

Wikidata items about biographies of the Austrian Empire from BLKOe - a dataset of entry items, person items and cited publication items*

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Abstract. New dataset about >25000 entries of "Biographisches Lexikon des Kaiserthums Oesterreich", a 19th century biographical dictionary of the Austrian Empire by Constant von Wurzbach, including 12000 people previously not mentioned in Wikipedia/Wikidata and main reference works cited in the dictionary. It enhances the Wikisource transcription of the work and provides a comparison with other datasets.

Keywords: resource paper, Constant von Wurzbach, Wikidata, citations, Wikidata item, encyclopedia, metadata, Austrian Empire, Austria-Hungary, "Biographisches Lexikon des Kaiserthums Oesterreich", BLKOe, person item, entry item, publication item, place name, Wikisource.

1 Introduction

Wikidata's contributors^{**} recently compiled a dataset including ca. 40,000 new records ("items")¹ related to "Biographisches Lexikon des Kaiserthums Oesterreich" (BLKOe), a biographical dictionary by Constant von Wurzbach². The dataset added ca. 12,000 people who lived in the 18th or 19th century previously unknown to Wikidata (or Wikipedia) and >400 publications cited in BLKOe. For ca. 10,000 people, the dataset links to existing Wikidata items about these persons, its facts, pool of identifiers and links to other databases and wikis (VIAF, LC, GND, ...), including Wikipedia articles.

The new dataset helps explore what is considered an "under-exploited mine of information"³ a while back by Evans (1985/2006) and "that doesn't not seem to have found the recognition it deserves" when written (Gottschall, 1874).

Questions we ask: what did we start with (2)? How is BLKOe structured (3.1)? How is it in Wikisource (3.2)? What form have these Wikidata items (3.3)? What is the size of the dataset (4.)? What has been done with it (5.)? How is it different from

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** notably by Mfchris84 (<https://www.wikidata.org/wiki/User:Mfchris84>) and also M2k~dewiki (<https://www.wikidata.org/wiki/User:M2k~dewiki>), following a detailed analysis by Pyfisch (<https://www.wikidata.org/wiki/User:Pyfisch>).

other similar datasets in Wikidata (6.)? How could be it be expanded (7.)? What may be future uses (8.)? The paper is completed with a series of appendixes and endnotes.

Wikidata items are generally referred to by their identifier (QID), e.g. Q25856 for the item about Constant von Wurzbach. The online version is at <https://www.wikidata.org/wiki/Q25856>. Unless stated, the version consulted is the one current on August 9, 2020. Appendix 1 lists URLs of the samples.

2 Starting point

BLKOe is a biographical dictionary compiled by Constant von Wurzbach⁴. Its 60 volumes were published over a period of thirty-five years from 1856 to 1891. The 22,000 biographies⁵ should cover people who were active in regions seen as part of the Austrian Empire between 1750 and 1850 (or publication). Published in German, most cited references are in German (~75%), others in Italian, Latin, Czech, Polish, Hungarian, French, etc.⁶

Wikisource⁷ hosts transcriptions of texts. It includes a transcription of the original publication of BLKOe broken down in one page per entry.

Wikidata⁸ is a database. Its database records consist of items about a concept with one or several statements about that concept. A statement consists of a property and a value, optional qualifiers and references. For BLKOe, these items are either about Wikisource's edition of entries in BLKOe ("entry item") or about the person subject of the entries ("person item"). Each entry item has a statement about its "main subject" linking it to the person item. Beyond the 22,000 person items discussed here, it includes several million other.

Wikimedia Commons⁹ includes copies of three scanned volumes and individual pages. Full scans of the sixty volumes are available from other sources¹⁰: Austrian Literature Online, Google Books, Internet Archive. Scans sometimes combine two volumes or lack pages, notably oversized tables.

Illustration 1 shows the main elements detailed below.

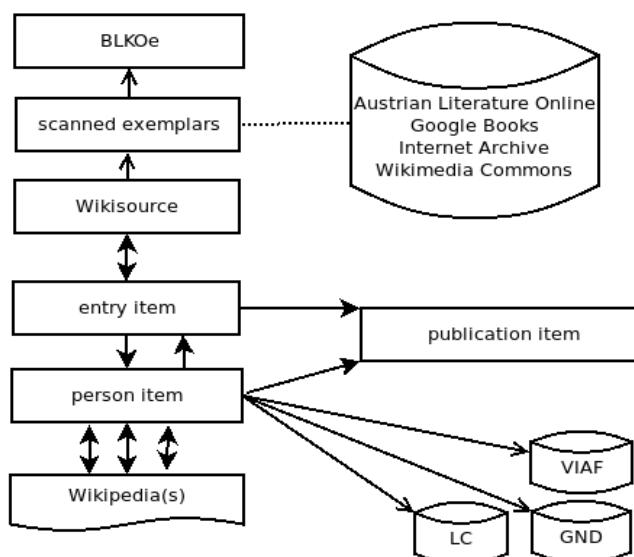


Illustration 1: main elements

3 Main elements

3.1 BLKOe

BLKOe consists essentially of three types of entries:

1. biographies of individuals, ordered by family name
2. articles about families, generally with a description of their coat of arms or a genealogical table
3. cross-references to other entries

Focus here is on the first group. Illustration 2 shows a (short) sample entry from BLKOe. Biographies include:

- date and place of birth/death (except for living people)
- occupation, military rank, religious order, awards received
- references

These are mentioned here as we come back to them later. For artists' biographies, it's said that the structure of entries didn't evolve much in later similar works.¹¹

References can be:

- publications about the subject
- articles in periodicals
- entries in other encyclopedias or reference works

BLKOe includes two lists of the latter two, one published in the first volume¹², one in the last volume¹³. Items for every publication in these lists were created, but could benefit from additional information.

The work is completed with some of the usual back and front matter:

- a preface for some volumes
- a postface in volume 60
- 3 indexes per volume:
 - alphabetical
 - by country of birth
 - by occupation/some other category
- errata and addenda
- two lists of general works used as references

3.2 At Wikisource

The transcription* of the >24000 pages of BLKOe is broken down in one page per entry. An entry may span several pages or be part of a larger paragraph in the print edition. A sample entry is reproduced as illustration 3.

* notably by Zabia (<https://de.wikisource.org/wiki/Benutzerin:Zabia>) among other contributors

After OCR of the work printed in Fraktur typeface, all pages have been checked at least once¹⁴. That status can be queried on Wikidata. Proofreading was done primarily based on the copy at Austrian Literature Online¹⁵, not Google Books, Internet Archive, or Wikimedia Commons.

Each page includes an infobox. It links to previous and next entry and indicates volume, page, year of publication. Where available, it links to the Wikipedia article, Wikisource page or GND identifier of the person.

Except for title pages, indexes by country of birth/by occupation, the entire 60 volumes have been transcribed.

Böhm, Joseph (Tonkünstler, geb. zu Pesth 4. März 1795 [nach dem „Musikalischen Erinnerungskalender der Zeitung für Musik“]). Nachdem er von seinem Vater im Gesang und Violinspiele unterrichtet worden war, machte er als achtjähriger Knabe mit diesem eine Kunstreise nach Polen, wo er vier Jahre verweilte. 1815 kam er nach Wien zurück, um 3 Jahre später Italien zu durchreisen. Nach seiner Rückkehr 1819 erhielt er die Stelle eines ersten Violinisten am Conservatorium. Im Jahre 1823 unternahm er abermals eine größere Kunstreise, u. z. nach Deutschland und Frankreich. Seine Compositionen bestehen in Concertstücken, Quartetten, Duetten, Polonaisen, Variationen, Gesängen u. s. w. Sein Spiel ist vorzüglich rein und zart, und aus seiner Violine spricht seelenvolle Innigkeit. B. ist auch Mitglied der kais. Hofkapelle.

Schilling (G. Dr.), Das musikalische Europa (Speyer 1842, H. C. Neidhart, gr. 8°) S. 39 (dort wird er als Leopold Joseph angeführt und das J. 1798 als Geburtsjahr angegeben). — Meyer (J.), Das große Conversations-Lexikon für gebildete Stände (Hildburghausen 1845, Bibl. Inst.) IV. Bd. 4. Abth. S. 1294: „III. Musiker, Nr. 4“ (gibt auch das J. 1798 als Böhms Geburtsjahr an). — Porträt: Facsimile des Namens. Kriehuber 1839 (lithogr.). Gedruckt bei Joh. Höselich (Wien 1839, Tob. Haslinger in Wien, Fol.).

Illustration 2: scan

Quelltext | Diskussion | Lesen | Quelltext anzeigen | Versionsgeschichte | Wikisource durchsuchen | Q

BLKÖ:Böhm, Joseph

Böhm, Joseph [BN 1] (Tonkünstler, geb. zu Pesth 4. März 1795 [nach dem „Musikalischen Erinnerungskalender der Zeitung für Musik“]). Nachdem er von seinem Vater im Gesang und Violinspiele unterrichtet worden war, machte er als achtjähriger Knabe mit diesem eine Kunstreise nach Polen, wo er vier Jahre verweilte. 1815 kam er nach Wien zurück, um 3 Jahre später Italien zu durchreisen. Nach seiner Rückkehr 1819 erhielt er die Stelle eines ersten Violinisten am Conservatorium. Im Jahre 1823 unternahm er abermals eine größere Kunstreise, u. z. nach Deutschland und Frankreich. Seine Compositionen bestehen in Concertstücken, Quartetten, Duetten, Polonaisen, Variationen, Gesängen u. s. w. Sein Spiel ist vorzüglich rein und zart, und aus seiner Violine spricht seelenvolle Innigkeit. B. ist auch Mitglied der kais. Hofkapelle.

Schilling (G. Dr.), Das musikalische Europa (Speyer 1842, H. C. Neidhart, gr. 8°) S. 39 [dort wird er als Leopold Joseph angeführt und das J. 1798 als Geburtsjahr angegeben]. — Meyer (J.), Das große Conversations-Lexikon für gebildete Stände (Hildburghausen 1845, Bibl. Inst.) IV. Bd. 4. Abth. S. 1294: „III. Musiker, Nr. 4“ [gibt auch das J. 1798 als Böhms Geburtsjahr an]. — Porträt: Facsimile des Namens. Kriehuber 1839 (lithogr.). Gedruckt bei Joh. Höselich (Wien 1839, Tob. Haslinger in Wien, Fol.).

Berichtigungen und Nachträge

1. ↑ E Böhm, Joseph [Bd. II, S. 20].
Handschriftliche Biographie und Verzeichniß seiner Werke nach seiner eigenen Angabe im Archiv u. s. w., wie bei Bachschmid. [Bd. 26, S. 370.]

Biographisches Lexikon des Kaiserthums Oesterreich
fertig
<<<Vorheriger Nächster>>
Böhm von Blumenheim, Franz
Band: 2 (1857), ab Seite: 20. (Quelle)
Joseph Böhm (Violinist) in der Wikipedia
GND-Eintrag: 102375119, SeeAlso
Fertig! Dieser Text wurde zweimal anhand der Quelle Korrektur gelesen. Die Schreibweise folgt dem Originaltext.
Linkvorlage für [Ausklappen] Wikipedia

Illustration 3: Wikisource transcription

3.3 In Wikidata

Entry item. The structure of an entry item is fairly simple. A sample is included as appendix 6 (html format) and appendix 2 (ttl format). Below a list of statements on such an entry item with the Wikidata property used for them:

- instance of (P31)¹⁶: biographical item (Q19389637)
- published in (P1433): BLKOe (Q665807)
- title (P1476): Wikisource page name
- main subject (P921): pointing to the person item (illustration 4)
- follows (P155)/followed by (P156)
- volume (P478), page(s) (P304)
- language (P407)
- scanned version at Commons (P996)
- first line (P1922): initial ~300 characters
- cites work (P2860): statements for each (incomplete), linking to publication items
- amended by (P2567): entry has an addendum in vol. 26
- eventually text size is planned to be included

Illustration 4: main subject (P921) statement linking entry item to person item

Other types used. For the "instance of"-property (P31), the value "biographical item" (Q19389637) is used on entry items about a person. Other values are:

- encyclopedic article (for entries about families)
- cross reference
- duplicate entry (a few people appear twice in BLKOe)
- addendum (some entries complete earlier entries or provide a full re-write, such as the entries about the Grand Dukes of Tuscany)
- genealogical table (appendix 3 provides some detail about these)

Back- and front-matter also have a few specific values, e.g. preface, postface, person index, etc. A short description of the way back matter could be described is included as appendix 4. A list with frequencies is available online.¹⁷

Main subject: person item. The entry items for biographical articles link to roughly 10000 existing person items. Mapping was done manually or automatically based on Wikipedia articles present in the infobox at Wikisource or GND identifiers. For 12000 persons new items were created. Occasionally a duplicate is created and merged only later.

Person items link to the entry with "described by source"-statements. Illustration 5 shows an extract from a person item. If the main subject of the entry is a family, the item about that family is linked when available.

Illustration 5: person item, partial collated view

Publication items: Entry items link to publication items for references included in entries. Each publication item should eventually have full details. Currently language, date and place of publication are generally available. A few encyclopedias and newspapers have Wikipedia articles about them.

Place names: a tentative attempt to index place names with Wikidata's lexeme entities has been made.¹⁸

Other items: Discussing the dataset wouldn't be complete without mentioning the item for the BLKOe itself and its author and the 60 volumes¹⁹. Each volume item provides links to most known scanned exemplars of the print edition.

4 Size of dataset

Overall count: table 1 gives some basic metrics per Heist et al. (2020), values include items from outside the dataset.²⁰

Table 1: dataset summary

aspect	num
#instances	40371
#assertions (statements)	380908
average linking degree	9.44
median ingoing edges ²¹	2
median outgoing edges ²²	7
#relations ²³	89
#classes	35

Count of instances by type: table 2 provides a count by instance. As entry items and publication items are mostly new, other statistics cover them generally together.

Table 2: types of items, quantity and new

type	quantity	new	missing	new if created	query
entry items	23737	23442	0	2020	https://w.wiki/Z7i
person items	22192	12132	83	after entry item	https://w.wiki/Z7k
other subject item	360	49	865	after entry item	https://w.wiki/Z7p
publication items	518	467	?	2020	https://w.wiki/Z7s
other items	3356	3307		2020	https://w.wiki/Z7v
total	50163	39397		948	

Depth of person items is measured by number of statements per items. Table 3 illustrates this for person items

Table 3: depth of person items

statements per person item	percentage
2-5	40%
6-9	13%
10-19	15%
20-49	27%
50+	5%

Other measures of the completeness are provided at Wikidata:²⁴:

- 75% have birth or death dates, or both statements
- 50% have places of birth, death, residence, work location
- 50% have occupation or position held statements
- family relationship statements are fairly rare (father, mother, child, or spouse)
- 45% of person items have neither a sitelink to another Wikimedia project or an external identifier²⁵.

"**Wurzbach measure of completeness**" could be proposed given the way Wurzbach prepared indexes for BLKOe and wrote lead sections: it includes occupation (statement with Wikidata property P106), place of birth (P19), date of birth (P569), place of death (P20), date of death (P570). A count of these is shown in table 4.

Table 4: completeness according to Wurzbach measure (person items)

properties present	percentage
0	21%
1-2	27%
3-4	19%
5	33%

Citations per entry item (table 5) shows how many of these have been identified per items for biographies

Table 5: citations per entry item

publication per entry item	percentage
0	54%
1	26%
2	11%
3	5%
4+	5%

Depth of entry items is given for symmetry (table 6).

Table 6: depth of entry items

number of statements	count of items
5-9	1351
10-19	26211
20-49	110
50+	2

5 What are its uses?

The new dataset provides a way to analyze the work itself and the people covered:

- number of pages²⁶ or biographies published
- percentage of living subjects at publication²⁷
- discovery of references used²⁸

Also, Wikidata provides a definite way to make lists of people described in BLKOe: besides the three ways provided by the work itself, already Zipper (1888) tried to prepare an additional list. Queries and lists for the following are currently provided:

- people living at publication²⁹
- people by occupation: composers³⁰, painters³¹
- people by their place of birth, present-day Spain³², France³³, United Kingdom³⁴
- members of a given family: Habsbourg³⁵, Stubenberg³⁶

Statistics by occupation³⁷, languages spoken³⁸, military rank³⁹, awards⁴⁰, family names⁴¹ suggest further similar lists that can be generated.

Reports primarily made for data quality checks can give anecdotal insight:

- Archduke Johann Salvator (1852--1890)⁴² died farthest from Vienna⁴³: at Cape Horn (he was born in Florence). He is followed by Hungarian János Czetz (1822-

1904)⁴⁴ who died in Buenos Aires and missionary Augustin Strobach (1646-1684)⁴⁵ in the Northern Mariana Island.

- historian Francisco Adolfo de Varnhagen, Viscount of Porto Seguro (1816-1878)⁴⁶ was born farthest from Vienna⁴⁷: in Iperó, Brazil (he died in Vienna). Only 5 or 6 other people were born outside Europe.
- 3rd century saint Victorinus of Pettau⁴⁸ is the earliest person with an article in BLKOe⁴⁹. He is followed by Eriprand Visconti (died 1037)⁵⁰. At least 200 people included were born before 1400.
- Maria Antonia, Princess of the Two Sicilies, Grand Duchess of Tuscany (1814-1898)⁵¹ is the 19th century person with most living descendants known to Wikidata (1448 people)⁵², that is a person with descendants having person items, recorded as children's children, known to be born in the 20th/21st century and no death date.
- Wolfgang Amadeus Mozart⁵³ has the person item with most external identifiers⁵⁴. He is followed by five other composers (Beethoven, Liszt, Brahms, Gluck, Haydn).
- the youngest people (at publication of the volume) included in BLKOe⁵⁵ are all members of the Habsbourg family, starting with Crown Prince Rudolf (1858-1889)⁵⁶ at age 3 (in vol. 7, published 1861).
- most recently born people⁵⁷ are Archduke Leopold Ferdinand (1882-1935)⁵⁸, Julius von Delpiny (1868-?)⁵⁹, sculptor Karl Zinsler (1867-?)⁶⁰, journalist Franz Tuvora (1866-?)⁶¹. About the last three, not much is at Wikidata beyond data from BLKOe.

Text analysis allows to add statements to person items and/or reference these to the article in BLKOe. Table 6 shows how many times this was done and which properties were used. This approach could be expanded to all person items for some properties. Expanding this helps gathering more of the countless facts included in BLKOe.

Table 7: statements referenced from BLKOe

Property	Number of statements
date of birth (P569)	12897
date of death (P570)	8724
occupation (P106)	5214
place of death (P20)	3248
place of birth (P19)	3171
military rank (P410)	1179
award received (P166)	910
religious order	365
languages spoken, written or signed	303
position held (P39)	105

Place of birth (or death) can be used to produce maps easily. It further provides an easy way to compare coverage of BLKOe with a language version of Wikipedia or Wikidata in general.

Illustration 6 shows that more than 50% of the people born in the present-day Czech Republic with an article in BLKOe have also one in the Czech language Wikipedia (cswiki).

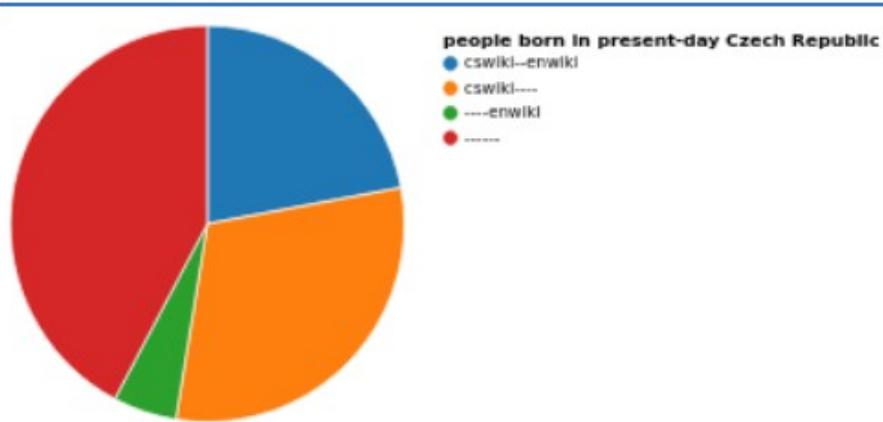
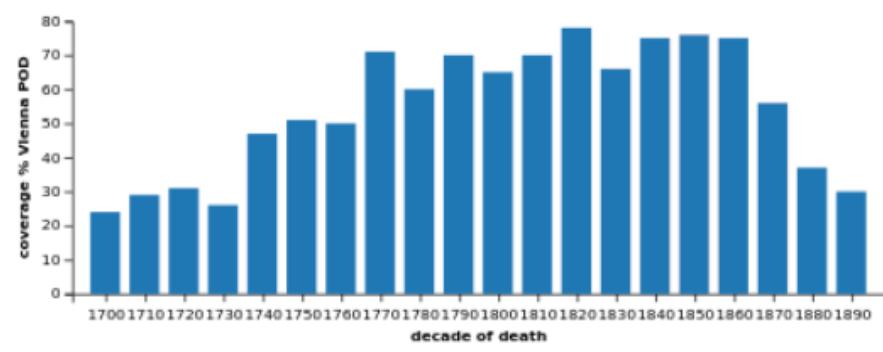


Illustration 6: people born in present-day Czech Republic coverage by Wikipedia in Czech and English

Illustration 7 shows that more than 70% of people who died in the 1820s in Vienna (and have an item in Wikidata) also have an article in BLKOe. The chart also shows that the percentage isn't at 0 for years before BLKOe's stated start date (1750).



End of automatically generated list.

Illustration 7: coverage by BLKOe of people in Wikidata who died in Vienna, by decade

Note: When viewing the current output, one needs to keep in mind the current and possible level of completeness of the dataset.

Appendix 5 includes a schematic summary of elements for use.

6 How is this dataset different?

BLKOe is unique by its geographic scope in that time period. A few other encyclopedias have been transcribed at Wikisource, notably in Russian. These have similar "entry items" associated with them, but they generally lack the statements about references used in the entries. Table 8 lists some.⁶²

Table 8: Overview of encyclopedias with entry items at Wikidata

qid	encyclopedia/dictionary	en- tries	% main	% sub- ject	% cita- tions
Q602358	Brockhaus and Efron Encyclopedic Dictionary	103202	44	0	
Q24717970	Small Brockhaus and Efron Encyclopedic Dict. 2. ed.	44058	20	0	
Q1138524	Paulys Realencyklopädie	33945	19	0	
Q19036877	Alumni Oxonienses: 1715-1886	28038	2	0	
Q15987216	Dictionary of National Biography, 1885-1900	27243	100	0	
Q590208	Allgemeine Deutsche Biographie	25886	91	1	
Q665807	BLKOe	23829	96	45	
Q10886720	A Dictionary of Chinese Buddhist Terms	21083	1	0	
Q2041543	Ottův slovník naučný	20928	33	0	
Q4173137	Jewish Encyclopedia of Brockhaus and Efron	18846	20	0	
Q1960551	Russian Biographical Dictionary	13736	75	0	
Q4114391	Sytin Military Encyclopedia	9153	37	0	
Q27680201	Riemann's Music Dictionary (1901-1904)	7703	74	0	
Q20078554	Great Soviet Encyclopedia (1926-1947)	7701	33	0	
Q19190511	New Encyclopedic Dictionary	6039	76	0	
Q16055052	A Naval Biographical Dictionary	4892	10	0	
Q4086271	Bible Encyclopedia of Archimandrite Nicephorus	4551	19	0	
Q20961706	Infernal Dictionary, 6th ed.	3821	8	0	
Q4532138	Granat Encyclopedic Dictionary	3426	78	0	
Q4135594	Geographical statistical dictionary of the Russian Empire	2145	16	0	
Q867541	1911 Encyclopædia Britannica	1886	95	0	
Q19538713	Vlastenský slovník historický	1801	58	0	
Q17290934	Lentapedia	1615	100	0	
Q19084840	The Dictionary of Australasian Biography, 1892	1532	84	0	
Q67202875	Thom's Irish Who's Who	1364	59	0	

Other novel or distinct elements:

- clear distinction between the publication used with "published in" and its volumes
- inclusion of the first line in the dataset
- cited encyclopedias also added to person items
- some analysis of dataset available online in English
- statements about the structure of back/front matter

7 Leads for expansion of dataset

Given the open nature of Wikidata, the dataset can easily be expanded with more elements, based on BLKOe or other sources.

For person items, one could analyze the text at Wikisource for statements about:

- family relationships
- grants of titles of nobility
- occupations
- notable works of writers and composers
- cited publications

For entry items, text analysis at Wikisource could provide with quantitative elements about the articles: such as text length or readability. The varying length of entries was already criticized while publication was ongoing.⁶³ Formal structure could be also be included.

Indexes by name, country of birth, occupation could help check the completeness of the list of entries.

Currently, mainly the most frequent place names are included (Vienna, Prague ..). A more detailed analysis could expand this significantly.

Through addition of "cited work" statements to other works using BLKOe as a reference or object of study, citations of the individual articles or the work as whole can be followed.

8 Future uses

The Wikidata dataset about BLKOe and the transcription at Wikisource opens BLKOe to the many forms of analysis done on Wikipedia. Similarly to Wikipedia, BLKOe can now be queried centrally from Wikidata.

Overlapping scope with BLKOe's predecessor (Oesterreichische National-Encyklopädie⁶⁴) and successor (Österreichisches Biographisches Lexikon⁶⁵) could be investigated.

Comparisons with Wikipedia language versions likely to contain articles about the same people of the 18th/19th century could bring more insight in the selection.

As BLKOe discusses diverging data, e.g. dates of birth/death, and Wikidata treasures such diverging statements, it could be interesting to review the accuracy of such basic statements in BLKOe.

Selection analysis, e.g. by N. Mengel (2017), could be validated, replicated and enhanced.

Items for entry simplify papers on the use of BLKOe in other works, be it as an object of study or a reference work.

Querying the dataset on Wikidata might surface more uses already referenced in Wikidata. The talk page on Wikidata can be used to bring up uses.⁶⁶

Appendix 1: Samples

Table 9

Table 9: samples mentioned in text

type	id	URL
new dataset		https://w.wiki/Z8s
new + existing		https://w.wiki/Z8r
author	Q25856	https://www.wikidata.org/wiki/Q25856
BLKOe	Q665807	https://www.wikidata.org/wiki/Q665807
volume 2	Q89309714	https://www.wikidata.org/wiki/Q89309714
scan		https://commons.wikimedia.org/w/index.php?title=File:Wurzbach_BLdK%C3%96_02.pdf&page=22
Wikisource		https://de.wikisource.org/wiki/BLK%C3%96:B%C3%B6hm,_Joseph
entry item	Q88567068	https://www.wikidata.org/wiki/Q88567068
person item	Q700771	https://www.wikidata.org/wiki/Q700771
publication item	Q12049440	https://www.wikidata.org/wiki/Q12049440
publication item	Q697173	https://www.wikidata.org/wiki/Q697173
place name	L297477	https://www.wikidata.org/wiki/Lexeme:L297477
genealogical table	Q90164477	https://www.wikidata.org/wiki/Q90164477

Appendix 2: entry item (ttl format)

Source: partially reproduced from <https://www.wikidata.org/wiki/Special:EntityData/Q88567068.ttl?flavor=dump>

```
wd:Q88567068 rdfs:label "Böhm, Joseph (BLKÖ)"@de ;
    rdfs:label "Böhm, Joseph (BLKÖ)"@en ;
    schema:description "Artikel im Biographischen Lexikon des Kaiserthums
        Oesterreich (Bd. 2, S. 20)"@de,
        "entry in the Biographisches Lexikon des Kaiserthums
        Oesterreich (vol. 2, p. 20)"@en,
    wdt:P31 wd:Q19389637 ;
    wdt:P1433 wd:Q665807 ;
    wdt:P921 wd:Q700771 ;
    wdt:P6216 wd:Q19652 ;
    wdt:P478 "2" ;
    wdt:P304 "20" ;
    wdt:P1476 "Böhm, Joseph"@de ;
    wdt:P156 wd:Q88573929 ;
    wdt:P155 wd:Q88573898 ;
    wdt:P996 <http://commons.wikimedia.org/wiki/Special:FilePath/Wurzbach%20BLdK%C3%96%2002.pdf> ;
    wdt:P407 wd:Q188 ;
    wdt:P1922 "Böhm, Joseph (Tonkünstler, geb. zu Pesth 4. März 1795 [nach dem
    „Musikalischen Erinnerungskalender der Zeitung für Musik“]). Nachdem er von seinem Vater
    im Gesang und Violinspiele unterrichtet worden war, machte er als achtjähriger Knabe mit
    diesem eine Kunstreise nach Polen, wo er vier Jahre ..."@de ;
    wdt:P2567 wd:Q89697570 ;
    wdt:P2860 wd:Q95948198,
    wd:Q97097143 ;
```

Appendix 3: Genealogical tables

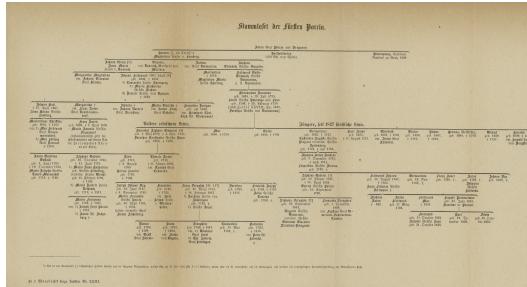


Illustration 8: scan of a family tree

BLKOe includes >350 genealogical tables. Illustration 8 shows a sample⁶⁷. Starting volume 6, these generally follow an article about the family and/or some of its most prominent members. A list of these tables was published in volume 60 and list is available on Wikidata⁶⁸.

Each table now has an item associated with it⁶⁹. This even if Wikisource includes the transcription⁷⁰ in an associated family article.

To provide structured data about these tables, some of the following information is added:

- time period covered: from, to (P7103, P7104)
- number of generations (P2670/Q213381/P1114)
- number of descendants (P2670/Q183905/P1114)
- key persons (P3342): an attempt is done to identify which ones are present in genealogical databases⁷¹

Appendix 4: Handling of BLKOe back matter

Each of the 60 volumes of BLKOe includes three types of indexes:

- alphabetical
- by country of birth, i.e. Austrian crown lands + "born outside of Austria"
- by occupation (or some other defining feature).

The structure of the later two are sometimes analyzed, notably as what actually could be seen as "Austria" changed from publication of the first to the last volume.

The dataset includes some statements to describe them in a structured way, allowing to compare them later:

- "has grouping" (P8306)
- "has column" (P8308)
- "has sorting" (P8307)

also:

- "quote" (P7081)
- "first line" (P1922)

The alphabetical index includes markers about diverging information found in references used. This hasn't been included (yet).

Appendix 5: summary of elements to use

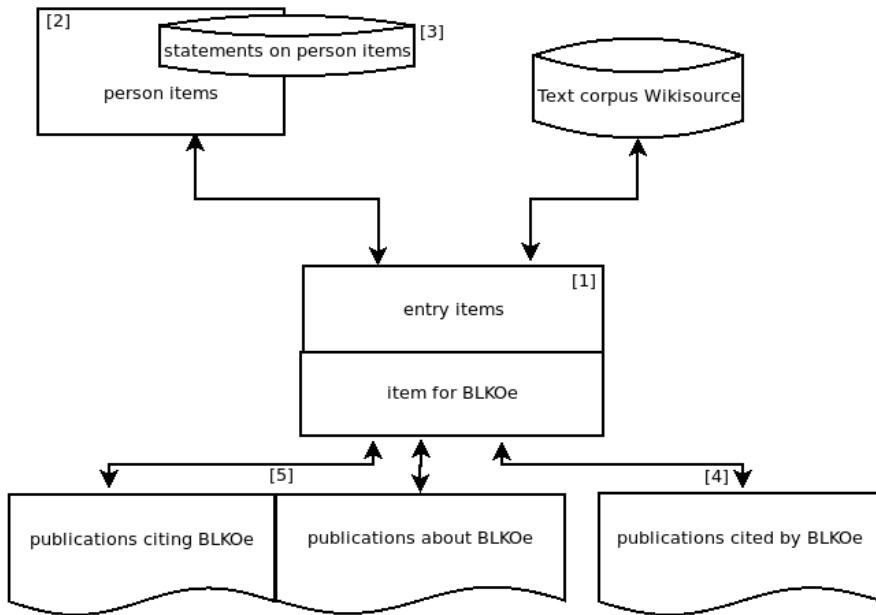
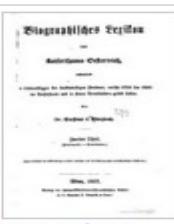


Illustration 9: summary of elements to use

Table 10: queries for summary of elements to use

#	elements to use	query
1	entry items	https://w.wiki/Z7i
2	person items	https://w.wiki/Z7k
3	statements on person items referenced by BLKOe	https://w.wiki/Z8m
4	publications cited by BLKOe	https://w.wiki/Z7s
5	publications citing BLKOe publications about BLKOe	https://w.wiki/Z8j

Appendix 6: entry item (html)

Böhm, Joseph (BLKÖ) (Q88567068)			
entry in the Biographisches Lexikon des Kaiserthums Oesterreich (vol. 2, p. 20)			
Language	Label	Description	Also known as
English	Böhm, Joseph (BLKÖ)	entry in the Biographisches Lexikon des Kaiserthums Oesterreich (vol. 2, p. 20)	edit Wikipedia (0 entries) edit Wildbooks (0 entries) edit Wikinews (0 entries) edit Wikiquote (0 entries) edit Wikisource (1 entry) edit Wikisource BLKÖ:Böhm, Joseph  Wikiversity (0 entries) edit Wikivoyage (0 entries) edit Wiktionary (0 entries) edit Other sites (0 entries) edit
Statements			
instance of	Biographical article 0 references		
follows	Böhm von Blumenheim, Franz (BLKÖ) 1 reference		
followed by	Böhm, Joseph Daniel (BLKÖ) 3 reference		
title	Böhm, Joseph (German) 1 reference		
main subject	Joseph Böhm 1 reference		
language of work or name	German 0 references		
first line	Böhm, Joseph (Tonkünstler, geb. zu Pesth 4. März 1795 [nach dem „Musikalischen Erinnerungskalender der Zeitung für Musik“]). Nachdem er von seinem Vater im Gesang und Violinspiel unterrichtet worden war, machte er als achtjähriger Knabe mit diesem eine Kunstreise nach Polen, wo er vier Jahre ... (German) 0 references		
amended by	Berichtigungen, Ergänzungen und Nachträge (Band 26) (BLKÖ) 0 references		
published in	Biographisches Lexikon des Kaiserthums Oesterreich 1 reference		
volume	2	statement is subject of Biographisches Lexikon des Kaiserthums Oesterreich volume 2	1 reference
page(s)	20		1 reference
document file on Wikimedia Commons	 Wurzbach BLKÖ 02.pdf 762 x 1,201, 466 pages; 20.51 MB file page 22 0 references		
copyright status	public domain determination method 100 years after author's death 0 references		
cites work	Q95948198 0 references		
	Q97097143 0 references		

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2. Biwald, B.: Archivar aus Leidenschaft. qid: Q98236260. In: Wiener Zeitung. 8 April 2018.
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- 1 overview of dataset: suggested query <https://w.wiki/Z8r> grouped by people items, entry items, publication items
- 2 compiler and author Constant or Constantin Wurzbach, later Edler von Tannenberg, then Ritter von Tannenberg, <https://www.wikidata.org/wiki/Q25856> VIAF 46994763, LC n86871520
- 3 see Evans (1985), p. 41 note 19
- 4 see Biwald B. (2018) and Lebensaft E., Reitterer H. (1992)
- 5 count by Wikidata: 22314 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/people, compare with 24254 mentioned in vol. 60, page IV.
- 6 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/cites/by_language
- 7 <https://de.wikisource.org/>
- 8 <https://www.wikidata.org/>
- 9 <https://commons.wikimedia.org/>
- 10 items for the individual volumes link to these, e.g. for volume 1, this is <https://www.wikidata.org/wiki/Q89309499>
- 11 see Kaiser M. (2017), p. 386
- 12 [https://de.wikisource.org/wiki/BLK%C3%96:Verzeichni%C3%9F_der_benutzten_Quellenwerke_\(Band_1\)](https://de.wikisource.org/wiki/BLK%C3%96:Verzeichni%C3%9F_der_benutzten_Quellenwerke_(Band_1))
- 13 https://de.wikisource.org/wiki/BLK%C3%96:Verzeichni%C3%9F_der_zum.biographischen_Lexikon_benutzten_Quellenwerke
- 14 Status at Wikisource is proofread ("korrigiert") or validated ("fertig"). https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource#Badges This status can be queried from Wikidata.
- 15 Austrian Literature Online: <http://www.literature.at/viewer.alo?objid=12537&page=1> (sample for vol. 1, p. 1)
- 16 <https://www.wikidata.org/wiki/Property:P31>
- 17 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/P31_values
- 18 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/frequent/place_of_birth
- 19 <https://www.wikidata.org/wiki/Q89309499> (sample: volume 1), query for others: <https://w.wiki/Z9G>
- 20 Metrics per Heist et al. (2020) with data from <https://w.wiki/Z8u>. Metrics calculated per https://www.wikidata.org/w/index.php?title=Help:Dataset_sizing&oldid=1257384747
- 21 see endnote 20 for method. Query used was <https://w.wiki/Zbn> and 0 added for items without any
- 22 see endnote 20 for method. Query used was <https://w.wiki/Zbp>
- 23 see endnote 20 for method. Query used was <https://w.wiki/Zbq>
- 24 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource#People:_available_properties
- 25 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource#Main_subject:_identifiers
- 26 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/chart_pages_published
- 27 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/chart_people_living
- 28 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/cites/by_work
- 29 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/living_at_publication
- 30 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/by_occupation/composer
- 31 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/by_occupation/painter
- 32 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/POB/Spain
- 33 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/POB/France
- 34 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/POB/UK
- 35 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/Habsbourg
- 36 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/by_name/Stubenberg
- 37 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/frequent/occupation
- 38 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/frequent/languages_spoken
- 39 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/frequent/military_rank
- 40 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/frequent/awards
- 41 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/numbers/frequent/names
- 42 <https://www.wikidata.org/wiki/Q657873>
- 43 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/died_farthest_from_Vienna
- 44 <https://www.wikidata.org/wiki/Q686993>
- 45 <https://www.wikidata.org/wiki/Q12856920>
- 46 <https://www.wikidata.org/wiki/Q708948>
- 47 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/born_farthest_from_Vienna
- 48 <https://www.wikidata.org/wiki/Q469199>
- 49 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/earliest
- 50 <https://www.wikidata.org/wiki/Q94620687>
- 51 <https://www.wikidata.org/wiki/Q235674>
- 52 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/living_descendants
- 53 <https://www.wikidata.org/wiki/Q254>
- 54 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/most_identifiers
- 55 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/youngest
- 56 <https://www.wikidata.org/wiki/Q152923>

- 57 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/reports/most_recently_born
- 58 <https://www.wikidata.org/wiki/Q78637>
- 59 <https://www.wikidata.org/wiki/Q94983355>
- 60 <https://www.wikidata.org/wiki/Q94693787>
- 61 <https://www.wikidata.org/wiki/Q90890669>
- 62 based on <https://w.wiki/Z8h>
- 63 see Loserth J. (1878)
- 64 <https://www.wikidata.org/wiki/Q19222701>
- 65 <https://www.wikidata.org/wiki/Q25666>
- 66 https://www.wikidata.org/wiki/Help_talk:Import_BLK%C3%96_from_wikisource
- 67 Porcia family tree, from BLKOe vol. 23 page 120a, image from:
https://commons.wikimedia.org/wiki/File:Wurzbach_Band_23_Seite_120a.jpg
- 68 https://www.wikidata.org/wiki/Help:Import_BLKÖ_from_wikisource/lists/genealogical_tables
- 69 <https://www.wikidata.org/wiki/Q90164477> (item for a table)
- 70 https://de.wikisource.org/wiki/BLK%C3%96:Porcia,_die_F%C3%BCrsten,_Genealogie#Seite_120a (transcription)
- 71 https://www.wikidata.org/wiki/Help:Import_BLK%C3%96_from_wikisource/lists/genealogical_tables/key_person