensive style of warfare, resulting in several victories against numerically superior forces while minimising his own losses.



[Europeana](https://www.europeana.eu/portal/nl/record/9200267/BibliographicResource_3000059120727.html)

https://www.europeana.eu/portal/nl/record/9200267/BibliographicResource_3000059120727.html

Battle overview

Wellington had positioned its army on and behind an east-west ridge on the north-bound road to Brussels. It had three main strongholds: the Hougomont farm, the La Haye Sainte farm and the Mont Saint-Jean farm, sitting on top of the ridge.



[Europeana](https://www.europeana.eu/portal/nl/record/90402/RP_P_AO_17_115.html)

https://www.europeana.eu/portal/nl/record/90402/RP_P_AO_17_115.html

Hougoumont farm

The Battle of Waterloo commenced with a diversionary attack on the Hougoumont farm by a division of French soldiers, supported by cannon fire.



[Europeana](https://www.europeana.eu/portal/nl/recor)

(<https://www.europeana.eu/portal/nl/recor>
[d/9200229/BibliographicResource_3000135](https://www.europeana.eu/portal/nl/recor)
[602983.html](https://www.europeana.eu/portal/nl/recor))

La Haye Sainte

The major French attack focused on the walled farmhouse La Haye Sainte, that was only defended by 400 British and German troops, to break through the Allied centre. The farm was only captured in the early evening because their ammunition ran out, too late as Prussian troops came to the rescue for the Allied troops.



[Europeana](https://www.europeana.eu/portal/nl/recor)

(<https://www.europeana.eu/portal/nl/recor>
[d/9200387/BibliographicResource_3000117](https://www.europeana.eu/portal/nl/recor)
[271145.html](https://www.europeana.eu/portal/nl/recor))

The Allied army

In the afternoon, the duke of Wellington received the message that the Prussian army was arriving at the battlefield. Prince Willem II, the Dutch commander and heir to the throne, has been wounded by that time (in the left foreground).



[Europeana](https://www.europeana.eu/portal/nl/recor)

(<https://www.europeana.eu/portal/nl/recor>
[d/90402/SK_A_1115.html](https://www.europeana.eu/portal/nl/recor))

Mont St. Jean

Here the army of the Duke of Wellington withstood repeated attacks by the French throughout the afternoon of the 18th, aided by the progressively arriving Prussians. The desperate final attack of the French Guard was narrowly beaten back. With the Prussians breaking through on the French right flank, Wellington's army counter-attacked in the centre, and the French army was routed.

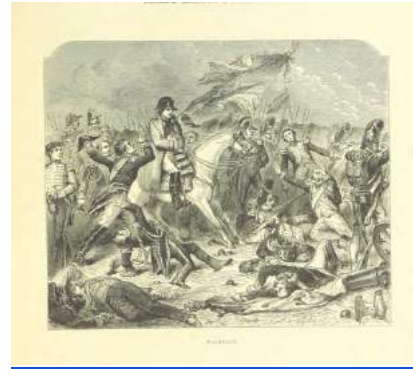


[Europeana](https://www.europeana.eu/portal/nl/recor)

(<https://www.europeana.eu/portal/nl/recor>
[d/90402/RP_P_OB_87_212.html](https://www.europeana.eu/portal/nl/recor))

The final attack

Napoleon himself supervised the initial deployment of the Middle and Old Guard elite troops. But they were stopped by Dutch and German troops while Prussian troops were attacking from the side.



[Europeana](#)

(https://www.europeana.eu/portal/nl/record/9200387/BibliographicResource_3000117284553.html)

Surrender

The fleeing French troops were pursued as far as Genappe. There, Napoleon's abandoned carriage was captured, containing many valuable objects, such as diamonds and these pistols. The remaining French army was enclosed at the Belle Alliance farm and retreated. Napoleon fled to Paris but surrendered on July 15 while trying to escape to North America. Napoleon died in exile on the island of Saint Helena in 1821.



[Europeana](#)

(https://www.europeana.eu/portal/nl/record/90402/NG_NM_11222.html)

French artillery

The French artillery used 250 guns at the Battle of Waterloo, part of them 12 pound Gribeauval guns.







[Sketchfab](https://sketchfab.com/3d-models/french-cannon-12-pounder-198a73fb230b4b1c8f3259f6f46bf155) (<https://sketchfab.com/3d-models/french-cannon-12-pounder-198a73fb230b4b1c8f3259f6f46bf155>)

French flintlock pistol

The French cavalry was using this flintlock pistol, model "An IX"



	<p>Sketchfab (https://sketchfab.com/3d-models/pistol-an-ix-54bead7554034300b6ee78b06cf3f5b4)</p>
<p>French sabre</p> <p>The French infantry used the Briquet sabre, model "An XI"</p>	 <p>Sketchfab (https://sketchfab.com/3d-models/sabres-francais-dinfanterie-de-marine-xi-0992b7a3c30c4c879015d15320776abf)</p>
<p>British sabre</p> <p>British infantry officers were using a sabre with a blade made in Solingen, Germany.</p>	 <p>Sketchfab (https://sketchfab.com/3d-models/british-infantry-officers-sabre-solingen-blade-c492946a19784b9daf2f444a2b627825)</p>
<p>Return of an old soldier</p> <p>Napoleon had used conscription to fill the ranks of the French army throughout his rule, but he did not conscript men for the 1815 campaign. His troops were mainly veterans with considerable experience and a fierce devotion to their Emperor.</p>	 <p>Europeana (https://www.europeana.eu/portal/nl/record/90402/RP_T_1929_22.html)</p>
<p>Commemorating the battle</p> <p>The battlefield was visited from the first day after the battle. Waterloo is commemorated in many ways, for example through monuments on the battlefield that were erected from 1820 onwards. But the most spectacular is the onsite re-enactment that takes place every year.</p>	

	Europeana (https://www.europeana.eu/portal/nl/record/90402/RP_P_OB_87_229.html)
<p>The Lion of Waterloo</p> <p>The Lion's Mound is a large conical artificial hill, ordered by the Dutch King Willem I, on the place where his son Willem II was hit in the shoulder by a musket ball. Contrary to popular belief, the lion is not made from melted down brass from French cannons but consists of 9 iron pieces that were assembled on site.</p>	 <p>Sketchfab (https://sketchfab.com/3d-models/lion-de-waterloo-cc4a9a6e9028492f853e53611c294c09)</p>

6. CASE STUDIES: CULTURAL HERITAGE INSTITUTIONS

6.1. Hotspots: Irish High Crosses

Scenario: High Crosses are the most iconic and artistically significant stone monuments of medieval Ireland surviving across old monastic sites. For a cultural heritage institution, they can be a challenging subject to exhibit due. In 2010 the Irish High Crosses Exhibition at the National Museum of Ireland brought together casts of 6 plaster High Crosses along with a selection of Irish early Christian treasures. It was a temporary exhibition and ended in 2011. Despite its great success, there has not been any other major exhibition of the Irish High Crosses since. At the same time, the advance in 3D technologies in the past decade made it possible to create digital 3D models of many of the Irish High Crosses, for example through the 3D-ICONS EU project (<http://www.3dicons.ie/>) or the Discovery Programme (<http://www.discoveryprogramme.ie/>). Furthermore, the digitisation of European collections allowed for hundreds of relevant Irish High Crosses materials to be accessible online, for example through Europeana (https://www.europeana.eu/portal/en/search?view=grid&q=high+cross&per_page=96). Such abundance of digital resources can be used to exhibit the Irish High Crosses online and through the use of digital devices, enrich a physical exhibition in the future. The Storytelling tool can be used to do that in an easy and visually attractive way, for example by exploring each cross and its decorative motifs in detail.

Story type: Storytelling tool - hotspots

Intended audience: museum visitors online and onsite

Addressed need: allow users to explore objects that would not be possible to exhibit *in situ*; learn about the Irish High Crosses; explore and look up close the details of the monuments

Method: interactivity, exploration

Duration: 15 minutes

Sources: Sketchfab and Europeana

Introduction

High Crosses are the most iconic and artistically significant stone monuments of medieval Ireland surviving in clusters in many ecclesiastical settlements of the period such as at Clonmacnoise, Durrow or Ahenny and singly at other sites throughout the country. Their normal configuration consists of four elements: the base, the shaft, the head and the capstone.



[Sketchfab | Cross of the Scriptures, Clonmacnoise](https://sketchfab.com/3d-models/cross-of-the-scriptures-clonmacnoise-e58c309514fb4899b5d98a6ae93d0928)
(<https://sketchfab.com/3d-models/cross-of-the-scriptures-clonmacnoise-e58c309514fb4899b5d98a6ae93d0928>)

Hotspot 1

This example is the Cross of the Scriptures at Clonmacnoise. It is one of the finest and well-preserved High Crosses remaining today. It is 4 metres high.



[Europeana | Clonmacnoise](https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162606.html?q=Clonmacnoise)
(https://www.europeana.eu/portal/en/record/91622/raa_kmb_16001000162606.html?q=Clonmacnoise)

Hotspot 2

The crosses were highly decorated with ornaments and patterns such as interlace, fretwork and spirals.



Hotspot 3

Such decorative carvings echo many motifs that are also evident on early medieval insular manuscripts and metalwork, like in this example of the Waterford Kite Brooch.



[Sketchfab | Waterford Kite Brooch
\(https://sketchfab.com/3d-models/waterford-kite-brooch-338ed399ca42407cb82adf8cf30addba\)](https://sketchfab.com/3d-models/waterford-kite-brooch-338ed399ca42407cb82adf8cf30addba)

Hotspot 4

The crosses are divided into panels with either figurative or abstract decorative carvings. This panel for example, depicts an ecclesiastic Abbot Colman and Flann Sinna, king of Ireland. At the bottom of the shaft is an inscription that has now become almost impossible to see: OR DO COLMAN DORROCROSSA AR RIG FL.ND, A prayer for Colman who had the cross erected on King Flann.



Hotspot 5

This panel depicts the Christ on the way to the cross.



Hotspot 6

The centre of the cross head features the crucifixion of Jesus. The figure on the left is identified as Stephaton who offers Jesus vinegar on a pole and on the right, it's Longinus who stabs Jesus with a lance. The figures above Jesus' head could be an angel who symbolizes God's presence.



Hotspot 7

A similar scene can be found in many other examples of early medieval art across Europe, such as manuscripts.



Europeana | The Crucifixion from BL Eg 2781, f. 161v

https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126265546.html?q=crucifixion#dclid=1573368240271&p=1

Hotspot 8

On each arm of the cross a figure kneels, holding an object. The objects are identified as symbols of the Sun or Ocean on the left or north and the Moon or Earth on the south or right.



Hotspot 9

This scene represents Jesus in the tomb surrounded by two soldiers. On the right side, we can see two Marys and an angel.



Hotspot 10




The other side of the head of the cross represents the Last Judgement. Jesus stands in the middle of the scene, with a rod over his right shoulder and a cross over the left one.



Hotspot 11

Typically the Last Judgement shows Christ enthroned rather than standing, which makes the iconography of the Cross quite unique.



	<p>Europeana Postcard of the Portal of Amiens Cathedral - The Last Judgement (https://www.europeana.eu/portal/en/record/2020601/https_1914_1918_europeana_eu_contributions_18172_attachments_206982.html?q=last+judgment#dcId=1573368240271&p=1)</p>
<p>Hotspot 12</p> <p>The Cross of the Scriptures also has a number of carvings which still pose problems of interpretation. No satisfactory explanation has ever been found, for this curious panel with a large man seated on top of a smaller figure into whose eye he pokes a stick with a bird on top of it.</p>	
<p>Hotspot 13</p> <p>The capstone of a cross is often carved in the shape of a house with a sloping roof, like here.</p>	
<p>Hotspot 14</p> <p>It is thought that such house-shaped capstones may represent reliquaries.</p>	 <p>Europeana Reliquary decorated with Christ, saints and angels (https://www.europeana.eu/portal/en/record/90402/BK_17206.html?q=reliquary#dcId=1573368240271&p=2)</p>

6.2. Slides: The 17th century pass glass

Scenario: A museum is organising an online exhibition to put their objects in context. One of the objects in its collection is a 17th century pass, which is difficult to engage the visitors. The glass is enclosed in a display with numerous examples of European glass objects and is

accompanied with a short label with description, origin, etc. The curators would like to put it in the spotlight to help visitors understand the object in the context of 17th century society and material culture. The Storytelling tool can be used to help with that - the story can appear on the museum's website as an addition to the exhibition, and in situ - on a touchscreen / tablet provided next to the object.

Story type: Storytelling tool - slides

Intended audience: museum visitors online and onsite

Addressed need: visualise intangible heritage and put a museum object in context; learn about the object's function in daily life and its representation in art; learn about society and material culture in the 17th century Netherlands

Duration: 15 minutes

Sources: Sketchfab and Europeana

Introduction

The pass glass (German term passglas) is a type of glass produced in the 16th and 17th centuries, mainly in the Netherlands, Germany and Scandinavia.



[Sketchfab | Passglass - first half 17th century](https://sketchfab.com/3d-models/passglass-first-half-17th-century-e29f4ce884c94479a4e5fe7df23a48fd)
(<https://sketchfab.com/3d-models/passglass-first-half-17th-century-e29f4ce884c94479a4e5fe7df23a48fd>)

Slide 1

It is a long cylindrical glass with markings - passes (lines/rings) made out of glass.






[Europeana | Pasglas](https://www.europeana.eu/portal/en/record/90402/BK_1960_191.html?q=pasglas#dclid=1572023479285&p=1)
(https://www.europeana.eu/portal/en/record/90402/BK_1960_191.html?q=pasglas#dclid=1572023479285&p=1)

Slide 2

Sometimes the markings were made out of coloured glass.



	<p>Europeana Onbekend (https://www.europeana.eu/portal/en/record/2021621/gla_col1_dat89003_GLA001006033.html?q=pasglas#dcId=1572023479285&p=1) </p>
<p>Slide 3</p> <p>... but the quality of the pass glass was usually low and often contained air bubbles. Zoom in, can you see it?</p>	 <p>Europeana Passglas (https://www.europeana.eu/portal/en/record/90402/BK_NM_705.html?q=pasglas#dcId=1572023479285&p=1) </p>
<p>Slide 4</p> <p>The rings on the glass, in addition to being decorative, may have had the function of making the glass easier to hold with greasy fingers. People were not using forks yet!</p>	 <p>Sketchfab Landelijke herberg De Swane - 17de eeuw (https://sketchfab.com/3d-models/landelijke-herberg-de-swane-17de-eeuw-8597916e5e244dcf8ac202326a5495ed)</p>
<p>Slide 5</p> <p>The pass glass was commonly used to drink beer. Beer was a common and safe drink as surface water could have been polluted, causing dangerous infections. Even children were drinking beer.</p>	 <p>Sketchfab Pass glass - 2nd half 17th century (https://sketchfab.com/3d-models/pass-glass-2nd-half-17th-century-102f0b69974143148850a4a3b53845da) </p>

Slide 6

Pass glass was used in drinking games during the 17th century. Each person took his/her turn to drink down to the next ring in one go – not easy if you were already tipsy. Those who did not manage to reach the ring had to keep on going until they succeeded.



[Europeana | The Merry Drinkers](https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_807.html#dclid=1560364392116&p=5)
(https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_807.html#dclid=1560364392116&p=5)

Slide 7

This drinking game was a common part of social life in the 17th century.



[Europeana | Interior of a Peasant Hut](https://www.europeana.eu/portal/en/record/90402/SK_A_3297.html?q=interior#dclid=1572023479285&p=4)
(https://www.europeana.eu/portal/en/record/90402/SK_A_3297.html?q=interior#dclid=1572023479285&p=4)

Slide 8

In the scenes depicting inns and taverns in the 17th century Netherlands you will often find the pass glass accompanied by merry villagers and peasants. The Haarlem artist Van Ostade specialised in such scenes.



[Europeana | Peasants in an Interior](https://www.europeana.eu/portal/en/record/90402/SK_C_200.html?q=peasants#dclid=1572023479285&p=1)
(https://www.europeana.eu/portal/en/record/90402/SK_C_200.html?q=peasants#dclid=1572023479285&p=1)

Slide 9

This type of peasant painting was very popular with respectable citizens, who were amused by the clumsy behaviour of these coarse characters.



[Europeana | Peasants at an Inn](https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_128.html#dcid=1560364392116&p=18)
(https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_128.html#dcid=1560364392116&p=18)

Slide 10

Such paintings often included men lighting their clay pipes and musicians with violins and fiddles, as well as dogs and cats.



[Europeana | Drinking Bout in an Inn](http://www.europeana.eu/portal/en/record/2064116/Museu_ProvidedCHO_Nationalmuseum_Sweden_23607.html?q=drinking+#dcid=1572023479285&p=4)
(http://www.europeana.eu/portal/en/record/2064116/Museu_ProvidedCHO_Nationalmuseum_Sweden_23607.html?q=drinking+#dcid=1572023479285&p=4)

Slide 11

Here you can see a dog and a cat fighting in the foreground!



[Europeana | Peasants Dancing in a Barn](https://www.europeana.eu/portal/en/record/90402/SK_A_2505.html?q=peasants#dcid=1572023479285&p=3)
(https://www.europeana.eu/portal/en/record/90402/SK_A_2505.html?q=peasants#dcid=1572023479285&p=3)

Slide 12

As more beer was consumed, the tavern would get more messy...



[Europeana](#) | [Painting](#)

https://www.europeana.eu/portal/en/record/2064105/Museu_ProvidedCHO_Hallwylska_museet_13270.html?q=interior#dclid=1572023479285&p=9

Slide 13

On another occasion a pass glass would be simply used to have a drink with a friend and discuss daily matters.



[Europeana](#) | [In a Tavern](#)

https://www.europeana.eu/portal/en/record/2021012/app_si_C_1265.html?q=tavern#dclid=1572023479285&p=1

Slide 14

A quiet evening with neighbours, reading, singing and playing a violin would also be a common setting to raise a pass glass or two.



[Europeana](#) | [Violoospeleer en een zingende man en vrouw; Het concert](#)

https://www.europeana.eu/portal/en/record/90402/RP_P_OB_12_709.html?q=Adriaen+van+Ostade#dclid=1572023479285&p=5

Slide 15

So as an intimate evening with a loved one!



[Europeana | Oud paar; Rustica Simplicitas \(https://www.europeana.eu/portal/en/record/90402/RP_P_1906_3593.html?q=Adriaen+van+Ostade#dcId=1572023479285&p=7\)](https://www.europeana.eu/portal/en/record/90402/RP_P_1906_3593.html?q=Adriaen+van+Ostade#dcId=1572023479285&p=7)

Slide 16

A pass glass was certainly an important item in taverns and inns, as well as some households. In this still life in a stable all kinds of household objects can be found: a copper kettle, a jug with straw, baskets, earthenware pots and dishes, a cabbage, a bread with a knife and a jug on a sheet on a chopping block and a pass glass with a napkin on a barrel.



[Europeana | Still life in a stable \(https://www.europeana.eu/portal/en/record/90402/SK_A_2790.html?q=+stilleven#dcId=1560352549909&p=5\)](https://www.europeana.eu/portal/en/record/90402/SK_A_2790.html?q=+stilleven#dcId=1560352549909&p=5)

Slide 17

Not everyone could afford glass though. Still life paintings depicting luxurious items from the 17th century are a great reminder of that. Here a pass glass is surrounded by a porcelain dish, oysters and other objects that bear witness to Dutch taste in the 17th century. The pepper in A hallmark in the form of the arms of Amsterdam is stamped on the lid of the jug, alluding to the city's key role as a centre of trade.





[Europeana | Still Life with a Beer Glass and Porcelain Dish with Pepper \(https://www.europeana.eu/portal/en/record/90402/SK_A_2362.html?q=beer#dcId=1560352549909&p=3\)](https://www.europeana.eu/portal/en/record/90402/SK_A_2362.html?q=beer#dcId=1560352549909&p=3)

Slide 18

Here the glass pass is placed on a white cloth next to a tin dish with a crab, a Chinese plate, a half-peeled lemon, a rummer with white wine, a silver cup, a plate with nuts and a plate with a sandwich. At the front left you can see a rolled paper with pepper, an expensive product that not everyone could afford.



[Europeana | Still life \(https://www.europeana.eu/portal/en/record/90402/SK_A_2362.html?q=beer#dcId=1560352549909&p=3\)](https://www.europeana.eu/portal/en/record/90402/SK_A_2362.html?q=beer#dcId=1560352549909&p=3)

	d/90402/SK_C_611.html?q=+stilleven#dcId=1560352549909&p=9)
<p>Slide 19</p> <p>Similar combinations of objects can be found on many still life paintings from that time. This example depicts a nautilus cup. The body of this cup is made from the shell of a marine mollusc, the nautilus and would be considered a luxurious item back then. This still life type allowed the wealthy to show off their valuables and wealth that can often be associated with the discovery of the New World.</p>	 <p>Europeana Still Life with Nautilus Cup (https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_936.html?q=still+life#dcId=1560352549909&p=80)</p>
<p>Slide 20</p> <p>Dutch still life paintings often represented delicacies and wealth, as well as hidden allegorical messages, such as vanitas. The vanitas still life paintings would include symbols such as musical instruments, wine and books to remind us explicitly of the vanity of worldly pleasures and goods.</p>	 <p>Europeana Still life with Passglas (https://www.europeana.eu/portal/en/record/2021672/resource_document_mauritshuis_533.html#dcId=1560364392116&p=30)</p>

6.3. Timeline: 10000 years of cats in art

Scenario: A cultural heritage institution is planning to celebrate the International Cat Day to appeal to all cat and art lovers, as well as social media audiences who share videos, pictures and memes with cats. In order to make it visually attractive and informative at the same time, the curators came up with a catchy title: '10000 years of cats in art' for a small online

exhibition. The Storytelling tool can be used to help with that - the timeline can present a selection of cats in art using available resources from Europeana and Sketchfab.

Story type: Storytelling tool - timeline

Intended audience: museum visitors online

Addressed need: create an attractive online exhibition to share via social media channels; raise awareness about the institution by sharing popular content among social media users; learn about different representations of cats in art history across 10000 years.

Duration: 10 minutes

Sources: Sketchfab and Europeana

Introduction

Did you know about an engraving of cats made over 10000 years ago? Would medieval monks illustrating manuscripts add pictures of cats next to gospels? Have you ever seen a cat having a dance lesson? How many famous cats can you fit on one wall? To find out more, explore this mini online exhibition '10000 years of cats in art'.



[Europeana | Cat playing a rebec from BL Harley 6563, f. 40](https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126284168.html?q=cat#dclid=1573432922736&p=7)
(https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126284168.html?q=cat#dclid=1573432922736&p=7)

8000 B.C.

Deep in the Messak Settafet is a site that has intrigued researchers for decades: the image known as 'Fighting Cats'. This iconic engraving shows two confronted, long-tailed figures standing on their hindquarters, with legs and arms partially outstretched against each other, as if fighting. This area is home to some of the oldest engravings in the Sahara desert (possibly as much as 10,000 years old) and some of the most well-known depictions in Saharan rock art.



[Sketchfab | Fighting Cats Rock Art, Libya](https://sketchfab.com/3d-models/fighting-cats-rock-art-libya-87697b078db84fc8995e94b0e98c3688)
(<https://sketchfab.com/3d-models/fighting-cats-rock-art-libya-87697b078db84fc8995e94b0e98c3688>)

664-30 B.C.

This metal figure of a cat is from 664–30 B.C.! It represents Bastet, who was a powerful goddess of Lower Egypt, one who was protective and could bring about great prosperity. Cat statuettes were among some of the most common zoomorphic dedications of



the Late and Ptolemaic Periods. Small statuettes would have been dedicated as offerings to temples or deposited in catacombs alongside cat mummies, as at the extensive catacombs at Bubastis and Saqqara. Sometimes larger hollow examples held a cat mummy inside.

[Sketchfab | Cat, 664–30 BC, Metropolitan Museum of Art, NYC](#)
(<https://sketchfab.com/3d-models/cat-66430-bc-metropolitan-museum-of-art-nyc-363e35ce64c04b21b8e1b30158d5f472>)

1310-1320

Cats made into many medieval manuscripts! This one here, shows a wild cat jumping mid-air towards a dragon-grotesque.



[Europeana | Wild cat from BL Royal 2 B VII, f. 188](#)

(https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126262846.html?q=cat#dcId=1573432922736&p=7)

1320-1330

... while they did not chase the dragons, they played instruments! This manuscript shows a cat playing a rebec, a bowed stringed instrument of the Medieval era and the early Renaissance.



[Europeana | Cat playing a rebec from BL Harley 6563, f. 40](#)




(https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126284168.html?q=cat#dcId=1573432922736&p=7)

1320-1330

... or played with mice! This marginal illustration shows a cat in a tower, throwing stones down at attacking mice. It is hard to tell if it's a play or defence!



[Europeana | Cat in a tower from BL Harley 6563, f. 72](#)

	<p>(https://www.europeana.eu/portal/en/record/9200397/BibliographicResource_3000126268815.html?q=cat#dclid=1573432922736&p=7)</p>
<p>1401-1500</p> <p>This is one of four known badges representing a cat with a mouse in its mouth, standing on an inscribed scroll. They all have a variation on the inscription here: 'YISIMUS'. The inscription has been suggested to mean 'Behold the Mouse' but its exact significance is unknown.</p>	 <p>Sketchfab Cat and Mouse Badge (https://sketchfab.com/3d-models/cat-and-mouse-badge-e2bfff8ff2b490ab8926e037d828cd0)</p>
<p>1620-50</p> <p>It is estimated that the Dutch made over 800 million Delft tiles during a period of 200 years! Many of them were plain white or simply decorated, but many showed landscapes, buildings, flowers, animals and people and eventually became the photos and story tellers of the past centuries. This one is with a cat. Is it a lion?</p>	 <p>Europeana Animal tile (https://www.europeana.eu/portal/en/record/2021609/objecten_17698.html?q=kat#dclid=1573432922736&p=5)</p>
<p>1660-79</p> <p>This is an illustration for the fable "The cat and the mice" by Aesop that tells the story of a house full of mice, and the cat who hunts them. A group of mice and rats is presenting a cat on a pedestal with a petition and in the background a cat chases mice and rats in front of an altar in a chapel.</p>	 <p>Europeana Etching by W. Hollar for a fable by Aesop.(https://www.europeana.eu/portal/en/record/9200579/e72e77qy.html?q=cat#dclid=1573432922736&p=4)</p>

1660-79

These children are up to mischief: they are teaching a cat to dance to the music of a shawm, a 17th-century wind instrument. While they are clearly enjoying themselves, the cat screeches in protest, joined by a barking dog. The old man at the window angrily rebukes the children: should they not be learning something rather than giving dancing lessons to a cat?



[Europeana | Children Teaching a Cat to Dance, Known as 'The Dancing Lesson'](https://www.europeana.eu/portal/en/record/90402/SK_A_718.html?q=cat#dcId=1573432922736&p=7)
(https://www.europeana.eu/portal/en/record/90402/SK_A_718.html?q=cat#dcId=1573432922736&p=7)

1763-39

Thomas Gainsborough was one of the most celebrated English portraitists of the 18th century. Cats and dogs also belonged to his repertoire, because his sitters frequently wished to be portrayed with their favourite pets. These studies are exceptionally true-to-life and show the same cat in various positions: comfortably curled up, dozing and washing itself.



[Europeana | Six studies of a cat](https://www.europeana.eu/portal/en/record/90402/RP_T_1952_114.html?q=cat#dcId=1573432922736&p=7)
(https://www.europeana.eu/portal/en/record/90402/RP_T_1952_114.html?q=cat#dcId=1573432922736&p=7)

1844

Not many artists specialized in cat portraits, but there were exceptions. Henriëtte Ronner-Knip, a Dutch-Belgian artist in the Romantic style is best known for her animal paintings, especially cats.



[Europeana | Cat with Kittens](https://www.europeana.eu/portal/en/record/90402/SK_C_163.html?q=kat#dcId=1573432922736&p=7)
(https://www.europeana.eu/portal/en/record/90402/SK_C_163.html?q=kat#dcId=1573432922736&p=7)

1857

This Ukiyo-e print by famous Japanese artist Utagawa Hiroshige shows a cat sitting on a wall where the sliding panels have been opened, watching the festival procession in the rice paddies nearby, with a view of Mount Fuji in the distance.



[Europeana | Asakusa Rice Fields and Torinomachi Festival](#)

https://www.europeana.eu/portal/en/record/2048429/item_XAWZS2MD35F5JY2J5ICNO3GS26ZUDG7X.html?q=katze#dclid=1573432922736&p=1

1868-69

Édouard Manet was a French modernist painter. He was one of the first 19th-century artists to paint modern life and he was also a cat lover! Many of his letters had small sketches of cats.



https://www.europeana.eu/portal/en/record/2021012/app_si_C_III_B_I_285.html?q=cat#dclid=1573432922736&p=6

1896

This is one of the most famous cat posters! The iconic Le Chat Noir poster (1896) was created by French Art Nouveau painter Théophile Steinlen (1859-1923) advertising a coming soon tour of the Le Chat Noir's troupe of cabaret entertainers.



[Sketchfab | Le Chat Noir Chibi 2.5D](#)
<https://sketchfab.com/3d-models/le-chat-noir-chibi-25d-38f7b41feb264204bddac45b2e191cc2>

1925-39

Louis Wain (1860 – 1939) was an English artist best known for his drawings, which consistently featured anthropomorphized large-eyed cats and kittens, like this example here.



[Europeana | A cat in "gothic" style.
Gouache by Louis Wain, 1925/1939.
\(https://www.europeana.eu/portal/en/record/9200579/nww85e9p.html?q=cat#dclid=1573432922736&p=3\)](https://www.europeana.eu/portal/en/record/9200579/nww85e9p.html?q=cat#dclid=1573432922736&p=3)

1978

This funny illustration comes from a children's book 'The cat washes the Omnibus' by Peter Hacks and Gertrud Zucker, published in 1978.



[Europeana | Die Katze wäscht den
Omnibus
\(https://www.europeana.eu/portal/en/record/2021657/96960.html?q=katze#dclid=1573432922736&p=1\)](https://www.europeana.eu/portal/en/record/2021657/96960.html?q=katze#dclid=1573432922736&p=1)

2016

The last and most recent example is a graffiti art from Nantes in France. It depicts the famous fictional cats, how many can you recognize? Happy cat spotting!



[Sketchfab | Famous cats, Nantes
\(https://sketchfab.com/3d-models/famous-cats-nantes-a244f784b8fe4bf69878161b1d559499\)](https://sketchfab.com/3d-models/famous-cats-nantes-a244f784b8fe4bf69878161b1d559499)

7. SUMMARY

This document shows how for a wide range of cultural heritage subjects, storytelling can be devised, based upon the rich and vast pools of Europeana and Sketchfab resources. For the sake of clarity and make this long document easily readable, a common structure is adopted that presents to the reader the following;

- Story scenario
- Story type (based on the three available templates of Share3D storytelling tool)
- Intended audience (target audience of Share3D)
- Addressed need
- Duration (of the story)
- Sources (Sketchfab, Europeana and others)