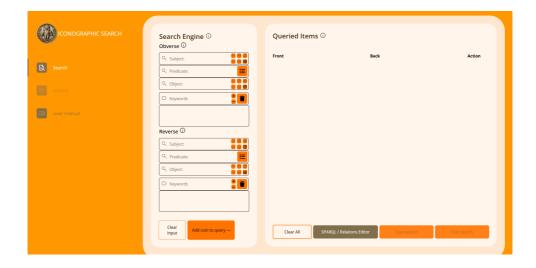
User manual

ICONOGRAPHIC SEARCH



by

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1 General

- With ICONOGRAPHIC SEARCH you are able to search coins from the Archaic period to the coinage of Moesia inferior, Thrace, Mysia and the Troad issued under Roman rule
- "Search engine" is used to create/customize coin descriptions for coin search
- "Queried items" lists the created coin descriptions and offers the possibility to edit, link and search for them
- Aspects that are not self-explanatory are explained in an infobox as well



Figure 1: Explanations on the website

• Buttons that cannot be used under the current input criteria are grayed out



Figure 2: Active button



Figure 3: Inactive button

2 Generating coin requests

- To find out which words you can use to describe the image of your coin request, you use the standard search or the hierarchy search
- To describe which strings a coin side has to contain in its description, you are able to add keywords

2.1 Standard coin description

- You can describe the obverse as well as the reverse of your coin
- To describe a coin side you can use the triple input for describing the coin side image or search words in the coin description through keywords

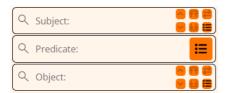




Figure 4: Tripel input

Figure 5: Keyword input

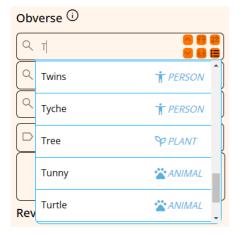
2.1.1 Triple input

- The search finds coins, based on the interactions being displayed on the relevant coin side.

 To describe the image of a coin side you are able to enter a subject a predicate and an object.
- For a coin description to be valid, you don't have to fill in everything. Entering just a subject
 without an associated predicate or object will extend the search range to find all coins that
 display the subject, regardless of whether the subject is performing any interactions on the
 image of the relevant coin side.
- To simple input a triple element you have to click into the specific field and type in your word and select the belong recommendation
- Important: Only selected recommendations can get find on a coin image!

Recommendations

- Based on your current input you get recommendations for your selected triple element
- Recommendations have to start with the current input, uppercase and lowercase doesn't matter here



Obverse ①

Wheel
Whip
Wing
Wreath
Wolf

Figure 6: Recommendations for subjects that start with the letter T/t

Figure 7: Recommendations for subjects that start with the letter W/w

OBJ

OBJ

(T) OBI

OBJ

* ANIMAL

• In addition to the current input, recommendations for a specific triple element are based on the coin side and the other selected elements for it.

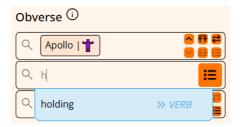


Figure 8: For Obverse holding is a valid predicate for Apollo

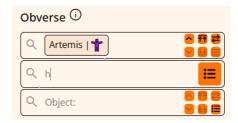


Figure 9: For obverse holding is not a valid predicate for Artemis

• To get all possible recommendations for a specific triple part you can click the "list all" button

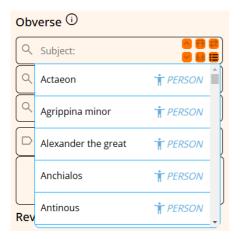




Figure 11: List all button

Figure 10: List all subjects example

 To make sure the element is possible to find on a coin side, you have to click on a recommendation, so that the input field contains your wished element as a tag element

Tag element

• Your triple element for the image of the coin side has to be an tag element, otherwise there will not be any search result for that coin description





Figure 12: Valid input

Figure 13: Invalid input

- There can maximum be one tag element per input field
- If you want to change your input manual, you have to delete the current tag element first , through entering back arrow

2.1.2 Keywords

- Every entered keyword / string has to be part of the description of the coin side
- A single keyword has a maximum size of 16 signs
- To enter a keyword you first have to select the keyword field and enter your word
- Every keyword is a simple string, no tag element
- For enterening a keyword you have two possible options

Add keyword

• Grants you the abilety to add a input to a list of words that must be included in a coin's description for the coin to be an eligible result for both type and coin searches

Negate keyword

• Grants you the abilety to add a input to a list of words that must be not included in a coin's description for the coin to be an eligible result for both type and coin searches



Figure 14: Add keyword



Figure 15: Negate keyword

• After adding your keyword, it displays under the keyword input field, there are listed all keywords for the coin side



Figure 16: Keyword input



Figure 17: Added keyword



Figure 18: Negate keyword

• You can also edit added keywords

Edit keyword

 After editing a keyword it displays in the input field, for the moment it's out of the keyword list

Delete keyword

- To delete a keyword input you can use the rubbish bin button
- If you want to delete an entered keyword you first have to click on the edit button and then you can clear the input field



Figure 19: Edit keyword



Figure 20: Delete keyword

2.2 Searching based on hierarhy

• After adding a tag element as a specific triple part you have the possibility to adapt it with help of the hierarchy buttons next to the input field

2.2.1 Hierarhy buttons

- These buttons give you the opportunity to get generalised/sepcialised or equivalent recommendations for the selected triple element based on the current inputs for the coin side
- In case that a tag has no generalised/sepcialised or equivalent recommendations based on the current coin description, the relevant buttons are unabled



Figure 21: No specialisation exists for Artemis



Figure 22: No generalisation exists for Person

• In general you have the following buttons as selection for adapting your tag element hierarchly:

Simple generalisation

• Recommendations only contain the classes that are exactly one hierarchy level above the tag element of the search field.



Figure 23: Simple generalisation button



Figure 24: Simple generalisation for Athena

Simple specialisation

Recommendations only contains the specific entities and classes that are exactly one hierarchy level below the tag element of the search field.



Figure 25: Simple specialisation button



Figure 26: Simple specialisation for Person

Absolute generalisation

• Recommendations only contains the specific class that occupies the highest hierarchy level above the tag element of the search field.



Figure 27: Absolute generalisation button

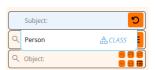


Figure 28: Absolute generalisation for Artemis

Absolute specialisation

• Recommendations only contains the specific entities that are on a hierarchy level below the tag element of the search field.



Figure 29: Absolute specialisation button



Figure 30: Absolute specialisation for Greek

Equivalent entity search

• Recommendations only contains the specific entities and classes that are exactly on the same hierarchy level as the tag element of the searchfield.



Figure 31: Equivalent entities button



Figure 32: Equivalent entities for Olympic

2.2.2 Hierarhy search field

- Through click on a hierarchy button the input field for the triple element changes to a search field for the hierarchy recommendations based on the current tag and the other triple elements of the current coin side
- Your input/tag is not deleted you can also go back by canceling the hierarchy search.
- The input field that can now be seen offers the option of filtering the recommendations for the respective hierarchy as well as for the standard search

Filtering hierarhy search

• Allows you to filter recommendations for hierarchy search to only include specific entities and classes that start with your input



Figure 33: Equivalent entities for Olympic



Figure 34: Equivalent entities for Olympic beginning with the Letter R

• In case that you don't want to change your selected tag element with one of the hierarchy recommendations you can also go back

Return to normal search

• The according button allows you to cancel a currently active hierarchy search



Figure 35: Cancel active hierarchy search button



Figure 36: Before canceling absolute hierarchy search for Artemis



Figure 37: After canceling absolute hierarchy search for Artemis

3 Edit coin requests

- You have two options to edit your coin requests
- You can edit the added coin descriptions.
- Second way is to change the logic relation between the added coin descriptions. Per Default only one description has to match a coin

3.1 Edit coin description

- If there is a added coin description you don't want to find on a coin any longer, you have two popssibilities
- First you can edit the coin:

Edit coin

- Allows you to modify already added coin request by transfering them back to the "Search engine".
- They are not longer part of "Queried items"

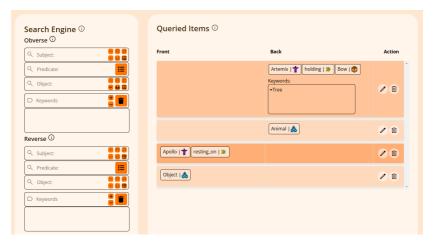
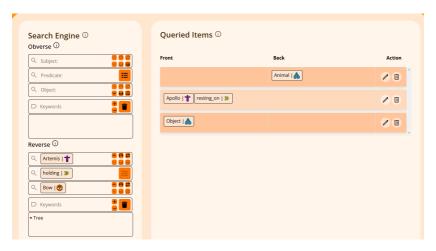


Figure 38: "Queried items" before adding coin descriptions



 $\textbf{Figure 39:} \ \text{``Artemis holding bow'' back in ``Search engine''} \ \text{after click on edit button for that coin description}$

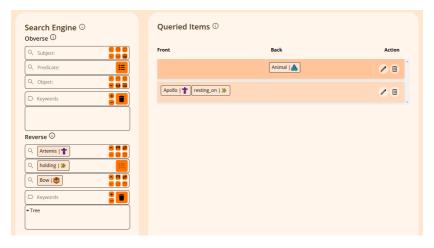


Figure 40: Coin description "Object" is now removed from "Queried items", after clicking on delete button

• Second opportunity is to delete the coin description

Delete coin

• Allows you to completly remove a coin request from the search.



Figure 41: Edit coin button



Figure 42: Delete coin button

3.2 Editing SPARQL relations

3.2.1 SPARQL / Relations Editor

- By default when multiple coin requests are entered at the same time only one request must be fullfilled for a coin to be counted as valid
- The SPARQL Relation Editior allows you to change this by building your own connections between coin requests.
- It also allows you to view the query used to find the wanted coins
- Open it through clicking on "SPARQL/Relations Editor"

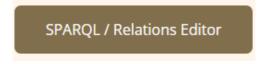


Figure 43: Button to open the menu to edit relation of added coin descriptions



Figure 44: Standard relation between two coin descriptions



Figure 45: Changing relation through clicking on the queried items and conacting them with help of the controls on the right

3.3 Search coins

• For searching coins you have two options: Search coins or search types

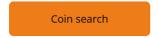


Figure 46: Coin search button



Figure 47: Type search button

Type search

• With help of type search you get all coins of a type there at least one coin matches the coin request



Figure 48: Request for coins with artemis holding bow on the reverse side



Figure 49: Results for type search with request for coins with artemis holding bow on the reverse side

Coin search

- Shows you all coins that were found based on your request. This also includes informations for the coin like the id, the mint, the time period its from, the diameter, the weight and the descriptions for both the obverse and reverse side of the coin
- Allows you to sort the coins by region, max diameter and weight in both ascending and descending order
- Allows you to group the coins by by region, max diameter, weight and type.



Figure 50: Two requests for coins one with artemis wearing hair bunch without word bow in description on the obverse side and one with apollo restion on the reverse side



Figure 51: Results for coin search with two requests one for coins with artemis wearing hair bunch without word bow in description on the obverse side and one for coins with apollo restion on the reverse side