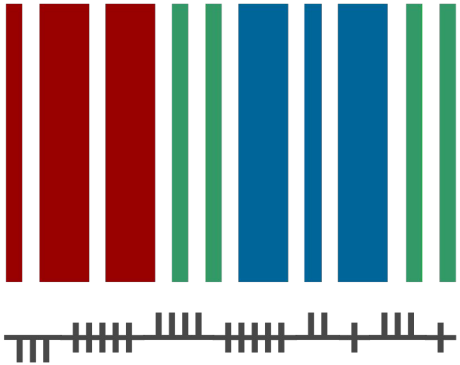
Og(h)am in Open Science Community Hubs and the Citizen Sciences - Wikidata



Florian Thiery /w S.C. Schmidt, M. Trognitz, T. Homburg

UK-Ireland DH Association | Annual Event 2024
University College Cork (UCC) / 04. - 05. June 2024
Session 3A - Talk 3A.III

CC BY

Archaeology and Wikidata

Wikimedia commons: CC 0

ID	Name	Breite	Länge
001	Korinth	37.91	22.87
002	Pergamon	39.13	27.18
...	...	...	...

Münze

ID	Name	Fundort-ID	Metall
0023	Commodus aus Korinth	001	Bronze
0024	Münze aus Korinth	001	Bronze
...	...	...	...

dokumentiert

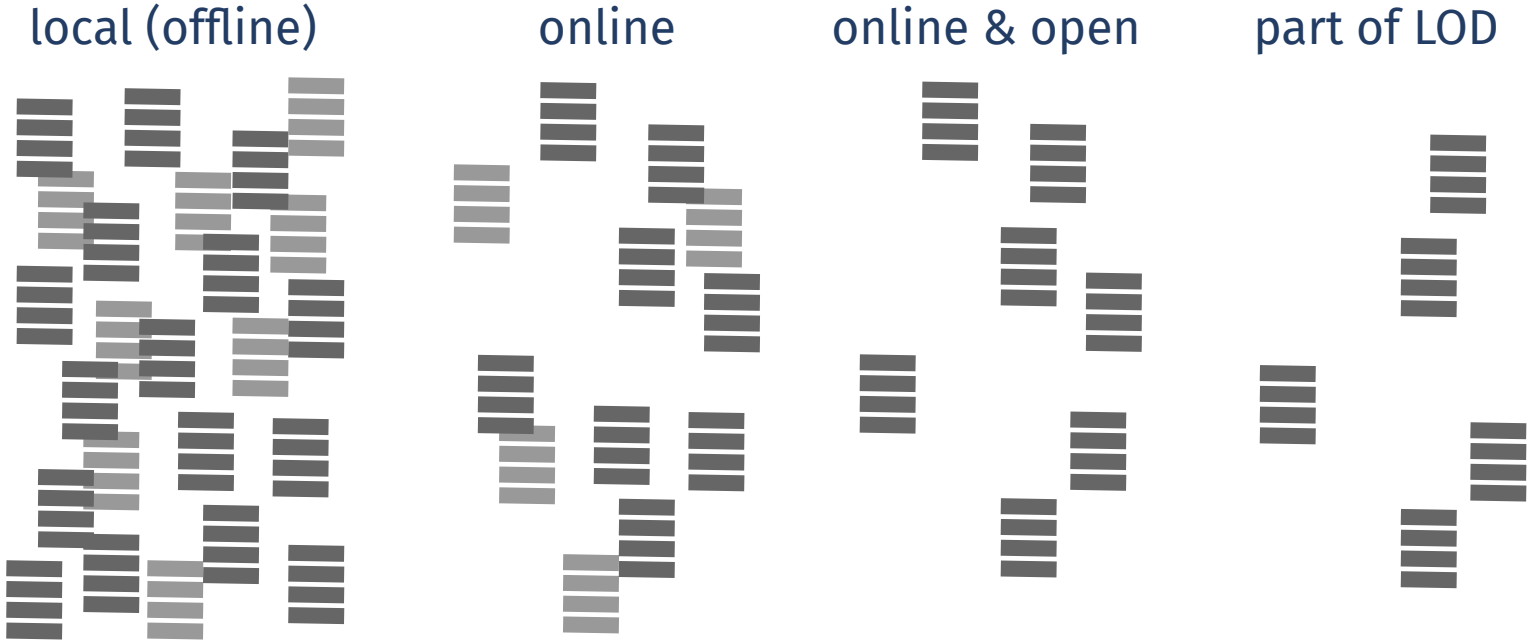
Münze-ID	Foto-ID
0023	0049
0023	0050
0024	0051
...	...

Foto

ID	Name
0049	Fundfoto - Avers
0050	Fundfoto - Revers
0051	Fundfoto

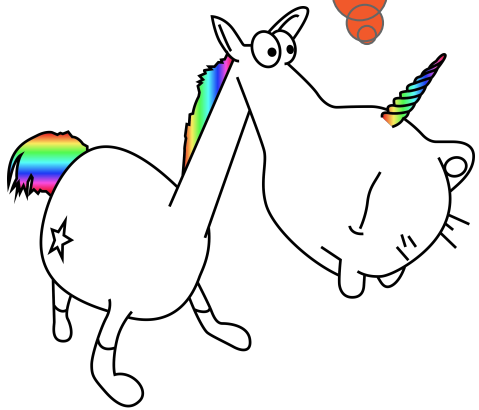
Martina Trognitz for IANUS, CC-BY SA

Databases play a central role in archaeological research



Not many databases are online. Few of them are openly available and accessible. Even less are part of the Linked Open Data Cloud.

I want to compare all greek amphoras dated between 500 and 400 BCE



MET (63.11.6) CC_0

MET (SF67441b) CC_0

part of LOD

online & open

online

local (offline)

Comparative analysis of records across multiple datasets is difficult

I could use...

WIKIDATA

wikidata.org

Do you know Wikidata?

Wikidata - A SPARQL(ing) Unicorn?

What is Wikidata?

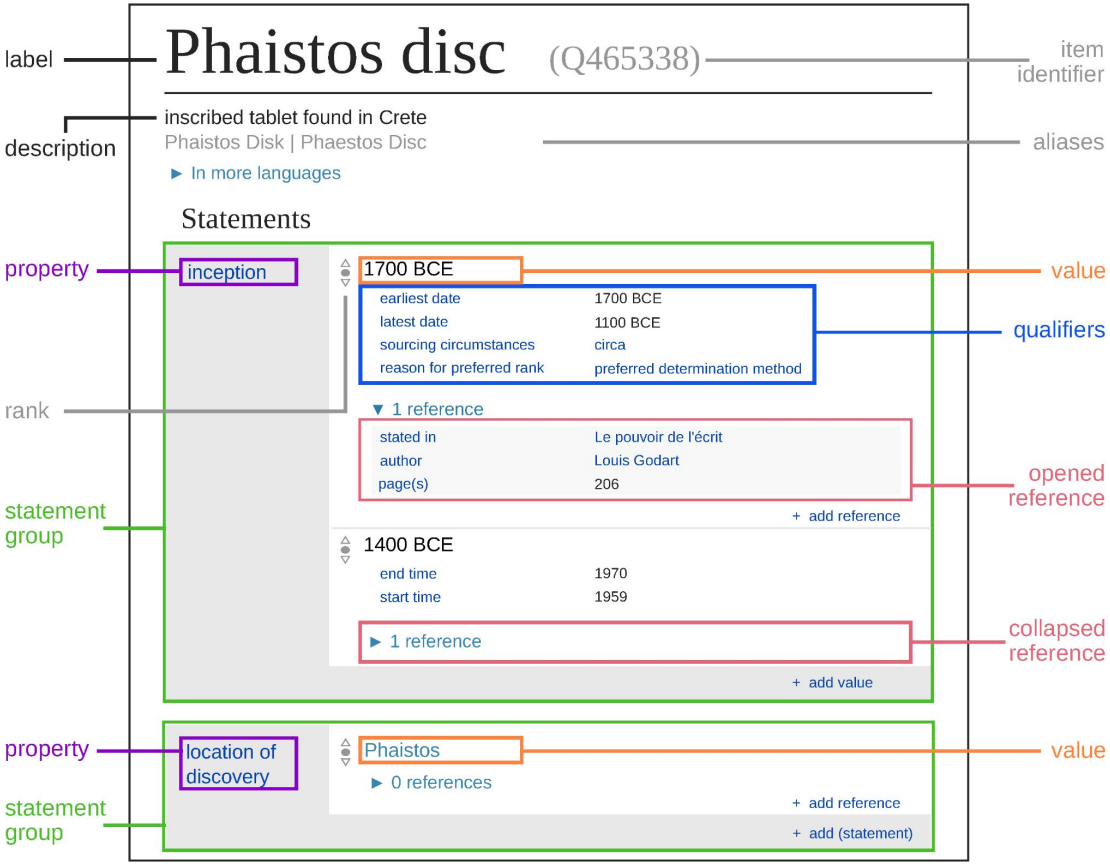
- A free and open knowledge base
  → everybody can add and edit
- Central storage for structured data of **Wikimedia** projects (Wikipedia, Wikivoyage, Wiktionary, Wikisource etc.)

Data in Wikidata is:

- Available under a free license (CC 0)
- Multilingual
- Accessible to humans and machines (GUI & API & SPARQL)
- Exported using standard formats (JSON, RDF, XML)
- Interlinked to other open data sets on the linked data web

Wikidata's Data Model

- **Items**
  - Label
  - Description
  - Alias
  - Identifier
- **Statements**
  - Property
  - Value
  - Qualifier
  - Reference

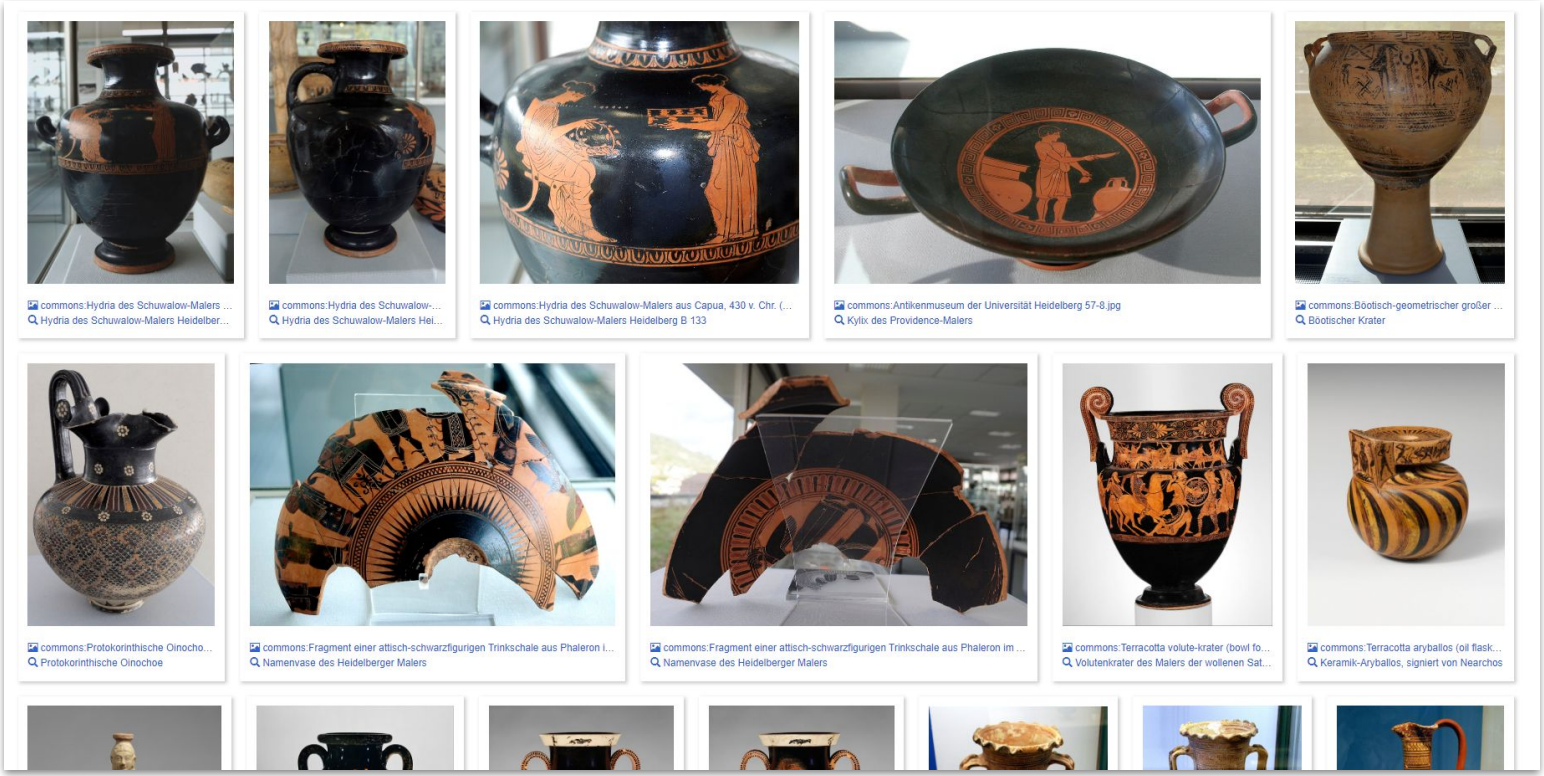


Mtrognitz, CC0, via Wikimedia Commons

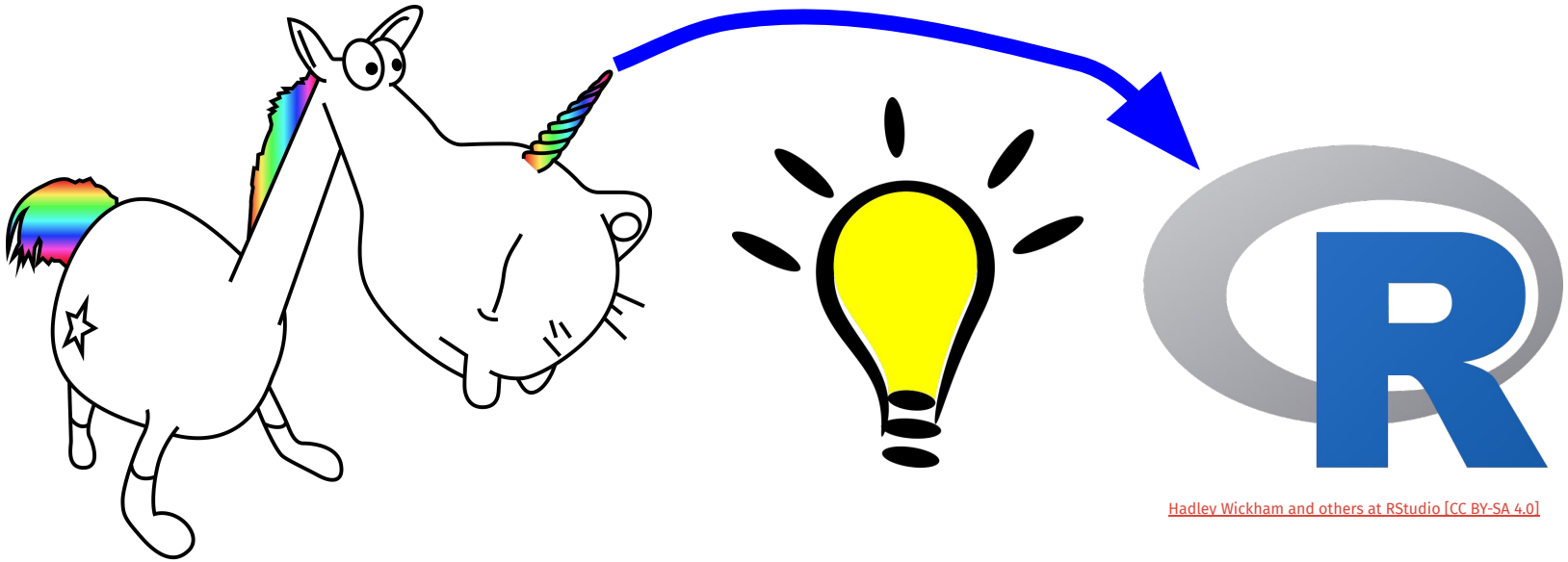
Use Wikidata SPARQL Query Service

w.wiki/8Xh

Which amphoras with images are in Wikidata?



AMPHORAS WITH IMAGES AS IMAGE-MAP



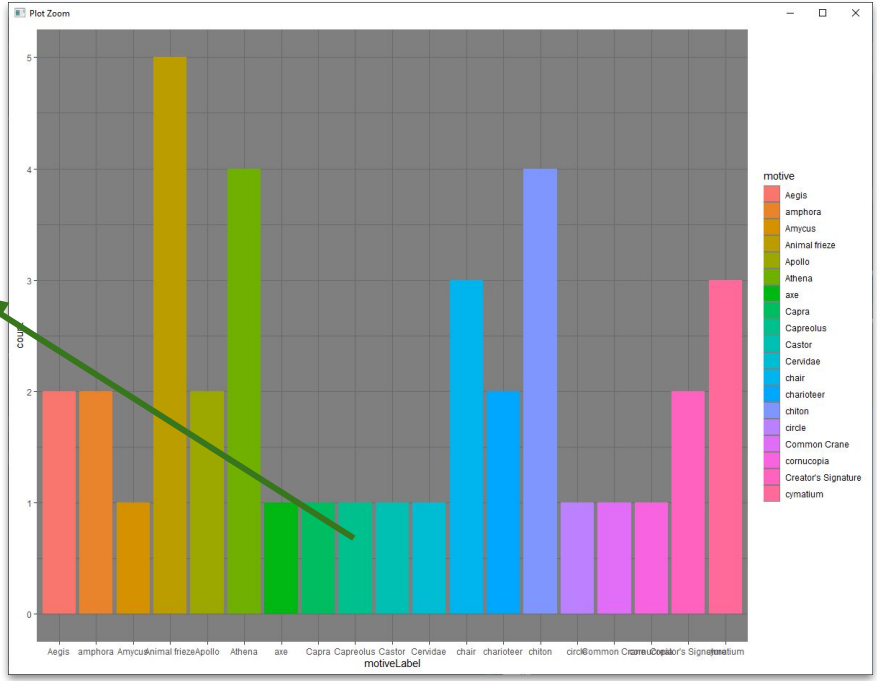
Hadley Wickham and others at RStudio [CC BY-SA 4.0]

SPARQL Unicorn goes R

Which motives are on wikidata greek amphoras, queried using R?

Capreolus (Q1043583)

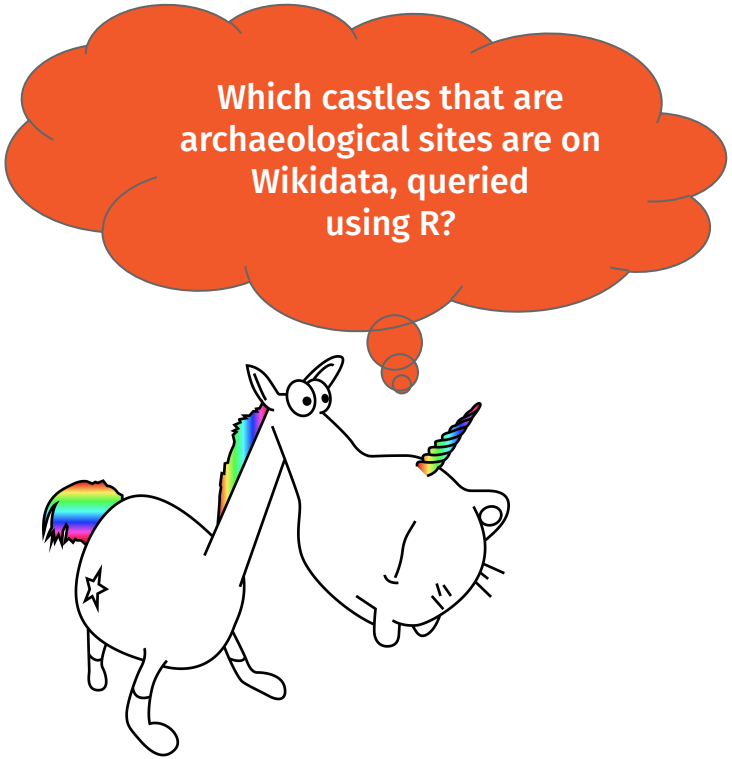
genus of mammals *Englisch*

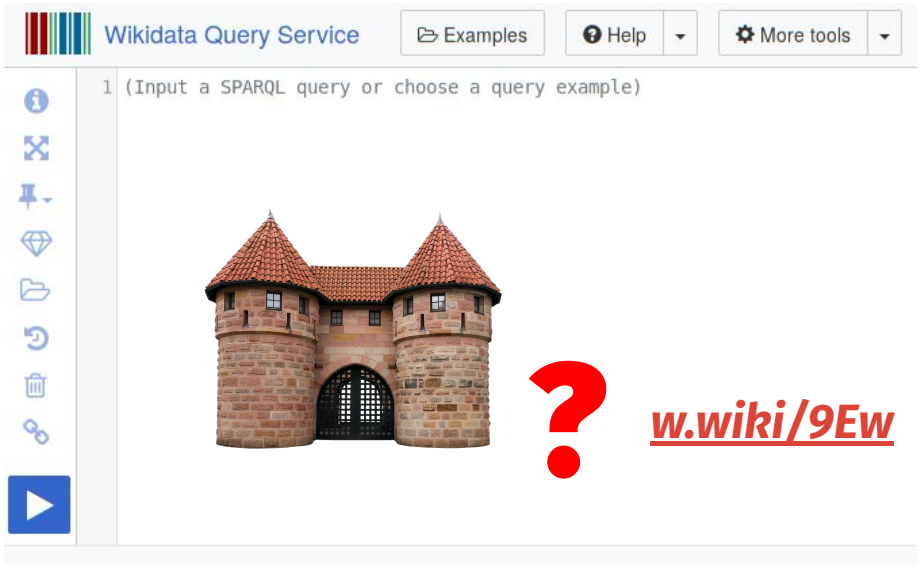


Museum August Kestner [CC BY-SA 3.0]

Query: w.wiki/9Er

EXAMPLE QUERY RESULT FROM 2019

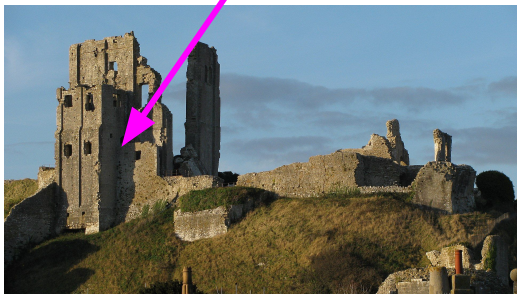




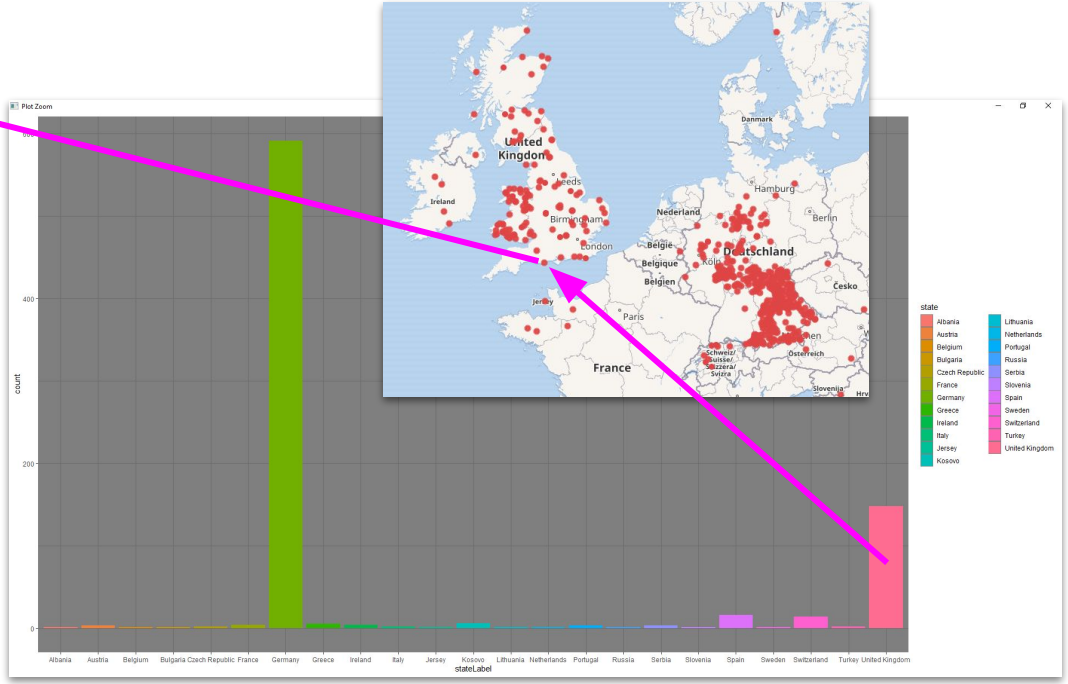
Which castles (archaeological sites) are on Wikidata, queried using R?

Corfe Castle (Q1236511)

fortification in Dorset, England



Chin tin tin [CC BY 3.0]

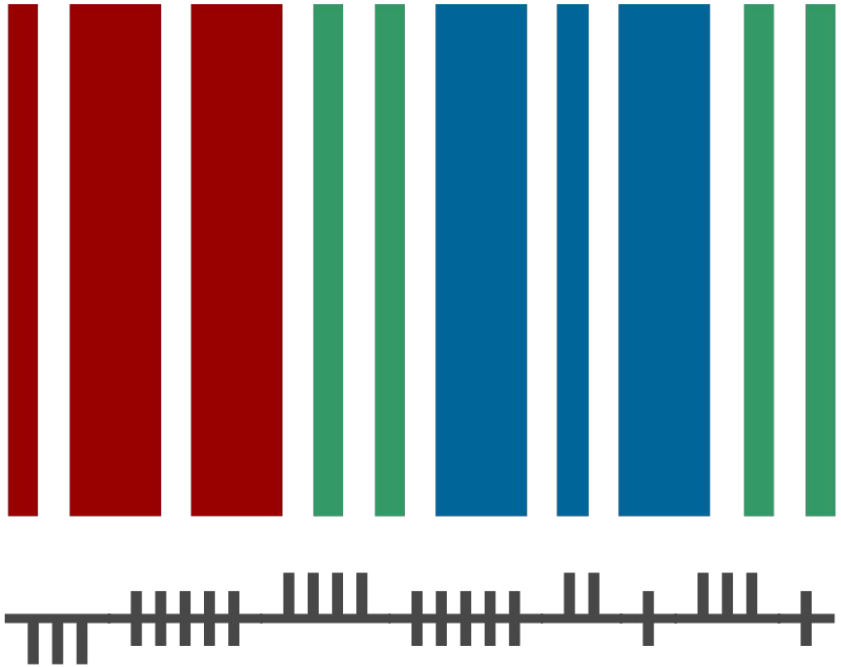


Query: wwiki/9Ew

EXAMPLE QUERY RESULT FROM 2019

Ogham and Wikidata

Ogham @ Wikidata



OSM @ Wikidata

OpenStreetMap element (P10689) : vei eller punkt i **Open Street Map** for denne tingen. hvis mulig benytt istedenfor "OpenStreetMap relation ID" (P402). *Norwegian Bokmål*

way or node in OpenStreetMap for the item

38 statements, 0 sitelinks - 16:27, 4 March 2023

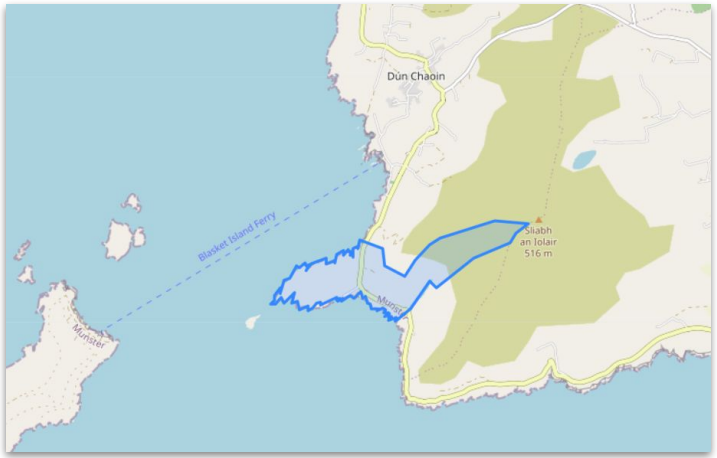
OpenStreetMap relation ID (P402) : **Open Street Map** sasaistes ID *Latvian*

identifier for a relation in OpenStreetMap

54 statements, 0 sitelinks - 17:30, 16 February 2023

Wikidata properties for linking resources with OSM elements and relations.

Townlands @ Wikidata



https://www.logainm.ie/ga/22572

WIKIDATA

Item Discussion Read View his

Coumeenoole North (Q104309699)

townland in Dunquin, County Kerry, Ireland edit

In more languages
Configure

Language	Label	Description	Also known as
English	Coumeenoole North	townland in Dunquin, County Kerry, Ireland	
German	No label defined	No description defined	
French	No label defined	No description defined	
Bavarian	No label defined	No description defined	

All entered languages

Main page
Community portal
Project chat
Create a new Item
Recent changes
Random Item
Query Service
Nearby
Help
Donate

Lexicographical data
Create a new Lexeme
Recent changes
Random Lexeme

Tools
What links here
Related changes
Special pages
Permanent link
Page information
Concept URI
Cite this page

Statements

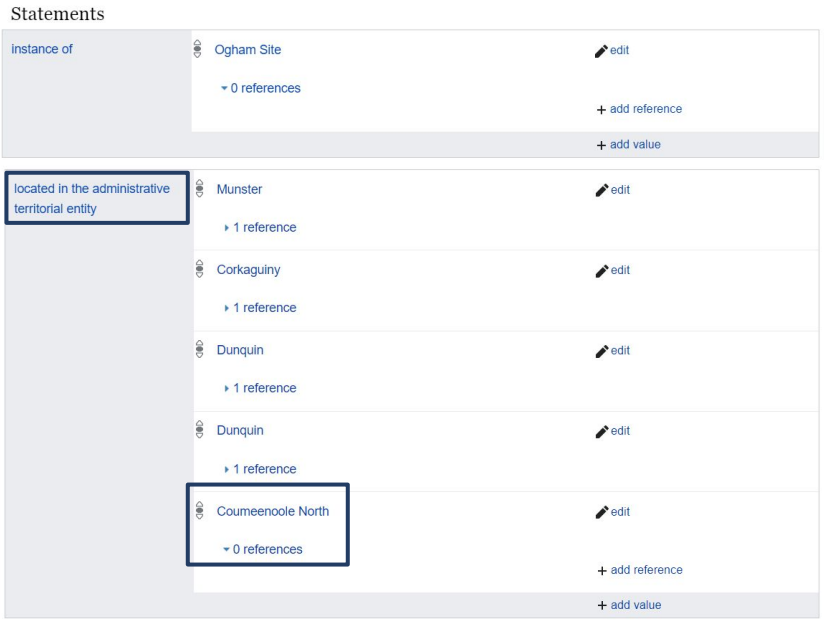
instance of — townland
0 references

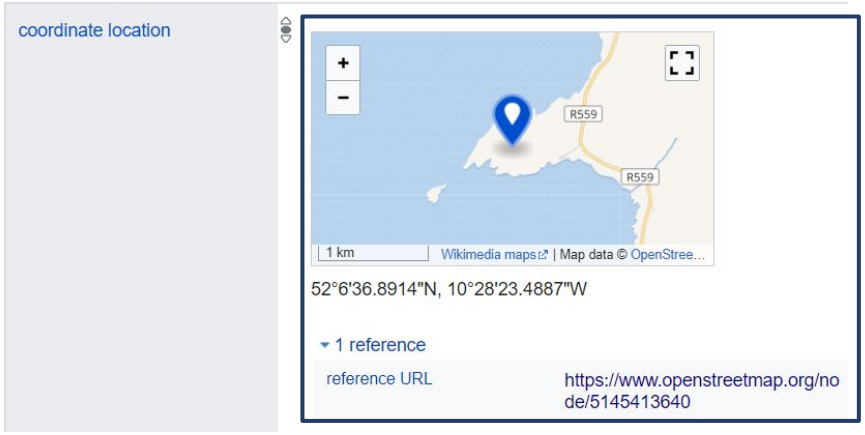
Identifiers

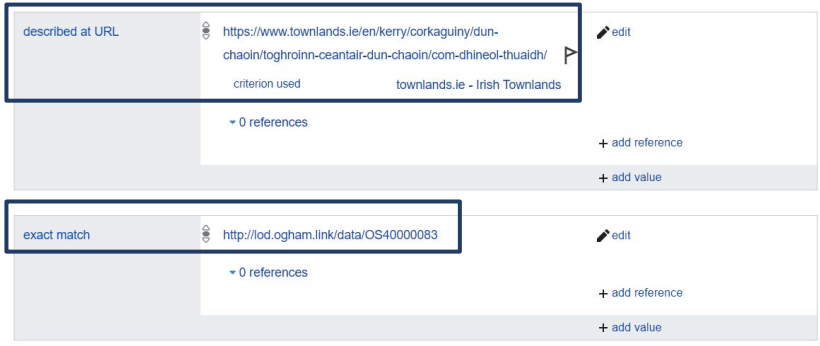
Logainm ID — 22572 — edit
0 references
add reference
add value

OpenStreetMap relation ID — 4250372 — edit
0 references
add reference
add value

Ogham Sites @ Wikidata







Coumeenoole North /Townland (Q104309699)

Ogham Stone CIIC 178 by Macalister @ Wikidata

instance of	ogham stone	edit
	1 reference	
	Ogham Stone Concept	
	0 references	
	Ogham Stone Concept (RAS Macalister)	
	0 references	

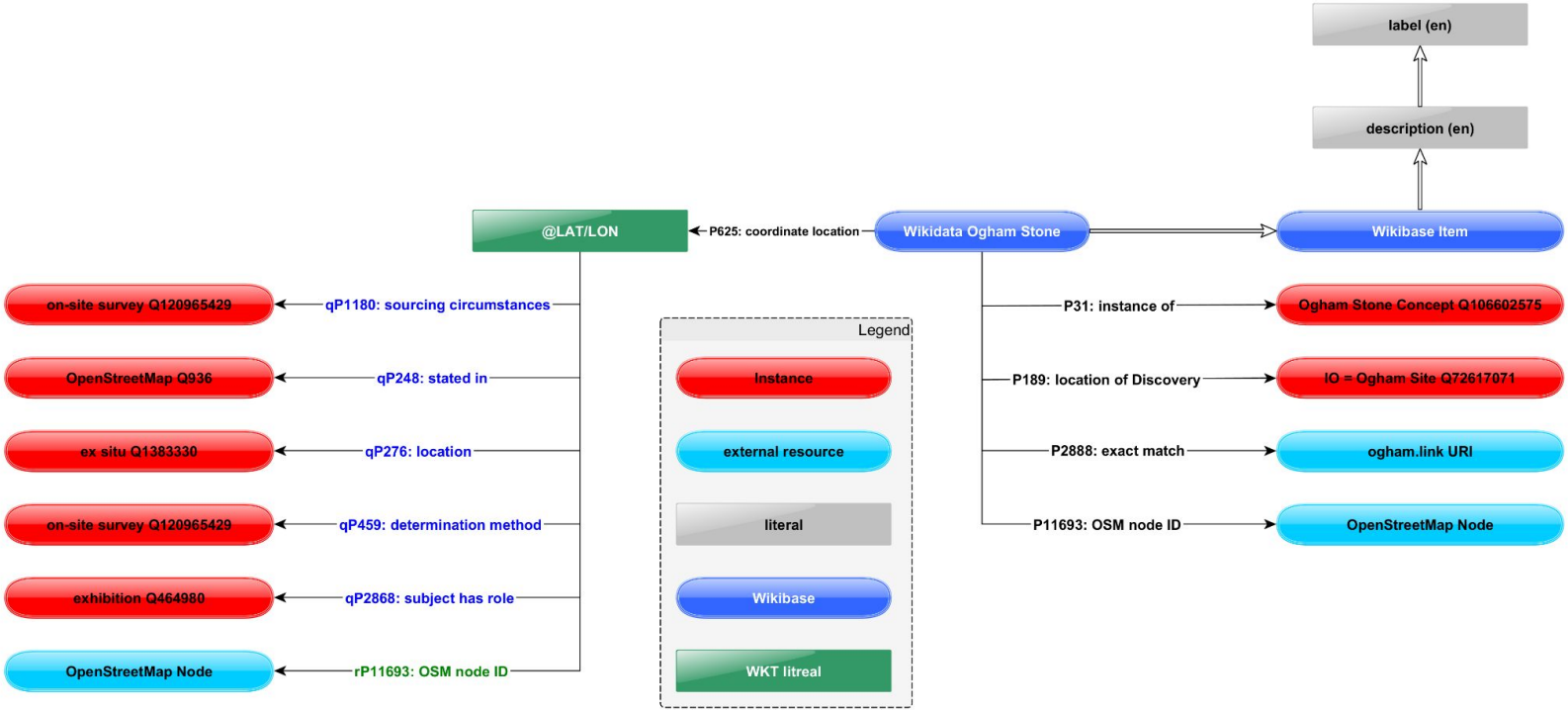
CIIC 178 (Q70892682)

Ogham Stone CIIC 178 by Macalister @ Wikidata

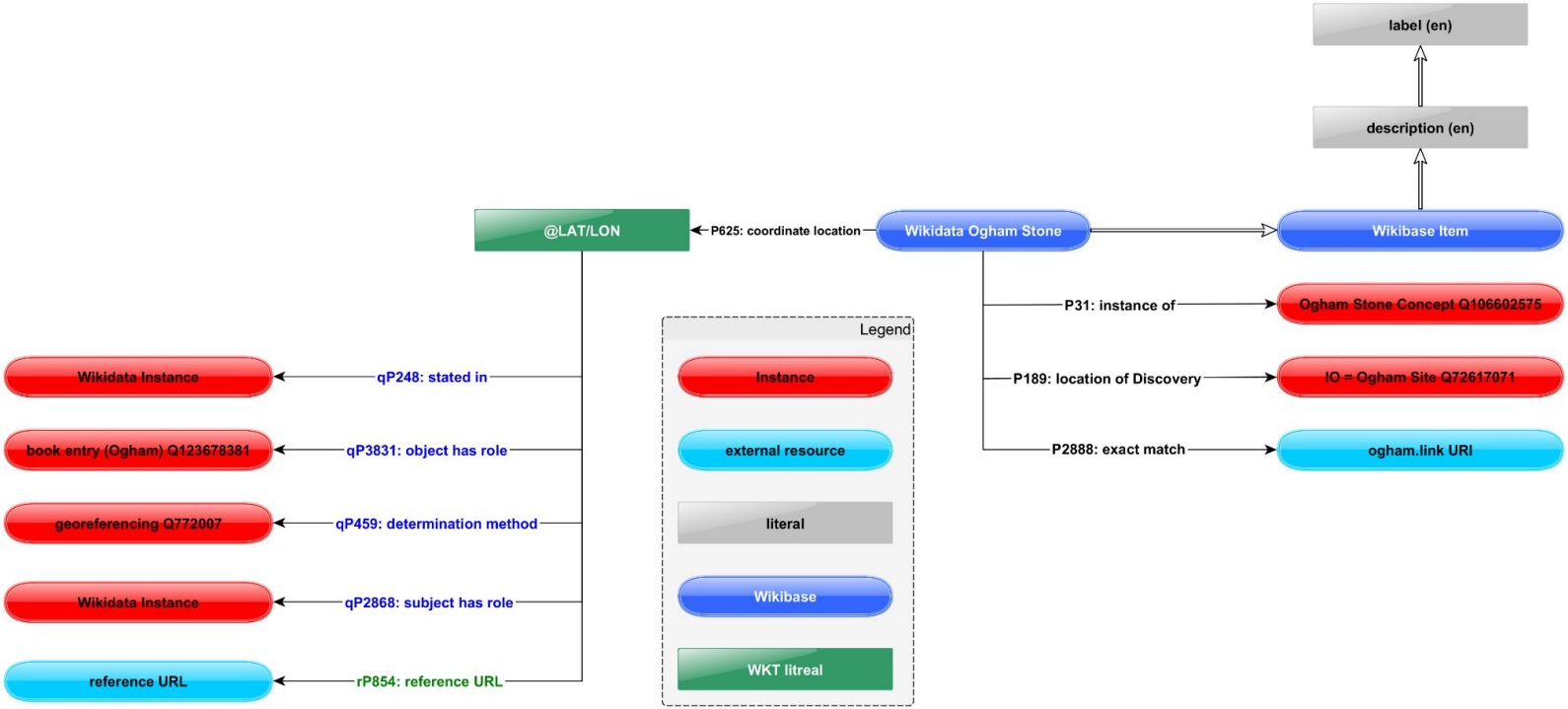
location of discovery	Coumeenoole North / Dunmore Head (Ogham Site) 1 reference	edit
	County Kerry 1 reference	edit
	+ add value	
inscription	ERC MAQI MAQI-ERCIAS MU DOVINIA (Irish) 1 reference	edit
	+ add value	
exact match	http://lod.ogham.link/data/Y10000088 0 references + add reference	edit
	+ add value	

OpenStreetMap element	node/5145413640
	0 references

CIIC 178 (Q70892682)



ex-situ Ogham Stone with on-site Survey



Ogham Stone: only Literature as Source

WIKIDATA

Item | Discussion

81 (Ogham Stone Concept by the Research Squirrel Ogham Project) (Q106680733)

Ogham Stone, Ireland

▾ In more languages

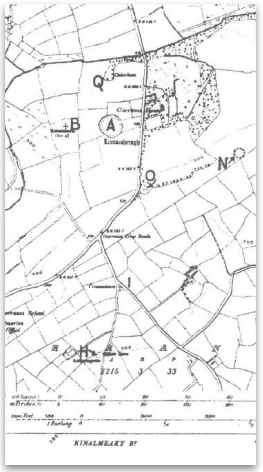
Configure

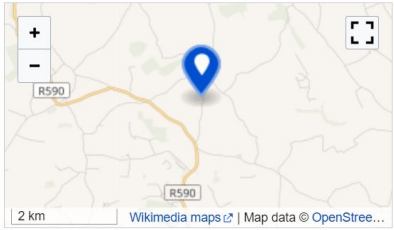
Language	Label	Description	Also known as
English	81 (Ogham Stone Concept by the Research Squirrel Ogham Project)	Ogham Stone, Ireland	
German	No label defined	No description defined	
American English	No label defined	No description defined	
Polish	No label defined	No description defined	

Statements

instance of	ogham stone	edit
	▾ 0 references	+ add reference
	Ogham Stone Concept	edit
	▾ 0 references	+ add reference
	Ogham Stone Concept (Research Squirrel Ogham Project)	edit
	▾ 0 references	+ add reference
		+ add value

VIA HTTPS://WWW.JSTOR.ORG/STABLE/25505959





51°48'59.58"N, 8°45'57.13"W

determination method	georeferencing
object has role	book entry (Ogham)
subject has role	archaeological site
stated in	academic journal article

▾ 1 reference

reference URL	https://www.corkhist.ie/wp-content/uploads/jfiles/1931/b1931-020.pdf https://www.jstor.org/stable/25505959

Example: CIIC 81 ⟶ Found in Garranes (Lisheenagreine)

WIKIDATA

Item | Discussion

81 (Ogham Stone Concept by the Research Squirrel Ogham Project) (Q106680733)

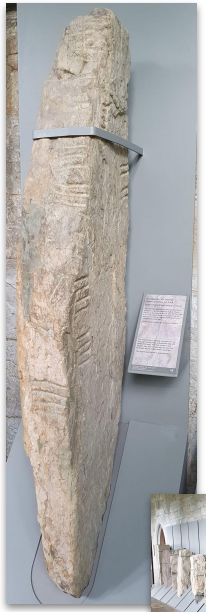
Ogham Stone, Ireland

▾ In more languages
Configure

Language	Label	Description	Also known as
English	81 (Ogham Stone Concept by the Research Squirrel Ogham Project)	Ogham Stone, Ireland	
German	No label defined	No description defined	
American English	No label defined	No description defined	
Polish	No label defined	No description defined	

Statements

instance of	ogham stone	edit
	▾ 0 references	+ add reference
	Ogham Stone Concept	edit
	▾ 0 references	+ add reference
	Ogham Stone Concept (Research Squirrel Ogham Project)	edit
	▾ 0 references	+ add reference
		+ add value



Florian Thiery, CC BY-NC-SA 4.0

51°53'37.7254"N, 8°29'31.6313"W

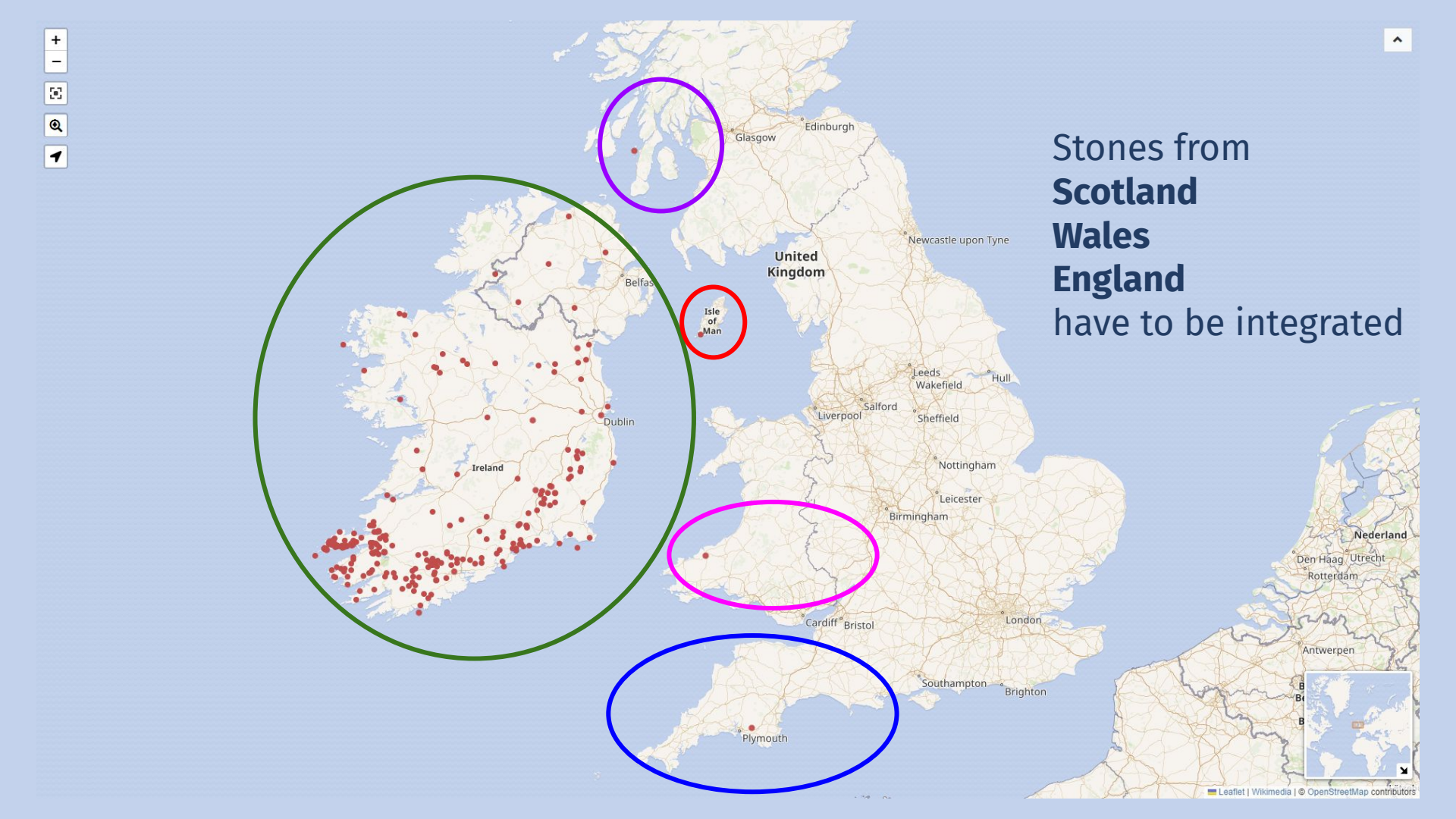
location	ex situ
sourcing circumstances	on-site survey
determination method	on-site survey
subject has role	exhibition
stated in	OpenStreetMap

▾ 1 reference

OpenStreetMap node ID	11071361392

Example: CIIC 81 → currently at UCC Cork #4

Which ogham stones are available in Wikidata?


Stones from
Scotland
Wales
England
have to be integrated
Glasgow
Edinburgh
Newcastle upon Tyne
United Kingdom
Belfast
Isle of Man
Leeds
Wakefield
Hull
Liverpool
Salford
Sheffield
Dublin
Ireland
Nottingham
Leicester
Birmingham
Nederland
Den Haag
Utrecht
Rotterdam
Cardiff
Bristol
London
Antwerpen
Southampton
Brighton
Plymouth
Leaflet | Wikimedia | © OpenStreetMap contributors

Which ogham stones are available in Wikidata?

Table

27 results in 40 ms

item	geo	label
wd:Q69377850	Point(-8.818333 52.015833)	CIIC 103 (Ogham Stone Concept by RAS Macalister)
wd:Q70885728	Point(-8.823889 51.955833)	CIIC 105 (Ogham Stone Concept by RAS Macalister)
wd:Q70885727	Point(-8.866111 51.991111)	CIIC 107 (Ogham Stone Concept by RAS Macalister)
wd:Q70885739	Point(-8.794722 51.868056)	CIIC 112 (Ogham Stone Concept by RAS Macalister)
wd:Q70382440	Point(-8.794722 51.868056)	CIIC 113 (Ogham Stone Concept by RAS Macalister)
wd:Q70885736	Point(-8.794722 51.868056)	CIIC 114 (Ogham Stone Concept by RAS Macalister)
wd:Q69383434	Point(-8.794722 51.868056)	CIIC 115 (Ogham Stone Concept by RAS Macalister)
wd:Q70382438	Point(-8.794722 51.868056)	CIIC 116 (Ogham Stone Concept by RAS Macalister)
wd:Q69385241	Point(-8.794722 51.868056)	CIIC 117 (Ogham Stone Concept by RAS Macalister)
wd:Q70885722	Point(-8.757222 51.946389)	CIIC 127 (Ogham Stone Concept by RAS Macalister)
wd:Q70885734	Point(-8.909167 52.0075)	CIIC 128 (Ogham Stone Concept by RAS Macalister)
wd:Q70885701	Point(-7.999889 52.199444)	CIIC 282 (Ogham Stone Concept by RAS Macalister)
wd:Q70885730	Point(-8.360556 52.008611)	CIIC 61 (Ogham Stone Concept by RAS Macalister)
wd:Q70885723	Point(-8.175556 51.969444)	CIIC 63 (Ogham Stone Concept by RAS Macalister)
wd:Q69385424	Point(-8.761667 51.816389)	CIIC 81 (Ogham Stone Concept by RAS Macalister)
wd:Q70885704	Point(-8.071111 52.026944)	CIIC 83 (Ogham Stone Concept by RAS Macalister)
wd:Q70885695	Point(-8.071111 52.026944)	CIIC 85 (Ogham Stone Concept by RAS Macalister)
wd:Q70885716	Point(-8.071111 52.026944)	CIIC 86 (Ogham Stone Concept by RAS Macalister)
wd:Q70885698	Point(-8.071111 52.026944)	CIIC 87 (Ogham Stone Concept by RAS Macalister)
wd:Q70885720	Point(-8.071111 52.026944)	CIIC 88 (Ogham Stone Concept by RAS Macalister)
wd:Q70885690	Point(-8.071111 52.026944)	CIIC 89 (Ogham Stone Concept by RAS Macalister)
wd:Q70885712	Point(-8.071111 52.026944)	CIIC 90 (Ogham Stone Concept by RAS Macalister)
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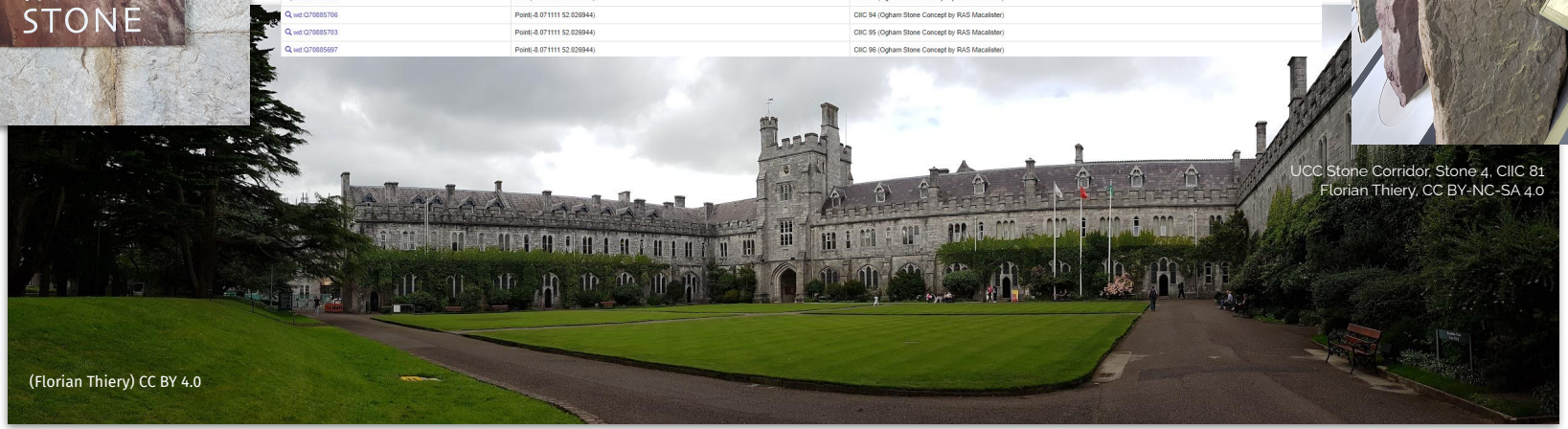
wd:Q70885692	Point(-8.071111 52.026944)	CIIC 93 (Ogham Stone Concept by RAS Macalister)
wd:Q70885706	Point(-8.071111 52.026944)	CIIC 94 (Ogham Stone Concept by RAS Macalister)
wd:Q70885703	Point(-8.071111 52.026944)	CIIC 95 (Ogham Stone Concept by RAS Macalister)
wd:Q70885697	Point(-8.071111 52.026944)	CIIC 96 (Ogham Stone Concept by RAS Macalister)



(Florian Thiery) CC BY 4.0

UCC Stone Corridor, Stone 4, CIIC 81
Florian Thiery, CC BY-NC-SA 4.0

Ogham and Citizen Science @UCC

F. Thiery, CC BY-NC-SA 4.0

A.K. Distel, CC BY-NC-SA 4.0

SfM using the KIRI App on 04/06/2024

F, Thierry, CC BY-NC-SA 4.0

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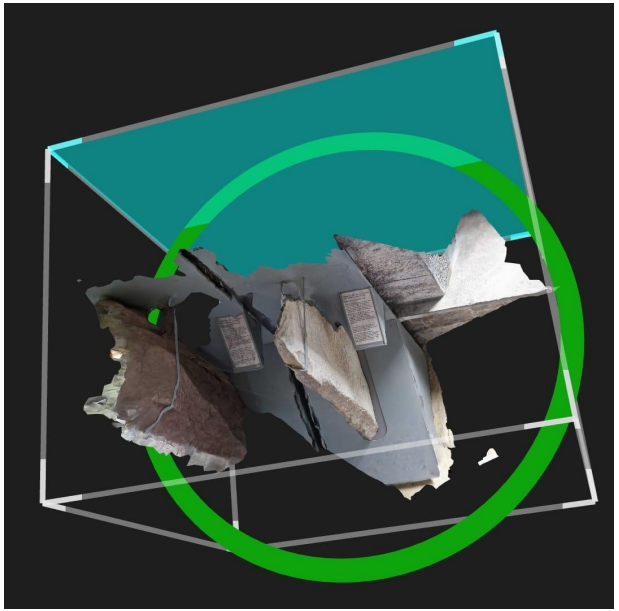
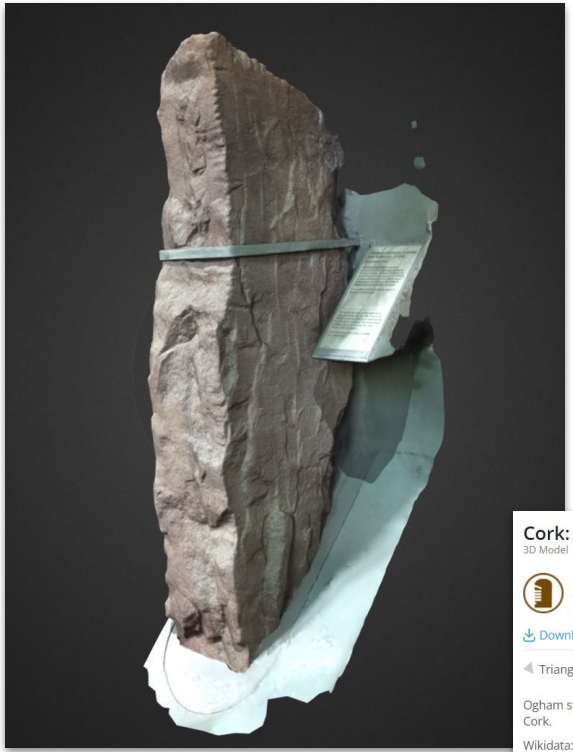


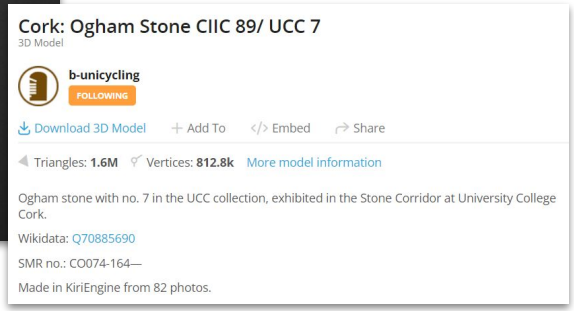
F, Thierry, CC BY-NC-SA 4.0

UCC Stone #1 / CIIC 103

F, THIERY, CC BY-NC-SA 4.0



A.K. DISTEL, CC BY-NC-SA 4.0, VIA HTTPS://SKFB.LY/OVMPR



MESHLAB AND SKETCHFAB VIEW

Ogham and Citizen Science

via https://www.theguardian.com/science/article/2024/may/08/teacher-finds-stone-ancient-ogham-writing-ireland-coventry-garden

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Archaeology

Teacher finds stone with ancient ogham writing from Ireland in Coventry garden

Exclusive: Sandstone rock featuring language markings created 1,600 years ago to go on display at museum

Dalya Alberge
Wed 8 May 2024 13.02 CEST

Share

The ogham stone, 11cm long and weighing 139g, was found in an overgrown garden. Photograph: The Herbert Art Gallery and Museum

A geography teacher was tidying his overgrown garden at his home in Coventry when he stumbled across a rock with mysterious incisions. Intrigued, he sent photographs to a local archaeologist and was taken aback to learn that the markings were created more than 1,600 years ago and that the artefact was worthy of a museum.

The rectangular sandstone rock that Graham Senior had discovered was inscribed in ogham, an alphabet used in the early medieval period primarily for writing in the Irish language.

Most viewed

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British passenger dies after severe turbulence on London to Singapore flight

Israeli soldiers and police tipping off groups that attack Gaza aid trucks

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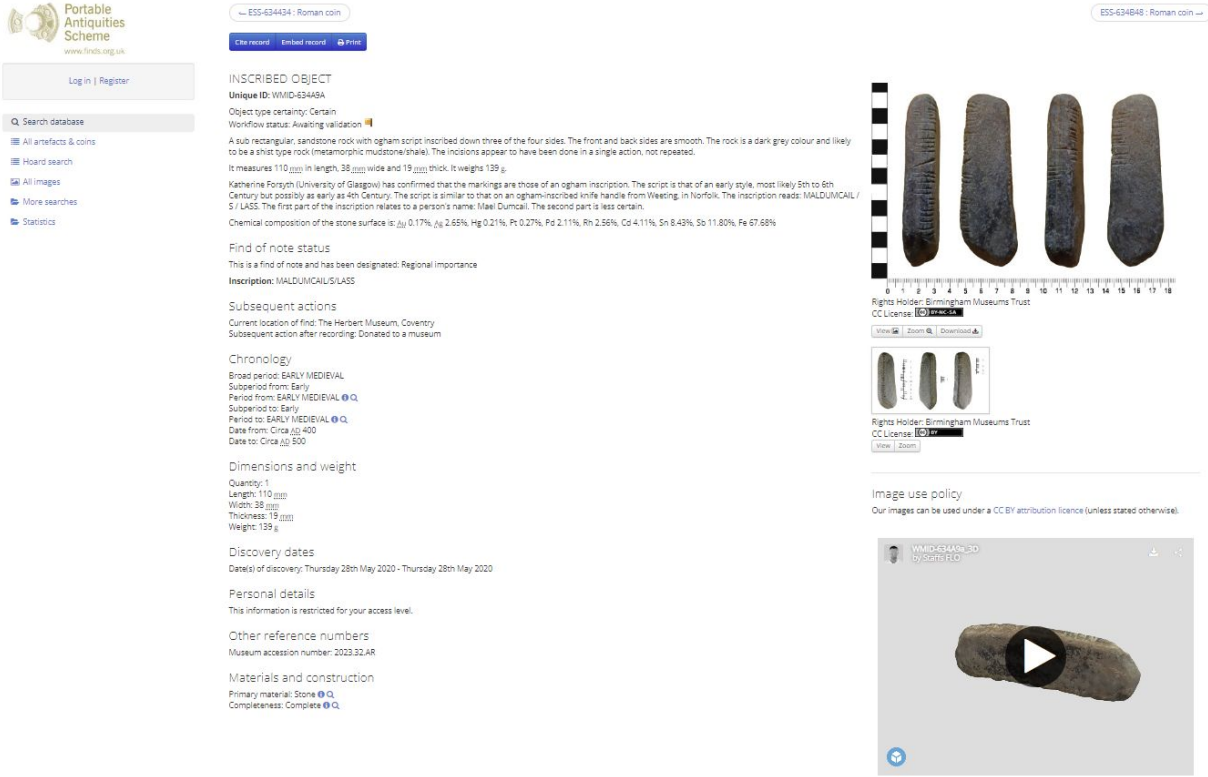
Microplastics found in every human testicle in study

Graham Senior, finder of the stone, with Ali Wells, exhibition curator at the Herbert Art Gallery and Museum in Coventry. Photograph: The Herbert Art Gallery and Museum.

Citizen Scientist Graham Senior found an Ogham Stone in Coventry

via https://finds.org.uk/database/artefacts/record/id/1004478



Integrated into the Portable Antiquities Scheme (PAS)

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Described with free images ...

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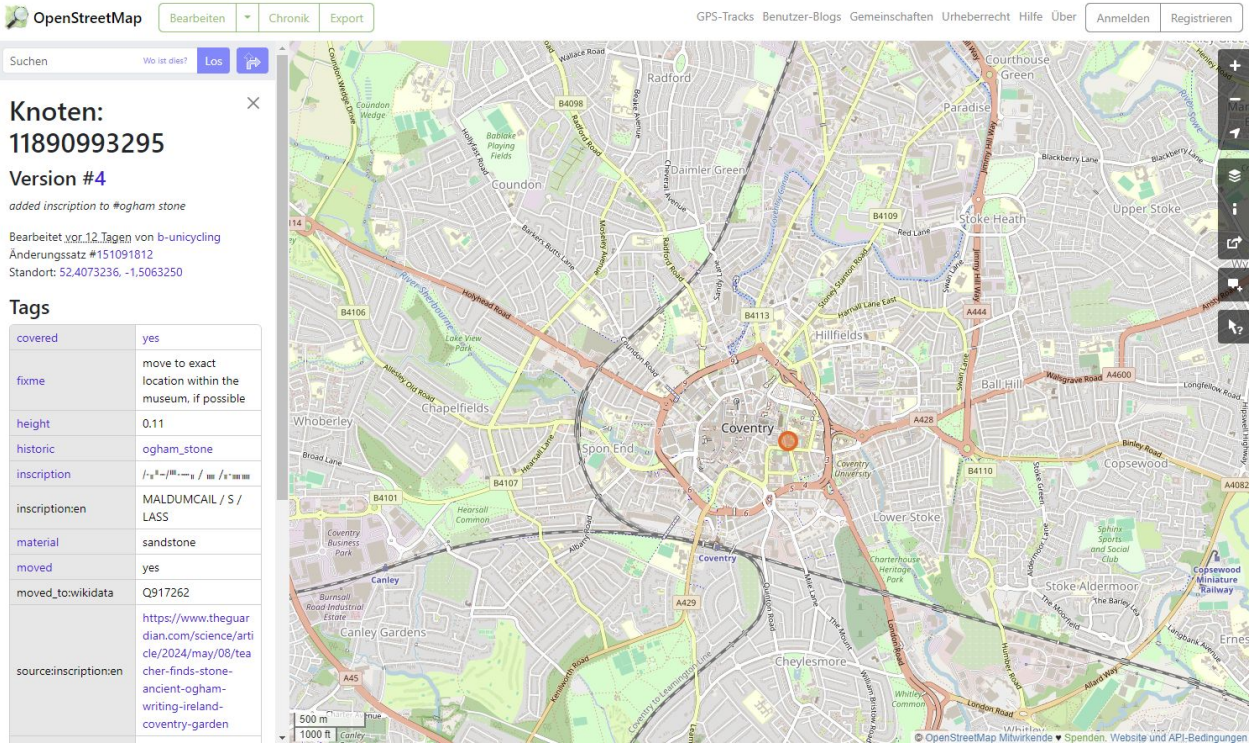
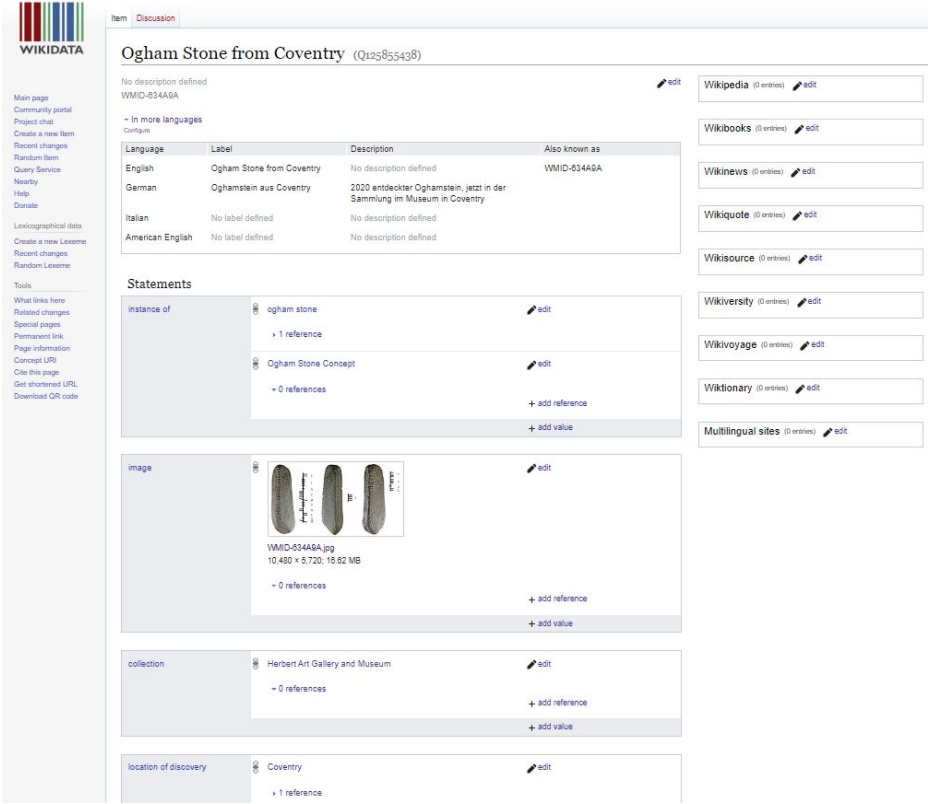
... A Free 3D-Model ...

via https://www.openstreetmap.org/node/11890993295



... in Open Street Map ...

via https://www.wikidata.org/wiki/Q125855438



... and Wikidata!

via https://www.theguardian.com/science/article/2024/may/08/teacher-finds-stone-ancient-ogham-writing-ireland-coventry-garden

Teresa Gilmore, am archaeologist and finds liaison officer for Staffordshire and West Midlands based at Birmingham Museums, said : “This is an amazing find. The beauty of the Portable Antiquities Scheme is that people are finding stuff that keeps rewriting our history.

“This particular find has given us a new insight into early medieval activity in Coventry, which we still need to make sense of. Each find like this helps in filling in our jigsaw puzzle and gives us a bit more information.”

When Senior sent her some photographs, she immediately saw its potential. She contacted Katherine Forsyth, professor of Celtic Studies at the University of Glasgow, who confirmed that it was an ogham script, that of an early style, which most likely dates to the fifth to sixth century but possibly as early as the fourth century.

Gilmore said such stones were “very rare and have generally been found in Ireland or Scotland ... so to find them in the Midlands is actually unusual.”

She suggested it could be linked to people coming over from Ireland or to early medieval monasteries in the area. “You would have had monks and clerics moving between the different monasteries.”

The stone, which is 11cm long and weighs 139g, is inscribed on three of its four sides.

Its purpose is unclear, said Gilmore, adding: “It could have been a portable commemorative item. We don’t know. It’s an amazing little thing.”

Explaining its inscription, “Maldumcail/ S/ Lass”, Gilmore said: “The first part relates to a person’s name, Mael Dumcail. The second part is less certain. We’re not sure where the S/ Lass comes from. It is probably a location. So something like ‘had me made’.”

Birmingham Museums Trust, CC BY 4.0

The newspaper article gives some information, however ...

“The angle with the most ogham stokes has what looks like **ṂOULDUMEAIL**. However, it makes more sense to read it as **MAELDUMCAIL** or perhaps **MAELDUMEAIL** - the problem is that the exact position of the stemline is uncertain and the vowel strokes are long like the consonant strokes. The initial M looks quite different to the other strokes (also slants the opposite direction to the other M) and may just be damage to the stone (hence the underdot in transcription).

On two other angles:
S
LASS

This could of course also be read the opposite direction.”

OG(H)AM
Harnessing digital technologies to transform understanding of ogham writing, from the 4th century to the 21st

Birmingham Museums Trust, CC BY 4.0

… trust in the Archaeological experts.

The adjective **máel** (https://dil.ie/31242) 'crop-headed, shorn, tonsured' is a commonly found first element in early Irish (religious) personal names (examples here https://dil.ie/31244).

However, the second element **-dumeail** or **-dumcail** isn't clear. **Dumeail** is reminiscent of **DUMELEDONAS** (CIIC 368), **DUMELI** (CIIC 252), **DDUMILEAS** (CIIC 198) in ogham inscriptions, but the meaning is unknown and the element doesn't seem to be attested in later manuscript sources.

It's hard to say much about S and LASS but the sequence lass- is found in some later inscriptions, e.g. lassa·ndernad “for whom it has been made” (https://emili.celt.dias.ie/LOU-001).

There are also names that begin **lass**-, e.g. **Lassar** 'flame, fire' (https://dil.ie/29600 or https://www.dib.ie/biography/lassar-a4690).

OG(H)AM
Harnessing digital technologies to transform understanding of ogham writing, from the 4th century to the 21st

Nice to Know

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https://www.ucl.ac.uk/archaeology/cisp/database/stone/ldwke_1.html

Dumeledonas (Language: Goidelic; Gender: male)
Rhys/1907, 80--81: `The name Dumeledo, genitive Dumeledonas, claims kinship with Dumelus of the stone at Llanddewi-brefi...The meaning of the name Dumel-, eludes me; and I have to make the same confession as to the ending -edu or -edo'.

Rhys, J. (1874):	--]MAQI[--] ||| [--] TAQOLEDEMU[-- **Expansion:** [--]MAQI[--] ||| TAQOLEDEMU Rhys/1874 19 reading only Westwood/1876 93 reading only
Rhys, J. (1906):	MAQI M[--] ||| DUMELEDONAS **Expansion:** MAQI MUCOI ||| DUMELEDONAS **Translation:** *Son of the kin of Dumeledonas (PN).* Macalister/1945 351 reading only Rhys/1877 398 reading only Rhys/1907 78--80 reading only Thomas/1994 98 reading only
Macalister, R.A.S. (1922):	--]MAQI M[--] ||| TUMELEDONAS **Expansion:** --] MAQI MUCOI ||| TUMELEDONAS Macalister/1922 22 reading only
Nash-Williams, V.E. (1950):	DUMELEDONAS ||| MAQI M[--] **Expansion:** DUMELEDONAS ||| MAQI MUCOI [--] **Translation:** *(The stone) of Dumeledo, son of the kin of...* Nash-Williams/1950 113 reading only

DUMELEDONAS (CIIC 368; CISP LDWKE/1)

Ogham in 3D, CC BY-NC-SA 3.0 Ireland,
via https://ogham.celt.dias.ie/252._Gurrane

https://www.ucl.ac.uk/archaeology/cisp/database/stone/guran_1.html

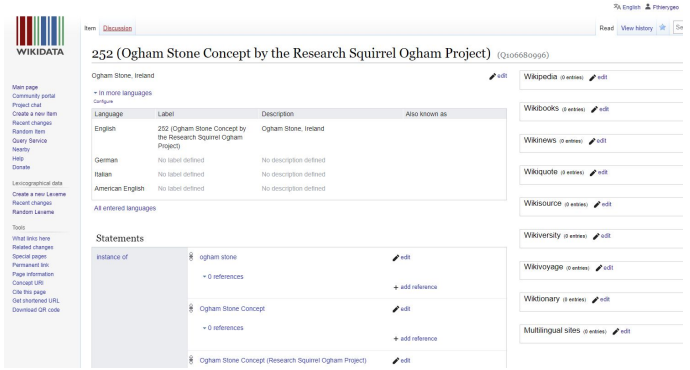
Macalister, R.A.S. (1945): DUMELIMAQIGL ||| ASIC ||| ONAS | NIOTTACOBRAN ||| OR[--
Expansion:
DUMELI MAQI GLASICONAS NIOTTA COBRANOR[IGAS]
Macalister/1945 247 reading only

McManus, D. (1991): DUMELIMAQIGL ||| ASIC ||| ONAS | NIOTTACOBRAN ||| [O]R[--
Expansion:
DUMELI MAQI GLASICONAS NIOTTA COBRANOR[--
McManus/1991 65 reading only

Dumeli (Language: Goidelic; Gender: male)
Glasiconas (Language: Goidelic; Gender: male)
See McManus/1991, 110, for discussion of the idea that GLASICONAS equated to c*glas*, an immigrant from outside Ireland.

McManus/1991, 102--105, `GLASICONAS (*Glaisiuc*, gen. *Glaschon*) ... (`grey' + `wolf')'.

Cobranor[igas] (Language: Goidelic; Gender: male)



https://www.wikidata.org/wiki/Q106680996

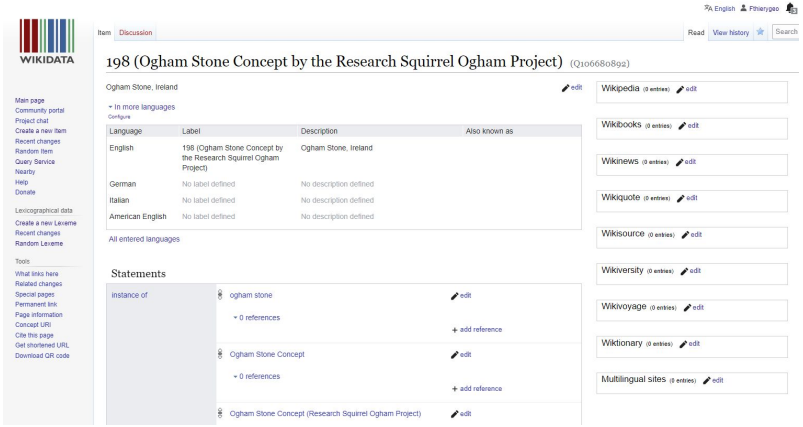
DUMELI (CIIC 252; CISP GURAN/1)

Ogham in 3D, CC BY-NC-SA 3.0 Ireland,
via https://ogham.celt.dias.ie/198._Coolmagort_II

https://www.ucl.ac.uk/archaeology/cisp/database/stone/coolm_2.html

Macalister, R.A.S. (1945): MAQIRITEASMAQIMAQIDDUMILEAS | MUCOITOICACI
Expansion:
MAQI-RITEAS MAQI MAQI-DDUMILEAS MUCOI TOICACI
Gippert/Web 198 reading only **[Gippert 198]**
Macalister/1945 193 reading only
McManus/1991 65 reading only

Maqi-Riteas (Language: Goidelic; Gender: male)
McManus/1991, 109: `MAQI-RITEAS ... (*Mac Rithe*)'.
Maqi-Ddumileas (Language: Goidelic; Gender: male)
McManus/1991, 109: `MAQI-DDUMILEAS (gen. *Duimle*)'.
Toicaci (Language: Goidelic; Gender: male)
McManus/1991, 53: `Three of the seven stones at Coolmagort, County Kerry [i.e. this stone and COOLM/1 and COOLM/4] .. Appear to commemorate members of the *t*ath* of **Toicacas*'.



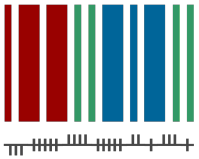
https://www.wikidata.org/wiki/Q106680892

Florian Thiery / Peter Thiery, CC BY 4.0

DUMELI (CIIC 198; CISP COOLM/2)

Finis!

Questions?



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