

CHiC Europeana Collection – Documentation

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This document describes the Europeana Test collection developed for the Cultural Heritage in CLEF track for the Cross-Language Evaluation Forum.

Contents

1. Data source.....	1
2. Collection generation.....	3
3. Data fields.....	4
4. Documentation of fields.....	7
5. Sub-collection statistics.....	14

1. Data Source

Europeana (www.europeana.eu) is the European digital library, archive and museum for digital or digitized cultural heritage objects from European cultural heritage institutions. Europeana aggregates over 2000 data providers into a single searchable index and portal using a common data format (at the time when this test collection was created, this was the Europeana Semantic Elements data format).

Europeana data comprises the metadata descriptions of an object as well as links to the object's original location on the web; it does not include the object itself.

Europeana contains metadata records on image, text, video and audio objects. The Europeana portal presents the metadata records or object representations as seen in figure 1.

The screenshot shows a detailed view of a Europeana metadata record. At the top left is a thumbnail of the Mona Lisa painting. To its right, the title "L.H.O.O.Q." is displayed in large, bold letters. Below the title are sections for "Creator", "Date", "Subject", "Description", "Repository/Location", "See more", "Data provider", and "Provider". The "Description" section includes a note about an inscription by Marcel Duchamp. On the right side, there are social sharing buttons for Google+ and Twitter, along with a "Translate details" dropdown menu. Below these are sections for "Cite on Wikipedia", "Auto-generated tags", and a "What" section containing a long list of concept labels in various languages. At the bottom, there is an "Explore further!" section with a "Similar content" heading and a grid of thumbnail images.

Fig. 1. Europeana Metadata Record as seen on the portal in Feb. 2013

The metadata record contains information on the object itself (e.g. creator, date, subject, description, format), information on the data provider and rights information. Additionally, Europeana added automatic enrichments that can be seen in the right-hand panel under auto-generated tags. These tags were created by automatically mapping terms and phrases in the type, creator, date and subject fields to standard controlled vocabularies and term lists like the DBpedia list for person names, Geonames for geographic locations or the GEMET thesaurus for subject terms. Outgoing links to the object's location at the original provider's site are also provided. The thumbnail is not part of the metadata record. The "Similar content", which is presented to the user in the bottom-center panel is a dynamically generated list by Solr and is not represented in the metadata record.

2. Collection Generation

The data used for the CHiC Europeana IR test collection was downloaded as a Solr search engine index dump in March 2012. It comprised 23,300,932 documents (i.e. metadata records).

Some Solr-specific fields that contained mostly redundant content were removed. The metadata fields were then wrapped with specific XML wrapper fields containing licensing and other information by the University of Padova.

After an extensive collection analysis, it was decided to split the collection into sub-collections based on the language provided in the europeana:language field, which determines the language of the record. The europeana:language field is determined by either the original data provider's country or by explicit language information in the metadata records themselves. This means that some of the records marked with a language tag based on provider country may contain metadata in different languages. An individual sub-collection was generated when more than 100,000 documents could be determined in this language. This resulted in 13 language-based sub-collections as well as a 14th collection containing the remaining objects. Table 1 lists the sub-collection languages as well as the document numbers that are contained within each sub-collection.

Sub-Collection Language	Number of Documents in Collection
de	3,865,680
fr	3,635,388
sv	2,360,050
it	2,120,059
es	1,953,124
no	1,557,820
nl	1,251,027
en	1,107,176
pl	1,093,705
fi	800,302
sl	246,952
el	197,371
hu	121,771
Other	2,990,507
Total	23,300,932

Table 1. CHiC Europeana test sub-collections by language.

No further distinction was made between object type (image, text, audio, video) or provider institution.

3. Data Fields

The CHiC Europeana collection is distributed in 23,309 XML files each containing ca. 1000 Europeana metadata records. These files are collected in zip files representing the 13 language-based sub-collections and the 14th sub-collection with the remaining metadata. Section 5 contains more detailed statistics on the files.

Each XML file contains the basic container element <ims:chic>, where all other content is contained in. Each file also contains a <ims:file-metadata> element, which contains a description of the file and information on the creator, date of creation and rights of the file. The actual metadata records are each wrapped in a <ims:metadata> element, which contains the remaining metadata elements within the <ims:fields> container elements. Figure 2 shows the basic structure of each Europeana CHiC collection file:

```
<ims:chic>
<ims:file-metadata>
    <dc:description>Document collection developed for the Cultural Heritage in CLEF
    (CHiC) Evaluation Lab of The CLEF Initiative (http://www.clef-initiative.eu/)
    with the support of the PROMISE FP7 Network of Excellence (contract n. 258191,
    http://www.promise-noe.eu/)</dc:description>
    <dc:rights>The metadata contained in this file is made available by Europeana
    (http://europeana.eu/) only to the members of the Europeana Network
    (http://pro.europeana.eu/about/network) that have agreed to use it for the
    research purposes of The CLEF Initiative (http://www.clef-initiative.eu/). This
    usage falls within the more general conditions of the Europeana Terms for Re-use
    of Europeana Metadata (http://pro.europeana.eu/terms-of-
    use).</dc:rights><dc:rights>The metadata contained in this file has been made
    available through the following provider(s): STERNA.</dc:rights>
    <dc:rights>The metadata contained in this file has been contributed by the
    following provider(s), which may hold rights on it: Heritage Malta.</dc:rights>
    <dc:creator>IMS Component Integrator (ICI) - Version 3.00 - Copyright (c) 2006-
    2012 - Information Management Systems (IMS) Research Group
    (http://ims.dei.unipd.it/) - Department of Information Engineering
    (http://www.dei.unipd.it/) - University of Padua (http://www.unipd.it/),
    Italy</dc:creator>
    <dc:date>2012-05-20T13:06:04.046+02:00</dc:date>
</ims:file-metadata>
<ims:metadata
ims:identifier="http://www.europeana.eu/resolve/record/10105/11EA7B17286EF9F48D081C5AD745F4330F9C6250" ims:namespace="http://www.europeana.eu/" ims:language="eng">
    <ims:fields>
        [actual metadata fields]
    </ims:fields>
</ims:metadata>
... [<ims:metadata> fields]
</ims:chic>
```

Fig. 2 Basic structure of a Europeana CHiC collection file

The <ims:metadata> element contains as attributes the unique identifier of the record (attribute ims:identifier) and the sub-collection language (attribute ims:language). These attributes will be used a record identifiers and sub-collection identifier in CHiC experiments. The <ims:metadata> attribute ims:identifier is identical with the field <europeana:uri> in the actual metadata record.

The metadata description format is the Europeana Semantic Elements (ESE) format. A detailed documentation can be found at this URL: <http://www.europeana.eu/schemas/ese/>. The ESE uses other namespaces (Dublin Core and Dublin Core) for its elements. The metadata of the Europeana CHiC collection also contains enrichment elements, which come from an additional namespace format detailed below. Section 4 contains a brief description for each element; section 5 contains statistics for all language-based sub-collections and available fields.

Namespaces

The record metadata fields (contained in <ims:fields> for each record) can be distinguished into four groups (or namespaces):

- europeana = fields from the Europeana ESE namespace
(europeana="http://www.europeana.eu/schemas/ese/")
- dc = fields from the Dublin Core namespace (http://purl.org/dc/elements/1.1/)
- dcterms = fields from the Dublin Core Terms namespace (http://purl.org/dc/terms/)
- enrichment = fields from the ESE enrichment namespace
(enrichment="http://www.europeana.eu/schemas/ese/enrichment/")

Required elements

The europeana namespace elements contain five elements that are required elements for each record. These are the only elements, which will occur in all collection records, all other elements are optional. The five required elements are:

- europeana:uri = unique identifier and URL of object description in Europeana
- europeana:type = type of described objects (text, image, audio or video)
- europeana:provider = institution where the metadata record comes from and where the digital object is housed
- europeana:country = host country of the described object (i.e. country of the provider NOT country where the object was created)
- europeana:language = language of the metadata record (commonly derived from provider language)

Because only few fields are required, Europeana CHiC metadata records can be very sparse. Figure 3 shows a typical example:

```

<ims:metadata
  ims:identifier="http://www.europeana.eu/resolve/record/10105/11EA7B17286EF9F48D081C
  5AD745F4330F9C6250"  ims:namespace="http://www.europeana.eu/"  ims:language="eng">
  <ims:fields>
    <dc:title>Kokka (Orn.1487)</dc:title>
    <dc:title>Eurasian Scops Owl (Orn.1487)</dc:title>
    <dc:identifier>Orn.1487</dc:identifier>
    <dc:subject>Eurasian Scops Owl</dc:subject>
    <dc:type>mounted specimen</dc:type>
    <europeana:dataProvider>Heritage Malta</europeana:dataProvider>
    <europeana:isShownAt>http://www.heritagemalta.org/sterna/orn.php?id=14
    87</europeana:isShownAt>
    <europeana:country>malta</europeana:country>
    <europeana:language>en</europeana:language>
    <europeana:type>IMAGE</europeana:type>
    <europeana:uri>http://www.europeana.eu/resolve/record/10105/11EA7B1728
    6EF9F48D081C5AD745F4330F9C6250</europeana:uri>
  </ims:fields>
</ims:metadata>
```

The diagram illustrates the structure of a typical Europeana CHiC metadata record. It shows the XML code with two callout boxes. The top box, labeled 'Optional fields', highlights the enrichment elements: <dc:title>, <dc:identifier>, <dc:subject>, <dc:type>, <europeana:dataProvider>, <europeana:isShownAt>, <europeana:country>, <europeana:language>, <europeana:type>, and <europeana:uri>. The bottom box, labeled 'Required fields', highlights the required elements: <ims:identifier>, <ims:namespace>, <ims:language>, <ims:fields>, <dc:title> (containing 'Kokka (Orn.1487)' and 'Eurasian Scops Owl (Orn.1487)'), <dc:identifier> (containing 'Orn.1487'), <dc:subject> (containing 'Eurasian Scops Owl'), <dc:type> (containing 'mounted specimen'), <europeana:dataProvider> (containing 'Heritage Malta'), and <europeana:isShownAt> (containing 'http://www.heritagemalta.org/sterna/orn.php?id=1487').

Fig. 3 Typical Europeana CHiC metadata record (contains 2 title fields and and a dc:type field explaining what is shown)

Enrichment elements

Europeana added automatic enrichments that were machine-generated concepts created in order to increase the content description of a metadata record. These tags were created by automatically mapping terms and phrases in the type, creator, date and subject fields to standard controlled vocabularies and term lists like the DBpedia list for person names, Geonames for geographic locations or the GEMET thesaurus for subject terms.

Since the enrichment elements were machine-generated, the validity and quality of their association with the original content cannot be guaranteed.

4. Documentation of Fields

The documentation will describe the ims container fields (for file management) and the metadata fields grouped by namespace.

4.1 ims Container Elements

[ims:chic]

- Opening/ending tag for XML-File
- Contains multiple namespace-declarations
 - xmlns:enrichments - Europeana ESE Enrichments (not ESE itself!)
 - xmlns:ims - Information Management Systems (Contains a mix of DC, DCTerms and ESE)
 - xmlns:dcterms - Dublin Core Terms (broader DC)
 - xmlns:dc - Dublin Core Metadata Format
 - xmlns:europeana - Europeana ESE

[ims:chic/ims:file-metadata]

- Contains information about the XML-file, i.e. the collection given in the XML-file

[ims:chic/ims:file-metadata/dc:creator]

- Contains information about the application that was used to create the metadata entries (in this case: IMS Component Integrator)

[ims:chic/ims:file-metadata/dc:date]

- Contains the timestamp when the file was created

[ims:chic/ims:file-metadata/dc:description]

- Contains information about the project background

[ims:chic/ims:file-metadata/dc:rights]

- Multiple occurrences possible
- Contains information about data providers (rights holders) and granted rights for the usage for the given collection

[ims:chic/ims:metadata]

- Container-tag for a record
- Attributes in this tag contain
 - ims:identifier - Link to dataset on Europeana
 - ims:namespace - Link to Europeana website
 - ims:language - Language of given sub-collection

[ims:chic/ims:metadata/ims:fields]

- Container-tag for metadata-fields of given record
- Contains the rest of the following tags in this documentation

4.2 ese Namespace Metadata Elements

Information based on Europeana Semantic Elements Specifications v.3.4.1.pdf
(<http://pro.europeana.eu/documents/900548/dc80802e-6efb-4127-a98e-c27c95396d57>)

[ims:chic/ims:metadata/ims:fields/europeana:country]

- The name of the country of the data provider or “Europe” in the case of Europe-wide projects.
- e.g. uk, ireland, GB

[ims:chic/ims:metadata/ims:fields/europeana:dataProvider]

- The name or identifier of the organisation that contributes data to Europeana
- e.g. The British Library

[ims:chic/ims:metadata/ims:fields/europeana:isShownAt]

- An unambiguous URL reference to the digital object on the provider's web site in its full information context.
- Refinement of dc:relation
- see also europeana:isShownBy
- e.g. <http://archives.library.nuigalway.ie:8080/balfour/photographs/0028>

[ims:chic/ims:metadata/ims:fields/europeana:isShownBy]

- An unambiguous URL reference to the digital object on the provider's web site in the best available resolution/quality.
- Refinement of dc:relation
- see also europeana:isShownat
- e.g. http://bhl-alexandria.nhm.ac.uk/aip-preview/uk-rbge/NRBGEv1-23/Volume06/NRBGE_0006/NRBGE_0006_1911_0026

[ims:chic/ims:metadata/ims:fields/europeana:language]

- language of the resource.
- e.g. en

[ims:chic/ims:metadata/ims:fields/europeana:object]

- The URL of a suitable source image in the best resolution available on the web site of the data provider from which small images could be generated for use in the portal. This will often be the same URL as given in europeana:isShownBy.
- e.g. http://bhl-alexandria.nhm.ac.uk/aip-preview/uk-rbge/NRBGEv1-23/Volume04/NRBGE_0004/NRBGE_0004_1908_0019/thumbnail.jpg

[ims:chic/ims:metadata/ims:fields/europeana:provider]

- Name of the organization that delivers data to Europeana.
- e.g. SCAN

[ims:chic/ims:metadata/ims:fields/europeana:rights]

- Information about rights held in and over the resource.
- e.g. <http://creativecommons.org/licenses/by-nc-sa/3.0/>

[ims:chic/ims:metadata/ims:fields/europeana:type]

- The nature or genre of the resource. Type includes terms describing general categories, functions, genres, or aggregation levels for content. The recommended best practice is to select a value from a controlled vocabulary (for example, the DC Type vocabulary is available at <http://dublincore.org/documents/dcmi-type-vocabulary/>).
- e.g. IMAGE, SOUND, TEXT, VIDEO

[ims:chic/ims:metadata/ims:fields/europeana:uri]

- An unambiguous URI to the resource within Europeana's context.
- e.g.
<http://www.europeana.eu/resolve/record/00401/0005CE3BD69CB08509FC8DA2A745CAB766647A72>

[ims:chic/ims:metadata/ims:fields/europeana:year]

- A point of time associated with an event in the life of the original analog or born digital object.

- e.g. 1950

4.3 dc Namespace Metadata Elements

[ims:chic/ims:metadata/ims:fields/dc:contributor]

- Contains information about the provider (e.g. providing institution) of the given record (not always equivalent to europeana:dataprovider)

[ims:chic/ims:metadata/ims:fields/dc:coverage]

- Indicator to a certain place or time related to the record (not necessarily date of creation!)

[ims:chic/ims:metadata/ims:fields/dc:creator]

- Contains information about the creator of the medium behind the record (name, date of birth/death)

[ims:chic/ims:metadata/ims:fields/dc:date]

- Contains date of creation (at least year)

[ims:chic/ims:metadata/ims:fields/dc:description]

- Contains an intellectually written description/abstract of the given record

[ims:chic/ims:metadata/ims:fields/dc:format]

- Contains information about the original format of the resource (e.g. video, image, metal cut, woodcut)

[ims:chic/ims:metadata/ims:fields/dc:identifier]

- Contains link to original source
- Multiple occurrences possible, though 2nd tag and after hardly ever contain any URLs

[ims:chic/ims:metadata/ims:fields/dc:language]

- Contains language of the given resource (not necessarily equivalent to europeana:language!)

[ims:chic/ims:metadata/ims:fields/dc:relation]

- Contains additional information about the resource if it is an extract from another container (e.g. name of container/book and page number)

[ims:chic/ims:metadata/ims:fields/dc:rights]

- Contains information about the rights holder

[ims:chic/ims:metadata/ims:fields/dc:source]

- Contains information about a related resource from which the described resource is derived

[ims:chic/ims:metadata/ims:fields/dc:subject]

- Contains information about the subject of the given record
- Query in Europeana: what:[subject] - e.g. what:fossils will return all items with the subject "fossils"

[ims:chic/ims:metadata/ims:fields/dc:title]

- Contains title of the given object
- Multiple occurrences possible

[ims:chic/ims:metadata/ims:fields/dc:type]

- Contains type of media of the given dataset (e.g. Image, Video, Text)

4.4 dcterms Namespace Metadata Elements

[ims:chic/ims:metadata/ims:fields/dcterms:alternative]

- Alternative title of the given resource

[ims:chic/ims:metadata/ims:fields/dcterms:conformsTo]

- An established standard to which the described resource conforms
(<http://dublincore.org/usage/terms/history/#conformsTo-003>)
- This tag is hardly used in the entire collection. Its purpose is not very clear though.

[ims:chic/ims:metadata/ims:fields/dcterms:created]

- Contains date/era of creation of a resource

[ims:chic/ims:metadata/ims:fields/dcterms:extent]

- Contains information about the size, weight or duration of the resource

[ims:chic/ims:metadata/ims:fields/dcterms:hasFormat]

- A related resource that is substantially the same as the pre-existing described resource, but in another format. (<http://purl.org/dc/terms/hasFormat>)
- Rarely used
- e.g. image/jpeg

[ims:chic/ims:metadata/ims:fields/dcterms:hasPart]

- A related resource that is included either physically or logically in the described resource.
(<http://purl.org/dc/terms/hasPart>)
- Rarely used
- e.g. Across the Universe / John Lennon, Paul Mc Cartney ; Bill Frisell, arrangements, guitare ; Jenny Scheinman, violon ; Greg Leisz, dobro. - Cité de la musique, 2005

[ims:chic/ims:metadata/ims:fields/dcterms:hasVersion]

- A related resource that is a version, edition, or adaptation of the described resource.
(<http://purl.org/dc/terms/hasVersion>)
- Rarely used
- Contains mostly timespans (e.g. 1871-1880)

[ims:chic/ims:metadata/ims:fields/dcterms:isFormatOf]

- A related resource that is substantially the same as the described resource, but in another format.
(<http://purl.org/dc/terms/isFormatOf>)
- Rarely used

[ims:chic/ims:metadata/ims:fields/dcterms:isPartOf]

- A related resource in which the described resource is physically or logically included.
(<http://purl.org/dc/terms/isPartOf>)
- Appears to contain the name of the collection/provider of the resource (e.g. Bowes Museum)

[ims:chic/ims:metadata/ims:fields/dcterms:isReferencedBy]

- A related resource that references, cites, or otherwise points to the described resource.
(<http://purl.org/dc/terms/isReferencedBy>)
- Contains bibliographic Data (e.g. Literatur zum Original: W.-H.Schuchhardt, Die Antike 6, 1930, 342 ff. Abb. 6.7.- Bonn, Verzeichnis 39 Nr. 175.)

[ims:chic/ims:metadata/ims:fields/dcterms:isReplacedBy]

- A related resource that supplants, displaces, or supersedes the described resource.
(<http://purl.org/dc/terms/isReplacedBy>)
- Rarely used

- Contains mostly bibliographic data (e.g. Continuada por: Ilustración cantábrica)

[ims:chic/ims:metadata/ims:fields/dcterms:isRequiredBy]

- A related resource that requires the described resource to support its function, delivery, or coherence. (<http://purl.org/dc/terms/isRequiredBy>)
- Rarely used (only appears 6 times in the Other-collection)
- e.g. dcterms:isRequiredBy 1
- e.g. dcterms:isRequiredBy 2

[ims:chic/ims:metadata/ims:fields/dcterms:issued]

- Date of formal issuance (e.g., publication) of the resource. (<http://purl.org/dc/terms/issued>)

[ims:chic/ims:metadata/ims:fields/dcterms:isVersionOf]

- A related resource of which the described resource is a version, edition, or adaptation. (<http://purl.org/dc/terms/isVersionOf>)
- Contains bibliographic data (mostly for editions and/or conference proceedings)
- e.g. Fifth Annual World Bank Conference on Environmentally and Socially Sustainable Development ; The World Bank

[ims:chic/ims:metadata/ims:fields/dcterms:medium]

- The material or physical carrier of the resource. (<http://purl.org/dc/terms/medium>)
- e.g. Acrylic and chalk on canvas

[ims:chic/ims:metadata/ims:fields/dcterms:provenance]

- A statement of any changes in ownership and custody of the resource since its creation that are significant for its authenticity, integrity, and interpretation (<http://purl.org/dc/terms/provenance>)
- e.g. Herkunft des Abgusses: unbekannt, Nachlaß Wieseler

[ims:chic/ims:metadata/ims:fields/dcterms:references]

- A related resource that is referenced, cited, or otherwise pointed to by the described resource. (<http://purl.org/dc/terms/references>)
- Reference to something, e.g. Wikipedia-Article http://de.wikipedia.org/wiki/Schloss_Charlottenburg

[ims:chic/ims:metadata/ims:fields/dcterms:replaces]

- A related resource that is supplanted, displaced, or superseded by the described resource. (<http://purl.org/dc/terms/replaces>)
- Rarely used
- e.g. Es continuación de: Diario Constitucional de Palma (Palma. 1839) = ISSN 9968-3032

[ims:chic/ims:metadata/ims:fields/dcterms:requires]

- A related resource that is required by the described resource to support its function, delivery, or coherence. (<http://purl.org/dc/terms/requires>)
- Rarely used
- Seems to refer to a resource (e.g. <http://www.birzumuziejus.lt/item.php?id=10951>)

[ims:chic/ims:metadata/ims:fields/dcterms:spatial]

- Spatial characteristics of the intellectual content of the resource. (<http://purl.org/dc/terms/spatial>)
- Seems to contain information about locations (e.g. Walsoken, Norfolk)

[ims:chic/ims:metadata/ims:fields/dcterms:tableOfContents]

- A list of subunits of the resource. (<http://purl.org/dc/terms/tableOfContents>)
- Rarely used

- e.g. 1. Reise von Aleppo zu den Ufern des Euphrat.; 2. Uebergang über den Euphrat zu Bir.; 3. Von Bir durch die Turkmanische Ebne n. Orfah.; (extract)

`[ims:chic/ims:metadata/ims:fields/dcterms:temporal]`

- Temporal characteristics of the resource. (<http://purl.org/dc/terms/temporal>)
- Contains time-span, date or era
- e.g. Sozialgeschichte 1819-1849

4.5 enrichment Namespace Metadata Elements

Enrichment elements are added to a metadata record in order to increase the content description. An enrichment always contains associated “term” and “label” elements. While the “term” contains the URL to a description of the concept, the “label” element contains the actual name of the concept.

`[ims:chic/ims:metadata/ims:fields/enrichment:agent_label]`

- Contains a name of a person, probably affiliated with described object
- e.g. willem van der hagen

`[ims:chic/ims:metadata/ims:fields/enrichment:agent_term]`

- Contains a link to a person entry on dbpedia
- e.g. http://dbpedia.org/resource/Willem_Van_der_Hagen

`[ims:chic/ims:metadata/ims:fields/enrichment:concept_broader_label]`

- Broader concept than described in metadata record
- Multilingual entries possible
- e.g. administração, agrartechnik, 違法

`[ims:chic/ims:metadata/ims:fields/enrichment:concept_broader_term]`

- Contains link to GEMET thesaurus (to the referred concept_broader_label)
- e.g. <http://www.eionet.europa.eu/gemet/concept/9041>

`[ims:chic/ims:metadata/ims:fields/enrichment:concept_label]`

- Related subjects/concepts that describe the resource
- Multilingual entries possible
- e.g. architektur, architektura, architecture

`[ims:chic/ims:metadata/ims:fields/enrichment:concept_term]`

- Contains link to GEMET thesaurus (to the referred concept_label)
- e.g. <http://www.eionet.europa.eu/gemet/concept/1015>

`[ims:chic/ims:metadata/ims:fields/enrichment:period_broader_label]`

- Contains a date/timespan/era describing a broader period time span than in the described metadata
- Multilingual entries possible
- e.g. 2 quarter of the 11th century, начало 20-го века

`[ims:chic/ims:metadata/ims:fields/enrichment:period_broader_term]`

- Contains a link to semium.org (to the referred period_broader_label)
- Semium.org: Free open-source who-what-where-when semantic tagger for catalogue data
- e.g. <http://semium.org/time/13xx>

`[ims:chic/ims:metadata/ims:fields/enrichment:period_label]`

- Contains related a date/timespan/era to the described metadata object
- Multilingual entries possible

- e.g. 1027, early 17th century, 7e siècle

[ims:chic/ims:metadata/ims:fields/enrichment:period_term]

- Contains a link to semium.org (to the referred period_term)
- e.g. <http://semium.org/time/1015>

[ims:chic/ims:metadata/ims:fields/enrichment:place_broader_label]

- Contains a location broadening the geographic space already described in the metadata
- Multilingual entries possible
- e.g. bulgaria, bulgária, българия, bulgarie

[ims:chic/ims:metadata/ims:fields/enrichment:place_broader_term]

- Contains a link to geonames.org (to the referred place_broader_label)
- geonames.org: multilingual thesaurus for places
- e.g. <http://sws.geonames.org/2637139/>

[ims:chic/ims:metadata/ims:fields/enrichment:place_label]

- Contains a related location
- Multilingual entries possible
- e.g. afganistan, afganistán, afganistanas, afganisztán

[ims:chic/ims:metadata/ims:fields/enrichment:place_term]

- Contains a link to geonames.org (to the referred place_label)
- e.g. <http://sws.geonames.org/2186224/>

5. Sub-Collection Statistics

Field	eng	fin	fre	ger	gre	hun	ita	nld	nor	pol	slv	spa	swe	other
File container elements														
ims:chic	1108	801	3636	3866	198	122	2121	1252	1558	1094	247	1954	2361	2991
ims:chic/ims:file-metadata	1108	801	3636	3866	198	122	2121	1252	1558	1094	247	1954	2361	2991
ims:chic/ims:file-metadata/dc:creator	1108	801	3636	3866	198	122	2121	1252	1558	1094	247	1954	2361	2991
ims:chic/ims:file-metadata/dc:date	1108	801	3636	3866	198	122	2121	1252	1558	1094	247	1954	2361	2991
ims:chic/ims:file-metadata/dc:description	1108	801	3636	3866	198	122	2121	1252	1558	1094	247	1954	2361	2991
ims:chic/ims:file-metadata/dc:rights	2714	2372	10876	10394	520	355	6323	3645	4674	3282	570	5796	6849	7629
Metadata container elements														
ims:chic/ims:metadata	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
ims:chic/ims:metadata/ims:fields	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
Europeana ESE metadata elements														
europeana:country	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
europeana:dataProvider	493659	766839	3601294	2656722	124738	109493	2079071	1139363	1557745	1093705	72122	1920830	2124677	1633700
europeana:isShownAt	1105790	792859	3635084	3848491	193571	112135	2020779	1224009	1557389	1093705	243706	1886399	1556793	2780095
europeana:isShownBy	101298	139286	1698585	2673278	83498	113174	496093	184564	1184628	90117	111727	399854	1411210	1512226
europeana:language	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
europeana:object	952923	336785	3591973	3833048	167348	112105	1981348	1249748	1182020	984114	244236	1471554	1826452	2679499
europeana:provider	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
europeana:rights	763554	4746	3467166	991245	104064	7760	464157	574786	512595	1063527	1616	458379	966063	1254632
europeana:type	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
europeana:uri	1107176	800302	3635388	3865680	197371	121771	2120059	1251027	1557820	1093705	246952	1953124	2360050	2990507
europeana:year	349878	710837	1439957	2713736	6662	12517	3091653	644103	1190158	869182	120624	1616714	1808591	1864466

Field	eng	fin	fre	ger	gre	hun	ita	nld	nor	pol	slv	spa	swe	other
dc Metadata Elements														
dc:contributor	665785	54511	885931	732262	38256	92890	61031	336376	539337	851235	33710	641227	191566	912620
dc:coverage	56185	276	1482610	1553222	29161	8503	40955	0	86147	105924	8513	76894	0	322425
dc:creator	537470	547570	2433915	2370192	124743	23399	119837	492833	983860	661928	74016	595748	411608	948268
dc:date	765269	230438	1868565	2003353	155958	99174	102748	542045	506715	837498	222646	1617494	418034	1802637
dc:description	1060229	723913	1606298	4486153	627458	194403	2169061	570108	1359337	2561188	68116	1801428	2105107	2698048
dc:format	612623	379980	4477212	1276887	108564	34987	66173	355308	14355	806479	2947	2370634	245017	562769
dc:identifier	1530322	943974	3901877	6333122	176510	137500	3882849	1632683	1557820	1189239	469202	2050075	2439986	3896357
dc:language	714888	192456	1390608	1540694	93061	25221	81976	62982	321158	817644	199879	1877974	562492	1823710
dc:publisher	223394	191489	2365300	587470	94405	3786	79275	2191	5109	1155587	153376	1020781	167007	893592
dc:relation	8766	184	4076367	663461	99263	34371	15000	146	292	568801	145013	56061	27940	95878
dc:rights	627398	149025	3262673	2690146	81151	10193	2104407	1592871	385032	1299953	43232	429017	1335752	2555453
dc:source	348553	607505	2580954	3942072	42811	108994	1729771	1186761	795588	1540763	173656	272552	2014241	2470857
dc:subject	1790047	100136	1906619	10615361	315893	50557	4198064	1737870	3713130	4281120	145690	3904870	2818708	4484405
dc:title	1105236	801250	4769830	3948133	220712	133330	1752519	1080286	1472427	1132837	250407	1968005	2370376	3024609
dc:type	739124	1457994	7007040	5382281	220712	124875	5318827	1207009	2160788	1468628	319340	1873343	2760882	2520458

Field	eng	fin	fre	ger	gre	hun	ita	nld	nor	pol	slv	spa	swe	other
dcterms Metadata Elements														
dcterms:alternative	77497	61024	14041	237336	2158	1947	407018	574576	1460	39088	8740	74049	7322	236271
dcterms:conformsTo	0	97	0	0	0	0	0	0	0	0	0	0	0	38155
dcterms:created	77522	538373	245997	1654237	15844	1052	1665518	497299	652054	254878	18673	123968	1286178	381474
dcterms:extent	193029	14822	872634	1007606	4226	108765	1513768	197402	473462	463	37112	509849	572243	1126030
dcterms:hasFormat	0	0	304	227827	0	0	0	94	0	0	0	3904	0	36874
dcterms:hasPart	0	237	32289	102	0	0	17197	17949	0	0	349035	16855	12064	410527
dcterms:hasVersion	0	0	0	10	0	0	0	0	0	0	0	6	0	12
dcterms:isFormatOf	0	2944	0	0	0	2	0	94	0	0	0	5674	0	6
dcterms:isPartOf	729270	6125	328148	461843	0	3	97730	1537980	304522	278	154070	1612389	345819	570650
dcterms:isReferencedBy	0	0	1	2064	0	100	13101	0	0	0	0	22254	11068	38190
dcterms:isReplacedBy	0	0	0	0	0	3	0	0	0	0	0	7027	0	10
dcterms:isRequiredBy	0	0	0	0	0	0	0	0	0	0	0	0	0	6
dcterms:issued	7457	3031	119921	16666	1000	459	46147	347689	0	453	702	1594108	823154	306655
dcterms:isVersionOf	0	0	0	3069	0	22	0	0	357	0	1	555	0	91566
dcterms:medium	192864	48996	444150	577094	10357	302	2161414	769658	562703	800	2063	263696	776	351141
dcterms:provenance	64170	291	549508	1918	0	1356	41932	0	487320	0	0	80496	3100	90654
dcterms:references	0	0	182	7456	0	0	14906	0	7280	0	0	27	411683	2070
dcterms:replaces	0	0	0	0	0	4	0	0	0	0	0	147	0	7
dcterms:requires	0	0	0	0	0	0	0	0	0	0	0	41	0	223
dcterms:spatial	352738	721253	1066829	754236	4925	89438	501626	867191	2686136	596	23460	1498301	5134325	1745307
dcterms:tableOfContents	43	8	2793	3097	0	0	2	0	2996	0	0	3825	0	41913
dcterms:temporal	85575	81	181318	123493	7	109	2231	141295	633937	0	1	242091	675947	200319

Field	eng	fin	fre	ger	gre	hun	ita	nld	nor	pol	slv	spa	swe	other
Enrichment Metadata Elements														
enrichment:agent_label	3546	212	2639	23235	42	22	463	4117	259	218	381	24268	461	8089
enrichment:agent_term	2373	37	784	5760	14	10	237	1630	62	40	58	2383	117	3174
enrichment:concept_broader_label	8805136	5592774	49773878	108999137	886927	269168	20200040	8615914	47967939	9694318	415112	22707187	75309501	42197329
enrichment:concept_broader_term	427288	289313	2321810	5224564	46375	14112	1048330	423806	2511343	479522	20740	1219855	3735725	2125029
enrichment:concept_label	3977403	3014571	20605197	61534138	447428	123452	9038587	3954606	14829042	5461159	191333	8309608	33212874	17323114
enrichment:concept_term	211682	151879	1180642	3357944	23894	6468	488985	207851	749467	284354	11190	433215	1820925	927050
enrichment:period_broader_label	10651256	4690262	31777156	28462740	2101841	1781991	1543020	11073433	11984521	10168724	2908322	28498096	11983529	29511576
enrichment:period_broader_term	3207403	1329603	9810252	8605165	653255	543364	469002	3363106	3694853	3096902	870183	8714768	3701508	9091563
enrichment:period_label	731160	353498	2659206	1646694	131346	98624	106097	618387	736504	602178	165811	1648786	739860	1972388
enrichment:period_term	725254	353255	1929465	1646566	130543	98624	106097	617083	736504	602054	165791	1640038	739826	1873331
enrichment:place_broader_label	2059057	17010227	3469620	20300159	51709	197114	946061	11727779	21865388	30690	90068	39025218	31985729	42426778
enrichment:place_broader_term	80755	687833	201980	851487	1688	6375	42852	369474	1095165	1137	3572	1801746	1627932	1657728
enrichment:place_label	3685981	5553206	3300622	10782956	86742	114899	9440027	5030779	8511484	32972	64943	5970819	33449737	9270775
enrichment:place_term	129032	659564	239384	1021068	3130	7208	444193	570099	1592090	1496	5368	1145607	3071615	1285089