

The Linked Open Data revolution in numismatics

Nomisma.org

is a collaborative project to provide stable digital representations of numismatic concepts according to the principles of Linked Open Data. These take the form of http URIs that also provide access to reusable information about those concepts, along with links to other resources.

While the URIs provided by nomisma.org are stable, the project is in progress and subject to constant expansion and ongoing correction. This is particularly the case for the information provided about each nomisma.org identifier.

Examples of Nomisma.org URIs

Nomisma.org focuses on URIs for concepts that are unique to numismatics or which have a distinct meaning within the discipline. Examples are:

<http://nomisma.org/id/axis>. The 'axis' is the angular relationship between the obverse and reverse of a coin.

<http://nomisma.org/id/ephesus>. The 'mint' at Ephesus. Nomisma relates this numismatic concept to other URIs such as wikipedia, Pleiades, Getty thesauri, and the British Museum.



augustus (foaf:Person)

skos:prefLabel

Август (bg), August (ca), Augustus (cs), Augustus (de), Αύγουστος (el), Augustus (en), César Augusto (es), Augustus (fi), Auguste (fr), Gaius Octavianus Caesar Augustus (hu), Augusto (it), アウグストゥス (ja), 아우구스투스 (ko), Augustus (nl), Augustus (no), Oktawian August (pl), Augusto (pt), Augustus (ro), Август (ru), Augustus (sv), Октавіан Август (uk), Augustus (vi), 奥古斯都 (zh)

Roman Emperor from 16 January 27 BC to 19 August AD 14.

skos:definition

(en)

dcterms:isPartOf

org:hasMembership

rdf:type

skos:exactMatch

skos:exactMatch

skos:exactMatch

skos:exactMatch

http://nomisma.org/id/roman_numismatics

http://nomisma.org/id/augustus#roman_emperor

skos:Concept

<http://collection.britishmuseum.org/id/person-institution/57074>

<http://dbpedia.org/resource/Augustus>

<http://viaf.org/viaf/18013086>

<http://vocab.getty.edu/ulan/500058949>

#roman_emperor (org:Membership)

nmo:hasStartDate

27 B.C.

org:role

http://nomisma.org/id/roman_emperor

Contributors

The following institutions have contributed data, specialist advice and/or financial support to the Nomisma project:

The American Numismatic Society

Paris Sorbonne Université

Portable Antiquities Scheme

The British Museum

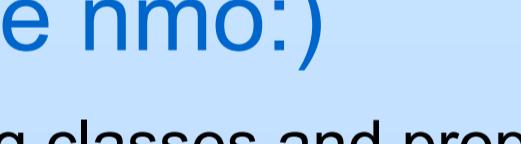
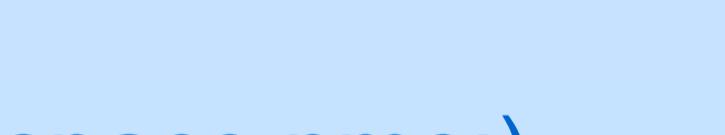
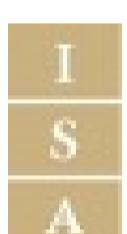
Arts & Humanities Research Council

Münzkabinett, Staatliche Museen zu Berlin

Deutsches Archäologisches Institut

Romanian Academy

Goethe Universität, Frankfurt



Using nomisma.org to link data repositories

Coin Hoards of the Roman Republic (CHRR) – <http://numismatics.org/chrr>

An online inventory of hoards of Romans coins closing up to AD 14

Online Coins of the Roman Empire (OCRE) – <http://numismatics.org/ocre>

A multilingual virtual catalogue of major international collections of Roman Imperial Coins to AD 491 (American Numismatic Society, British Museum, Münzkabinett Berlin)

The screenshot shows the OCRE interface with a search bar for 'lucius'. Below it, there's a keyword search and a sidebar for filtering by mint and findspot. The main content area displays two sections: 'RIC I (second edition) Augustus 206' and 'RIC I (second edition) Augustus 207'. Each section includes a brief description, a list of objects, and thumbnail images of the coins. At the bottom, there's a grid of small coin images with their details. A legend in the bottom left corner defines 'Mint' and 'Findspot' icons. A map in the bottom right shows the distribution of Roman coin finds across Europe and North Africa.

The nomisma ontology (namespace nmo:)

A central feature of nomisma.org is an ontology defining classes and properties that are specific to the domain of numismatics, for example:

Classes

nmo:CoinWear Wear on a coin occurring as a result of its use.
nmo:Mint Generic term for a place of manufacture of a coin or for the issuing city.

Properties

nmo:hasPortrait Identifies the person whose portrait appears on a numismatic object
nmo:hasAxis Describes the directional relationship between the obverse and reverse of a numismatic object

Current and previous versions of the nomisma ontology are available as RDF or TTL files at:
<http://nomisma.org/ontology>

Here is an example for coin ID 1678 in the coin-find database AFE-WEB



<http://afe.dainst.org:8080/AFE_RGK/show_coin?coin_id=1678> rdf:type nmo:NumismaticObject ;
nmo:hasAppearance <http://afe.dainst.org:8080/AFE_RGK/show_picture?pic_id=22&id=1678>;
nmo:hasDenomination <<http://nomisma.org/id/denarius>>;
nmo:hasAuthority <<http://nomisma.org/id/vespasian>>;
nmo:hasMint <<http://nomisma.org/rome>>;
nmo:hasDate "75";
nmo:hasTypeSeriesItem <[http://numismatics.org/ocre/id/ric.2_1\(2\).ves.777](http://numismatics.org/ocre/id/ric.2_1(2).ves.777)>;
nmo:hasCollection <<http://museen.de/stadt-und-industriemuseum-wetzlar.html>> .

Format and archiving of nomisma.org

The canonical format of nomisma.org is RDF/XML, with serializations available in JSON-LD (including geoJSON-LD for complex geographic features), Turtle, KML (when applicable), and HTML5+RDFa 1.1

There are two Github repositories associated with the project. The application code is available in:

<https://github.com/nomisma/framework>

The RDF/XML data and ontology versions are in:

<https://github.com/nomisma/data>

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