Some ways of using the Bergen Wittgenstein Archives’ resources and tools for *Tractatus* Nachlass research

With an addendum on how computational ontology can be utilized for researching the Vienna Circle’s reception of the *Tractatus*
Abstract

(i) After a brief overview of *Tractatus* genesis, I will present the items that are open access available for the study of *Tractatus* genesis on websites offered by the Wittgenstein Archives at the University of Bergen (WAB) and partners ([http://www.wittgensteinsource.org/](http://www.wittgensteinsource.org/), [http://wittgensteinonline.no/](http://wittgensteinonline.no/), [http://wab.uib.no/sfb](http://wab.uib.no/sfb) and [http://wittfind.cis.lmu.de/](http://wittfind.cis.lmu.de/)). These items include Nachlass items *Ts*-201a1 (1913), *Ts*-201a2 (1913), *Ms*-301 (1914), *Ms*-101 (1914), *Ms*-102 (1914-15), *Ms*-104 (1915?-18), *Ms*-103 (1916-17), *Ts*-204 (1918), *Ts*-202 (1918), *Ts*-203 (1919), as well as the Ostwald print (1922), the typescript with the English translation by Ramsey (a.o.) (1921-22), Ogden’s list of questions (1922), and the proofs of the bilingual edition (1922).

(ii) Then I will give concrete demos of how these resources which include facsimiles, transcriptions, metadata and advanced search and analysis tools can be put to use for studying the *Tractatus* genesis and its documents. Among the possibilities are various edition formats, chronological sorting of the texts, several filtering options, advanced text search and metadata driven browsing of the documents.

(iii) Finally I will focus on the post-*Tractatus* period and give an example of how use of semantic technologies can help studying agreement and disagreement in the Vienna Circle reception of the *Tractatus*. My touch stone and empirical data will be provided by Rose Rand’s “*Entwicklung der Thesen des ‘Wiener Kreises’*” (item “*Wiener Kreis Protokolle*” RC 081-07-01 in University of Pittsburgh ULS Archives & Special Collections, Rudolf Carnap Papers).
Resources available open access on wittgensteinsource.org (BNE, PTT, LPA) and wittgensteinonline.no (IDP)*

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Gratis vs. Libre Open access
wittgensteinsource.org and wittgensteinonline.no offer to all their resources gratis open access which permits fair use.

Only some of their resources are licensed also under “libre” open access terms.

*Other relevant OA resources include bazzocchi.net, http://tractatus.lib.uiowa.edu a.o.
BNE, LPA, PTT and IDP


- (2016-): Interactive Dynamic Presentation (IDP) of Ludwig Wittgenstein's philosophical Nachlass [http://wittgensteinonline.no/]. Edited by the Wittgenstein Archives at the University of Bergen under the direction of Alois Pichler. Bergen: WAB.
WAB offers the Nachlass in diplomatic and linear (normalized) text editions as well as facsimile

“Diplomatic”, “Linear” ...: “At one end of the spectrum are transcriptions that may be called strictly diplomatic, in which every feature that may reasonably be reproduced in print is retained. These features include not only spelling and punctuation but also capitalization, word division, and variant letterforms. The layout of the page is also retained, in terms of line division, large initials, and so on. Any abbreviations in the text will not be expanded, and, in the strictest diplomatic transcriptions, apparent slips of the pen will remain uncorrected. Such editions are often so close to the originals as to be all but unreadable for those unfamiliar with early paleographic or typographic conventions, or in any case no easier to read than the originals. At the opposite end are fully modernized transcriptions, where the substantives are retained but everything else is brought up-to-date, in some cases to such an extent as to make it questionable whether they are to be regarded as transcriptions at all. Between these two extremes a number of levels may be distinguished – semidiplomatic, seminormalized, and so on – depending on how the accidentals of the original are dealt with (Driscoll 2006, 254).” [Lexicon of Scholarly Editing > https://lexiconse.uantwerpen.be/index.php/lexicon/transcription-level/]

Alois Pichler, Vienna 12.6.2021
The Nachlass in facsimile, diplomatic and linear (normalized) edition on BNE
WAB also offers for the Nachlass (as well as some other Wittgenstein sources) text string search, lemmatized search and metadata search

- **Text search on**
  - [http://wittgensteinsource.org](http://wittgensteinsource.org) (text string search across all text editions on wittgensteinsource.org)
  - [http://wittgensteinonline.no](http://wittgensteinonline.no) (text string search within the HTML-output of the single Nachlass item or Nachlass group)
  - [http://wittfind.cis.lmu.de/](http://wittfind.cis.lmu.de/) (lemmatized and other advanced text search across the Nachlass)
  - M. Pilch’s *Wittgenstein Source Prototratatus Tools (PTT)*, e.g. [http://www.wittgensteinsource.org/PTT/PTT_A_5.pdf](http://www.wittgensteinsource.org/PTT/PTT_A_5.pdf) (text string search within the single PDF files of PTT)

- **Metadata* search on**
  - [http://wab.uib.no/sfb/](http://wab.uib.no/sfb/) (e.g. [http://wab.uib.no/sfb/?q=section%2023](http://wab.uib.no/sfb/?q=section%2023))

*For provenance of metadata see [http://wab.uib.no/wab_facets.page/](http://wab.uib.no/wab_facets.page/).
Interactive dynamic presentation of the Nachlass: Things that one cannot do with static editions only

Working with *interactive and dynamic* rather than *static* editions only: Some examples of how to put wittgensteinonline.no to work
Demos

- How to change from default linear to diplomatic edition format, and how to combine parameters from both formats
- How to download transcriptions of entire Nachlass item groups rather than single Nachlass items only
- How to achieve chronological ordering of a single item or an entire item group
- How to sort a single item or an entire item group according to publication in «work»
  - How to arrange Ms-104’s *Prototractatus* in the order of its decimal numbering
- How to hide or show from a typescript item revisions in hand
- How to extract from an item all and only the remarks that by Wittgenstein were marked with a specific section mark
  - How to extract from Ms-104 all and only the remarks that by Wittgenstein are marked as being “in der Korrektur”
- How to highlight passages with secret code, logical and mathematical notation, graphics a.o.
- How to make WAB’s datings and other metadata for the single remarks visible
- How to jump from a transcription on wittgensteinonline.no to the static edition incl. facsimile on wittgensteinsource.org
Wittgenstein Archives at the University of Bergen (WAB):
Open access to transcriptions of Wittgenstein's Nachlass (2016-)

Read.me (last changed 26.6.2020)

Select a single Wittgenstein Nachlass Item or an entire Wittgenstein Nachlass Item group from the drop-down list below:
Interactive Dynamic Presentation (IDP)*

• Changing presentation parameters (e.g. combining diplomatic and linear parameters)
• Filtering the text according to different parameters (e.g. section marks)
• Sorting the text according to different parameters (e.g. alleged chronology)
• Highlighting selected parts of the text (e.g. passages in secret code)
• Working with entire Nachlass item groups rather than single Nachlass items only (e.g. working with the entire *Tractatus* corpus)

*Find more on the term in Pichler and Bruvik 2014.*
Presentation parameters: Diplomatic vs. Linear

Ms-104,43 in diplomatic version

Ms-104,43 in linear version

Alois Pichler, Vienna 12.6.2021
Presentation parameters: How to switch between the linear and the diplomatic version

Wittgenstein Archives at the University of Bergen (WAB): Open access to transcriptions of Wittgenstein’s Nachlass (2016-)

Select a single Wittgenstein Nachlass item or an entire Wittgenstein Nachlass item group from the drop-down list below:

- [ ] SI-101 (German, 1974 [published in ‘Tabulados’ and ‘Elements Tabulados’])

Below style
- [ ] Diplomatic
- [ ] Linear

Show original line breaks [etc.]
- [ ] Yes
- [ ] No

Exclude handwritten revisions in typescript [etc.]
- [ ] Yes
- [ ] No

Display all retained variants
- [ ] Yes
- [ ] No

Display section marks (Zwischenzeichen)
- [ ] Yes
- [ ] No

Filter text according to section marks [No section mark]
- [ ] Include
- [ ] Exclude

Filter text according to section marks
- [ ] Include
- [ ] Exclude

Alois Pichler, Vienna 12.6.2021
Groups: How to download transcriptions of entire Nachlass item *groups* rather than *single items* only
Groups: Parts

On wittgensteinonline.no, WAB offers the Nachlass in six non-overlapping groups ("parts"): 

1) Notebooks and loose sheets (1914-51, incl. Ms-101, Ms-102, Ms-103);
2) (Band) Series I (1929-40);
3) (Band and notebook) Series II (1940-49);
4) Typescripts and typescript cuttings (1913-49, incl. Ts-201a1, Ts-201a2);
5) Dictations (1914-35, incl. Ms-301);
6) Works (incl. Ms-104, Ts-202, Ts-203, Ts-204)
Groups: Collections

On wittgensteinonline.no, WAB offers the Nachlass additionally in potentially overlapping and further extendable groups (“collections”):

1) Remarks in code or containing passages in code ("Geheimschriftstellen") (1914-50, incl. from Ms-101, Ms-102, Ms-103)

2) Items in English or with parts in English (1913-41, incl. Ts-201a1, Ts-201a2, Ms-301)

3) Tractatus corpus (1913-19, incl. Ts-201a1, Ts-201a2, Ms-301, Ms-101, Ms-102, Ms-103, Ms-104, Ts-204, Ts-202, Ts-203)

4) Big Typescript corpus (1929-34)

5) Brown Book corpus (1933-36)

6) …
Sorting parameters: How to sort a single item (Ms-101, Ms-104 ...) or an entire item group (Band series I) in (alleged) chronological order

Chronological sorting

With additional inclusion of (alleged) datings

Alois Pichler, Vienna 12.6.2021
Ms-101, chronologically sorted: See for example pp. 22r and 26v
Sorting parameters: How to sort a single item or an entire item group according to publication in «work»

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Include</th>
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<tr>
<td>Highlight</td>
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<tr>
<td>Code writing (&quot;Geheimschrift&quot;)</td>
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<tr>
<td>Notation and graphics</td>
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<tr>
<td>Publication in 'work'</td>
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<tr>
<td>Display metadata (siglum, date, publication in 'work')</td>
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<td>Sort text by</td>
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<tr>
<td>ORDER OF PUBLICATION IN 'WORK'</td>
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</tbody>
</table>

Alois Pichler, Vienna 12.6.2021
Sorting parameters: How to sort a single item or an entire item group according to «publication in work» > Gives for Ms-104 the text in the order of its decimal numbering!

Alois Pichler, Vienna 12.6.2021
Filtering parameters: How to hide from a typescript item revisions in hand
Part of Ts-213,101r in diplomatic version – without and with handwritten revisions
Part of Ts-213,189r in diplomatic version – without and with handwritten revisions
Filtering parameters: How to extract from an item (e.g. Ms-105) all and only the remarks that are marked by a slash ("/"), circle («o») or other «section mark»
Filtering parameters: How to extract from Ms-104 all and only the remarks that are “in der Korrektur” (marked by Wittgenstein “+”; see Ms-104,103), or all and only the remarks that are marked by Wittgenstein with a dash (“−”), or all and only the additions by Wittgenstein in red pencil

➡️ WAB’s transcriptions do not yet distinguish all the different writing materials!

➡️ See M. Pilch’s PTT
M. Pilch’s PTT records *all* the fine-grained details of Ms-104 (genesis)

M. Pilch: [http://www.wittgensteinsource.org/PTT/PTT_A_4.pdf](http://www.wittgensteinsource.org/PTT/PTT_A_4.pdf)
Highlighting parameters: How to highlight passages in secret code, logical and mathematical notation, graphics or publication in “works”
Highlighting of metadata: How to display datings and other WAB metadata, incl. information about where the text has been published in one of the «works»
Hyperlinks to BNE: How to jump from a dynamic and interactive transcription output on wittgensteinonline.no to the static edition (incl. facsimile) on wittgensteinsource.org

Alois Pichler, Vienna 12.6.2021
Semantic facetted search and browsing: Things that one cannot do with editions and text search only

Working with Nachlass and Wittgenstein domain metadata rather than text editions only: Some examples of how to put wab.uib.no/sfb to work
Demos

• How to search in WAB’s metadata for the Nachlass and other Wittgenstein sources

• How to restrict one’s metadata search to specific item groups, specific periods, to items with reference to a specific work a.o.

• How to find variants of (= remarks similar to) and thus also text genetic paths of a specific remark

• How to view on wab.uib.no/sfb a (linear) transcription, and how to jump from wab.uib.no/sfb to the facsimile of the remark on wittgensteinsource.org

• How to jump from wab.uib.no/sfb to the correspondence in the Innsbruck Gesamtbliefwechsel edition on http://pm.nlx.com/

• How to cite WAB’s online resources
http://wab.uib.no/sfb/
Faceted search and browsing on http://wab.uib.no/sfb/

➢ How can I get a list of all «Wittgenstein records» relating to a **specific period, e.g. 1912-15**?

➢ How can I, within the resulting list of records relating to the period 1912-15, focus on the **Nachlass documents** only?

➢ How can I, within the resulting list of Nachlass documents relating to the period 1912-15, focus on those which contain a **reference to Frege**?

➢ Etc.

Alois Pichler, Vienna 12.6.2021
How to use http://wab.uib.no/sfb for metadata search
How to focus one’s metadata search (e.g. on specific item groups, specific periods, items with reference to a specific work etc. etc.)

Alois Pichler, Vienna 12.6.2021
How to find variants of (i.e. remarks similar to) a specific remark (→ text genetic paths!)

Alois Pichler, Vienna 12.6.2021
How to view on wab.uib.no/sfb a (linear) transcription, and how to jump from wab.uib.no/sfb to the facsimile of the Nachlass remark in question.
How to get from wab.uib.no/sfb to the Correspondence in the Innsbruck Gesamtbrieftausch edition on http://pm.nlx.com/

Alois Pichler, Vienna 12.6.2021
## Summary overview: Retrieving, researching and citing *Tractatus* Nachlass materials

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<thead>
<tr>
<th>Text search</th>
<th>Metadata search</th>
<th>Interactive dynamic presentation</th>
<th>Cite facsimile and text editions from</th>
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<td></td>
<td>BNE &gt; Text edition, e.g. <a href="http://wittgensteinsource.org/Ms-301_d">http://wittgensteinsource.org/Ms-301_d</a></td>
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Alois Pichler, Vienna 12.6.2021
Addendum
(in collaboration with A. L. Opdahl):

Applying computational ontology for research on agreement and disagreement in the Vienna Circle’s reception of the Tractatus
WAB’s ontology of the Wittgenstein domain
«The discussion protocols of the Schlick Circle ... represent the only original and authentic testimony of the intensive and productive culture of communication that developed in the course of the meetings in the Boltzmanngasse. Unfortunately they are incomplete. They come from the Nachläss of Rose Rand (1903–1980), who participated regularly in the meetings and was officially designated to take minutes (Iven 2004). ... The basis for the summaries of the positions of the individual members of the Vienna Circle (4.1.1.4) are provided by hand-written notes by Rose Rand. They provide further important information about the theoretical profile of the Vienna Circle. The selections are intended to represent the ‘hard core’ of the Circle. This also holds true for the subsequent reproduction of the document “Development of the Theses of the Vienna Circle” (4.1.1.5). On the one hand, it is intended to trace the reception of Wittgenstein’s teachings; on the other hand, it is intended to visualize in overview the plurality of philosophical opinions in the Circle as far as the main issues of discussion are concerned.»
R. Rand’s «Entwicklung der Thesen des Wiener Kreises» (EWK), as transcribed and translated in Stadler 2015 (engl.), p.144 (Stadler 2015 (dt.), p. 148)
EWK’s statements («points») in Protégé ontology representation
EWK’s statements as «considered true» by [person: Waismann / Carnap / Hahn ...] in [situation: _TLP / _before / _after]
All perspectives on EWK’s point 1 (P1: «By specifying rules philosophy wants to clarify the concepts and rules of science»)
Most agreed upon as considered *true* in the *Tractatus*

[DL Query (Reasoner HermiT 1.3.7): Point and consideredTrueBy min 6 (Perspective and heldIn value TLP)]

- P7: Der Sinn eines Satzes ist die Methode der Verifikation. / The meaning [Sinn] of a sentence is the method of verification.†
- P8: Die Methode der Verifikation besteht in der Definition der Worte, die in Satz vorkommen. Worte im Definiens werden weiter definiert. / The method of verification consists in the definition of the words that occur in the sentence. Words in the definiens are to be defined further.
- P19: Die singulären Sätze der Realwissenschaften sind Wahrheitsfunktionen von Ausgangssätzen. / The singular sentences of empirical science are truth functions of the first sentences.

[DL Query (Reasoner HermiT 1.3.7): Point and consideredTrueBy min 5 (Perspective and heldIn value TLP)]

- P1, P3, P5, P6, P7, P8, P9, P11, P14, P19

†The translations are taken from Stadler 2015.
Most agreed upon as considered *false* in the *Tractatus*

[DL Query (Reasoner HermiT 1.3.7): Point and consideredFalseBy min 5 (Perspective and heldIn value TLP)]

- P2: Philosophy wants to clarify the concepts and sentences of science and everyday life, not by prescribing the rules for the use of words, but by laying out the rules of the use of a word and by drawing attention to the logical consequences of a rule. More precisely: philosophy does not demand a certain use of a word but it prohibits the confusion of the consequences of the rules adopted and the disregard of them.

- P15: Truth is only freedom from contradiction; falsity is contradiction.

- P20: The singular sentences of empirical science are truth functions of protocol sentences. These are the first sentences of science. Their verification is not effected by a comparison with reality but only by comparisons with each other.

- P23: Thesis of physicalism: all sentences contain spatiotemporal termini.

- P25: To speak of “reality” is metaphysics. True sentences are sentences which agree with other sentences.

[DL Query (Reasoner HermiT 1.3.7): Point and consideredFalseBy min 3 (Perspective and heldIn value TLP)]

- P2, P4, P13, P15, P18, P20, P23, P25
Most agreed upon as considered *meaningless* in the *Tractatus*

[DL Query (Reasoner Hermit 1.3.7): Point and consideredMeaninglessBy min 4 (Perspective and heldIn value TLP)]

• P10: There is only one kind of definition, namely definition by means of words. The definition by reference to experiences is impossible since it is impermissible to speak of experiences.

[DL Query (Reasoner Hermit 1.3.7): Point and consideredMeaninglessBy min 3 (Perspective and heldIn value TLP)]

• P10: There is only one kind of definition, namely definition by means of words. The definition by reference to experiences is impossible since it is impermissible to speak of experiences.

• P12: A definition is a member of a causal nexus and nothing else. Either of a causal nexus between two word structures or between a word structure and a reaction or between a stimulus and a word structure.
What is it that Carnap and Waismann *post Tractatus* agree upon?

All points considered true by Carnap *post TLP*

All points considered true by Waismann *post TLP*
What is it that Carnap and Waismann agree upon about *Tractatus*?

Points considered by Carnap true about *TLP*

Points considered by Waismann true about *TLP*
Usw.!

(It is our intention to offer our EWK-ontology soon for faceted search and browsing on wab.uib.no/sfb.)
Many thanks to the Norwegian Clarino and Clarino+ projects and WAB’s friends at the University of Bergen Library for their support - esp. Øyvind L. Gjesdal, Hemed Al Ruwehy and Tone Merete Bravik without whose programming wittgensteinsource.org, the BNE, http://wittgensteinonline.no, http://wab.ub.no/sfb and WAB’s Wittgenstein ontology work would not be possible.