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Manual Wikidata for collection managers

This paper is part of the project 'Linked Open Data publication with Wikidata'¹. This is the fourth project deliverable (D4. Manual Open Data management in Wikidata) and was described in the project plan as follows:

Based on the whitepaper, the experiences from the first Workshop and the upload of data in Wikidata, a manual will be created for data publishers who aim at publishing collection information on Wikidata.

The manual is first and foremost interesting to collection managers, but is also of interest to volunteers who add and adapt information about art on Wikidata.

The paper is comprised of four chapters (and a couple Annexes). First we indicate how you can manage existing data on Wikidata (looking for data, change it, add references, ...). In a following chapter you learn how you can add new items to Wikidata, both manually as with the help of a bot (volunteer).

We also look at how data can be used and how changes (to the data) can be monitored. Finally you read more about the available export(s) of Wikidata information, and we showcase some examples of data applications.

The manual also contains a small appendix, listing some handy tools that you can use inside Wikidata, an overview of the mapping of object type terms as used by the museums - with the terms used in Wikidata; information on notability and a couple examples of SPARQL-queries.

This paper was written by Sandra Fauconnier (wiki-user Spinster²), Bert Lemmens & Barbara Dierickx (PACKED vzw) and is available under a Creative Commons Attribution-Share Alike

License, International 4.0 (http://creativecommons.org/licenses/by-sa/4.0/).



Important!

This manual describes the functioning and the state of the art on Wikidata at the end of 2015 - beginning 2016. The project is under continuous development and possibly information from this manual may become obsolete quite quickly. Always check the mentioned links with other local manuals, instructions and informations on the Wikidata platform!

¹ See project page on Wikidata:

² https://www.wikidata.org/wiki/User:Spinster

0. Getting started: an account on Wikidata

Just like all Wikimedia projects, anyone can edit Wikidata. You don't need to have an account and/or login to do so.

Edits by users who are not logged in can also be seen in the revision history of a Wikidata item. They are shown as the IP address of the editing user.



An anonymous user edited the Wikidata record on 'De aanbidding door de wijzen'3.

For collection managers, and anyone willing to edit and follow a large quantity of information on Wikidata, it is highly recommended to DO create an account on Wikidata, and to make all edits under this account. There are many advantages in creating your own account:

- As a person, you are much more recognisable to others on Wikidata and the other Wikimedia projects. This way, edits made by you, in what is seen as your field of expertise, are more easily detected by others. You're also more easily approachable for others.
- 2. Also when you edit Wikidata from another location (with a different IP address), your edits remain linked to your own account.
- 3. You can activate and use all kinds of handy tools and gadgets.
- 4. It is much easier to create your own watchlist and keep an eye on changes to 'your' data (see further down).

Creating an account can be done on this page:

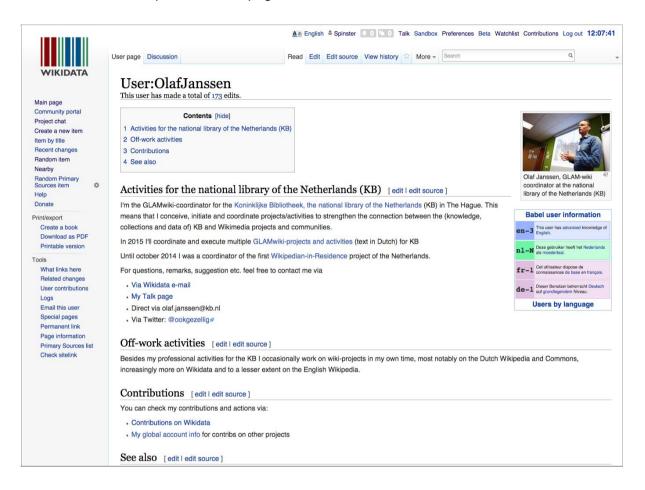
https://www.wikidata.org/w/index.php?title=Special:UserLogin&type=signup

Guidelines:

 Wikimedia accounts are personal and individual. Single users need to be held accountable for their own edits. Do not create an account for your institution! If

³ See https://www.wikidata.org/wiki/Q22080834

- multiple persons from your organisation are going to edit Wikidata (or Wikipedia, ...), each individual should have his/her own account.
- Your account name may be (a part of) your own name. An alias will do just fine as well.
- Clearly indicate in your user page that you work for a certain institution. A well documented, personal user page creates trust.

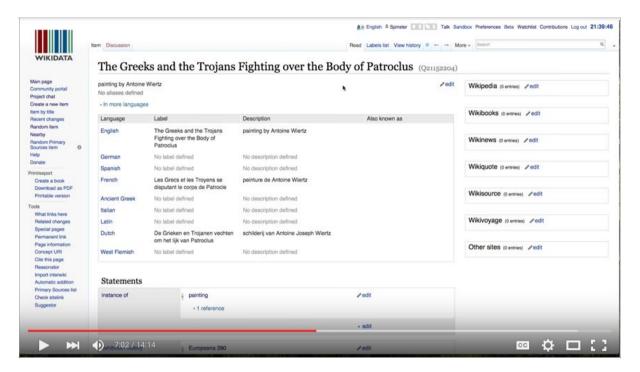


An inspiration: the Wikidata user page of Olaf Janssen, staff member Koninklijke Bibliotheek/Royal Library (NL). https://www.wikidata.org/wiki/User:OlafJanssen

With an account on Wikidata, you can also log in on all other Wikimedia projects, such as also on Wikipedia (all language versions), Wikimedia Commons etc.

1. How do I manage existing information (items) on Wikidata?

This **Dutch** YouTube video described how an item on Wikidata can be manually changed: https://youtu.be/Rvhg_n01jV4



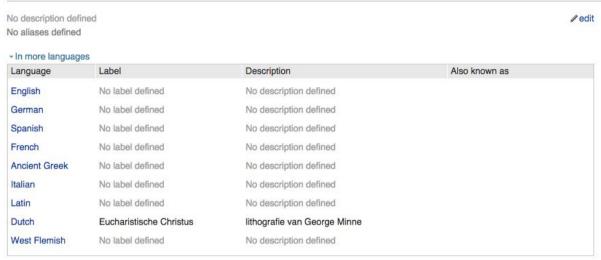
1.1 Search Wikidata

There's a search bar on each Wikidata page, on the top right of your screen. The search function is quite flexible and works in several languages.

In order to find a work of art, one can for example fill a couple of words from the work's title into the search bar.

TIP: When your preferred language on Wikidata is set to English, it seems that a lot of art works don't have a title. They do have one, but it has been inserted/added in Dutch.

No label defined (Q22252757)

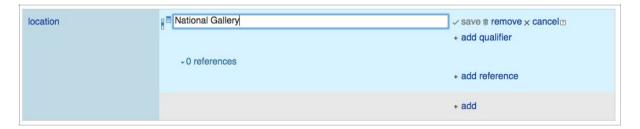


Example of a Wikidata item with just a title ('label') in Dutch. At the top of the item it looks as if it doesn't have a label, but this is not the case.

1.2 Manually changing a Wikidata item

Statements - the name of small bits of information, e.g. 'date of creation: 1979' or 'is instance of: painting' - can be corrected or deleted on Wikidata, or you can add new (additional) statements.

Existing statements can be changed or deleted by clicking the 'edit' link. Next the information in the input field can be adapted. A 'remove' link will also appear, allowing you to delete the full statement. Be careful when deleting information: see thereto *Chapter 1.5 Can I just delete information from an existing Wikidata item?*

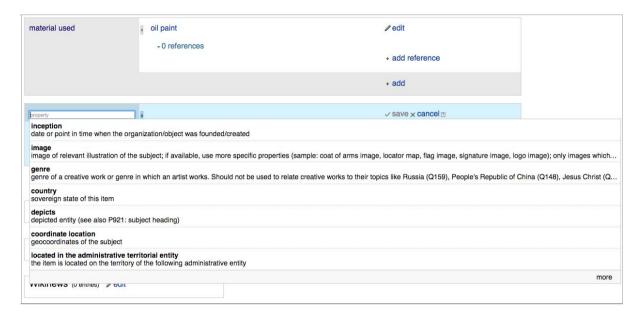


New statements can be added by clicking the 'Add' link at the bottom of the list of existing statements.



1.3 How to find the right properties?

When adding a new statement, you will automatically receive 'logical' suggestions for new properties. A <u>property</u> described a data value, but is not the actual 'value' in itself. Each statement is linked to a property, and gives the property one or more values.



If the desired property is not in the list, you can type in the property field the first word or the first letters of the wanted characteristic - possibly the right property then gets suggested.

If this too does not render a result, you can check the full (and very long) list of Wikidat properties in order to find the right property: https://www.wikidata.org/wiki/Wikidata:List of properties

A list of properties for (creative) works can be found on https://www.wikidata.org/wiki/Wikidata:List_of_properties/Works

1.4 Sources, references, URLs

Ideally, every property or statement on Wikidata should have a (reliable and external) source.

In the project 'Linked Open Data publication with Wikidata', all works of art are linked to three persistent URIs: a WorkPID, a DataPID and a RepresentationPID.

- The WorkPID links to a combination of data and image (representation) of a work. This URL is used as reference (source) to the statement that matches/links the inventory number to the work of art (in this (project) case: 'inventory number').
- The DataPID is used with the other statements on the work of art, which links directly to a collection website. This is by the way only recommended in case the information

- in the statement (for example: 'this work dates from 1613') is also explicitly mentioned on the collection website!
- A Wikidata item can lastly also have a general descriptive URL ('described by URL').
 In this project, the DataPID is used again here.

Attention! URLs that do not work/resolve, will be removed by Wikidata volunteers.

1.5 Can I just delete information from an existing Wikidata item?

Anyone can, and is allowed to, delete information from a Wikidata item. However it is important to use common sense here, and to keep the broader context in mind.

- Vandalism and clearly nonsensical statements are of course removed as quickly as possible. Example: someone adds to a work by Rubens, that the creator is James Ensor.
- 2. Sometimes Wikidata items contain old, obsolete or incorrect information, but backed by (reliable) sources. This could also be information that once was correct, but not anymore (such as for example a collection or attribution). In both cases this old/incorrect information should continue to exist WITH source reference. The said statement could then get a 'deprecated' ranking.



On the left next to an entry field of a statement or a property, there is an icon with three square blocks.

Using this, you can indicate whether a statement is 'preferred', 'normal' or 'deprecated'.

The use of rankings with statements on Wikidata is explained on https://www.wikidata.org/wiki/Help:Ranking

- 1. Normal ranking: for the current, correct information.
- 2. Preferred ranking: when different characteristics exist next to each other, whereby one of them is most actual or recent.
- 3. Deprecated ranking: to indicate that a characteristic or statement is dated (e.g. in an earlier attribution of a work of art).

2. How can I add new records to Wikidata?

2.1. An individual record

When? Adding individual and manually created records on Wikidata, works best for a small number of records (1 to a couple dozen). Larger numbers can best be handled by tools (see 2.2) or with the aid of a volunteer (see 2.3).

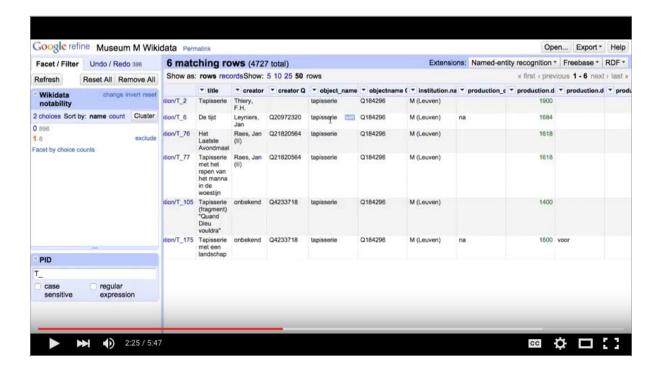
Required skills? Some experience in adding content through an (online) database or web application is useful. You do not need programming skills.

How long does it take? Reserve 5 to 10 minutes per record if you are a novice. Experienced users work faster.

TIPS:

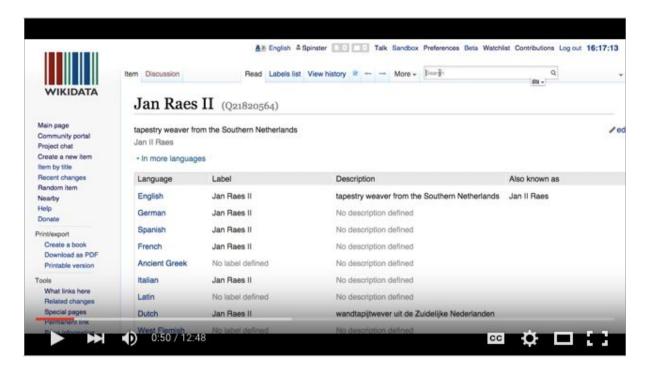
- The manual below described the way things are in Wikidata at the beginning of 2016. After this time, things may change. Therefore:
- As an inspiration, always look at a couple of well documented (existing) records on Wikidata
 - e.g. Mona Lisa: https://www.wikidata.org/wiki/Q12418

The **input preparation** of an individual record is described in this **DUTCH** YouTube video: https://youtu.be/kFJ57gusRpU. The video tackles the question: what information do you definitely need to create an art work on Wikidata, and how do you prepare the input information the best way possible?



The actual input is explained in this video:

https://youtu.be/RtuuNQIIOU4



The video demonstrates the following actions:

- · Check first whether the work of art does not already have an item on Wikidata
- Adding a title and a short description
- If available, also adding titles in other languages
- Adding dates, creator, collection and inventory number
- Nice extras are adding information on depicts, location, material used.

2.2 A small dataset

When? This method is best for adding more than a couple dozen records, up to a few hundreds. A smaller number of records can best be handled manually (see 2.1); for a larger number of records you can rely on the aid of a volunteer who's able to do this with a bot (see 2.3).

Required skills? Experience in adding content through an (online) database or web application; ins and outs of working with spreadsheets or OpenRefine.

How long does it take? Depending on your skills background, this take a couple of hours.

TIPS:

- OpenRefine (previously Google Refine) is a great tool for data cleaning and preparation. OpenRefine is open source software and free to download via http://openrefine.org/
- A very readable and to the point introduction including examples of a cultural data set - is the book *Using OpenRefine* by Ruben Verborgh and Max De Wilde. Also available as an ebook:

https://www.packtpub.com/big-data-and-business-intelligence/using-openrefine

A small quantity of data - say until about 1.000 records - can be handled best by a non-programmer using the **QuickStatements** tool:

https://tools.wmflabs.org/wikidata-todo/quick_statements.php

QuickStatements is a web application, written by Magnus Manske⁴, a Wikimedia volunteer who has written a lot of indispensable and useful software to support among others Wikipedia and Wikidata.⁵ Through QuickStatements you can adapt and add Wikidata items by the masses. It uses very simple and low level commands (syntax). The syntax looks quite complex at first, but is actually very logical and and well understandable.

Here you find an example of one work of art that is added using QuickStatements. The set up is explained below.

⁴ https://en.wikipedia.org/wiki/Magnus_Manske

⁵ Here's a list of tools that are created by Manske: http://tools.wmflabs.org/magnustools/

Syntax for creating the item 'Lovanium vulgo Loven. Grondplan van Leuven' (1657) by Johannes Jansonius, collectio M - Museum Leuven, inventory number LP/7-a

In the manual below we explain step by step how a data set with artworks should be prepared, and how it can then be transformed to the syntax of QuickStatements.

The White paper open data management in Wikidata⁶, written in this project, contains a table with minimal fields that should be submitted⁷. The table below is copied from the white paper document. If you want to do an import using QuickStatements, this data should be further prepared.

Metadata to deliver in a dataset (* black = mandatory / blue= optional; please note: data which was not provided in the original dataset, might be added by volunteers later)	Wikidata	Remarks
Titel of the work title*	Label of the Wikidata item (in the language(s) provided)	Titles may be provided in more than one language, if the dataset clearly indicates which language(s). Alternative titles are welcome too; these are stored as aliases in Wikidata and improve findability of each item.
Creator(s) of the work creator*	property P170 (creator)	Preferably formatted as Firstname Lastname, or first name and last name in separate fields. Formatting as Lastname, Firstname is less clear. The uploader must 'match' all creators in Wikidata – i.e. the exact, correct person with his/her Q number must be found on Wikidata). Therefore it helps if the original dataset already contains a match with Wikidata. Wikidata also stores VIAF, ULAN and RKDartists identifiers; via this way, artists are also findable. Providing (a selection of) these IDs in the original

⁶ Available online:

https://www.wikidata.org/wiki/Wikidata:Flemish_art_collections, Wikidata_and_Linked_Open_Data/Whitepaper#Crosswalk.2C data delivery and upload method

https://docs.google.com/document/d/1Kv3ztZgp19ZL5TDI3xhW9lg-WkoS6sunmD900zIMqUg/edit

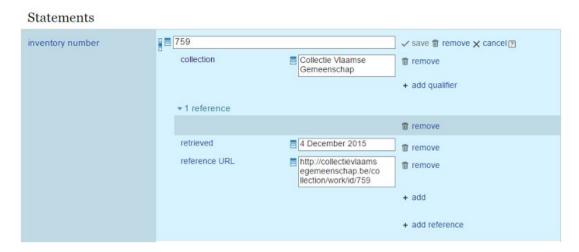
⁷ Available at

		dataset is thus also very helpful.
Type of object (what kind of artwork is it?) objectName*	property P31 (instance of)	The uploader must 'match' all object types in Wikidata – i.e. the exact, correct concept with its Q number must be found on Wikidata. Therefore it helps if the original dataset already contains a match with Wikidata. Wikidata also stores AAT identifiers; via this way, types and genres of artworks are also findable. Providing (a selection of) these IDs in the original dataset is thus also very helpful. In this Google sheet you will find the AAT terms that the museums in this project have used, mapped to the Wikidata terms for object type.
Collecting institution custodian*	property P195 (collection)	The uploader must 'match' all organisations in Wikidata – i.e. the exact, correct organisation with its Q number must be found on Wikidata. Therefore it helps if the original dataset already contains a match with Wikidata. Wikidata also stores ISIL identifiers; via this way, types and genres of artworks are also findable. Providing (a selection of) these IDs in the original dataset is thus also very helpful.
Inventory number in this collection objectNumber*	property P217 (inventory number) with qualifier: property P195 (collection)	
Date* (if known)	property P571 (inception)	Wikidata only supports precise dates that coincide with Day Month Year Decade Century Millennium Dates like 'circa 1856' and 'between 1574 and 1603' can't be expressed in Wikidata. Approximations will be used in a data import.
URL / URI, preferably	1. as reference	In this project

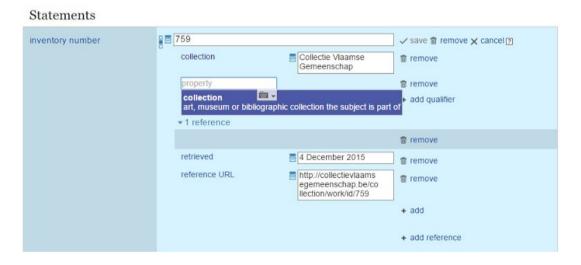
persistent / a permalink, referring you to more information about the work of art	(source) of property P217 (inventory number) and/or property P571 (inception) and/or property P170 (creator) and/or property P195 (collection) 2. property P973 (described at URL)	 workPID (information about work + image) dataPID (information about work) representationPID (image) Use them as follows: WorkPID as reference to the inventory number DataPID as reference to all other statements you make about the artwork DataPID as URL in the field 'Described at URL'
Image(s)	property P18 (image)	Like all other Wikimedia projects, Wikidata only includes (links to) images and media that are available under a free license (public domain, CC-BY, CC-BY-SA) and that are uploaded to the media bank Wikimedia Commons.
What is depicted on the artwork?	property P180 (depicts)	
Location of the artwork	property P276 (location)	In most cases the same as the collecting institution, but may be different (e.g. in case of long-term loan, art in public space)
Material	P186 (material used)	
Genre	P136 (genre)	
Art movement	P135 (movement)	
Width	P2049 (width)	
Height	P2048 (height)	
Weight	P2067 (mass/weight)	

Extra info in relation to this table:

Inventory number in the collection/objectNumber = property P217 (inventory number) with qualifier: property P195 (collection). This 'qualifier' is an additional piece of information that you indicate yourself. In Wikidata, such qualifier looks like this:



If no qualifier is visible yet, click on +add qualifier. That will look as follows:



Step 1. Preparing the data

The data that needs to be uploaded should first be cleaned and prepared. This is the most essential, and also most time-consuming step. This preparation happens best in a spreadsheet programme (like Microsoft Excel or Google Sheets), or in OpenRefine. The benefit of OpenRefine is that this tool has been specifically equipped to comfortably edit and clean data. If the data is originally available as (for example) an xml, csv of tsv file, you can best open it in a spreadsheet programme or OpenRefine.

The spreadsheet or the OpenRefine file should minimally contain the following <u>columns</u>. In principle, their order doesn't really matter but it is useful to in any case put title information in one of the first spreadsheet columns.

- 1. The title of the artwork
- 2. The object type of the artwork (for example painting, engraving, installation, ...)
- 3. The Wikidata Q number of the corresponding object type of the artwork
- 4. The name of the creator
- 5. The Wikidata Q number of the creator
- 6. The date or dating of the work
- 7. The inventory number of the work
- 8. The name of the collecting institution
- 9. The Wikidata Q number of the collecting institution
- 10. The URL that acts as source/reference of the stated information about the artwork
- 11. The general URL where one can find more information on the artwork as a whole

For every column there are specific TIPs, instructions and requirements. They are explained here below.

1. The title of the artwork

The title should be available in at least one language. Multiple languages are of course more than welcome. In case of multiple languages, each language version should be recorded in a separate column (for example a column 'title_EN', 'title_FR', 'title_DE', etc).

Alternative titles are possible and very useful to increase the findability of the record on Wikidata (in case that is needed). These titles will be recorded as aliases. Save these in a separate column too, for example as 'title_alt_EN'.

2. The object type of the artwork

In this field you can use the names of object types that are used in your own collection management system (such as for example aquarel, pencil drawing, video installation). Also here we welcome different languages; again each language in its separate column. Preferably every record/work of art has one specific object type. In case the object type is unknown, go for the general term 'work of art'.

It is important to note that the name of the object type should be matched in Wikidata (= the exact term corresponding to the Q number needs to be found on Wikidata). In this project, we've created a <u>useful Google sheet</u> that matches (Dutch) AAT terms that were used in this project, with their corresponding object type term on Wikidata⁸. You should NOT start adding your own terms as a value for this field!

3. The Wikidata Q number of the corresponding object type of the artwork

Wikidata is built in a very modular and layered way, and uses only a limited number of types to identify works of art. An overview of frequently occurring object types, their equivalent in

⁸ Available via this link (in Dutch): https://drive.google.com/open?id=1vLI0_2Dm6ZthujrCFWUao41g5Dvgjx2Mmj0YFbESVPo

the (Dutch) Art & Architecture Thesaurus, and their equivalent on Wikidata can be found in Appendix 2.

4. The name of the creator

This name will be recorded in the description of the work of art. You can best format it as Name Surname (so NOT Surname, Name). In case you need to switch these bits of information, you can divide a column edited as Surname, Name and merge it again in the right order.

5. The Wikidata Q number of the creator

In principle you need to look up the unique Wikidata Q number for every creator. If you're handling a large data set, that means a lot of work. You can make this search a bit easier by using the tool 'Linked Items', which is described in Appendix 1.

6. The date or dating of the work

At the moment, Wikidata accepts dates with a precision range of

- Day
- Month
- Year
- Decade
- Century
- Milennium

This means that in many cases, dates need to be simplified or 'broadened'. In some cases it is not possible to add thesei data in a correct way to Wikidata.

Some examples:

- 'Between 1850 and 1899' is simplified to '19th century'
- 'Between 1744 and 1747' is simplified to '1740s'
- 'Between 1887 and 1909' can not be entered correctly on Wikidata; you can not simplify it to a specific decade or century.

This also means that Wikidata does not (yet) support all refinements of the standardised ISO 8601 date notations.

7. The inventory number of the work

This column contains the inventory number of the work of art, exactly as noted in your own collection management system.

8. The name of the collecting institution

If the dataset contains objects from just one collection, this value will be the same for all records. Use the official notation of the institution's name. If there are more language versions of the institution's name (for example in English and in Spanish), then record them in two separate columns with headers such as e.g. 'institution EN' and 'institution ES'.

9. The Wikidata Q number of the collecting institution

You can look up this number on Wikidata. For S.M.A.K. for example, this number is Q1540707. If the dataset only contains records from one collection, this value will be the same for every record. Still you have to record this number for every record in the dataset.

10. The URL that acts as source/reference of the stated information about the artwork

This is the URL that will be used as a [inhoudelijke] 'source reference' for information on the artwork. In the project 'Linked Open Data publication with Wikidata', this is the dataPID.

11. The general URL where one can find more information on the artwork as a whole

This is the URL containing all basic information about the work, and may serve as general information link on the artwork as a whole. In the project 'Linked Open Data publication with Wikidata', this is the dataPID.

Step 2. Converting prepared data (from a spreadsheet or OpenRefine) to the QuickStatements syntax

An up to date manuel of QuickStatements can be found on https://tools.wmflabs.org/wikidata-todo/quick_statements.php

Converting dates to the QuickStatements format

In order to work with dates in QuickStatements, they need to be converted to this format: +00000001967-01-17T00:00:00Z/11

whereby /11 indicates the precision range. /11 is precise to the day, /10 precise to the month, /09 = year, /08 = decade, /07 = century.

Some examples:

- +00000001967-01-17T00:00:00Z/11 is January 17 1967
- +00000001967-01-01T00:00:00Z/09 is 1967
- +00000001960-01-01T00:00:00Z/08 is the '60 years (decade)
- +0000001900-01-01T00:00:00Z/07 is the twentieth century

Adding columns with the right properties

TIP: There are many possible ways to convert data from a spreadsheet or OpenRefine to the format that is supported by the QuickStatements tool. Below we only describe one possible way, but this is perhaps not the most user friendly one. If you're quite experienced with spreadsheets you may even come up with a better method ...

In this step we prepare the spreadsheet or the OpenRefine document for the proper QuickStatements input, resulting in an export which is structured like this:

```
CREATE
LAST Lnl
           "Lovanium vulgo Loven. Grondplan van Leuven"
         "kopergravure van Johannes Janssonius, M - Museum Leuven, LP/7-a"
    Dnl
LAST
LAST P31 Q11060274 S854 "http://mleuven.be/collection/work/data/LP 7a"
S813 +00000002016-01-09T00:00:00Z/11
LAST P170 Q949492 S854 "http://mleuven.be/collection/work/data/LP_7a"
                                                               S813
+00000002016-01-09T00:00:00Z/11
LAST P571 +00000001657-01-01T00:00:00Z/09
                                        S854
LAST P195 Q2362660 S854 "http://mleuven.be/collection/work/data/LP 7a"
S813
     +00000002016-01-09T00:00:00Z/11
LAST P973 http://mleuven.be/collection/work/data/LP 7a"
```

Syntax for the creation of the item 'Lovanium vulgo Loven. Grondplan van Leuven' (1657) by Johannes Jansonius, collection M - Museum Leuven, inventory number LP/7-a

Which actions do you need to perform to get this result?

- A couple of columns are copied or moved
- The correct properties are added
- (Source) references are prepared
- Some elements have to be put between quotation marks these should also be prepared in columns

The processing of a rough dataset into the QuickStatements syntax has been visualised in a **public Google Sheet**.

- 1. Tab 1 contains the original data (five records; in practice this will of course be much more)
- 2. Tab 2 contains the cleaned data
- 3. Tab 3 contains the data as prepared for QuickStatements
- 4. Tab 4 shows you how the copied data than looks in a (good) text editor
- 5. Tab 5 shows you how this data is then formatted correctly for QuickStatements

The exact, most up-to-date syntax of QuickStatements is described quite clearly on the homepage of the tool itself: https://tools.wmflabs.org/wikidata-todo/quick_statements.php

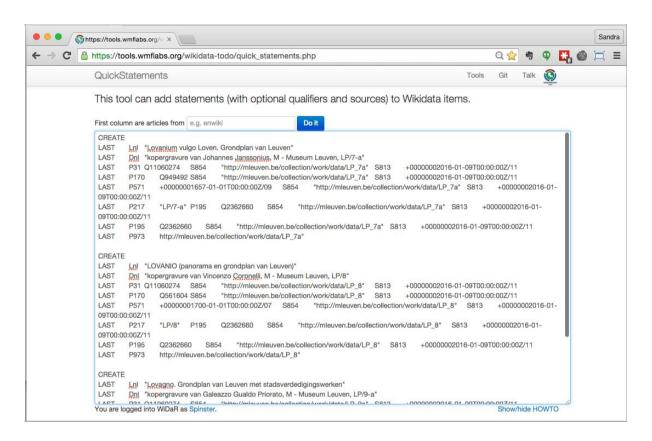
TIP: Tabs and quotation marksneed to be exactly correct.

TIP: Work with an advanced text editor, such as TextWrangler for Mac, in which you can visualise all invisible characters (such as tabs, spaces, line breaks). This will help to form the

syntax correctly. It is essential to be able to see the tabs very clear, as they are crucial when doing data input in QuickStatements.

Step 3. Input and control

The text file, as prepared above, may then be entered/pasted in the input field of the QuickStatements tool.



Important: make a first test with just one item, move on to a couple items, and add a larger quantity of items only after that.

Always take a detailed look at the Wikidata items that you've created via Quickstatements, and check that they're 100% correct. If you still see some errors, then return to your text file for input and correct it.

Limit each input tot a maximum of a couple dozen items. If something goes wrong, you don't need to fix too many errors working like that.

Stay near your machine and continue to monitor the progress of the tool. Should you notice red lines containing error messages, then you do have errors in your syntax.

2.3 A large dataset

When? A dataset of a thousand records or more is not so easy to handle using the methods described above (manually - 2.1 or using tools - 2.2) and can best be uploaded to Wikidata using a bot (script).

Required skills? Good knowledge of the content of your data set, sufficient knowledge to clean and prepare your dataset as good as possible.

How long does it take? Depending on the availability of a volunteer, this may take a couple of days to weeks/months. Well cleaned and prepared data significantly simplifies/facilitates the process.

TIP: An organisation with a (couple of) technically skilled employee(s) who understand the programming language Python, can dive into the fascinating world of building their own Wikidata bots.

Making a request for the upload of a large dataset by a volunteer, can be done like this:

- Post your request (in English) on the discussion page of the project Wiki Loves Open Data: https://www.wikidata.org/wiki/Wikidata_talk:Wiki_Loves_Open_Data. Indicate how many records you're looking at, and what the general subject is. An example message could look like this:
 - I would like to request a volunteer with bot to upload a set of approximately 1.200 records from our collection. These are mostly paintings, tapestries and prints and are an addition to our data which is already present here. For each entry we have title, date, creator, object type and a URI.
 - Save the discussion page to your watchlist (see further on).
- 2. Write a short message on the page Wikidata:Bot requests https://www.wikidata.org/wiki/Wikidata:Bot_requests and use a link to refer to the message which you've just posted on the Wiki Loves Open Data discussion page. Save this page to your watchlist (see further on).
- In the next few weeks, regularly visit your Wikidata watchlist; this way you can follow up on potential questions and stay in touch with volunteers who are monitoring your upload.

A volunteer will add the data to Wikidata using a bot (script).

```
254. 19:26, 9 September 2015 (diff I hist) . . (+420) . . King Gustav III of Sweden and his Brothers (Q20087504) (Added reference to claim: collection (P195):
      Nationalmuseum (Q842858))
255. 19:26, 9 September 2015 (diff I hist) . . . (+407) . . King Gustav III of Sweden and his Brothers (Q20087504) (Created claim: collection (P195): Nationalmuseum
     (Q842858))
256. 19:26, 9 September 2015 (diff I hist) . . (+420) . . King Gustav III of Sweden and his Brothers (Q20087504) (Added reference to claim: creator (P170): Alexander
     Roslin (0315102))
257. 19:26, 9 September 2015 (diff I hist) . . (+407) . . King Gustav III of Sweden and his Brothers (Q20087504) (Created claim: creator (P170): Alexander Roslin
258. 19:26. 9 September 2015 (diff I hist) ... (+420) ... King Gustav III of Sweden and his Brothers (020087504) (Added reference to claim: image (P18): Alexander
     Roslin - King Gustav III of Sweden and his Brothers - Google Art Project.jpg)
259. 19:26, 9 September 2015 (diff I hist) . . (+424) . . King Gustav III of Sweden and his Brothers (Q20087504) (Created claim: image (P18): Alexander Roslin - King
      Gustav III of Sweden and his Brothers - Google Art Project.jpg)
260. 19:26, 9 September 2015 (diff I hist) . . . (+420) . . Diana and Endymion (Q20087509) (Added reference to claim: collection (P195); National Museums Liverpool
261. 19:26, 9 September 2015 (diff I hist) . . . (+408) . . Diana and Endymion (Q20087509) (Created claim: collection (P195): National Museums Liverpool (Q1967497))
262. 19:26, 9 September 2015 (diff I hist) . . (+420) . . Diana and Endymion (Q20087509) (Added reference to claim: image (P18): Francesco Solimena - Diana and
     Endymion - Google Art Project.jpg)
263. 19:26, 9 September 2015 (diff I hist) . . (+402) . . Diana and Endymion (Q20087509) (Created claim: image (P18): Francesco Solimena - Diana and Endymion -
      Google Art Project.jpg)
264. 19:26, 9 September 2015 (diff I hist) . . (+420) . . Bouquet près de la fenêtre (Q20708206) (Added reference to claim: collection (P195): private collection
265. 19:26, 9 September 2015 (diff I hist) . . (+407) . . Bouquet près de la fenêtre (Q20708206) (Created claim: collection (P195): private collection (Q768717))
266. 19:26, 9 September 2015 (diff I hist) . . . (+420) . . Autoportrait (Q19901889) (Added reference to claim: collection (P195): private collection (Q768717))
267. 19:26, 9 September 2015 (diff I hist) . . (+407) . . Autoportrait (Q19901889) (Created claim: collection (P195): private collection (Q768717))
268. 19:26, 9 September 2015 (diff I hist) . . (+420) . . Autoportrait (Q19901889) (Added reference to claim: creator (P170): Tamara de Lempicka (Q229351))
269. 19:26, 9 September 2015 (diff I hist) . . (+407) . . Autoportrait (Q19901889) (Created claim: creator (P170): Tamara de Lempicka (Q229351))
270. 19:26, 9 September 2015 (diff I hist) . . (+380) . . (Q18574352) (Created claim: creator (P170): Josef Wilhelm Wallander (Q6230276), Adding creator Josef
      Wilhelm Wallander (Q6230276) based on "painting by Wilhelm Wallander")
```

(Part of the) edit history of BotMultichill⁹, a Wikidata bot managed by Multichill (Dutch volunteer Maarten Dammers).

In principle the upload bot can handle data that is offered in various formats. The most important condition is that the data is structured in a very clear way. The following formats and methods of delivery are (amongst others) appropriate; should you have any questions about this then you can always contact a Wikidata volunteer.

- A csv, tsv or other type of 'delimited' text file
- An Excel file, Google Sheet, OpenOffice spreadsheet ...
- An xml or RDF file
- A Microsoft Access export file (though a 'flat' structured file is preferred)
- An API making the data accessible online

See pt. 2.2 for the fields that are required in your dataset.

⁹ https://www.wikidata.org/wiki/User:BotMultichill

2.4 Attention! Wikidata special cases

1. Two or more distinct items having the same label and description

On Wikidata, you can not have two distinct items carrying the exact same label and description. If you do try creating such items, you will receive an error message and notice that you can't create such items. Therefore it is important to make every description unique. A nice solution for this is, as described above, adding the inventory number of the artwork as part of the description.

De Romeinse kunst (Q21658200): sculpture by Jules Anthone (KMSKA 8066) 7 KB (15 words) - 11:51, 5 December 2015

De Romeinse kunst (Q21649244): sculpture by Jules Anthone 7 KB (11 words) - 23:42, 4 December 2015

On Wikidata there are two separate (and different!) sculptures with the title 'The Roman art' by Jules Anthone. They each have a different description on Wikidata. Should both items have been added identically as 'sculpture by Jules Anthone', an error message would appear and one of the items would be impossible to save/create.

2. Doubles: two or more items for the exact same artwork, person, ...

It sometimes happens that there are two or more Wikidata items on the same object or the same person. If you are 100% certain that you are dealing with the EXACT same thing, the items can be merged. Be very careful doing this. Items that have been merged incorrectly can sometimes be hard to separate afterwards. In order to merge items comfortably, it is advised to tick the 'Merge' box under the tab 'Gadgets', which you will find under your User Preferences.

Wikidata-centric Merge: This script adds a tool for merging items

After ticking this box, you'll see an extra item in your menu as part of 'More ...'. You'll find it next to the Wikidata search bar and it is called 'Select for merging...'.



You can use this function as follows:

- 1. Open the tow Wikidata items that you want to merge, as separate browser tabs
- 2. Go to item 1 and pick 'Select for merging' in the 'More ...' menu
- 3. You'll see a warning message: 'Merge.js has been started. You can now focus your browser on the other item.'
- 4. Go to the browser tab of the second item (to merge). There you'll see a new icon, a circle with two arrows, appearing in the menu. Click on it.



5. In the dialogue box there is information about the merge that's about to happen. In 'Append the following text...' you can still indicate why you're merging these items (for example: "same artwork" / "same person"). Click the merge button



6. Both items have now been merged.

3. Objects that are part of a bigger whole

In visual arts we sometimes have to deal with artworks that are comprised of different parts. For instance a triptych having different parts, or a work that is produced as part of a series.

On Wikidata in this case items are created both for the whole of the work, as for the inividual parts. Collection information and inventory numbers are preferrentially recorded on the level of the parts; this because in many cases different parts may be held in different collections (as is the case of polyptychs of which the different panels are spread over different collections). There's no consensus yet on Wikidata about saving collection data on the level of the whole. In every case however a connection between the whole and its part(s) needs to be declared using the properties 'has part' and 'part of'. In order to successfully query Wikidata (data), it is recommended to describe the parts to a whole SEPARATELY as being part of a collection.

An example of a triptych, of which the three parts are part of the same collection, is the triptych *Landverhuizers* (Land movers) by Eugène Laermans, collection KMSKA.



The item for the triptych: https://www.wikidata.org/wiki/Q21618967
Left panel (*To the harbour*): https://www.wikidata.org/wiki/Q21618969
Right panel (*Goodbye*): https://www.wikidata.org/wiki/Q21618968

4. Accuracy in attributions is key!

Wikidata loves information on creators which is as accurate as possible. In this project, we've seen information that was delivered as follows (semi-fictional examples): In het project is best veel data aangeleverd als volgt (semi-fictieve voorbeelden):

- 1. Painting 'De barmhartige Samaritaan' with listed creators Peter Paul Rubens and Paulus Pontius. In reality, the painting was made by an anonymous artist, after a drawing by Paulus Pontius, who copied a work by Rubens into a drawing.
- 2. Painting 'Kanunnik van der Paele' by Jan van Eyck, while it is actually a 'faithful copy' of a work of Jan Van Eyck: https://www.wikidata.org/wiki/Q2480921. The 'real' work: https://www.wikidata.org/wiki/Q2480921

On Wikidata we want to record and save these last examples, the correct information.

5. Anonymous and unknown creators; Master of ...; Monogrammist ...

Artworks by anonymous and unknown makers are identifed on Wikidata using the property Creator: anonymous (https://www.wikidata.org/wiki/Q4233718)

For nameless, but regardless specifically identified creators, specific items exist - such as for example the Master of the Family of Saint Anne (https://www.wikidata.org/wiki/Q18516727). Also unknown monogrammists, whose name is otherwise unknown, may have their own item. This is for example case of the Braunschweiger Monogrammist: https://www.wikidata.org/wiki/Q541119.

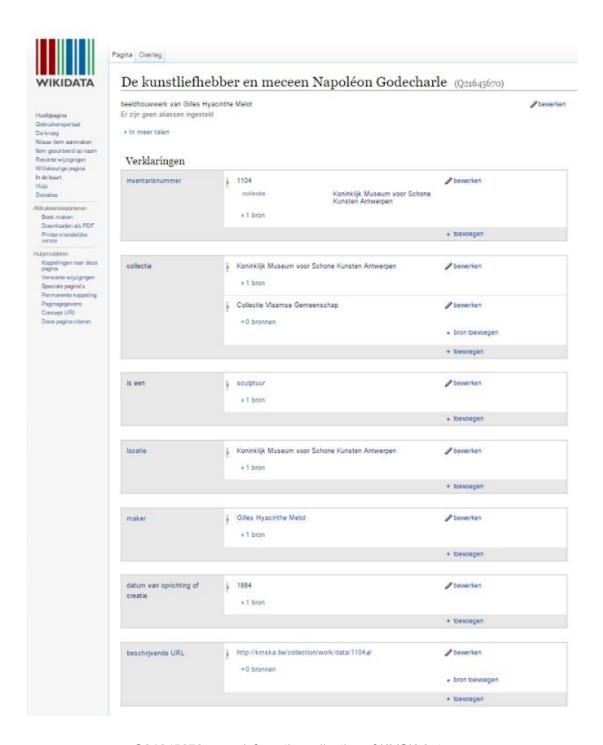
2.5 Example record

In order to add a minimal record on Wikidata, the following statements are deemed 'required' in this project:

- inventory number
- collection
- type of work (instance of)
- location
- creator
- inception
- described at URL

Additionally a **title** of the artwork is also required (this will appear at the top of the page).

Under point 2.2 of this Manual you will find a table containing the required fields. In the right column you will also find instructions on how to fill each of the abovementioned fields. An example of a minimally completed record on Wikidata can be found below.



Q21645670, a work from the collection of KMSK Antwerp.

3. How is my data being used?

3.1 Modifications within Wikidata

3.1.1. Who's going to edit my data?

Data on Wikidata is edited by individual users and by bots.

Items of artworks are edited only sporadically. The changes you can expect to occur most frequently are:

- Adding an image, if available on Wikimedia Commons
- Adding titles in other languages, and title variations (aliasses)
- Adding descriptions in different languages (mostly by bots)
- Authority control for example adding the RKDimages ID in case the work is registered in that database
- Adding properties like 'depicts', 'material used', 'genre', 'movement'

Items on creators are changed more frequently. Changes you can expect to occur, are:

- Adding name variants
- Adding descriptions in other languages
- Adding identifiers in (new) authority files
- Adding an image or portrait
- Change, correction, adding of other properties: date of birth, place of birth, date of death, place of death, family members, affiliation with certain artist collective(s), ...
- Adding sources/references for all relevant statements: in Wikidata, this currently has a very high priority ranking.

3.1.2. How do I keep track of edits/changes?

1. Add items to your watchlist

On Wikidata - but also on other Wikimedia projects - you can add as many particular pages as you want to a watchlist. This kind of 'internal bookmarks' system allows you to track changes to these specific pages. You need to be logged in and have an account in order to use thi functionality.

You can put a page or an item on your watchlist by clicking the white star icon right next (left) to the search bar. When a page is added to your watchlist, the star is/will turn blue.



Blue star: the page has just been added to the watchlist.

In 'Preferences' you can indicate whether you want to receive an email every time a change was made to a page from your watchlist.

In order to track edits to a large dataset, you can also use the two following (external) options. If you're inventive, you will probably also figure out a useful and new solution!

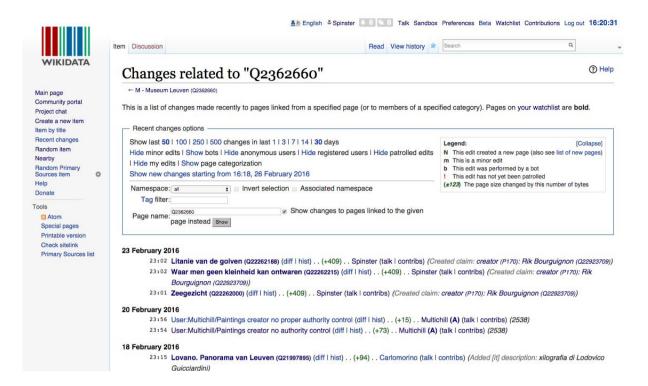
- Pick a couple of 'sample' items that are representative for your collection; a combination of masterpieces by well-known creators and a couple of obscure works are ideal. Add these sample items to you watchlist and regularly check what happens to these items.
- 2. Use the tool Listeria (see further on) to create a couple of lists of the items in your collection, whereby you select all metadata that you think are important. Add these lists to your watchlist; this way you can keep track of the global changes happening across your collection, with just one look. (Keep in mind that Listeria lists can contain max. up to a few thousand items, in order to maintain the time needed for loading and calculation. In most cases you'll have to split your collection lists, for example 'per century'). An example of such list is the overview of the KMSKA collection:

https://www.wikidata.org/wiki/Wikidata:Flemish_art_collections,_Wikidata_and_Linke d Open Data/KMSKA

2. Use 'Related changes'

You can call upon the most recent changes to Wikidata, linked to a specific item (such as an artist or a museum), as follows:

- 1. Go to the item on Wikidata
- 2. Click in the left column of the Menu on 'Related changes'. You will now see changes to item that are linked to the item itself on Wikidata.
- 3. Next go to 'Recent changes options', and tick the box next to 'Show changes to pages linked to the given page instead.' Click the 'Show' button.
- 4. Now you will see recent changes to Wikidata-items which are linked to the item (for example recent changes to artworks of an artist or from the collection of a museum).



Example of recent changes related to M - Museum Leuven:

https://www.wikidata.org/w/index.php?namespace=&tagfilter=&target=Q2362660&showlinkedto=1&title=&target=Q2362660&showlinkedto=1&target=&target=Q2362660&showlinkedto=1&target=&target=Q2362660&showlinkedto=1&target=&target=Q2362660&showlinkedto=1&target=&target=Q2362660&showlinkedto=1&target=&target=Q2362660&showlinkedto=1&target=&target=Q2362660&showlinkedto=1&target=&target

3.2 Use outside of Wikidata

External reuse of the data in Wikimediaprojects (such as Wikipedia) and by external parties is as of now not yet traceable or measurable. Recommendations and desiderata for this kind of statistics will be recorded in the final report on this project, and will be communicated to the Wikimedia community.

4. Reuse of data from Wikidata

TIP: Always check the following sources for an up to date overview of the situation:

- Wikidata:Data access https://www.wikidata.org/wiki/Wikidata:Data access
- Wikidata:Database download
 https://www.wikidata.org/wiki/Wikidata:Database_download/en.

4.1 What kind of data exports does Wikidata offer?

4.1.1 Export of a single item

Actual/up to date information: https://www.wikidata.org/wiki/Wikidata:Data access

Wikidata offers among others RDF exports on item level in different formats (.json, .rdf, .tt. en.nt). If you know the Q number of an item, you can easily export these formats.

TIP: The links below sometimes lead to very heavy downloads!

An export of *Man met Romeinse munt* by Hans Memling (https://www.wikidata.org/wiki/Q3937422) can be downloaded as:

- json http://www.wikidata.org/wiki/Special:EntityData/Q3937422.json
- rdf http://www.wikidata.org/wiki/Special:EntityData/Q3937422.rdf
- ttl http://www.wikidata.org/wiki/Special:EntityData/Q3937422.ttl
- nt http://www.wikidata.org/wiki/Special:EntityData/Q3937422.nt

4.2.2 Export of Wikidata as a whole

Actual/up to date information: https://www.wikidata.org/wiki/Wikidata:Database_download/en

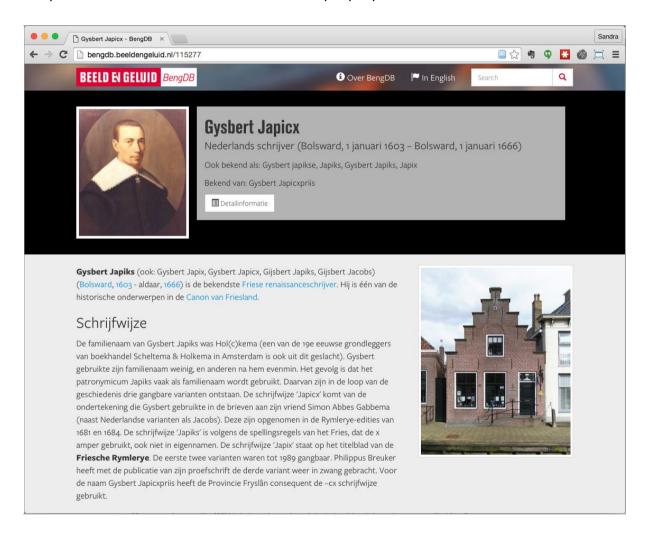
There are regularly dumps available of all Wikidata items, in JSON, XML and RDF format. RDF dumps can be found on https://dumps.wikimedia.org/wikidatawiki/entities/

4.2.3. Looking up specific sets

If a reuser is looking for a specific (partial) set, he/she could best use the SPARQL endpoint via https://query.wikidata.org/. In Appendix 6 you will find some written out examples of SPARQL-queries in Wikidata. SPARQL (Simple Protocol And RDF Query Language) is an RDF query language used to query RDF-based data through search actions (query). Using this query language it is possible to call on information that can be used again in other applications.

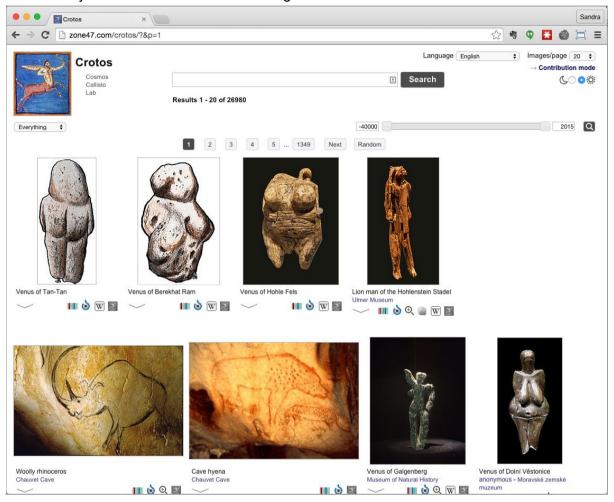
4.2. Examples of applications and websites reusing data from Wikidata

BengDB of the Dutch Institute for Sound and Vision imports data from Wikidata and Wikipedia to create a visual encyclopedia of individuals that are related to the history of Dutch television. This website shows how a cultural institution can make use of Wikidata to complete and enrich its own information about people/persons.



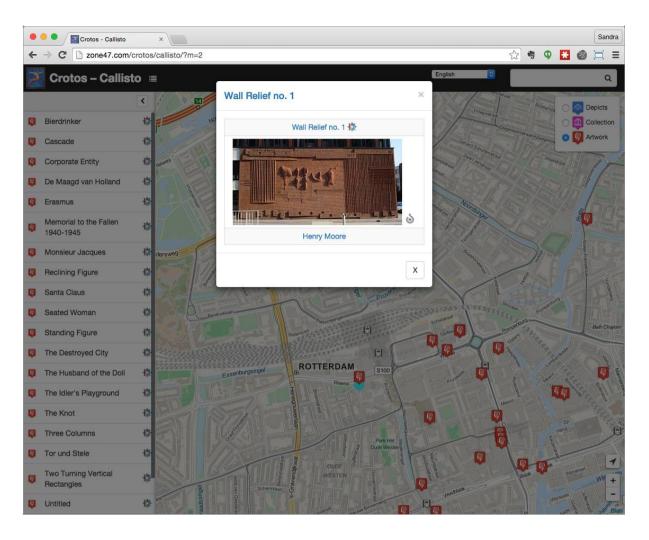
Screenshot: http://bengdb.beeldengeluid.nl/

Crotos is an external webtool, developed by the French Wikidata volunteer Shonagon, which is used to present visual arts on Wikidata in an attractive way. Crotos only shows Wikidata objects which are linked to an image on Wikimedia Commons.



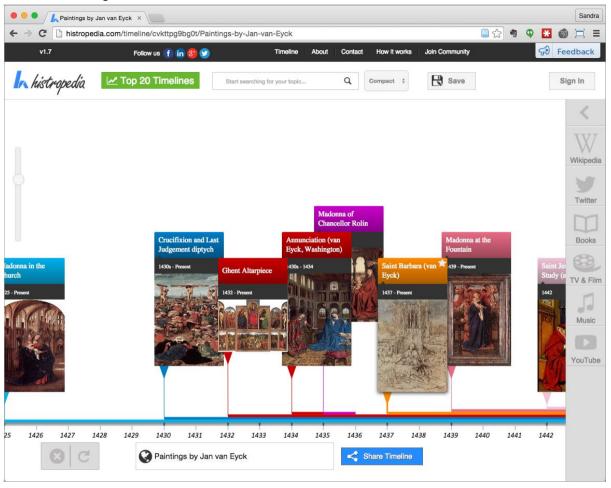
Screenshot: http://zone47.com/crotos/?l=en

Crotos also offers a geographical interface: a map on which (among others) artworks in the public space - if they're geotagged - can be visualised.



Works of art in Rotterdam's public space. http://zone47.com/crotos/callisto

Histropedia is a web application which runs based on Wikidata and Wikipedia information. It can be used to generate timelines.



Screenshot: http://histropedia.com/timeline/cvkttpg9bg0t/Paintings-by-Jan-van-Eyck

Appendix 1. Useful tools on Wikidata

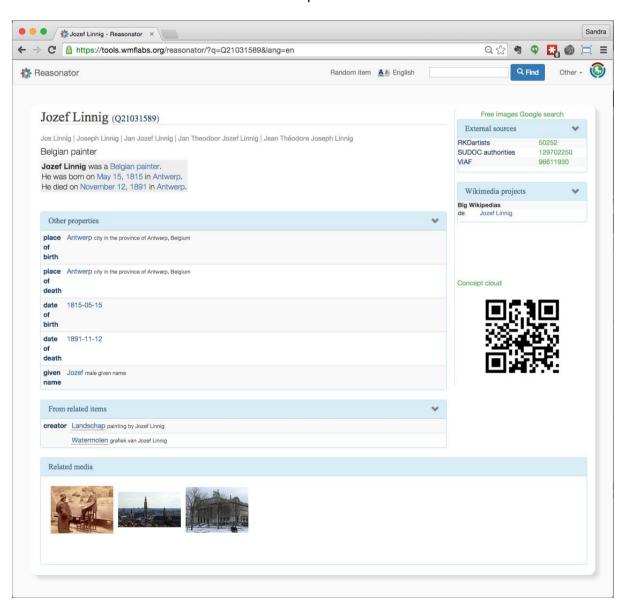
TIP: You can find an up to date list of Wikidata tools on https://www.wikidata.org/wiki/Wikidata:Tools/External tools

Reasonator https://tools.wmflabs.org/reasonator/

"Wikidata in pretty". An interface presenting you all metadata from a Wikidata item in a nice-looking and logical way.

For individuals a mini biography is automatically generated.

Reasonator has an even more clear and transparent search function than Wikidata itself.

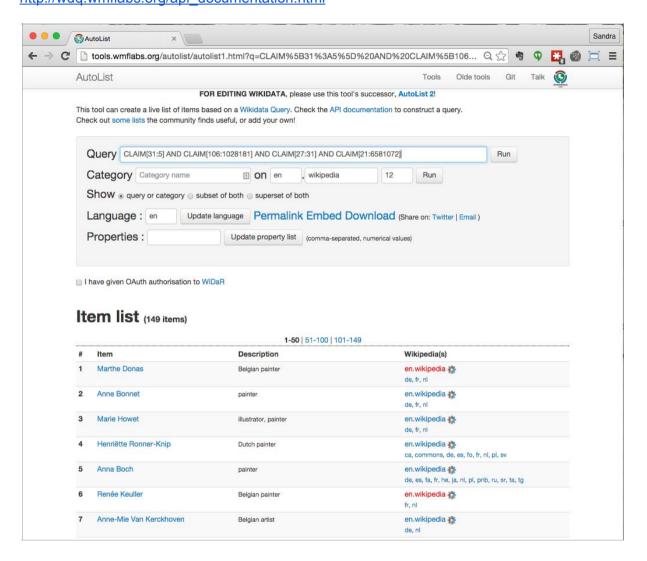


Jozef Linnig via Reasonator: https://tools.wmflabs.org/reasonator/?q=Q21031589&lang=en

Autolist http://tools.wmflabs.org/autolist/autolist1.html

An advanced search and query tool for Wikidata.

Uses Wikidata Query (WDQ), a simple query language which is also understandable for non-programmers/technicians. It is well described on http://wdq.wmflabs.org/api documentation.html



List of Belgian female painters

In order to generate this list, we used the following WDQ query: CLAIM[31:5] AND CLAIM[106:1028181] AND CLAIM[27:31] AND CLAIM[21:6581072] (instance of human; occupation painter; country of citizenship Belgium; gender female)

Listeria - https://tools.wmflabs.org/listeria/index.php

A functionality to create a table on a page of a Wikimedia project, based on Wikidata information. This also works based on WDQ.

image •	instance of	title •	description •	creator •	collection •	inventory number	inception •	material oused	genre •	movement •	depicts •	described at URL
	painting	The Temptation of St. Anthony	painting after Hieronymus Bosch	anonymous	Royal Museum of Fine Arts Antwerp (KMSKA)	25	1500s				Temptation of Saint Anthony in visual arts	http://kmska.be/collection/work/id/25@
	painting	Christ Crowned with Thorns with Donor	painting by a follower of Jheronimus Bosch	Hieronymus Bosch	Royal Museum of Fine Arts Antwerp (KMSKA)	840	1500s	oil paint	religious painting	Early Netherlandish painting		http://kmska.be/collection/work/id/840@
	painting ex-voto	Jacopo Pesaro being presented by Pope Alexander VI to Saint Peter	painting by Titian	Titian	Royal Museum of Fine Arts Antwerp (KMSKA)	357	1503			Venetian school High Renaissance	Jacopo Pesaro Peter Alexander VI man boat bas-relief helmet flag	http://kmska.be/collection/work/id/357.e/
	painting	Q21614892	painting by Conrad Faber	Conrad Faber von Kreuznach	Royal Museum of Fine Arts Antwerp (KMSKA)	560	1510					http://kmska.be/collection/work/id/560@
	painting	The Lamentation over the Dead Christ	triptych by Quentin Matsys	Quentin Matsys	Royal Museum of Fine Arts Antwerp (KMSKA)	245	1511		religious painting			http://kmska.be/collection/work/id/245@
	painting	Q21614845	painting by Jacob Cornelisz. van Oostsanen	Jacob Cornelisz van Oostsanen	Royal Museum of Fine Arts Antwerp (KMSKA)	524	1515					http://kmska.be/collection/work/id/524@

16th century works from the KMSKA collection in a Listeria list:

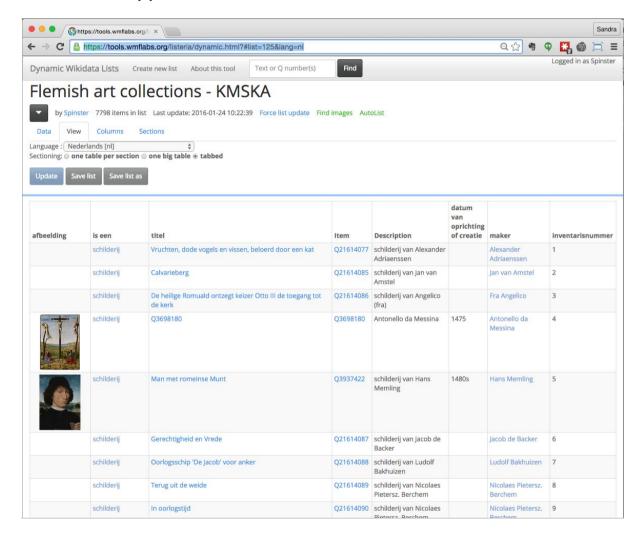
https://www.wikidata.org/wiki/Wikidata:Flemish_art_collections,_Wikidata_and_Linked_Open_Data/K_MSKA/16th_Century

Dynamic lists - https://tools.wmflabs.org/listeria/dynamic.html?#

A standalone tool with which you can create dynamic lists and tables of Wikidata items.

This tool is different from Listeria (see above) on the following aspects:

- 1. The lists are in a standalone web application, not embedded in a Wiki page
- 2. The list can be easily shown in another language
- When you choose Dynamic lists, columns with links to articles in (among other)
 Wikipedia (in different languages) can also be recorded. Listeria does not have this functionality yet.



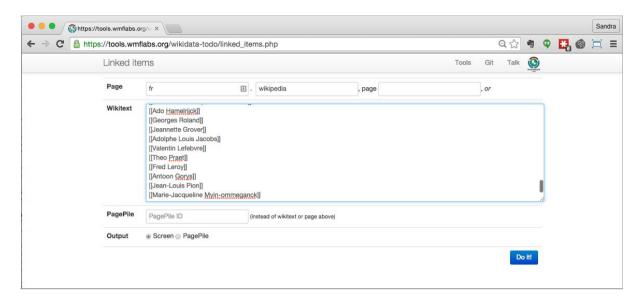
Dynamic list of the KMSKA collection:

https://tools.wmflabs.org/listeria/dynamic.html?#list=125&lang=nl

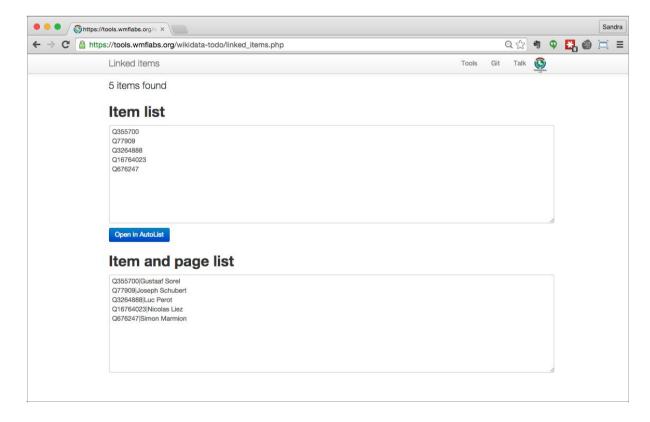
Linked Items https://tools.wmflabs.org/wikidata-todo/linked_items.php

A tool to do a quick (and rough) search of Wikidata number of (among others) a list of terms or names.

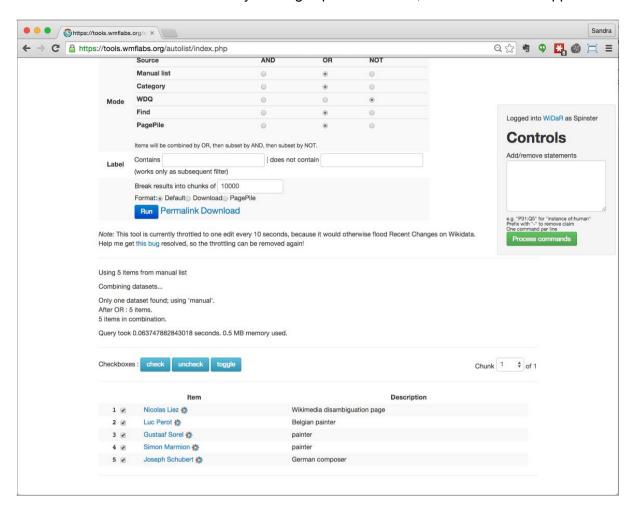
The results should always be checked thoroughly!



Looking up Q numbers from a list of (mainly French speaking) artists, using French Wikipedia. Notice that the name should be formatted as a wikilink, so for example [[Antoon Gorys]].

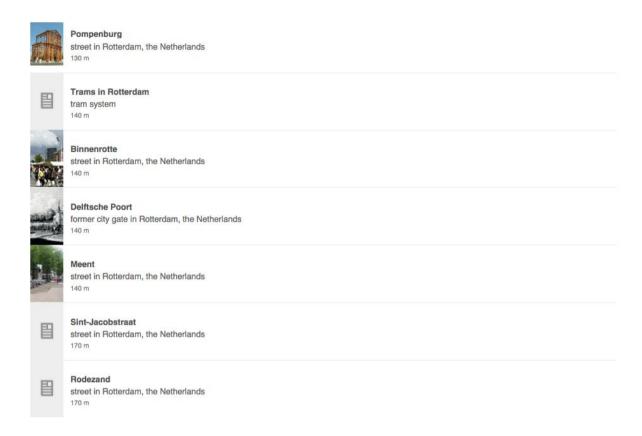


The search action mentioned above results in five hits. These then need to be checked: is it the right person we're talking about? This can for example be done by checking (looking at) the Q numbers on Wikidata itself. By clicking 'Open in Autolist', a clickable list will appear.



Special:Nearby https://www.wikidata.org/wiki/Special:Nearby

This feature ftrack all items that have geocoordinates in the near surroundings of the user.



Wikidata items in the city centre of Rotterdam, found via Special:Nearby.

Appendix 2. Mapping of the object terms used by the museums (in this project), with Wikidata terms

- The list contains all terms that correspond to 'notable' artworks in the participating collections. For an overview of the types of artworks that were not notable and skipped, see Appendix 3.
- The corresponding Q number on Wikidata is entered as value for the property 'instance of'.

General principles:

- 1. Some museums use the material used (for example: 'bronze') as object name. This is dealt with differently on Wikidata. In the field 'instance of', you should always record the broadest classification of the artwork (mostly painting / sculpture / drawing / installation / etc.). Through additional properties, you are going to tell more about particular materials or techniques. A pencil drawing is thus recorded as 'instance of: drawing + material used: pencil'. A bronze as 'instance of: sculpture' + 'material used: bronze'.
- The abovementioned method of working is definitive. The Wikidata community is still
 young and continually improves on its methodologies. It may well be possible that in
 the future, the items of the artworks of the participating (project) museums will be
 adapted to a new consensus.

Appendix 3. Notability on Wikidata, and objects falling out of scope

When adding the participating collections to this project, only about 1.000 objects from M - Museum Leuven have been left out, based on Wikidata's notability policy (see Appendix 4 and the Whitepaper open data management in Wikidata).

These 1.000+ objects were mainly every day use objects. They had the following object names: (in Dutch)

- afdruk krijttekening
- albe
- altaardwaal
- altaargordijn
- altaarkruis
- altaarkussen
- altaarschel
- amict
- ampul
- ansichtkaart
- antependium
- area rug
- Baldakijn
- balkhoofd
- balkslof
- beeldfragment
- beker
- beker op voet
- bellenkoord
- bierglas
- boek
- boekbeslag
- boekomslag
- bokaal
- bonbondoos
- borduurwerk
- borstrok
- bretel
- broek
- bursa
- chatelaine (kledingaccessoire)
- chrismatorium
- cingel
- communiebankdwaal
- compoteschaal
- dalmatiek
- deurpost
- devotieafbeelding
- drinkglas

- drukproef (prent)
- drukwerk
- facsimile
- foto
- fotogravure
- garneersel
- gebrandschilderd glas-in-lood
- gewaad
- gewelfsleutel
- gildebreuk
- glas
- glas-in-lood
- glas-in-lood (raam)
- hemd
- hoed
- jampot
- jassen
- kabinet (kastmeubilair)
- kalkafdruk
- kalot
- kandelaar
- karaf
- kazuifel
- kazuifelkruis
- kelkvelum
- kleedje
- koffiekan
- koorhemd
- koorkap
- koorkapschild
- koorkapsluiting
- kopergravure
- kousenband
- kraag (kledingaccessoire)
- kruisbeeld
- kruissteekborduurwerk
- kruiwagen
- kussen
- kussenovertrek
- kwast (garneersel)
- lezenaarsantependium
- likeurglas
- manipel
- mantel (kleding)
- maquette
- medaillon (sieraad)
- merklap
- missaallint
- mosterdpot
- muizenflesje
- nieuwjaarsprent

- olie- en azijnstel
- oosters tapijt
- palla's (bedekkingen voor kelken)
- parasol
- prent
- processiebaldakijn
- processiekruis
- pyxisbeurs
- reliekbuste
- reliquiarium
- reproductie
- retabel
- retabelfragment
- sacramentstoren
- sarong
- scapulier
- schootsvel
- schort
- schoudervelum
- sjaal
- sluier
- snuifdoos
- stolen (liturgische kleding)
- strik
- strooibus (tafel)
- studiokeramiek
- tegeltableau
- textielfragment
- vaandel
- vaas
- val
- velum
- vest (kleding)
- vlag
- vlaggenstok
- vleugelglas
- voetstuk
- wandsculptuur
- waterpijp
- wierookscheepje
- wierookvat
- wijnglas
- wijwateremmer
- zoutvat

Appendix 4. Relevance / notability on Wikidata

From the Whitepaper open data management in Wikidata¹⁰:

Which information belongs on Wikidata, which doesn't? In its initial phase, Wikidata has the following two goals¹¹:

- 1. Wikidata centralises links between different language versions (interlanguage links) across Wikimedia projects (for example: one central Wikidata item for all Wikipedia articles about Peter Paul Rubens, his category on Wikimedia Commons, etc).
- 2. Wikidata serves as a general knowledge base for the world at large.

An item is acceptable on Wikidata if and only if it fulfills at least one of these two goals, that is if it meets at least one of the criteria below:

- 1. It contains at least one valid sitelink to a page on Wikipedia, Wikivoyage, Wikisource, Wikiquote, Wikinews, Wikibooks, Wikidata or Wikimedia Commons.
- 2. It refers to an instance of a clearly identifiable conceptual or material entity. The entity must be notable, in the sense that it can be described using serious and publicly available references.
- 3. It fulfills some structural need, for example: it is needed to make statements made in other items more useful.

The data provided in the project Linked Open Data publication with Wikidata usually falls under goal #2 and criterion #2. In a few cases, Wikipedia articles already exist about artworks in the contributing collections, which makes these fall under goal #1 and criterion #1.¹² The same principle applies to the artists who created the artworks in the contributing collections.

By the end of 2015, no significant problems have emerged in terms of notability of unique artworks (paintings, drawings, installations, unique sculptures) from public collections, described in art historical literature and/or whose creator is mentioned in reputable sources.

Notability of items produced in series is under discussion. Individual copies of a massively spread publication (like a book) don't belong on Wikidata. In October 2015, there's no community consensus or 'best practice' yet on describing individual prints of e.g. engravings or lithographs, of which different copies may exist in various art collections.

Individual everyday objects in art collections are usually not relevant or notable enough for Wikidata. An exception can be made if it is a very special object, described individually in independent and reputable sources. A good example is the Saliera (Cellini Salt Cellar

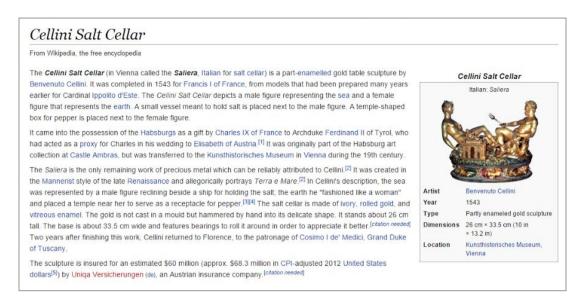
https://www.wikidata.org/wiki/Wikidata:Flemish_art_collections,_Wikidata_and_Linked_Open_Data/Whitepaper#Notable

¹⁰

¹¹ https://www.wikidata.org/wiki/Wikidata:Notability

¹² Een voorbeeld is het schilderij De Heilige Hiëronymus in gebed van Jheronimus Bosch (https://www.wikidata.org/entity/Q2566840), dat in zes Wikipedias een artikel heeft.

(Q697208))¹³ by Benvenuto Cellini, in the collection of the Kunsthistorisches Museum Wien. This object has a Wikipedia article in many languages and is covered in many publications.



English Wikipedia article on the Saliera

¹³ https://www.wikidata.org/entity/Q697208

Appendix 5. Useful links

Glossary of terms used Wikidata: https://www.wikidata.org/wiki/Wikidata:Glossary

Volunteer project on visual arts on Wikidata, containing a.o. Information about types of visual arts and their description:

https://www.wikidata.org/wiki/Wikidata:WikiProject_Visual_arts

Appendix 6. Examples of SPARQL queries

Here we list a couple of SPARQL query examples, based on the data that was offered in the framework of this project.

1. Find all artworks by James Ensor, displaying inventory number, WorkPID, work title and collection to which the work belongs.

```
SELECT ?work ?collectionLabel ?invnr ?WORKpid ?workLabel
WHERE {
    ?work wdt:P170 wd:Q158840 . # find all items created by James Ensor
    ?work p:P217 ?y . # find all items that have an inventory number statement
    ?y v:P217 ?invnr . # look up the value for every inventory number statement
    ?y pq:P195 ?collection . # for every inventory number statement, look up the corresponding
collection
    ?y prov:wasDerivedFrom ?z . # for every inventory number statement, look up the reference
statement
    ?z pr:P854 ?WORKpid . # for every reference statement, look up the corresponding URL
SERVICE wikibase:label {bd:serviceParam wikibase:language "nl" .} # show the label in Dutch for
all properties
}
```

2. Find all artworks from the (collection of the) Groeningemuseum, displaying work title and DataPID.

```
SELECT ?work ?workLabel ?collectionLabel ?datapid
WHERE {
    ?work wdt:P195 wd:Q1948674 . # find all items that are preserved in the Groeningemuseum
    ?work p:P195 ?y . # find all collection statements for these works
    ?y v:P195 ?collection . # for these collection statements, look up their value
    ?y prov:wasDerivedFrom ?z . # for these collection statements, look up the reference
    statement
    ?z pr:P854 ?datapid . # for all these reference statements, look up the corresponding URL
    SERVICE wikibase:label {bd:serviceParam wikibase:language "nl" .} # show the label in Dutch for all properties
    }
```

3. Find all artworks from the (collection of) SMAK, who belong to the Collectie Vlaamse Gemeenschap behoren, including their DataPID (this is a test).

```
SELECT ?work ?workLabel ?collectionLabel ?datapid
WHERE {
   ?work p:P195/v:P195 wd:Q1540707 . # find all items that belong to the collection of SMAK
   ?work p:P195/v:P195 wd:Q2173225 . # for all of these items, find out which ones belong to the
```

Collectie Vlaamse Gemeenschap

4. Find all artists with works in the (collection of) MSK Gent, who aren't deceased for 70 years yet.

```
PREFIX wd: <a href="http://www.wikidata.org/entity/">http://www.wikidata.org/entity/>
PREFIX wdt: <a href="http://www.wikidata.org/prop/direct/">http://www.wikidata.org/prop/direct/</a>
PREFIX wikibase: <a href="http://wikiba.se/ontology#">http://wikiba.se/ontology#>
PREFIX p: <a href="http://www.wikidata.org/prop/">PREFIX p: <a href="http://www.wikidata.org/prop/">http://www.wikidata.org/prop/</a>
PREFIX v: <a href="http://www.wikidata.org/prop/statement/">http://www.wikidata.org/prop/statement/</a>
PREFIX q: <a href="http://www.wikidata.org/prop/qualifier/">http://www.wikidata.org/prop/qualifier/</a>
PREFIX rdfs: <a href="http://www.w3.org/2000/01/rdf-schema">http://www.w3.org/2000/01/rdf-schema">http://www.w3.org/2000/01/rdf-schema</a>
SELECT DISTINCT ?c ?cLabel ?dod # DISTINCT = remove all doubles (names) from the list, i.e.
from here on every name will only appear once.
WHERE
 ?p wdt:P195 wd:Q2365880 . # Find all works from MSK (?p)
 ?p wdt:P170 ?c . # Of these works, find all artists (?c)
 ?c wdt:P570 ?dod . # OF these artists, find their date of death (?dod)
 FILTER (?dod > "1946-01-01T00:00:00Z"^^xsd:dateTime) . # filter the list to only keep those
who are not deceased for 70 years (or more)
 SERVICE wikibase:label {
bd:serviceParam wikibase:language "nl,en" .
}
} ORDER BY ?cLabel
```

This query doesn't function for 100%. ie. https://www.wikidata.org/wiki/Q1862458 is not recorded in the results (and should be).

Find all WorkPIDs from the MuZEE (collection) and their corresponding DataPIDs.

>> Not fullyl ok: doens't filter DataPIDs from other collections.

```
SELECT ?invnr ?invnrCollectionLabel ?workpid ?datapid WHERE {
```

```
?work p:P195 ?x.
?x v:P195 wd:Q1928672 . # find all items, belonging to the collection of Mu.ZEE
?work p:P217 ?y . # for these items, find all inventory number statements
?y v:P217 ?invnr . # for all these inventory number statemens, look up the value
?y prov:wasDerivedFrom ?z . # for all of these inventory number statements, look up those
containing a source reference
?z pr:P854 ?workpid . # for all these inventory number statements, look up the
corresponding URLs
?y pq:P195 ?invnrCollection . # for all these inventory number statements, look up their
collection statements
?x prov:wasDerivedFrom ?a . # for all these inventory number statements, look up those
having a source reference
?a pr:P854 ?datapid . # for all these inventory number statements, look up the
corresponding URLs
SERVICE wikibase: label {bd:serviceParam wikibase: language "nl" .} # show the label in Dutch for
all properties
}
   6. Find all creators who have work in the (collection of the) MSK and display their
```

corresponding Wikipedia articles.

```
prefix schema: <a href="http://schema.org/">http://schema.org/>
PREFIX wikibase: <a href="http://wikiba.se/ontology#">http://wikiba.se/ontology#>
PREFIX wd: <a href="http://www.wikidata.org/entity/">http://www.wikidata.org/entity/>
PREFIX wdt: <a href="http://www.wikidata.org/prop/direct/">http://www.wikidata.org/prop/direct/</a>
SELECT DISTINCT ?creator ?creatorLabel ?dob ?dod ?article WHERE {
?p wdt:P195 wd:Q2365880 . # find all works from the collection of MSK
?p wdt:P170 ?creator . # for those works, find all their creators
?creator wdt:P569 ?dob . # for all those creators, find their date of birth
?creator wdt:P570 ?dod . # for all those creators, find their date of death
OPTIONAL {
?article schema:about ?creator . # find all external articles about those creators
?article schema:inLanguage "en" . # ... in English ...
FILTER (SUBSTR(str(?article), 1, 25) = "https://en.wikipedia.org/") # filter this list and only
fetch Wikipedia articles
}
SERVICE wikibase:label { # Fetch the label for the artist in English
bd:serviceParam wikibase:language "en" .
}
}
```