



européana

Semantic Enrichment Strategy for SearchCulture.gr

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National Documentation Centre /EKT



housekeeping

Any questions that you have you can add them in the **Q&A** section or to this document <https://bit.ly/30ZwZM2>

Use the **Chat** space to introduce yourself to the group

The recording and relevant documents will be made available on the **event page on Europeana Pro**
<https://bit.ly/2zKsZUo> or shared with you via **EventBrite**

Survey <https://bit.ly/3drpAYq> - Thank You!

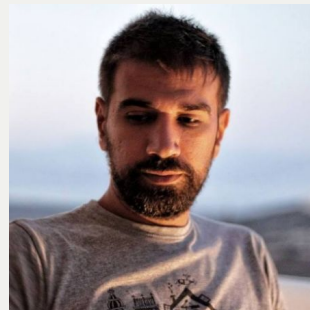
speakers

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overview

- Goal and key challenges
- Pros and cons of two different enrichment approaches
- The SearchCulture.gr enrichment strategy
 - Type enrichment
 - Subject enrichment
 - Time normalization and enrichment
- Outcome: how it affected SearchCulture.gr

National Documentation Centre/ EKT

Digital content and services

We aggregate, collect, document, preserve and disseminate digital content & data, produced and used by the Greek scientific, research and cultural communities.



NATIONAL DOCUMENTATION CENTRE



eContent
Digital content & services

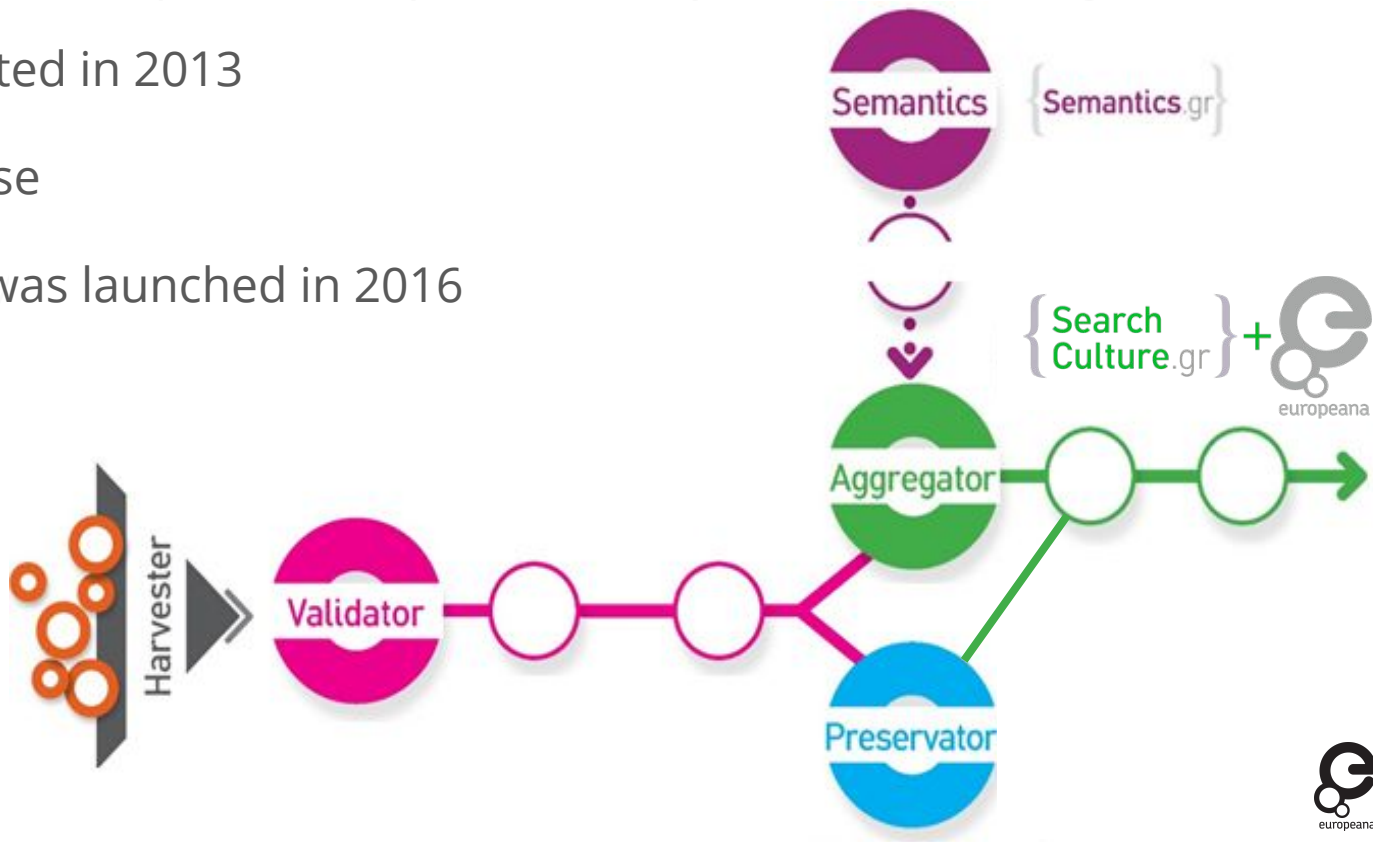
- **repositories EKT** | DSpace SaaS repository service
- **openABEKT** | SaaS Integrated Library System
- **ePublishing** | OA scholarly publishing suite
- **National Archive of PhD Theses**
- **SearchCulture.gr** | National Aggregator for CH
- **OpenArchives.gr** | Scientific Aggregator

EKT aggregation infrastructure

Development started in 2013

Developed in-house

SearchCulture.gr was launched in 2016

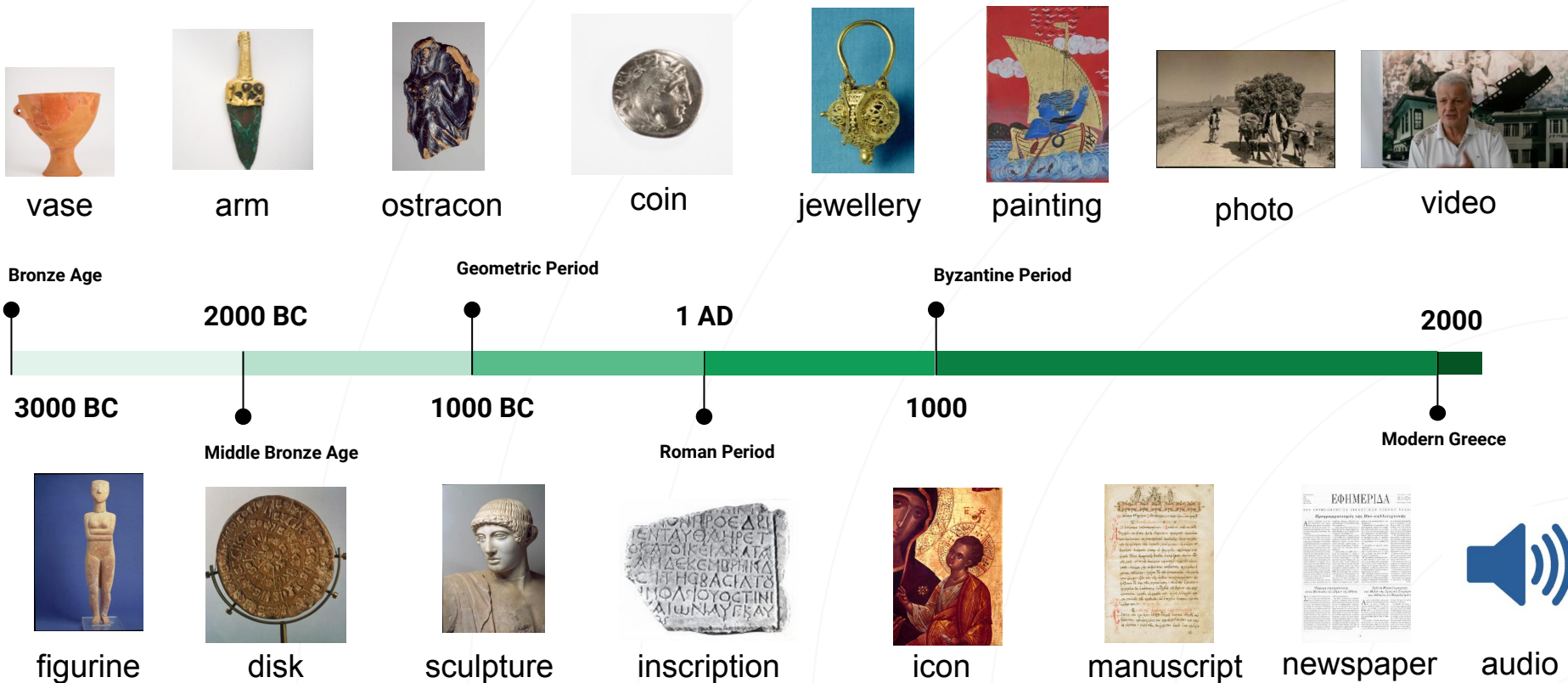


SearchCulture.gr | Greek National Aggregator



- **85** collections from **66** institutions
- museums | archives | ephorates of antiquities | municipalities | cultural foundations
- **680.000+** digital assets
- archaeological items | historical documents | folklore items | works of art | maps | oral history
- **320.000+** digital assets published in Europeana

SearchCulture.gr is a cross-domain aggregator



What were we trying to achieve?

- **browsing** by item types, subjects, time spans and historical periods
- **search** with time criteria; year ranges or historical periods
- **search** by choosing types and/or subjects
- **facets** on types, subjects, year ranges and historical periods
- submit combined **queries** like
 - icons from the late byzantine period
 - photographs from the WW2
 - paintings depicting the 1821 Revolution
 - manuscripts dating from 1850 to 1860
 - sculptures dated strictly within the Greek middle classical period

Metadata heterogeneity

Key challenges for large scale cultural
aggregators

Problems (1)

- Too detailed vs too generic documentation (e.g. "amphora" | "archeological object")
- Different languages
- Synonyms
- Plural vs singular (e.g. "photograph" | "photographs")
- Small vs capital letters (e.g. "BOOK" | "Book" | "book")
- Typos and spelling errors (e.g. "archaeology" | "archeology")
- Lack of URI references to controlled vocabularies or thesauri
- Too specific or event-based subjects which makes disambiguation difficult without context
- Item types used as subjects

Original Item Types



Original Subjects



Problems (2)

- Historical periods vs. chronologies
- Descriptive expressions in chronologies
- Different date/time formats
- Different granularity of time (dates, years, centuries)
- Misuse of dc:date, dcterms:created, dcterms:temporal and dcterms:issued

Original Time Values

Archaic - Byzantine period
427-421 BC. 1912/12
1897-1900 Roman 10-12-1987
14ος αι. μ.Χ. 1980/12
2nd half of the 6th c. BC.
Classic (5th-4th c. BC)
1767 Bronze Age
YE I-II 16th c.BC. 13th c.BC.
Ύστερος 6ος - πρώιμος 5ος αι.π.Χ.
Μικηνναϊκή περίοδος (YE IIIΓ) 132-134 AD.

Pick your enrichment strategy

fully automated strategy

vs.

“exhaustive classification” strategy

how

- Use **existing large vocabularies** (Getty AAT, wikidata, LCSH)
- **fully automated** mapping on distinct values or directly on records (string similarity matching, machine learning)

pros + cons

- ✓ Cheap: fully automated process
- ✓ Searchability is improved at some extend
- ? Are they covering target languages and/or country specific aspects (e.g. event-based local history concepts)
- ✗ Large ratio of invalid enrichments
- ✗ The enrichment coverage remains low
- ⇒ Not appropriate for browsing
- ⇒ Discoverability and visual presentation are not improved

how

- **Create more compact vocabularies** and link them to popular ones such as Getty AAT or LCSH
 - **Greek labels and Greek-aspect**
- **Semi-automated mapping** on distinct values: automated mapping (string similarity matching, machine learning) combined with a **curation** phase (manual mappings)
- Enrich per collection

pros + cons

- ✓ Searchability is improved
- ✓ The enrichment coverage is very high
- ✓ Curation improves quality: lower ratio of invalid enrichments
- ⇒ Appropriate for browsing
- ⇒ Discoverability is improved drastically
- ✗ More expensive: labour-intensive process

Enrichment process

Our semantic enrichment method

- **Semantics.gr:** a platform developed by EKT where institutions can create, establish and publish LOD vocabularies, taxonomies, thesauri and authority files (SKOS but also other schemas as well: MADS/RDF, EDM Contextual Classes)
 - Vocabulary of 139 item types
 - Unesco Thesaurus - EKT version (1400 concepts) + a Vocabulary with 500 thematic tags
 - Vocabulary of 94 Greek historical periods
- **Enrichment tool of Semantics.gr:** a tool for setting *enrichment mapping rules* from distinct metadata values to vocabulary terms
 - Mappings per collection
 - Semi-automatic (automatic suggestions and curation) and self-improving
 - Mappings can be based on one or more metadata fields
- **Time normalization tool:** a tool for setting parametric normalization patterns of time values

Type enrichment | Our goal



Each record is enriched with a new field:
EKT Type: from our vocabulary of types

Type enrichment | The vocabulary 'EKT Types'

<https://www.semantics.gr/authorities/vocabularies/ekt-item-types?language=en>

Cultural heritage item types

- 139 item types
- Hierarchical
- Bilingual (Greek and English)
- Linked to Getty AAT
- Schema: skos:Concept

Cultural heritage item types

URI: <http://semantics.gr/authorities/vocabularies/ekt-item-types>
[RDF/XML](#) [JSON-LD](#)

The vocabulary is hierarchical and bilingual and is linked to the Getty Art & Architecture Thesaurus (AAT) and the semantic thesaurus DBpedia of Wikipedia. The vocabulary is used for the homogenization and classification of the content aggregated by SearchCulture.gr, the National Aggregation Infrastructure for Cultural Heritage Content.

Category: Concepts
Semantic class: [skos:Concept](#)
Provider/Creator: [National Documentation Center \(EKT\)](#)
Default language: [en](#)
License: [Attribution \(CC BY 4.0\)](#)

[CC BY 4.0](#)

175 terms

[Αυλή πολιτιστική κληρονομιά](#) [Intangible cultural heritage](#)
Same as: [Intangible cultural heritage](#) [Getty AAT](#)

[Διαστάσιμα γραφικά](#) [2D Graphics](#)

[Αντίγραφο](#) [Replica](#)
Same as: [replicas](#) [Getty AAT](#)

[Εικόνες και διακόσμηση έκδοσης](#) [Images and ornament for layout features](#)
Same as: [Images and ornament for layout features](#) [Getty AAT](#)

[Εικονογράφηση](#) [Illustration \(layout features\)](#)
Same as: [Illustrations \(layout features\)](#) [Getty AAT](#)

[Εκτύπωση](#) [Print](#)
Same as: [prints \(visual works\)](#) [Getty AAT](#)

[Γραμματόσημο](#) [Stamp](#)
postage stamp
Same as: [postage stamps](#) [Getty AAT](#)

Type enrichment | Steps per collection

1. Insert the collection in the **acceptance portal**
2. Inspect the documentation quality of types
 - is **dc:type** sufficient to set mappings on? (primary field)
 - should we use **OAI setSpecs** instead? (primary field)
 - should we use values of **dc:subject** as filters? (secondary field)
 - should we use keywords in **dc:title** as filters? (secondary field)
3. Create **mapping rules** in the **Enrichment tool** of **Semantics.gr**
4. Re-index the collection in the **acceptance portal** and **check**
5. Insert (or re-index) and publish the collection in **SearchCulture.gr**

Type enrichment | mappings on dc:type values (1)

- **Good documentation of dc:type**
- **Primary field:** dc:type
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot displays the 'Repository field mapping' interface. At the top, there are tabs for 'Repository', 'Collection A', 'Field', 'dc:type', 'Vocabularies', and 'EKT Item types'. The 'Field' tab is selected. On the left, a 'Filters' panel contains sections for 'Secondary field for filters', 'Filters on filters', and 'Additional filters', each with a text input field. Below these is a checkbox labeled 'Filtering based on 'term inclusion'' and an 'Automatic creation' button. On the right, there are two panels. The first, 'Distinct primary field values', contains a 'Harvest field values' button (highlighted with a red arrow) and a 'Delete' button. The second, 'Mapping vocabulary terms', contains an 'Automatic match' button and a 'Delete' button.

Type enrichment | mappings on dc:type values (2)

- **Good documentation of dc:type**
- **Primary field:** dc:type
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot displays the 'Repository field mapping' interface. At the top, there are tabs for 'Repository', 'Collection A', 'Field', 'dc:type', 'Vocabularies', and 'EKT Item types'. The 'Field' tab is selected, and the 'dc:type' field is chosen. The interface is divided into three main sections: 'Filters', 'Distinct primary field values', and 'Mapping vocabulary terms'.

Filters: This section includes a 'Secondary field for filters' input, 'Filters on filters', an 'Automatic creation' button, 'Additional filters', and a checkbox for 'Filtering based on 'term inclusion''.

Distinct primary field values: This section lists three distinct values: 'Architectural sculpture' (3 items), 'Various documents' (43 items), and 'Liturgical object' (34 items). Each value has a 'Mapping status' dropdown set to 'Pending' and buttons for 'Harvest field values' and 'Delete'.

Mapping vocabulary terms: This section shows three search bars for mapping terms. A red arrow points to the 'Automatic match' button in the first search bar. Each search bar has a 'Q' icon, '+ Add' button, and 'Choose' button.

Type enrichment | mappings on dc:type values (3)

- **Good documentation of dc:type**
- **Primary field:** dc:type
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection A Field dc:type Vocabularies EKT Item types

Filters

Secondary field for filters

Filters on filters

Automatic creation

Additional filters

Filtering based on 'term inclusion'

Distinct primary field values

Harvest field values Delete

Architectural sculpture (3 items)

Mapping status Under validation

Various documents (43 items)



Mapping status Under validation

Liturgical object (34 items)

Mapping status Pending

Mapping vocabulary terms

Automatic match Delete

URI  



ekt-item-types/glypto

Preferred label

3D Artefacts and Realia

Sculpture

Q + Add Choose

URI  



ekt-item-types/eggrafo

Preferred label

Text

Document

Q + Add Choose

URI  

Q + Add Choose

Type enrichment | mappings on dc:type values (4)

- **Good documentation of dc:type**
- **Primary field:** dc:type
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot displays the 'Repository field mapping' interface. At the top, there are tabs for 'Repository', 'Collection A', 'Field', 'dc:type', 'Vocabularies', and 'EKT Item types'. The 'Field' tab is selected, and the 'dc:type' field is chosen. The interface is divided into several sections:

- Filters:** Includes a 'Secondary field for filters' input, 'Filters on filters' input, and 'Additional filters' input. There is an 'Automatic creation' button and a checkbox for 'Filtering based on 'term inclusion''.
- Distinct primary field values:** A blue header with 'Harvest field values' and 'Delete' buttons.
- Mapping vocabulary terms:** A blue header with 'Automatic match' and 'Delete' buttons.
- Mapping status:** Three rows showing mappings for 'Architectural sculpture', 'Various documents', and 'Liturgical object'. Each row has a 'Mapping status' dropdown set to 'Final'. Red arrows point to these dropdowns.
- URI and Preferred label details:** On the right, three panels show details for each mapping:
 - Architectural sculpture:** URI: `ekt-item-types/glypto`, Preferred label: `Sculpture`.
 - Various documents:** URI: `ekt-item-types/eggrafo`, Preferred label: `Document`.
 - Liturgical object:** URI: `ekt-item-types/ergaleia-kai-eksoplismos`, Preferred label: `Tools and equipment`.

Type enrichment | mappings on dc:type & dc:subject values (1)

- **Poor documentation of dc:type, useful dc:subject**
- **Primary field:** dc:type
- **Secondary field:** dc:subject for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection B Field dc:type Vocabularies EKT Item types

Filters

Secondary field for filters

Filters on filters


[Automatic creation](#)

Additional filters


☐ Filtering based on 'term inclusion'

Distinct primary field values

[Harvest field values](#) [Delete](#)

Text
(4044 items) 

Mapping status Pending

Image
(129 items) 

Mapping status Pending

Mapping vocabulary terms

[Automatic match](#) [Delete](#)

[Q](#) [+ Add](#) [Choose](#)

[Q](#) [+ Add](#) [Choose](#)

Type enrichment | mappings on dc:type & dc:subject values (2)

- **Poor documentation of dc:type, useful dc:subject**
- **Primary field: dc:type**
- **Secondary field: dc:subject** for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection B Field dc:type Vocabularies

Filters

Secondary field for filters

Filters on filters

Automatic creation

Additional filters

Filtering based on 'term inclusion'

Distinct primary field values

Harvest field values

Text (4044 items)

Image (129 items)

Mapping status Pending

Mapping status Pending

Text

Repository of the Union of the Democratic Centre (EDIK)

Select EKT types

Select EKT historical period

Choose license for o

Historical

Search strictly within the limits of histo

Filters

1 2 3

Type

Europeana type

Rights

Language

Repository/Collection

Subject

- ☐ Correspondence documents (1200)
- ☐ Report (1325)
- ☐ Manuscript (370)

Organωτική εγκύκλιος της Φιλελεύθερης Δημοκρατικής Ένωσης - 1955

EKT Chronology 1955

EKT type

Legal case and case note, Document

Europeana type

Text

Creator

E.Δ.Η.Κ

Rights

CC BY-NC-ND 4.0

Type enrichment | mappings on dc:type & dc:subject values (3)

- **Poor documentation of dc:type, useful dc:subject**
- **Primary field:** dc:type
- **Secondary field:** dc:subject for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection B **Field** dc:type Vocabularies EKT Item types

Filters

Secondary field for filters

dc:subject

Filters on filters

Automatic creation

Additional filters

☐ Filtering based on 'term inclusion'

Distinct primary field values

Harvest field values Delete

Text
(4044 items)

Mapping status Pending

Image
(129 items)

Mapping status Pending

Mapping vocabulary terms

Automatic match Delete

Search Add Choose

Search Add Choose

Type enrichment | mappings on dc:type & dc:subject values (4)

- **Poor documentation of dc:type, useful dc:subject**
- **Primary field:** dc:type
- **Secondary field:** dc:subject for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection B Field dc:type Vocabularies EKT Item types

Filters

Secondary field for filters

dc:subject

Filters on filters

Automatic creation

Additional filters

☐ Filtering based on 'term inclusion'

Distinct primary field values

Harvest field values Delete

Text (4044 items)

Select a filter

Mapping status Pending

Mapping vocabulary terms

Automatic match Delete

Filters

And at least one of

But not any of

Automatic match with filters

Image (129 items)

Select a filter

Mapping status Pending

Type enrichment | mappings on dc:type & dc:subject values (5)

- **Poor documentation of dc:type, useful dc:subject**
- **Primary field: dc:type**
- **Secondary field: dc:subject** for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection B Field dc:type Vocabularies EKT Item types

Filters

Secondary field for filters

dc:subject

Filters on filters

Automatic creation

Additional filters

☐ Filtering based on 'term inclusion'

Distinct primary field values

Harvest field values Delete

Text

(4044 items)

Correspondence documents

Mapping status Under validation

Mapping vocabulary terms

Automatic match Delete

URI

ekt-item-types/allhlografia

Preferred label

Document

Correspondence

Filters

Correspondence documents

And at least one of

But not any of

URI

ekt-item-types/xeiografo

Preferred label

Text

Manuscript

Filters

Manuscript

And at

Type enrichment | mappings on dc:type values & dc:title keywords (1)

- **Poor documentation of dc:type, useful dc:title**
- **Primary field:** dc:type
- **Secondary field:** dc:title
- Keywords for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot displays the 'Repository field mapping' interface. On the left, a 'Filters' panel includes sections for 'Secondary field for filters', 'Filters on filters', and 'Additional filters', along with an 'Automatic creation' button and a checkbox for 'Filtering based on 'term inclusion''. The main area shows a list of mappings for 'Grave good' (74 τεκμήρια) and 'Text' (129 items), both with a 'Mapping status' of 'Pending'. A red arrow points from the 'Grave good' entry to a detailed view on the right. This view includes a 'Type' field with a dropdown menu showing 'Grave good', 'Digital Pylia', and 'Select EKT types'. Below this is a 'Filters' section with a 'Clear' button. The 'Type' field is expanded, showing a list of filters including 'Europeana type', 'Rights', 'Language', 'Repository/Collection', and 'Subject'. The 'Europeana type' filter is selected, showing a list of types: 'Europeana type', 'Archaeological object, Figurine', '3D model', 'Creator', 'Rights', 'Institution', and 'The Ephorate of Antiquities of Messina'. A red box highlights the 'Europeana type' filter, and a red arrow points to the 'Europeana type' filter in the list.

Type enrichment | mappings on dc:type values & dc:title keywords (2)

- **Poor documentation of dc:type, useful dc:title**
- **Primary field:** dc:type
- **Secondary field:** dc:title
- Keywords for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot shows the 'Repository field mapping' interface. At the top, there are tabs: Repository, Collection C, Field, dc:type, Vocabularies, and EKT Item types. The 'Field' tab is selected. On the left, there are three sections: 'Filters' (with a dropdown arrow), 'Secondary field for filters' (containing 'dc:title' highlighted in yellow), and 'Filters on filters' (with a text input area and an 'Automatic creation' button). Below these is 'Additional filters' (with a text input area) and a checkbox for 'Filtering based on 'term inclusion''. On the right, there are two main panels. The top panel is 'Distinct primary field values' with a 'Harvest field values' button and a 'Delete' button. Below it are two rows of field mappings. The first row shows 'Grave good' with a flag icon and '(74 terms)' in parentheses, with a 'Mapping status' dropdown set to 'Pending'. The second row shows 'Text' with a flag icon and '(129 items)' in parentheses, also with a 'Mapping status' dropdown set to 'Pending'. To the right of these rows are two search input fields with 'Add' and 'Choose' buttons.

Type enrichment | mappings on dc:type values & dc:title keywords (3)

- **Poor documentation of dc:type, useful dc:title**
- **Primary field:** dc:type
- **Secondary field:** dc:title
- Keywords for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot displays the 'Repository field mapping' interface. At the top, there are tabs for 'Repository', 'Collection C', 'Field', 'dc:type', 'Vocabularies', and 'EKT Item types'. The 'Field' tab is selected.

On the left, under the 'Filters' section, there is a 'Secondary field for filters' dropdown set to 'dc:title'. Below this, a list of 'Filters on filters' includes 'architectural elemen', 'artifact', 'disk', and 'figurine'. A red arrow points to the 'Automatic creation' button. Below the filters, there is an 'Additional filters' section with a checkbox for 'Filtering based on 'term inclusion''.

The main area shows two mappings. The first mapping is for 'Grave good' (74 items) with a 'Mapping status' of 'Pending'. The second mapping is for 'Text' (129 items) with a 'Mapping status' of 'Pending'. Each mapping has a 'Harvest field values' button and a 'Delete' button.

On the right, there is a 'Mapping vocabulary terms' section with an 'Automatic match' button and a 'Delete' button. Below this, there are two search bars with '+ Add' and 'Choose' buttons.

Type enrichment | mappings on dc:type values & dc:title keywords (4)

- **Poor documentation of dc:type, useful dc:title**
- **Primary field:** dc:type
- **Secondary field:** dc:title
- Keywords for filters
- Automatic suggestions of mappings
- The tool 'remembers' manual mappings for better future suggestions

The screenshot displays the 'Repository field mapping' interface. At the top, there are tabs for 'Repository', 'Collection C', 'Field', 'dc:type', 'Vocabularies', and 'EKT Item types'. The 'Field' tab is selected.

On the left, there is a 'Filters' section with a 'Secondary field for filters' set to 'dc:title'. Below this, 'Filters on filters' lists 'architectural elemen', 'artifact', 'disk', and 'figurine'. An 'Automatic creation' button is present. The 'Additional filters' section is empty. A checkbox for 'Filtering based on 'term inclusion'' is at the bottom.

The main area shows two mapping entries:

- Grave good** (74 τεκμήρια): A red arrow points to the 'Harvest field values' button. The 'Mapping status' is 'Pending'.
- Text** (129 items): The 'Mapping status' is 'Pending'.

On the right, there is a 'Mapping vocabulary terms' section with an 'Automatic match' button. Below it, there are two filter configuration panels, each with a search bar, '+ Add', and 'Choose' buttons. The filters are configured with 'And at least one of' and 'But not any of' options, each with 'All' and 'Clear' links.

Type enrichment | mappings on dc:type values & dc:title keywords (5)

- **Poor documentation of dc:type, useful dc:title**
- **Primary field:** dc:type
- **Secondary field:** dc:title
- Keywords for filters
- Automatic suggestions of mappings & manual mappings
- The tool 'remembers' manual mappings for better future suggestions

Repository field mapping

Repository Collection C Field dc:type Vocabularies EKT Item types

Filters

Secondary field for filters

dc:title

Filters on filters

architectural elemen
artifact
disk
figurine

Automatic creation

Additional filters

☐ Filtering based on 'term inclusion'

Distinct primary field values

Harvest field values Delete

Grave good 🇬🇷
(74 τεκμήρια) 👁

Select a filter 👁

Mapping status Under validation

Mapping vocabulary terms

Automatic match Delete

URI
ekt-item-types/eidwlio

Preferred label
Sculpture

Figurine

🔍 + Add 📄 Choose

Filters
✕ figurine ✕ statuette |
All Clear

And at least one of
All Clear

But not any of
All Clear

URI
ekt-item-types/diskio

Preferred label
3D Artefacts and Realia

Disk

🔍 + Add 📄 Choose

Filters
✕ disk
All Clear

Subject enrichment | Our goal

ΑΓΓΕΙΟ Hittite Landscape Cemeteries Modern Διεύρυση
BAΛΚΑΝΙΚΗ Classical δοκίμια STADIUMS Βιογραφία ΑΡΓΟΣ
Cities ANATOLIK'ES People Medieval Architecture
MODERN Αρχιεπισκοπή ΕΛΛΗΝΙΣΜΟΣ
Portrait Theaters CLASSICAL ARCHAEOLOGY" Roman Διεθνές
ΕΚΚΛΗΣΙΑ Αρχιτεκτονική ΔΙΟΙΚΗΤΙΚΟ Γλυπτό
Ζωή Sculpture Ethnography Islamic Δικαιώματα Animals
Άγιος Δ'ΙΚΑΙΟ Διαφήμιση Education World Photography
ΓΥΑΛΙΝΑ ΕΘΝΙΚΟΑΠΕΛΕΥΘΕΡΩΤΙΚΟ Ακρωτήριο



Greek History History Arts Greece Science
Cultural policy and planning
Religion Asia Folklore Music Culture Oral tradition Press
Intangible cultural heritage Art Visual arts
Politics, law and economics Historical periods

ΕΛ • ΕΝ


Each record is enriched with a new field
EKT Subject with terms from **2 vocabularies**:
A vocabulary based on UNESCO thesaurus
A complementary vocabulary with thematic tags

Subject enrichment | 2 vocabularies are used

<http://semantics.gr/authorities/vocabularies/ekt-unesco?lang=en>

UNESCO Thesaurus (EKT version)

- **1368** terms
- Hierarchical
- Bilingual (Greek and English)
- Linked to UNESCO Thesaurus
- Schema: skos:Concept

 **UNESCO Thesaurus (EKT version)**

URI: <http://semantics.gr/authorities/vocabularies/ekt-unesco>

[RDF/XML](#) [JSON-LD](#)



The vocabulary comprises the Greek version of the UNESCO Thesaurus terms. It is primarily destined for describing cultural resources, so it focuses on terms within the cultural, educational, social and humanities domain. It is continuously updated and enriched with additional terms on its application.


Category Concepts

Semantic class skos:Concept


Provider National Documentation Center (EKT)


Creator


Default language  

License  Attribution-ShareAlike (CC BY-SA 4.0)


1367 terms


 Εκπαίδευση


 Education

Same as: [Education](#)  Unesco thesaurus


[RDF/XML](#) [JSON-LD](#)


 Βασικά και γενικά θέματα σπουδών


 Basic and general study subjects

Same as: [Basic and general study subjects](#)  Unesco thesaurus


[RDF/XML](#) [JSON-LD](#)


 Διδακτέα ύλη


 Curriculum

Same as: [Curriculum](#)  Unesco thesaurus


[RDF/XML](#) [JSON-LD](#)


 Πρόγραμμα σπουδών


 Curriculum

Same as: [Curriculum](#)  Unesco thesaurus


[RDF/XML](#) [JSON-LD](#)


 Εξωσχολικές δραστηριότητες


 Extracurricular activities

Same as: [Extracurricular activities](#)  Unesco thesaurus


[RDF/XML](#) [JSON-LD](#)


 Διδασκαλία και εκπαίδευση


 Teaching and training

Same as: [Teaching and training](#)  Unesco thesaurus

[RDF/XML](#) [JSON-LD](#)

 Εκπαιδευτικά ιδρύματα

 Educational institutions

Same as: [Educational institutions](#)  Unesco thesaurus

[RDF/XML](#) [JSON-LD](#)

 europeana

Subject enrichment | 2 vocabularies are used

https://www.semantics.gr/authorities/vocabularies/thematic_tags?lang=en

Thematic Tags (by EKT)

- 553 terms
- Hierarchical
- Bilingual (Greek and English)
- Schema: skos:Concept
- Linked to

UNESCO Thesaurus (EKT version)

via **skos:broaderMatch**

Thematic tags

URI: http://semantics.gr/authorities/vocabularies/thematic_tags

[🔗 RDF/XML](#) | [🔗 JSON-LD](#)

The vocabulary is interlinked with the UNESCO Thesaurus (EKT version with Greek terms) supplementing it with more specific topics. You can see the two interlinked vocabularies as a common hierarchy here [https://www.semantics.gr/authorities/vocabularies/ekt-](https://www.semantics.gr/authorities/vocabularies/ekt-unesco.thematic_tags?lang=el)
unesco.thematic_tags?lang=el

Category Semantic class Provider Creator Default language License	Concepts skos:Concept National Documentation Center (EKT) Attribution (CC BY 4.0)
---	--

556 terms

- Aθλήματα:** 🇬🇷 Sports 🇬🇷[RDF/XML](#) | [JSON-LD](#) | 🔗
 Same as: info.ddc/22/eng/I796.8 🇬🇷
- ⊞
- Aθλήματα πάλης:** 🇬🇷 Wrestling 🇬🇷[RDF/XML](#) | [JSON-LD](#) | 🔗
 Same as: info.ddc/22/eng/I796.8 🇬🇷
- ⊞
- Aθλήματα σφαίρισης:** 🇬🇷 Ball games 🇬🇷[RDF/XML](#) | [JSON-LD](#) | 🔗
 Same as: info.ddc/22/eng/I796.3 🇬🇷
- ⊞
- Άρση βαρών:** 🇬🇷 Weight lifting 🇬🇷[RDF/XML](#) | [JSON-LD](#) | 🔗
 Same as: info.ddc/22/eng/I796.41 🇬🇷
- ⊞
- Γκολφ:** 🇬🇷 Golf 🇬🇷[RDF/XML](#) | [JSON-LD](#) | 🔗
 Same as: info.ddc/22/eng/I796.352 🇬🇷
- ⊞
- Γυμναστική:** 🇬🇷 Gymnastics 🇬🇷[RDF/XML](#) | [JSON-LD](#) | 🔗

Subject enrichment | 2 vocabularies are used

UNESCO
Thesaurus
(EKT version)

Thematic Tags
(by EKT)

Αραβική ιστορία : Arab history
Ιστορία των Αράβων
Ίδιο με: Arab history Unesco thesaurus

Ασιατική ιστορία : Asian history
Ιστορία της Ασίας
Ίδιο με: Asian history Unesco thesaurus

Αφρικανική ιστορία : African history
Ιστορία της Αφρικής
Ίδιο με: African history Unesco thesaurus

Ελληνική Ιστορία : Greek History
Ίδιο με: info:ddc/22/eng/938 Ελληνική Ιστορία

Αρχαία Ελληνική Ιστορία : Ancient Greek History
Ίδιο με: info:ddc/22/eng/938 Αρχαία Ελληνική Ιστορία

Αρχαϊκή εποχή : Archaic age
Ίδιο με: αρχαϊκή εποχή info:ddc/22/eng/938.02

Κυρίως αρχαϊκή εποχή : Main archaic age
Ίδιο με: κυρίως αρχαϊκή εποχή info:ddc/22/eng/938.02

Ελληνικός εποίκισμός : Greek inhabitation
Ίδιο με: ελληνικός εποίκισμός info:ddc/22/eng/938.02

Μεταρρυθμίσεις του Κλεισθένη : Cleisthenes' reforms
Ίδιο με: μεταρρυθμίσεις του Κλεισθένη info:ddc/22/eng/938.02

Temporal enrichment | Our goal

Archaic - Byzantine period
427-421 BC. 1912/12
1897-1900 Roman 10-12-1987
14ος αι. μ.Χ. 1980/12
2nd half of the 6th c. BC.
Classic (5th-4th c. BC)
1767 Bronze Age
YE I-II 16th c.BC. 13th c.BC.
Ύστερος 6ος - πρώιμος 5ος αι.π.Χ.
Μικηναϊκή περίοδος (YE IIIΓ) 132-134 AD.



1912: Reign of King George I
1767: Ottoman Period
-700/1453: Byzantine period
-31/324: Roman Period
-1600/-1251: Late Bronze Age
1897/1900: Reign of King George I -1300/-1201: Late Bronze Age
-550/-501: Archaic Period
-3200/-1050: Bronze Age
-480/-323: Classic Period
-427/-421: Middle Classical Period
-1200/-1100: Late Helladic Period IIIc 123/134: Roman Period

ΕΛ • ΕΝ

Each record is enriched with 2 new fields

- **EKT Chronology**: year/year range (e.g. -31/324)
- **EKT Historical Period**: from a vocabulary of historical periods (e.g. Roman Period)

Temporal enrichment | The vocabulary of EKT Historical Periods

<https://www.semantics.gr/authorities/vocabularies/historical-periods?lang=en>

Greek Historical Periods

- **94** periods
- Hierarchical
- Bilingual (Greek and English)
- Schema: edm:TimeSpan
 - year ranges: edm:begin, edm:end
- **Absolute periods:** cover the entirety of hellenic territory
- **Relative periods:** have a strict local scope (e.g. minoan, cycladic and helladic periods)

The screenshot displays the 'Greek Historical Periods' vocabulary page. At the top, it shows the title 'Greek Historical Periods' with a book icon, the URI 'http://semantics.gr/authorities/vocabularies/historical-periods', and download links for RDF/XML and JSON-LD. Metadata on the right includes the category 'Time periods', semantic class 'edm:TimeSpan', provider 'National Documentation Center (EKT)', and a CC BY 4.0 license. A search bar is present below the metadata. The main content area lists 94 terms, with the first five visible: Mesolithic Period (Μεσολιθική Εποχή), Neolithic Period (Νεολιθική Περίοδος), Aceramic Period (Προκεραμική Περίοδος), Early Neolithic Period (Πρώιμη Νεολιθική Περίοδος), and Middle Neolithic Period (Μέση Νεολιθική Περίοδος). Each entry shows its range in years (e.g., 8000 - 7000 B.C.) and provides links to its Greek and English labels. The bottom of the page shows the start of the 'Late Neolithic Period' (Ύστερη Νεολιθική Περίοδος).

Exhaustive temporal homogenization | Two approaches

Historical period-driven enrichment



Original period label →

EKT Historical Period → EKT Chronology



according to **mapping rules** set in the **enrichment tool** of **Semantics.gr**



year ranges in
voc terms

Chronology-driven enrichment



Original time value →

EKT Chronology → EKT Historical Period



according to the
chronological patterns
set in the **time normalization tool**



year ranges in
voc terms

Historical period-driven enrichment

Metadata records

dcterms:temporal	EKT historical period Step 1: Mapping rules - primary field	EKT chronology Step 2: extract year span
Post-Byzantine Period	➔ Ottoman Period	➔ 1453/1821
Second War	➔ World War II	➔ 1940/1944
Middle - Late Hellenistic Years	➔ Middle Hellenistic Period - Late Hellenistic Period	➔ -220/-31

Mapping rules on **dcterms:temporal** for
collection in **Semantics.gr**
(**enrichment tool**)

Vocabulary of
EKT historical periods

Exhaustive temporal homogenization | Two approaches

Historical period-driven enrichment



Original period label →

EKT Historical Period → EKT Chronology



according to **mapping rules** set in the **enrichment tool** of **Semantics.gr**



year ranges in
voc terms

Chronology-driven enrichment



Original time value →

EKT Chronology → EKT Historical Period



according to the
chronological patterns
set in the **time normalization tool**



year ranges in
voc terms

A tool for time normalization

- based on **regular expression** processing
- 4 classes of chronological patterns, each with different extraction algorithm
 - century range | century | year/date range | year/date
- Predefined and custom parametric placeholders are used inside patterns
 - **placeholder for "BC"**: "BC", "BCE", "π.Χ."
 - **placeholder for "first half of"**: "first half of", "1st half of", "first A", "πρώτο μισό του"
 - **placeholder for "century"**: "century", "c.", "cent.", "αιώνας", "αι."
- completely parametric and extensible
- unlike mapping rules which are created per collection, once you create a pool of chronological patterns, you almost done for all collections
- we created 30 patterns to cover the diversity of **SeachCulture.gr** collections

A tool for time normalization | our pool of 30 patterns

Chronological Pattern Class	# of patterns	Examples
century range	5	2nd half of 5th c. BC until 4th c. BC → -450/-301 5th c. bc (2nd half of) - 4th c. bc → -450/-301
century	7	early 18th century → 1700/1730 first half of 5th c. BC → -500/-451 τέλος 4ου αι.π.χ. → -330/-301
date/year range	8	1342/48 → 1342/1348 1342 - 1654 → 1342/1654 579 - 570 π.Χ. → -579/-570
date/year	11	526 BC → -526 11/01/1980 → 1980 May the 1 st 1870 → 1870

A tool for time normalization | a pattern example

Pattern name: early Xth century

Pattern class: **century**

Pattern: `\[(?<#century_identifier>)(.*\s)?(\d{1,4})\s?<#s0>?(\\s)?(<#bc_ad>(\\s*)?)?(\\s<#s1>\\.?)`



Extraction pointers: 4

Predefined placeholders:

- **#century_identifier**
early: "early", "first quarter of", "beginning of", "αρχές" ...
late: "late", "end of", "end of", "τέλος", ...
- **#bc_ad**
BC: "bce", "bc", "b.c.e.", "b.c.", "b.c", "π.χ.", "π.χ", "πχ"
AD: "μ.χ.", "μ.χ", "μχ", "ad", "a.d.", "a.d", "ce", "c.e.", "c.e"

Custom placeholders:

- **#s0:** ος|ος|ου|st|nd|rd|th
- **#s1:** αιώνας|αι|α|century|cent|c

Examples:

early 6th c. BCE → -600/-571

early 6th c. AD → 500/530

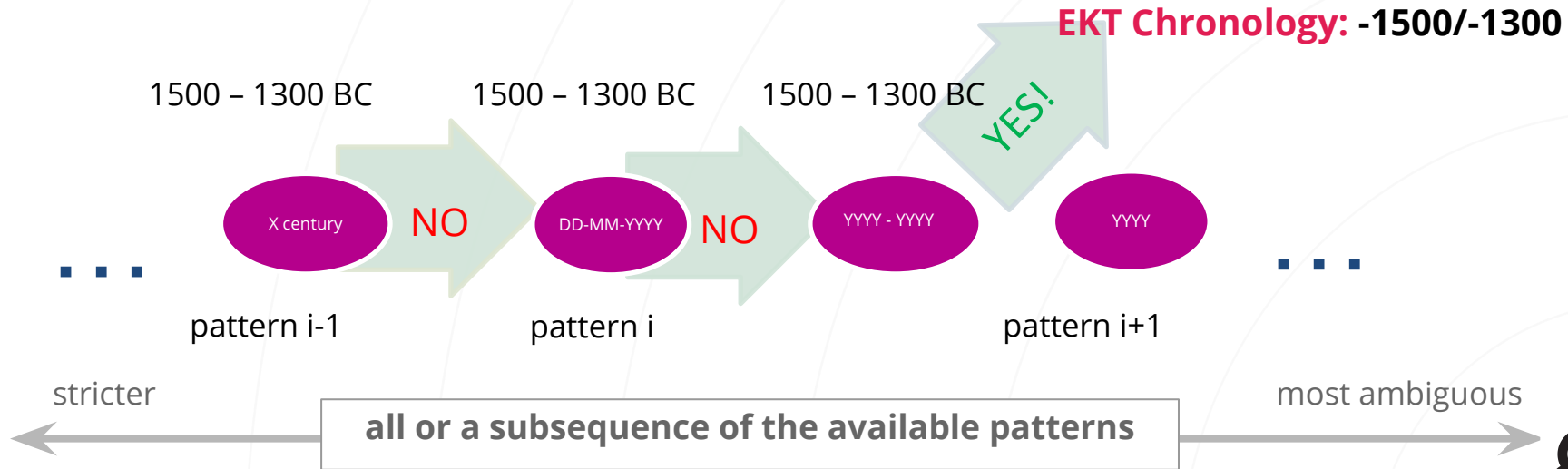
first quarter of the 2nd c. AD → 100/130

end of the 12th cent. → 1171/1200

αρχές 5ου αι. π.Χ. → -500/-471

A tool for time normalization | how does it work?

- patterns have a natural order: from the stricter to the most ambiguous
- when a chronological value is to be normalized, it passes through all the chronological patterns sequentially, until the first match is found.



Chronology-driven enrichment

Metadata records

dc:date	EKT chronology Step 1: normalize chronologies	EKT historical period Step 2: enrich with corresponding <i><u>absolute</u></i> period
Late 5th century	➡ 471/500	➡ Early Byzantine Period
7th c. B.C - mid 6th c. BC	➡ -700/-551	➡ Early Archaic to Middle Archaic Period
03/11/1980	➡ 1980	➡ Regime change

Subsequence of chronological patterns
(time normalization tool)

Vocabulary of
EKT historical periods
Index from year range to terms

Lessons learned (1)

Choose the target vocabularies

- Very big vocabularies do not facilitate browsing
- Small vocabularies do not facilitate automated mappings based on string-similarity matching
- Consider the option of **creating your own vocabulary** especially when one is not available in your language or they don't cover country-specific subjects (e.g. historical events). Link it!

Enrichment based on mappings

- Mappings on **distinct** metadata values not per record!
- Fully automatically generated mappings are not as to the point as **automatic mapping suggestions combined with curation**
- Facilitate the curator's work by giving her tools that facilitate better understanding of the content during the enrichment process
- **Self-improving mapping suggestion mechanism** : manual mappings are precious if used for future automatic mapping suggestions
- Enrich **each collection separately** - take into account the general subject/material type/particularities of the collection during mappings
- Examine **other metadata fields** that may help (e.g. for type enrichment, apart from dc:type, dc:subject may help)
- Do not forget examining the **OAI SetSpecs!** (e.g. for type or subject enrichment, oai sets may give better results than dc:type or dc:subject)

Lessons learned (2)

After the enrichment

- Don't hesitate to enrich/update your vocabularies if needed during processing a collection.
- But if you do so, you may have to go back and update existing mappings for some collections!

Time enrichment

- Time enrichment is really useful and worthy when it leads to **time-based search and browsing**
- **Historical labels vs. chronological values:** Use time **uniformly**; they both should lead to **equivalent** time-based search and browsing
- Historical labels
 - **Mappings** to a Vocabulary of Historical Periods that includes the year intervals as well
 - Use the Historical Periods to **assign the respective year intervals as well!**
- Chronological values:
 - **Time normalization** is needed (years or year intervals is what you need)
 - Regular expressions that take into account **time language-specific descriptors** worked fine
 - Use normalized years/year intervals to **assign the Historical Periods as well!**

Results

SearchCulture.gr in 2016 | 100,000 items • 20,000 in Europeana

Search by
Types

The image shows a screenshot of the SearchCulture.gr search interface. The main search bar contains the text "Enter word or phrase" and a dropdown menu set to "In all fields". A green "Search" button is to the right. Below the search bar, there is a link to "Less search options" and a "Help" icon. The "Institution / collection" section has a dropdown menu labeled "Select institution or collection". The "EKT type" section has a dropdown menu labeled "Select item type" with a list of options: "2D Graphics", "Sketch", "Technical drawing", and "Architectural drawing". A modal window is open over the "EKT type" section, showing a list of selected types: "Leaflet" and "Program".

Enter word or phrase In all fields Search

Less search options Help

Institution / collection

Select institution or collection

EKT type

Select item type

2D Graphics

EKT type

Leaflet Program

Sketch

Technical drawing

Architectural drawing

SearchCulture.gr in 2016 | 100,000 items • 20,000 in Europeana

Facet by Types

Filters

1 2 3

<< < 1 2 3 > >>

1 - 30 from 561,203 results

1 2 3

Clear

EKT type

☐ 2D Graphics (204,009)

☐ Collage (6)

☐ Drawing (12,962)

☐ Chart (153)

☐ Sketch (3,183)

☐ Technical drawing (2,426)

☐ Architectural drawing (2,259)

☐ Ephemera (3,627)


☐ Images and ornament for layout features (19,521)

☐ Illustration (layout features) (16,825)

☐ Master (25)

☐ Mixed media work of art (3)

☐ Mosaic (540)



Άποψη της κρήνης του
Σουλτάνου Αχμέτ Γ' στο
Σκούταρι.


EKT chronology
1817

EKT item type
Moslems, Women, Landscape, Hou...

Thumbnail or file license
CC BY-NC 4.0

Institution
Aikaterini Laskaridis Foundation

Collection
Travelogues



Εικ. 1. Άποψη του όρους
Σινά από την Ερυθρά
Θάλασσα. Εικ. 2. Ο βράχος


EKT chronology
1752

EKT item type
Religious practice, Land forms, Lan...

Thumbnail or file license
CC BY-NC 4.0

Institution
Aikaterini Laskaridis Foundation

Collection
Travelogues



Τοπίο στο Μπουγιούκ Ντερέ,
στη βορειοδυτική ακτή του
Βοσπόρου.


EKT chronology
1817

EKT item type
Thrace, Women, Landscape, Comm...

Thumbnail or file license
CC BY-NC 4.0

Institution
Aikaterini Laskaridis Foundation

Collection
Travelogues



europaana

SearchCulture.gr in 2016 | 100,000 items • 20,000 in Europeana

EKT types

EKT enriches and homogenizes the aggregated content against a hierarchical bilingual **Vocabulary of Item Types**. Metadata records are enriched with a separated field 'EKT Type' that has references to terms of the vocabulary. The content of SearchCulture.gr is classified according to a compact and balanced set of types which gives it semantic cohesion and improves its searchability, presentation and multilingualism.

 2D Graphics | 204,009 items [s](#)

- Replica | 120 items [↗](#)
 - Images and ornament for layout features | 19,521 items [↗](#)
 - Illustration (layout features) | 16,826 items [↗](#)
 - Print | 40,815 items [↗](#)
 - Stamp | 70 items [↗](#)
 - Printed material | 25,235 items [↗](#)
 - Clipping | 30 items [↗](#)
 - Sticker | 428 items [↗](#)
 - Poster | 3,974 items [↗](#)
 - Record cover | 401 items [↗](#)
 - Program | 12,783 items [↗](#)
 - Leaflet | 6,887 items [↗](#)
 - Card | 12,950 items [↗](#)
 - Santino | 9 items [↗](#)
 - Greeting cards | 72 items [↗](#)
 - Postcard
 - Playing
 - Identifying material
 - Banknote |
 - Religious visual
 - Icon | 405 items [↗](#)
 - Mixed media work
 - Ephemera | 3,621 items [↗](#)
 - Painting | 14,038 items [↗](#)
 - Lithography
 - Mural painting
 - Engraving |
 - Collage | 6 items [↗](#)
 - Master | 25 items [↗](#)
 - Drawing | 12,096 items [↗](#)
 - Chart | 153 items [↗](#)
 - Sketch | 3,114 items [↗](#)
 - Technical drawing
 - Architect
 - Photo | 124,692 items [↗](#)
 - Photonegative
 - Slide | 18 items [↗](#)
- Book page

Partial document

Speech, Lecture

Jewellery

3D Artefacts and Realia | 45,762 items

- Album | 22 items [S](#)
- Relief | 2,100 items [S](#)
- Souvenir | 986 items [S](#)
- Replica | 48 items [S](#)
- Archaeological object | 22,228 items [S](#)
- Archaeological site | 1,298 items [S](#)
- Architectural element | 1,983 items [S](#)
- Sculpture | 5,400 items [S](#)
- Figurine | 2,249 items [S](#)
- Disk | 49 items [S](#)
- Installation | 24 items [S](#)
- Lamella | 233 items [S](#)
- Costume (mode of fashion) | 7,308 items [S](#)
- Prize | 89 items [S](#)
- Inscription | 2,134 items [S](#)

Browse by Types



SearchCulture.gr in 2017 | 160,000 items • 60,000 in Europeana

Search by
Historical periods

EKT historical period strict time spans ☐

Select historical period ▼ Historical period ▼

- ▶ Early Minoan Period
- ▶ Early Minoan Period I
- ▶ Early Minoan Period II
- ▶ Early Minoan Period III
- ▶ Middle Bronze Age
- ▶ Middle Helladic Period
- ▶ Middle Helladic Period I

gr and

Ευρωπαϊκή Ένωση / European Union
Εκπαίδευση, θεωρία & πρακτική / Theory & practice of education, Ιστορία του Πολιτισμού / History of Civilization, Ευρετήριο / Indexes, Οικολογία / Ecology, Δίκαιο / Law, Γεωγραφία / Geography, Τέχνες / Arts, Πολιτικές Επιστήμες / Political Science

EKT historical period

strict time spans ☐

Middle Bronze Age ▼

Historical period ▼

SearchCulture.gr in 2017 | 160,000 items • 60,000 in Europeana

Search by
Year ranges

EKT chronology

strict time spans ☐

1700-1750|

Year span



SearchCulture.gr in 2017 | 160,000 items • 60,000 in Europeana

Historical periods and time spans facets

Filters

1 - 30 from 16,713 results

EKT type

EKT subject

EKT historical period

- ☐ Ottoman Period (39)
- ☐ Modern Greece (16,713)
 - ☐ Establishment of New Hellenic State (228)
 - ☐ Reign of King Otto (230)
 - ☐ Reign of King George I (308)
 - ☐ World War I and Asia Minor Campaign (321)
 - ☐ Interwar period (7,563)
 - ☐ World War II (16,713)
 - ☐ Civil War (449)
 - ☐ Postwar Greece (379)
 - ☐ Military junta (351)
 - ☐ Regime change (305)

EKT chronology

- ☐ 2000 - 2049 (268)
- ☐ 1950 - 1999 (424)
- ☐ 1900 - 1949 (16,713)
- ☐ 1850 - 1899 (240)
- ☐ 1800 - 1849 (228)
- ☐ 1750 - 1799 (1)
- ☐ 1700 - 1749 (1)
- ☐ 1650 - 1699 (1)
- ☐ 1600 - 1649 (1)
- ☐ 1550 - 1599 (1)
- ☐ 1500 - 1549 (1)
- ☐ 1450 - 1499 (1)

Συνολικά

Αναζήτηση

EKT type

EKT subject

EKT historical period

EKT chronology

EKT item type

EKT chronology

EKT item type

Creator

Thumbnail or file license

Institution

Collection

Digital Delphi

Inscription paléochrétienne en mosaïque provenant de Kallion, Early Christian

EKT chronology

1821 - 2017

EKT item type

Photography, Archaeology, Antiquities of Phocis

Creator

Créateur inconnu, Άγνωστος δημιουργός

Thumbnail or file license

CC BY-NC-SA 4.0

Institution

Ephorate of Antiquities of Phocis

Collection

Digital Delphi

Lesite de l'ex-voto des Deinomenids au sanctuaire d'Apollon, the site of the

EKT chronology

1821 - 2017

EKT item type

Photography, Archaeology, Antiquities of Phocis

Creator

Άγνωστος δημιουργός, créateur inconnu

Thumbnail or file license

CC BY-NC-SA 4.0

Institution

Ephorate of Antiquities of Phocis

Collection

Digital Delphi

Statue d'un philosophe terrasse du temple d'Apollon, Αδριάντας

EKT chronology

1821 - 2017

EKT item type

Photography, Archaeology, Antiquities of Phocis

Creator

Créateur inconnu, Άγνωστος δημιουργός

Thumbnail or file license

CC BY-NC-SA 4.0

Institution

Ephorate of Antiquities of Phocis

Collection

Digital Delphi

SearchCulture.gr in 2017 | 160,000 items • 60,000 in Europeana

Browse by historical periods

EKT historical periods

EKT enriches the aggregated content with homogenized chronology and with historical periods using a hierarchical bilingual vocabulary of [Greek Historical Periods](#).

You can choose between two ways of grouping items into historical periods. When the option below is not checked (default), an item is considered to belong to a historical period if that period overlays with the period of the item. When the option is checked, an item is considered to belong to a historical period only if that period coincides with or contains the period of the item.

☐ Strict grouping in periods

► Neolithic Period (7000 - 2800 π.Χ.) | 160 items [S](#)

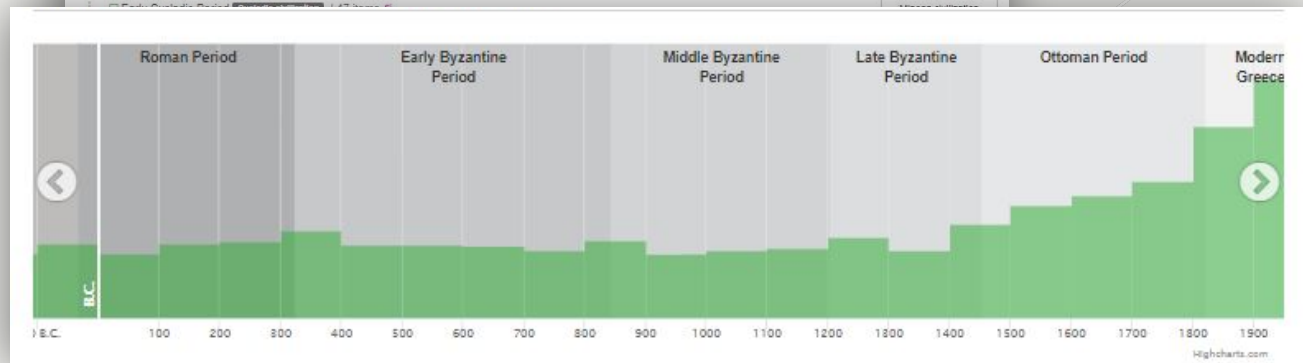
- Aceramic Period | 78 items [S](#)
- Early Neolithic Period | 108 items [S](#)
- Middle Neolithic Period | 107 items [S](#)
- Late Neolithic Period | 105 items [S](#)

► Bronze Age (3200 - 1050 π.Χ.) | 2,187 items [S](#)

- Early Bronze Age | 435 items [S](#)

Cycladic civilization

Mycenaean civilization



○ Middle Geometric Period | 343 items [S](#)
○ Late Geometric Period | 461 items [S](#)

SearchCulture.gr in 2020 | 680,000 items • 320,000 in Europeana

Search by subjects

EKT subject

Select subject

- ▶ Philosophy and ethics
- ▶ Metaphysics
 - ▶ Ontology
- ▶ Philosophy
- ▶ Logic
- ▶ Philosophical schools
- ▶ Humanism

SearchCulture.gr in 2020 | 680,000 items • 320,000 in Europeana

Facet by
subjects

The screenshot displays the SearchCulture.gr interface. On the left, a facet titled "EKT type" and "EKT subject" (both with a "{Semantics.gr}" tag) is shown. The "EKT subject" facet is expanded, revealing a hierarchical list of subjects with checkboxes and counts:

- ☐ Culture (1,094)
 - ☐ Art (18)
 - ☐ Arts (1)
 - ☐ Works of art (1)
 - ☐ Antiquities (1)
 - ☐ Art styles (2)
 - ☐ Contemporary art (2)
 - ☐ History (3)
 - ☐ Historical periods (1)
 - ☐ Ancient history (1)
 - ☐ Ancient civilizations (1)
 - ☐ National history (3)
 - ☐ Greek History (3)
 - ☐ Ancient Greek History (1)
 - ☐ Contemporary Greek History (2)

Below the facet, the "EKT historical period" and "EKT chronology" sections are partially visible. On the right, a detailed view of a stamp is shown. The stamp features a map of Greece and the text "HELLAS 2004" and "€ 0.47". The item title is "Γραμματόσημο Ολυμπιακών Αγώνων, Stamps of the Olympic Games". Other metadata includes "EKT chronology: 2003", "EKT item type: Sport, Sports competition", "Creator: Άγνωστος Δημιουργός", "Thumbnail or file license: CC BY-NC-ND 4.0 GR", "Institution: Hellenic Olympic Committee", and "Collection: Historical Archive of the Hellenic Olympic Committee". At the bottom right of the item view, there are links for "RDF", "eye", and a share icon.

SearchCulture.gr in 2020 | 680,000 items • 320,000 in Europeana

Browse by subjects

“EKT subjects”

Items are enriched with a new field “EKT Subject” that includes references to terms of a [bilingual and hierarchical vocabulary of thematic categories](#) created by the EKT that constitutes the Greek version of the [UNESCO Treasures](#) and of a [bilingual vocabulary of thematic tags](#) that is complementary to the UNESCO Thesaurus and covers more specific topics. You can see the two interlinked vocabularies as a common hierarchy [here](#). The enrichment is based on the original values of the “subject” metadata field.

☐ Countries and country groupings | 27,576 items [SI](#)

☐ Americas and the Caribbean | 945 items [SI](#)

☐ America | 1,002 items [SI](#)

- Argentina | 2 items [SI](#)
- United States of America | 741 items [SI](#)
- Canada | 5 items [SI](#)
- Cuba | 29 items [SI](#)
- Mexico | 7 items [SI](#)
- Peru | 1 items [SI](#)
- Chile | 1 items [SI](#)

☐ Asia and the Pacific | 16,072 items [SI](#)

☐ Asia | 16,114 items [SI](#)

- Armenia | 6 items [SI](#)
- Vietnam | 119 items [SI](#)
- Georgia | 83 items [SI](#)
- Near East | 44 items [SI](#)
- Japan | 27 items [SI](#)
- India | 7 items [SI](#)
- Iran | 91 items [SI](#)
- Israel | 682 items [SI](#)
- China | 15 items [SI](#)
- Lebanon | 129 items [SI](#)
- Palestine | 493 items [SI](#)
- Syria | 162 items [SI](#)
- ☐ Turkey | 14,855 items [SI](#)
 - Istanbul | 5,372 items [SI](#)
 - Asia Minor | 4,849 items [SI](#)
 - Pontus | 1,912 items [SI](#)

☐ Africa | 15 items [SI](#)

- Egypt | 2,677 items [SI](#)



SearchCulture.gr in 2020 | 680,000 items • 320,000 in Europeana

Creating a query for a thematic exhibition

Example: creating a thematic exhibition titled "Archaeology"

Query: use combination of EKT fields

EKT Type: Archeological item, ...

EKT Chronology: [<1500]

EKT Historical Period: [< Middle Ages]

EKT Subject: Archeology, Ancient Greece, ...

Collection: Digital Delphi, Archaeological Museum of Chania, ...

SearchCulture.gr in 2020 | 680,000 items • 320,000 in Europeana

Thematic exhibitions

Covering a variety of EKT Types, Subjects, Historical Periods or Chronologies, from several collections.

Goal: to showcase variety and span

thematic exhibitions

explore the stories that emerge through SearchCulture.gr collections



Thessaloniki, a multicultural metropolis

Discover 130 years spanning the end of the Ottoman Empire and its integration in the modern Greek state



Delphic Festivals

An attempt to revive the Delphic Ideals



Seascape painting

Seascapes and beaches in modern Greek painting



The world of archaeological digs

100 years of archaeological excavations in Greece in photographs



Mythology

Mythological iconography from antiquity to present day



Stage and costume design in modern Greek theater

100 years of scenography in modern Greek theater



Byzantine jewelry

The incomparable art of Byzantine jewelry



Embroidery

Traditional home crafts, textiles and embroidery

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Thematic exhibitions

Thematic exhibition

The world of archaeological digs

100 years of archaeological excavations in Greece in photographs



View of the excavation, Acropolis, Athens, 1910-1911. CC-BY-NC-ND 4.0 I.S. GR. The Archaeological Society of Athens

Enter word or phrase
Search

Filters

10 11 Clear

EKT type

EKT subject

EKT historical period

EKT chronology

Type

Europeana type

Thumbnail or file license

Language

Institution / collection

Subject

View of the site

EKT type

EKT subject

EKT historical period

EKT chronology

Type

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Thematic exhibition

Children's Portraits

Child Photography at the turn of the Century



Portrait of a girl, Kostas Adonidis, 1910-1911. CC-BY-NC-ND 4.0 I.S. GR. The Archaeological Society of Athens

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Thematic exhibition

Stage and costume design in modern Greek theater

100 years of scenography in modern Greek theater



View of the exhibition, 1910-1911. CC-BY-NC-ND 4.0 I.S. GR. The Archaeological Society of Athens

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The exhibition, through stage models and objects, sketches and theatrical costumes, documents a 100-year journey of the art of theatre design in Greece.

The journey begins with works by the "father" of Greek scenography, Petros Avramidis, recognized both in Greece and in Germany in the 1920s.

The 100 years for the theater was a decade that launched with the founding of the National Theater and was characterized by the flourishing of scenographic art in Greece. Theatre design of the time evolved alongside artists of the "1920s generation", such as Kostas Adonidis, Agapopoulos, Moralis. Many of the sets and costumes in the exhibition carry their names as creators. Similarly, a native scenographic scene begins to develop, with scenographers with theoretical training and technical knowledge emerging, who creatively grafted the search for the indigenous with European modernism, influenced by movements such as expressionism, abstraction, constructivism and cubism. Color patterns, costume drawings and architectural stage plans, merge the development of a scenographic vocabulary that satisfies the demand for a vernacular that references ancient and Byzantine art, but also folk art, slum architecture and traditional handicrafts.

Set design, costume sketches and models from the interwar to the postwar period, tell a tale of an economical, thoughtful use of resources. A Spartan, minimalist aesthetic characterizes the scenography of the postwar era, balancing the aesthetic of the times with the technical and economic restrictions and managing to transform humble materials in particles of stage magic.

View of the exhibition, 1910-1911. CC-BY-NC-ND 4.0 I.S. GR. The Archaeological Society of Athens

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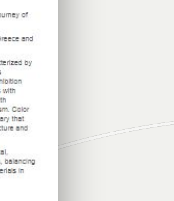
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Thematic exhibition

Stage and costume design in modern Greek theater

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Plans for future developments

- Enrichment of spatial metadata with Geonames (or wikidata)
- Enrichment on dc:creator, dc:contributor and dc:subject using an authority file of agents

Further reading

- Haris Georgiadis, Agathi Papanoti, Maria Paschou, Alexandra Roubani, Despoina Chardouveli, Evi Sachini: Using type and temporal semantic enrichment to boost content discoverability and multilingualism in the Greek cultural aggregator SearchCulture.gr. Int. J. Metadata, Semantics and Ontologies, Vol. 13, No. 1, pp.75–92, 2018 ([preprint](#))
- Haris Georgiadis, Agathi Papanoti, et al: [The semantic enrichment strategy for types, chronologies and historical periods in SearchCulture.gr](#), In Proc. MTSR 2017
- Haris Georgiadis, Agathi Papanoti, et al: [Semantics.gr: A self-improving service to repositories and aggregators for massively enriching their content](#). In Proc. of the DHC Workshop of MTSR 2016
- Ioanna Ourania Stathopoulou, Haris Georgiadis, Vangelis Banos, et al: [An Open Cultural Digital Content Infrastructure](#), In Proc. DL'2014

Links

- <https://www.searchculture.gr/?language=en>
- <https://www.semantics.gr/authorities/?language=en>
- Vocabularies in semantics.gr:
 - Cultural heritage item types
<https://www.semantics.gr/authorities/vocabularies/ekt-item-types?language=en>
 - UNESCO Thesaurus (EKT version)
<http://semantics.gr/authorities/vocabularies/ekt-unesco?lang=en>
 - Thematic tags
http://semantics.gr/authorities/vocabularies/thematic_tags
 - Greek Historical Periods
<https://www.semantics.gr/authorities/vocabularies/historical-periods?lang=en>

Thank you!!!

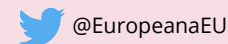
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Library Department
NATIONAL DOCUMENTATION CENTRE (EKT)**

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