

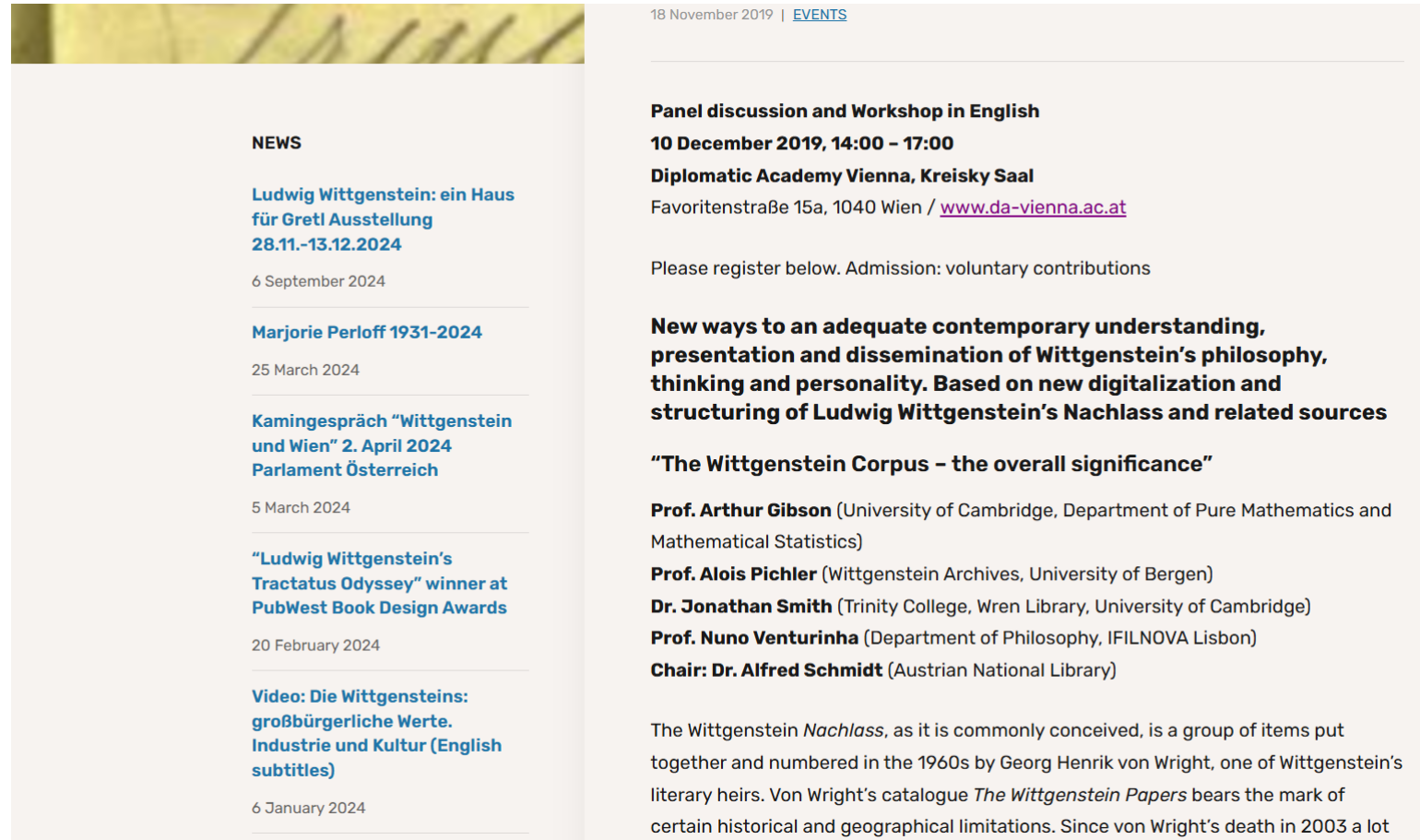
# Alois Pichler (Wittgenstein Archives at the University of Bergen)

Wittgenstein Initiative workshop “The Wittgenstein Corpus 2.0”  
12-13 December 2024, Bulgarian Cultural Institute “Haus Wittgenstein”, Vienna

## Towards a chatbot for the Wittgenstein Nachlass

- 1) Work done at WAB since last time
- 2) Two Wittgenstein chatbots
- 3) Can AI be used for the transcription of the Wittgenstein Nachlass?

# 1) Work done at WAB since last time



18 November 2019 | [EVENTS](#)

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**NEWS**

**Ludwig Wittgenstein: ein Haus für Gretl Ausstellung**  
28.11.-13.12.2024  
6 September 2024

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**Marjorie Perloff 1931-2024**  
25 March 2024

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**Kamingespräch "Wittgenstein und Wien" 2. April 2024**  
Parlament Österreich  
5 March 2024

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**"Ludwig Wittgenstein's Tractatus Odyssey" winner at PubWest Book Design Awards**  
20 February 2024

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**Video: Die Wittgensteins: großbürgerliche Werte. Industrie und Kultur (English subtitles)**  
6 January 2024

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**Panel discussion and Workshop in English**  
**10 December 2019, 14:00 – 17:00**  
**Diplomatic Academy Vienna, Kreisky Saal**  
Favoritenstraße 15a, 1040 Wien / [www.da-vienna.ac.at](http://www.da-vienna.ac.at)

Please register below. Admission: voluntary contributions

**New ways to an adequate contemporary understanding, presentation and dissemination of Wittgenstein's philosophy, thinking and personality. Based on new digitalization and structuring of Ludwig Wittgenstein's Nachlass and related sources**

**"The Wittgenstein Corpus – the overall significance"**

**Prof. Arthur Gibson** (University of Cambridge, Department of Pure Mathematics and Mathematical Statistics)  
**Prof. Alois Pichler** (Wittgenstein Archives, University of Bergen)  
**Dr. Jonathan Smith** (Trinity College, Wren Library, University of Cambridge)  
**Prof. Nuno Venturinha** (Department of Philosophy, IFILNOVA Lisbon)  
**Chair: Dr. Alfred Schmidt** (Austrian National Library)

The Wittgenstein *Nachlass*, as it is commonly conceived, is a group of items put together and numbered in the 1960s by Georg Henrik von Wright, one of Wittgenstein's literary heirs. Von Wright's catalogue *The Wittgenstein Papers* bears the mark of certain historical and geographical limitations. Since von Wright's death in 2003 a lot

# Proofreading, correcting and improving the transcriptions

XML based Interactive Dynamic x +

- +Ms-122 'XVIII. Philosophische Bemerkungen' || German; 1939-40 (parts published in 'Remarks ...')
- +Ms-123 'Philosophische Bemerkungen' || German; 1940-41
- +Ms-124 || German; 1941 and 1944 (parts published in 'Remarks on the Foundations of Mathem ...')
- +Ms-125 || German; 1941-42 (parts published in 'Remarks on the Foundations of Mathematics', I ...)
- +Ms-126 || German; 1942-43 (parts published in 'Remarks on the Foundations of Mathematics', I ...)
- +Ms-127 'F Mathematik und Logik' || German; 1943-44 (parts published in 'Remarks on the Foun ...')
- +Ms-128 || German; 1944
- Ms-129 || German; 1944
- +Ms-130 || German; 1944? and 1946
- +Ms-131 || German; 1946
- +Ms-132 || German; 1946
- Ms-133 || German; 1946-47
- Ms-134 || German; 1947
- +Ms-135 || German; 1947
- +Ms-136 'Q' || German; 1947-48
- Ms-137 'R' || German; 1948-49 (parts published in 'Last Writings on the Philosophy of Psycholog ...')
- Ms-138 'S' || German; 1949 (published in 'Last Writings on the Philosophy of Psychology' vol. 1)
- +Ms-139a so-called Lecture on Ethics || English; 1929
- +Ms-139b so-called Lecture on Ethics || English; 1929
- Ms-140 so-called Grosses Format || German; 1933? and 1936 (parts published in 'Philosophical ...')**
- Ms-140 so-called Grosses Format || German; 1933? and 1936 (parts publishe ...)

Click here to change default options

GO

## D. Bielefeld, H.W. Krüger, A. Pichler ...

### Wittgenstein Nachlass Ts-219: Muss sich denn nicht ... (WL)

User filtered transcription. In: Wittgenstein, Ludwig: Interactive Dynamic Presentation (IDP) of Ludwig Wittgenstein's philosophical Nachlass. University of Bergen 2016.

#### Editorial

##### Author:

Ludwig Wittgenstein

##### Publisher:

[WAB](#) (directors: Claus Huitfeldt 1990-2000, Alois Pichler 2001-)

##### Transcription:

Claus Huitfeldt 1990-2000: coordination and editorial guidelines; implementation of MECS-WIT

Kyrre Trojell, Peter Cripps transcription in MECS-WIT markup: 1996

Alois Pichler 2001-: coordination and editorial guidelines; amendments; conversion from MECS-WIT to XML-TEI, XML-TEI markup

Claus Huitfeldt, Kjersti Bjørnstad Berg, Sindre Sørensen, MLCD project 2001: parser for conversion from MECS to XML

Vernund Olstad, Øyvind L. Gjesdal, Tone Merete Bruvik 2002-: stylesheets

Tone Merete Bruvik, Øyvind L. Gjesdal 2006-: XML-TEI validation

Heinz Wilhelm Krüger, Deirdre C. P. Smith 2006-09: amendments; XML-TEI markup

Claus Huitfeldt 2020: spell-check

Rune Falch, Alois Pichler, Sara Lavazza, Michele Lavazza 2023: redrawing of graphics

Alois Pichler 2023: inclusion of redrawn graphics (PNG format)

Michael Biggs 2023-: consultancy on graphics

Heinz Wilhelm Krüger 2024: proofreading of normalized transcription

Heinz Wilhelm Krüger, Alois Pichler 2024: inclusion of corrections in XML transcription

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# Correcting and improving transcription of notation and graphics

Ms-108\_156

Urzeichen nannte, weil er das andere System in seinen Sätzen nicht sähe.

Käme dann Einer & gäbe die Definition  $\sim p \cdot \sim q = p \mid q$  so hätte er freilich nur eine an sich unwesentliche Abkürzung eingeführt aber sie wäre der Ausdruck einer Entdeckung in dem Sinne daß sie einen bestimmten neuen Aspekt betont. (Russell hat richtig darauf hingewiesen daß die Bedeutung von Definitionen oft auf diesem Betonen beruht.)

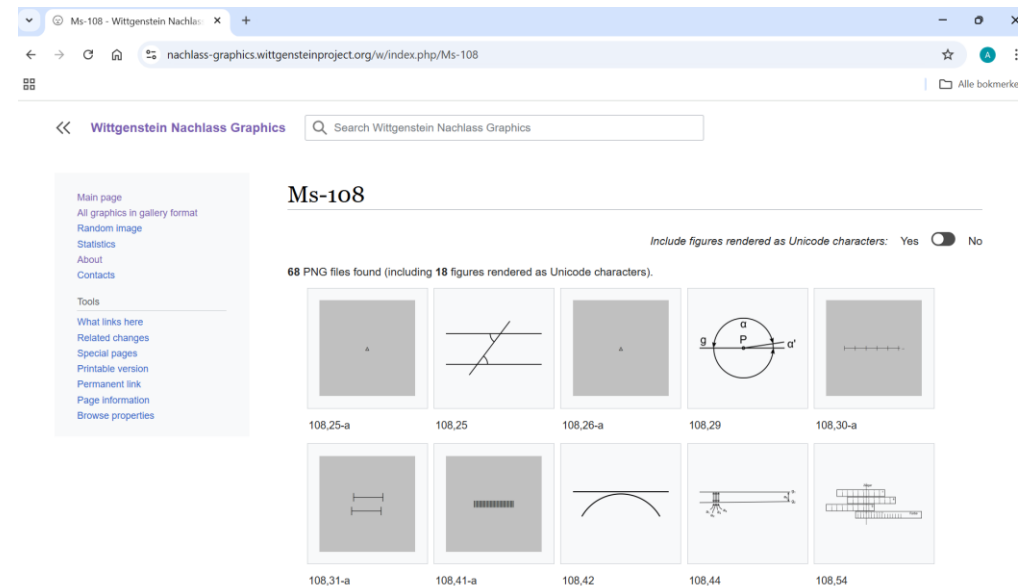
(Beinahe wie die Namengebung  $M^{\text{FS}}$  John Robinson ein bestimmtes Verhältnis von Mann & Frau betont.)

Es ist ein Unterschied ob man auf die Dampfmaschine als die Maschine **katexochen** schaut (wie man es einmal getan hat) oder als eine Maschine; **||** – unter vielen andern. – Und man sieht ein anderes System wenn man 12 Striche nur als das System  betrachten kann (also kennt) oder dieses System als eins von den vielen möglichen sieht.

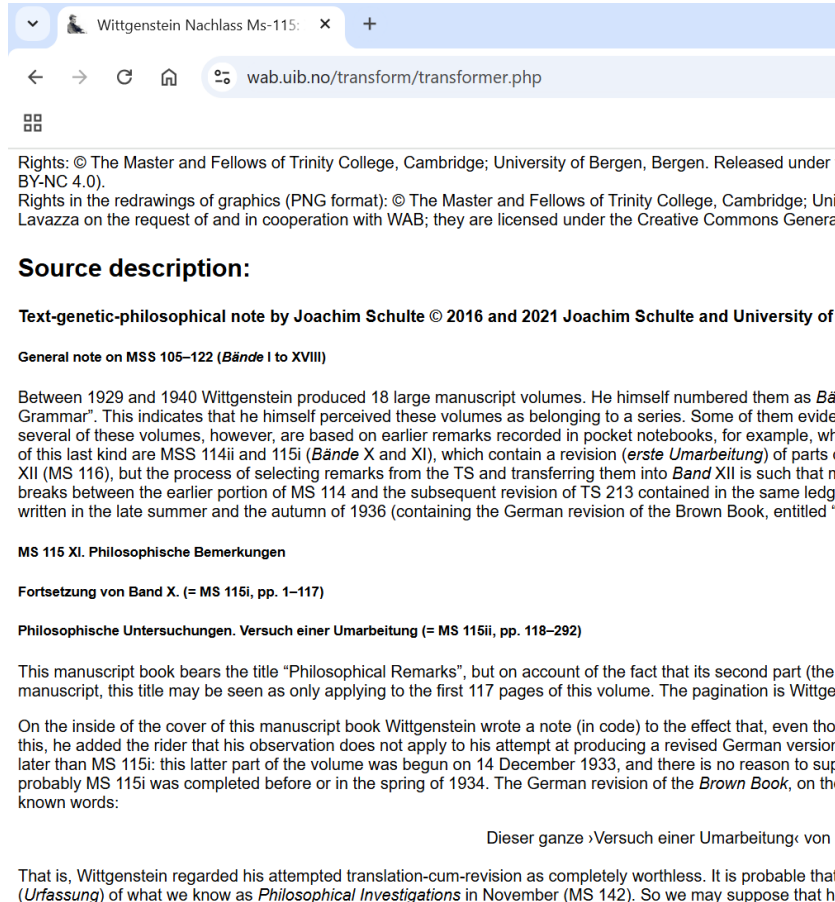
Die Mathematik „abrunden“ kann man so wenig wie man sagen kann „runden wir die 4 primären Farben auf 5 oder 10 ab“ oder runden wir die 8 Töne einer Oktave auf 10 ab (oder auf).

Ms-108\_157

See M. Lavazza's [https://nachlass-graphics.wittgensteinproject.org/w/index.php/Main\\_Page](https://nachlass-graphics.wittgensteinproject.org/w/index.php/Main_Page)



# Adding text genetic-philosophical and archival descriptions



Wittgenstein Nachlass Ms-115: x +

wab.uib.no/transform/transformer.php

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## Source description:

**Text-genetic-philosophical note by Joachim Schulte © 2016 and 2021 Joachim Schulte and University of**

**General note on MSS 105–122 (Bände I to XVIII)**

Between 1929 and 1940 Wittgenstein produced 18 large manuscript volumes. He himself numbered them as *Bä.* Grammar". This indicates that he himself perceived these volumes as belonging to a series. Some of them evide several of these volumes, however, are based on earlier remarks recorded in pocket notebooks, for example, wh of this last kind are MSS 114ii and 115i (*Bände X and XI*), which contain a revision (*erste Umarbeitung*) of parts c XII (MS 116), but the process of selecting remarks from the TS and transferring them into *Band XII* is such that r breaks between the earlier portion of MS 114 and the subsequent revision of TS 213 contained in the same ledg written in the late summer and the autumn of 1936 (containing the German revision of the Brown Book, entitled "

**MS 115 XI. Philosophische Bemerkungen**

**Fortsetzung von Band X. (= MS 115i, pp. 1–117)**

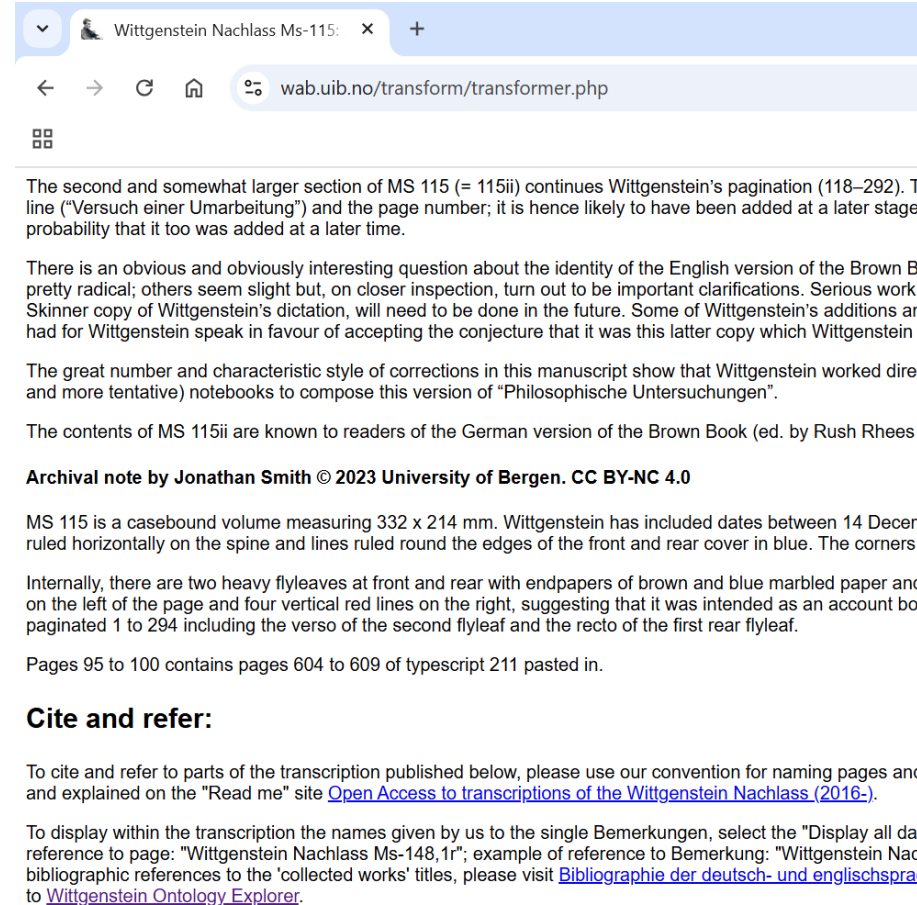
**Philosophische Untersuchungen. Versuch einer Umarbeitung (= MS 115ii, pp. 118–292)**

This manuscript book bears the title "Philosophical Remarks", but on account of the fact that its second part (the manuscript, this title may be seen as only applying to the first 117 pages of this volume. The pagination is Wittge

On the inside of the cover of this manuscript book Wittgenstein wrote a note (in code) to the effect that, even thoi this, he added the rider that his observation does not apply to his attempt at producing a revised German version later than MS 115i: this latter part of the volume was begun on 14 December 1933, and there is no reason to sup probably MS 115i was completed before or in the spring of 1934. The German revision of the *Brown Book*, on the known words:

Dieser ganze ›Versuch einer Umarbeitung‹ von :

That is, Wittgenstein regarded his attempted translation-cum-revision as completely worthless. It is probable that (*Urfassung*) of what we know as *Philosophical Investigations* in November (MS 142). So we may suppose that hi



Wittgenstein Nachlass Ms-115: x +

wab.uib.no/transform/transformer.php

The second and somewhat larger section of MS 115 (= 115ii) continues Wittgenstein's pagination (118–292). T line ("Versuch einer Umarbeitung") and the page number; it is hence likely to have been added at a later stage. probability that it too was added at a later time.

There is an obvious and obviously interesting question about the identity of the English version of the Brown B pretty radical; others seem slight but, on closer inspection, turn out to be important clarifications. Serious work Skinner copy of Wittgenstein's dictation, will need to be done in the future. Some of Wittgenstein's additions an had for Wittgenstein speak in favour of accepting the conjecture that it was this latter copy which Wittgenstein t

The great number and characteristic style of corrections in this manuscript show that Wittgenstein worked direc and more tentative) notebooks to compose this version of "Philosophische Untersuchungen".

The contents of MS 115ii are known to readers of the German version of the Brown Book (ed. by Rush Rhees :

**Archival note by Jonathan Smith © 2023 University of Bergen. CC BY-NC 4.0**

MS 115 is a casebound volume measuring 332 x 214 mm. Wittgenstein has included dates between 14 Decem ruled horizontally on the spine and lines ruled round the edges of the front and rear cover in blue. The corners

Internally, there are two heavy flyleaves at front and rear with endpapers of brown and blue marbled paper and on the left of the page and four vertical red lines on the right, suggesting that it was intended as an account bo paginated 1 to 294 including the verso of the second flyleaf and the recto of the first rear flyleaf.

Pages 95 to 100 contains pages 604 to 609 of typescript 211 pasted in.

## Cite and refer:

To cite and refer to parts of the transcription published below, please use our convention for naming pages and and explained on the "Read me" site [Open Access to transcriptions of the Wittgenstein Nachlass \(2016-\)](#).

To display within the transcription the names given by us to the single Bemerkungen, select the "Display all dat reference to page: "Wittgenstein Nachlass Ms-148,1r"; example of reference to Bemerkung: "Wittgenstein Nach bibliographic references to the 'collected works' titles, please visit [Bibliographie der deutsch- und englischsprac to Wittgenstein Ontology Explorer](#).

# Adding functionalities to the IDP site

The screenshot shows a web browser window with the URL `wab.uib.no/transform/wab.php?modus=opsjoner`. The page title is "XML based Interactive Dynamic". Below the browser window, there is a section titled "Choose an item:" with a link to "Ms-140 so-called Grosses Format || German, 1933? and 1936 (parts published in 'Philosophical Grammar', Part I)".

Below this, there is a section "Click here to change default options" with a "Basic style" section containing radio buttons for "Linear" (selected) and "Diplomatic".

The "Additional style" section contains several checkboxes:

- Show original line breaks [tbc.]
- Exclude handwritten revisions in typescript [tbc.]
- Exclude all deleted text
- Display retained variants only
- Display 'section marks' ('Randzeichen')
- No marking of editorial corrections

The "Filter Bemerkungen according to section marks" section has radio buttons for "Tick all" (selected) and "Untick all". It contains two columns of checkboxes for various section marks, all of which are checked:

- [Without mark]
- Section mark: /
- Section mark: \
- Section mark: |
- Section mark: x
- Section mark: -
- Section mark: +
- Section mark: †
- Section mark: \*
- Section mark: ?
- Section mark: !?
- Section mark: \?
- Section mark: ✓
- Section mark: //
- Section mark: \\\
- Section mark: .\
- Section mark: o

The "Blue highlighting of" section contains checkboxes for:

- Code writing ('Geheimschrift')
- Notation and graphics
- Bemerkungen published in one of Wittgenstein's 'collected works'

At the bottom, there is a "Metadata" section.

war etwas ironisch und mir nicht

[Ms-101.3r](#)

recht sympathisch. Resultat = 0. Heute kam es heraus daß ich Matura etc. gemacht hatte worauf eine ganze Reihe der Einjährigen mich mit Herr Kollege betitelten & auf mich eindringen ich solle doch mein Freiwilligenrecht geltend machen. Dies machte mir Spaß. (It bucked me up). Gestern & heute starken Katarrh & oft Unwohlbefinden. Manchmal ein wenig deprimiert. Traf heute in der Kantine einen Leutnant dem es auffiel daß ich dort zu Mittag aß er fragte mich sehr nett was ich im Zivil sei wunderte sich sehr daß sie mich nicht zu den einjährig Freiwilligen genommen hatten & war überhaupt sehr freundlich was mir sehr wohl tat.

15.8.14.

Es geschieht so viel daß mir ein Tag so lange vorkommt wie eine Woche. Bin gestern zur Bedienung eines Scheinwerfers auf einem von uns gekaperten Schiffe auf der Weichsel

[Ms-101.4r](#)

beordert worden die Bemannung ist eine Saubande! Keine Begeisterung, unglaubliche Rohheit, Dummheit & Bosheit! Es ist also doch nicht wahr daß die gemeinsame große Sache die Menschen adeln muß. Hiedurch wird auch die lästigste Arbeit zum Frondienst. Es ist merkwürdig wie sich die

Basic style

Linear  Diplomatic

Additional style

- Show original line breaks [tbc.]
- Exclude handwritten revisions in typescript [tbc.]
- Exclude all deleted text
- Display retained variants only
- Display 'section marks' ('Randzeichen')
- No marking of editorial corrections
- No marking of page breaks



# Demo

...und ergründeten zusammen, was es für einen Gegenstand gab, der mir so gut gefiel, und gab mir freundliche & ausführliche Antworten. So etwas ermutigt ungeheuer. Es erinnerte mich an englische Verhältnisse.<sup>1</sup>

10.8.14.

Als Rekrut eingekleidet worden. Wenig Hoffnung meine technischen Kenntnisse verwenden zu können. Brauch sehr viel gute Laune & Philosophie um mich hier zurecht zu finden. Als ich heute aufwachte war es mir wie in einem jener Träume worin man plötzlich ganz unsinniger Weise wieder in der Schule sitzt. In meiner Stellung ist freilich auch viel Humor & ich verrichte die niedrigsten Dienste mit fast ironischem Lächeln. Nicht gearbeitet. Dies ist eine Feuerprobe des Charakters eben darum weil so viel Kraft dazu gehört die gute Stimmung & die Energie nicht zu verlieren.

11.8.14.

Schlecht geschlafen (Ungeziefer). Nachdem ich das Zimmer gekehrt hatte marschierten wir zu ein paar alten Mörsern & wurden im Gebrauch instruiert. Furchtbar heiß. Das Essen ist uneliebar. Werde vielleicht in Zukunft außerhalb der Kaserne schlafen. An David geschrieben. Meine sich schon nach einem Brief von ihm um das Gefühl des Kontakts mit meinem früheren Leben nicht zu verlieren. Noch nicht gearbeitet.

13.8.14.

Vorgestern beim Hauptmann gewesen. War sehr verdattert & stand nicht militärisch vor ihm. Er war etwas ironisch und mir nicht recht sympathisch. Resultat = 0. Heute kam es heraus daß ich Matura etc. gemacht hatte worauf eine ganze Reihe der Einjährigen mich mit Herr Kollege betrauten & auf mich eindringen ich solle doch mein Freiwilligenrecht geltend machen. Dies machte mir Spaß. (It bucked me up). Gestern & heute starken Katarrh & oft Unwohlbefinden. Manchmal ein wenig deprimiert. Traf heute in der Kantine einen Leutnant dem es auffiel daß ich dort zu Mittag als er fragte mich sehr nett was ich im Zivil sei wunderte sich sehr daß sie mich nicht zu den einjährig Freiwilligen genommen hatten & war überhaupt sehr freundlich was mir sehr wohl tat.

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Es geschieht so viel daß mir ein Tag so lange vorkommt wie eine Woche. Bin gestern zur Bedienung eines Scheinwerfers auf einem von uns gekaperten Schiffe auf der Weichsel beordert worden die Bemannung ist eine Saubande! Keine Begeisterung, ungläubliche Rohheit, Dummheit & Bosheit! Es ist also doch nicht wahr daß die gemeinsame große Sache die Menschen adeln muß. Hiedurch wird auch die lästige Arbeit zum Frondienst. Es ist merkwürdig wie sich die Menschen ihre Arbeit selbst zu einer häßlichen Mühsal machen. Unter allen unseren äußeren Umständen könnte die Arbeit auf diesem Schiffe eine herrliche glückliche Zeit geben und statt dessen! – Es wird wohl unmöglich sein sich hier mit den Leuten zu verständigen (außer etwa mit dem Leutnant der ein ganz netter Mensch zu sein scheint). Also in Demut die Arbeit verrichten & || und sich selbst um Gottes willen nicht verlieren!!!! Nämlich am leichtesten verliert man sich selbst wenn man sich anderen Leuten schenken will.

16.8.14.

Auf der „Goplana“. Nochmals: Die Dummheit, Frechheit & Bosheit dieser Menschen kennt keine Grenzen. Jede Arbeit wird zur Qual. Aber ich habe heute schon wieder gearbeitet & werde mich nicht unterkriegen lassen. Schrieb heute eine Karte an den lieben David. Der Himmel beschütze ihn & erhalte mir seine Freundschaft! – Die Fahrt selbst entlang der Weichsel ist herrlich & ich bin in guter Stimmung.

17.8.14.

Ein Gaunerpack! Die Offiziere nur sind nette Menschen & zum Teil wirklich

sehr fein. Müssen auf der bloßen Erde schlafen & ohne Decken. Sind jetzt in Rußland. Durch die schwere Arbeit bin ich ganz unsinnlich geworden. Heute noch nicht gearbeitet. G S<sup>2</sup> Auf dem Deck ist es zu kalt & unten sind zu viel Menschen die sprechen, schreien, stinken etc. etc.

18.8.14.

Nachts um 1 werde ich plötzlich geweckt, der Oberleutnant fragt nach mir & sagt ich müsse sofort zum Scheinwerfer. „Nicht anziehen“. Ich lief fast nackt auf die Kommandobrücke. Eisige Luft, Regen. Ich war sicher jetzt würde ich sterben. Setzte den Scheinwerfer in Gang & zurück mich anzukleiden. Es war falscher Alarm. Ich war furchtbar aufgeregt & stöhnte laut. Ich empfand die Schrecken des Krieges. Jetzt (abends) habe ich den Schreck schon wieder überwunden. Ich werde mein Leben mit aller Kraft zu erhalten trachten wenn ich nicht meinen gegenwärtigen Sinn ändere.

21.8.14.

Der Leutnant & ich haben schon oft über alles Mögliche gesprochen; ein sehr netter Mensch. Er

Kaufmann, der öffnet die Lade, auf welcher das Zeichen "Apfel" steht, dann sucht er in einer Tabelle das Wort "rot" auf und findet ihm gegenüber ein Farbmuster, nun sagt er die Reihe der Grundzahlwörter – ich nehme an, er weiß sie auswendig – bis zum Worte "fünf" und bei jedem Zahlwort nimmt er einen Apfel aus der Lade, der die Farbe des Musters hat. – So, und ähnlich, operiert man mit Worten. – "Wie weiß er aber, wo und wie er das Wort 'rot' nachschlagen soll und was er mit dem Wort 'fünf' anzufangen hat?" – Nun, ich nehme an, er hat es beschrieben habe. Die Erklärungen haben irgendwo ein Ende. – Was ist aber die Bedeutung des Wortes "fünf"? – Von einer solchen war hier garnicht die Rede; nur davon, wie das Wort "fünf" gebraucht wird.

2. Jener philosophische Begriff der Bedeutung ist in einer primitiven Vorstellung, von der Art und Weise, wie die Sprache funktioniert, zu Hause. Man kann aber auch sagen, es sei die Vorstellung einer primitiveren Sprache, als der unsern.

Denken wir uns eine Sprache, für die die Beschreibung, wie Augustinus sie gegeben hat, stimmt: Die Sprache soll der Verständigung eines Bauenden A mit einem Gehilfen B dienen. A führt einen Bau auf aus Bausteinen; es sind Würfel, Säulen, Platten und Balken vorhanden. B hat ihm die Bausteine zuzureichen, und zwar nach der Reihe, wie A sie braucht. Zu dem Zweck bedienen sie sich einer Sprache, bestehend aus den Wörtern: "Würfel", "Säule", "Platte", "Balken". A ruft sie aus; – B bringt den Stein, den er gelernt hat, auf diesen Ruf zu bringen. – Fasse dies als vollständige primitive Sprache auf.

3. Augustinus beschreibt, könnten wir sagen, ein System der Verständigung; nur ist nicht alles, was wir Sprache nennen, dieses System. (Und das muß man in so manchen Fällen sagen, wo sich die Frage erhebt: "Ist diese Darstellung brauchbar, oder unbrauchbar?" Die Antwort ist dann || off: "Ja, brauchbar; aber nur für dieses eng umschriebene Gebiet, nicht für das Ganze, das Du darzustellen vorgabst." Denke z.B. an Theorien der Nationalökonomien.)

Es ist, als erklärte jemand: "Spielen besteht darin, daß man Dinge, gewissen Regeln gemäß, auf einer Fläche verschiebt ...." – und wir ihm antworten: Du scheinst an die Brettspiele zu denken; aber das sind nicht alle Spiele. Du kannst deine Erklärung richtigstellen, indem du sie ausdrücklich auf diese Spiele einschränkst.

4. Denke Dir eine Schrift, in welcher Buchstaben zur Bezeichnung von Lauten benützt würden, aber auch zur Bezeichnung der Betonung und als Interpunktionszeichen. (Eine Schrift kann man auffassen als eine Sprache zur Beschreibung von Lautbildern.) Denke dir nun, daß Einer jene Schrift so verstünde, als entspräche einfach jedem Buchstaben ein Laut und als hätten die Buchstaben nicht auch ganz andere Funktionen. So einer, zu einfachen, Auffassung der Schrift gleicht Augustinus' Auffassung der Sprache.

5. Wenn man das Beispiel vom-Einkaufen im §1 betrachtet, so ahnt man vielleicht, inwiefern der allgemeine Begriff der Bedeutung der Worte das Funktionieren der Sprache mit einem Dunst umgibt, der das klare Sehen unmöglich macht. – Es zerstreut den Nebel, wenn wir die Erscheinungen der Sprache an primitiven Arten ihrer Verwendung studieren, in denen man den Zweck und das Funktionieren der Wörter klar übersehen kann.

Solche primitive Formen der Sprache verwendet das Kind, wenn es sprechen lernt. Das Lehren der Sprache ist hier kein Erklären, sondern ein Abrichten.

6. Wir könnten uns vorstellen, daß die Sprache im §2 die g a n z e Sprache des A und B ist, ja, die ganze Sprache eines Volksstammes. Die Kinder werden dazu erzogen d i e s e

Denke nun an diese Verwendung der Sprache: Ich schicke jemand einkaufen. Ich gebe ihm einen Zettel, auf diesem stehen die Zeichen: "fünf rote Äpfel". Er trägt den Zettel zum Kaufmann, der öffnet die Lade, auf welcher das Zeichen "Apfel" steht, dann sucht er in einer Tabelle das Wort "rot" auf und findet ihm gegenüber ein Farbmuster, nun sagt er die Reihe der Grundzahlwörter – ich nehme an, er weiß sie auswendig – bis zum Worte "fünf" und bei jedem Zahlwort nimmt er einen Apfel aus der Lade, der die Farbe des Musters hat. – So, und ähnlich, operiert man mit Worten. – "Wie weiß er aber, wo und wie er das Wort 'rot' nachschlagen soll und was er mit dem Wort 'fünf' anzufangen hat?" – Nun, ich nehme an, er hat es beschrieben habe. Die Erklärungen haben irgendwo ein Ende. – Was ist aber die Bedeutung des Wortes "fünf"? – Von einer solchen war hier garnicht die Rede; nur davon, wie das Wort "fünf" gebraucht wird.

§-227a.6|2|let7|11 (date: 1944.06.08?-1944.10.01?) (published in work: P1, Section 2)

2. Jener philosophische Begriff der Bedeutung ist in einer primitiven Vorstellung, von der Art und Weise, wie die Sprache funktioniert, zu Hause. Man kann aber auch sagen, es sei die Vorstellung einer primitiveren Sprache, als der unsern.

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§-227a.7|2 (date: 1944.06.08?-1944.10.01?) (published in work: P1, Section 3)

3. Augustinus beschreibt, könnten wir sagen, ein System der Verständigung; nur ist nicht alles, was wir Sprache nennen, dieses System. (Und das muß man in so manchen Fällen sagen, wo sich die Frage erhebt: "Ist diese Darstellung brauchbar, oder unbrauchbar?" Die Antwort ist dann || off: "Ja, brauchbar; aber nur für dieses eng umschriebene Gebiet, nicht für das Ganze, das Du darzustellen vorgabst." Denke z.B. an Theorien der Nationalökonomien.)

Es ist, als erklärte jemand: "Spielen besteht darin, daß man Dinge, gewissen Regeln gemäß, auf einer Fläche verschiebt ...." – und wir ihm antworten: Du scheinst an die Brettspiele zu denken; aber das sind nicht alle Spiele. Du kannst deine Erklärung richtigstellen, indem du sie ausdrücklich auf diese Spiele einschränkst.

§-227a.7|3|let8|11 (date: 1944.06.08?-1944.10.01?) (published in work: P1, Section 4)

4. Denke Dir eine Schrift, in welcher Buchstaben zur Bezeichnung von Lauten benützt würden, aber auch zur Bezeichnung der Betonung und als Interpunktionszeichen. (Eine Schrift kann man auffassen als eine Sprache zur Beschreibung von Lautbildern.) Denke dir nun, daß Einer jene Schrift so verstünde, als entspräche einfach jedem Buchstaben ein Laut und als hätten die Buchstaben nicht auch ganz andere Funktionen. So einer, zu einfachen, Auffassung der Schrift gleicht Augustinus' Auffassung der Sprache.

§-227a.8|2 (date: 1944.06.08?-1944.10.01?) (published in work: P1, Section 5)

5. Wenn man das Beispiel vom-Einkaufen im §1 betrachtet, so ahnt man vielleicht, inwiefern der allgemeine Begriff der Bedeutung der Worte das Funktionieren der Sprache mit einem Dunst umgibt, der das klare Sehen unmöglich macht. – Es zerstreut den Nebel, wenn wir die Erscheinungen der Sprache an primitiven Arten ihrer Verwendung studieren, in denen man den Zweck und das Funktionieren der Wörter klar übersehen kann.

Solche primitive Formen der Sprache verwendet das Kind, wenn es sprechen lernt. Das Lehren der Sprache ist hier kein Erklären, sondern ein Abrichten.

§-227a.8|3|let9|1|let10|11 (date: 1944.06.08?-1944.10.01?) (published in work: P1, Section 6)

6. Wir könnten uns vorstellen, daß die Sprache im §2 die g a n z e Sprache des A und B ist, ja, die ganze Sprache eines Volksstammes. Die Kinder werden dazu erzogen d i e s e Tätigkeiten zu verrichten, diese Wörter dabei zu gebrauchen, und s o auf die Worte des Anderen zu reagieren.

Ein wichtiger Teil der Abrichtung wird darin bestehen, daß der Lehrende auf die Gegenstände weist, die Aufmerksamkeit des Kindes auf sie lenkt, und dabei ein Wort ausspricht; z.B. das Wort "Platte" beim Vorzeigen dieser Form. (Dies will ich nicht "hinweisende Erklärung" oder "Definieren" nennen, weil die das Kind noch nicht nach der Bedeutung

# Adding metadata and functionalities on the SFB site

The screenshot shows the homepage of the Wittgenstein Ontology Explorer. The browser address bar displays 'wab.uib.no/sfb/'. The page header includes the logo and name 'WITTGENSTEIN ONTOLOGY EXPLORER' along with a Creative Commons license notice: 'CC BY-NC 4.0. By the Wittgenstein Archives at the University of Bergen and the University of Vienna'. A search bar contains the term 'denk'. Below the search bar, a list of search results is displayed, including 'denk', 'denkbar', 'denkbare', 'denkbewegung', 'denkbewegungen (db/mt, ed. 1997 somavilla)', 'denke', 'denken', 'denkend', 'denkende', 'denkens', 'denker', 'denkst', 'denkt', 'denkvorgang', and 'denkweise'. Each result is accompanied by a small icon representing its category.

The screenshot shows the search results page for the query 'Musical notation'. The browser address bar displays 'wab.uib.no/sfb/?filter=textGenre.exact%23Musical%20notation'. The page features a search filter 'Musical notation' and a 'Reset' button. The results are sorted by 'Date created (asc)' and show 16 hits. The page is divided into several sections: 'Date range' with 'From' and 'To' fields; 'Document types' with checkboxes for 'Nachlass Bemerkung (16)', 'MS (11)', and 'TS (5)'; 'Contents' with a checked box for 'Musical notation (16)' and 'Graphic (4)'; 'Languages' with checkboxes for 'German (14)' and 'English (2)'; 'Collected works' with checkboxes for 'Culture and Value (VB/CV, eds. 1977 von Wright) (2)', 'The Blue and Brown Books (BBB, ed. 1958 Rhees) (2)', 'Prototractatus (PT, eds. 1971 McGuinness, Nyberg) (1)', 'Tractatus logico-philosophicus (TLP, 1922 et . . .) (1)', and 'Zettel (Z, eds. 1967 Anscombe et von Wright) (1)'; and 'References'. On the right side, there are two result cards. The first card is titled 'Ms-104.25[12]et26[1]' and lists several document entries with their IDs and dates. The second card is titled 'Ts-203.13r[7]' and lists several document entries with their IDs and dates. Each card has a 'View transcription' button.



# Demo

WITTGENSTEIN ONTOLOGY  
EXPLORER

CC BY-NC 4.0. By the Wittgenstein Archives at the University of Bergen and the University of Bergen Library.  
[Read me](#)

familienähnli\* spengl\*

Reset Show 15 Sorted by Date created (asc) 5 HITS

**Date range**  
From: 1930 To: 1935

**Document types**  
 Nachlass Bemerkung (5)  
 TS (3)  
 MS (2)

**Languages**  
 German (5)

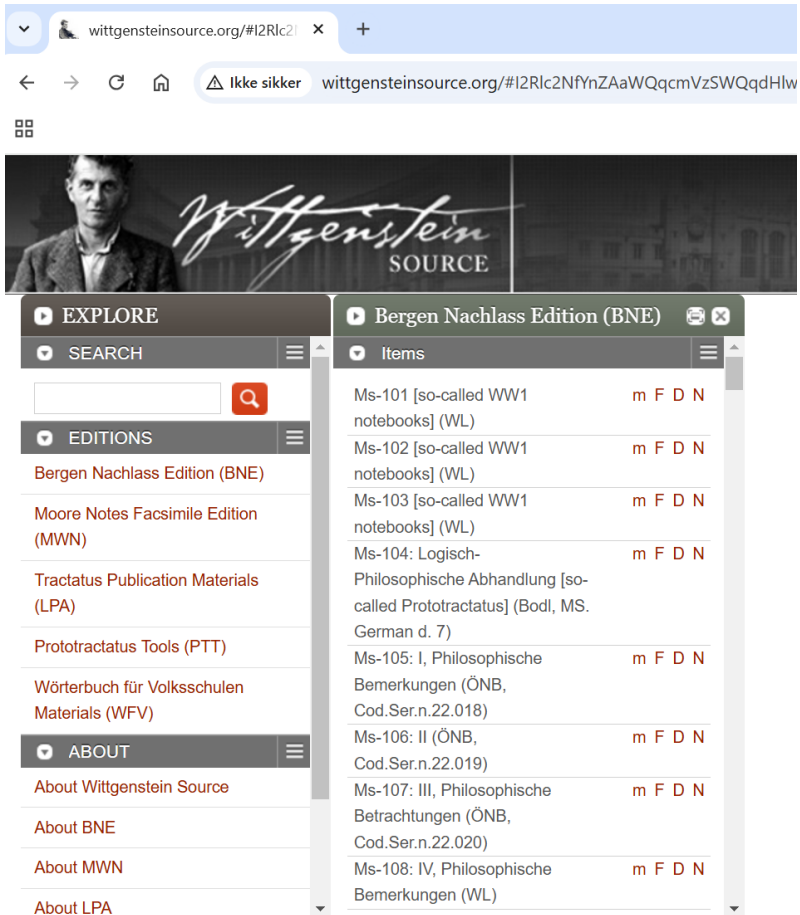
1

[View transcription](#)

**Ts-211,72[2]et73[1]**

- Ms-111,120[3] (19310819)
- Ms-111,119[1]et120[1] (19310819)
- Ts-211,72[2]et73[1] (19310901?-19320831?)
- Ts-213,259[3]et258v[2]et258v[3]et260r[1] (19330319?-19330415?)
- Ms-115,56[2]et57[1] (19331214?-19331231?)
- Boltzmann, Ludwig: Über Maxwells Elektrizitätslehre

# Updating and extending Wittgenstein Source



- Facsimile of the Wittgensteiniana in the Rose Rand Nachlass, the Schlick Nachlass ...
- Continuous maintenance and corrections
- Wittgenstein Source is curated by Alois Pichler (2009–) and **Joseph Wang-Kathrein (2020–)**

Continuing work with semantic  
technologies and ...  
Working now also with AI!

## *Can AI be used for **philosophical research**?*

- I will present two Wittgenstein specialized chatbots and show their usefulness for research and teaching about Wittgenstein.

## *Can AI be used for **transcription**?*

- If time, I will also discuss a possible challenge to AI that arises from the transcription of Wittgenstein's manuscripts.

# 2) Two Wittgenstein (ChatGPT) chatbots

## Tractarian Wittgenstein, by J. Gomulka

### Open AI LLM, customized for the *Tractatus*

- Instruction to ChatGPT: “The knowledge file uploaded contains the content of Ludwig Wittgenstein's *Tractatus Logico-Philosophicus* [in German and structured into units according to the *Tractatus* numbering]. Answer to all the questions as if the file was the primary source of knowledge for you.”

## Wittgensteinian Oracle, by F. Mosca

### Open AI LLM, customized for 5000 Nachlass pages

- Instruction to ChatGPT: “Please use the contents of the knowledge file I provide as your primary source for your answers to prompts. This knowledge file (JSON file) has as its keys: ...”
  - One knowledge base per Nachlass item, structured into units according to WAB’s Nachlass reference system

# F. Mosca and J. Gomułka

- Jakub Gomułka: Associate Professor at the Faculty of Humanities, AGH University of Science and Technology, Krakow
- Filippo Mosca: Dottorato in Filosofia, Università di Roma Tor Vergata, Roma
- See F. Mosca and J. Gomułka: “What Wittgensteinian GPTs Can’t Do” In: *Contributions of the Austrian Ludwig Wittgenstein Society 2024*: <https://symposium.alws.at/#/article/f90fe21e-0bdf-4956-b5b8-b803374f4ffe>



# What these chatbots can help you with

- Help you search and research Wittgenstein in your preferred language
  - Cf. “When will the Nachlass be translated into English?”
- Help with semantic search (rather than text search only)
- Help with stylistic comparisons and text genre analysis
- Help identify semantic, stylistic ... patterns
- Help identify similar texts
- Help with extracting terms + theses + arguments ... and group them according to different parameters, including semantic relations and semantic fields

# WAB's larger plan

- Create a Wittgenstein Nachlass chatbot tailored to the entire Wittgenstein Nachlass (ca 20 000 pages) as its knowledge base.
- Create a Wittgenstein chatbot tailored to the entire corpus of Wittgenstein primary sources and research literature as its knowledge base.

\* WAB = Wittgenstein Archives at the University of Bergen

# What can we learn from using F. Mosca's *Wittgensteinian Oracle* chatbot?

## Wittgensteinian Oracle

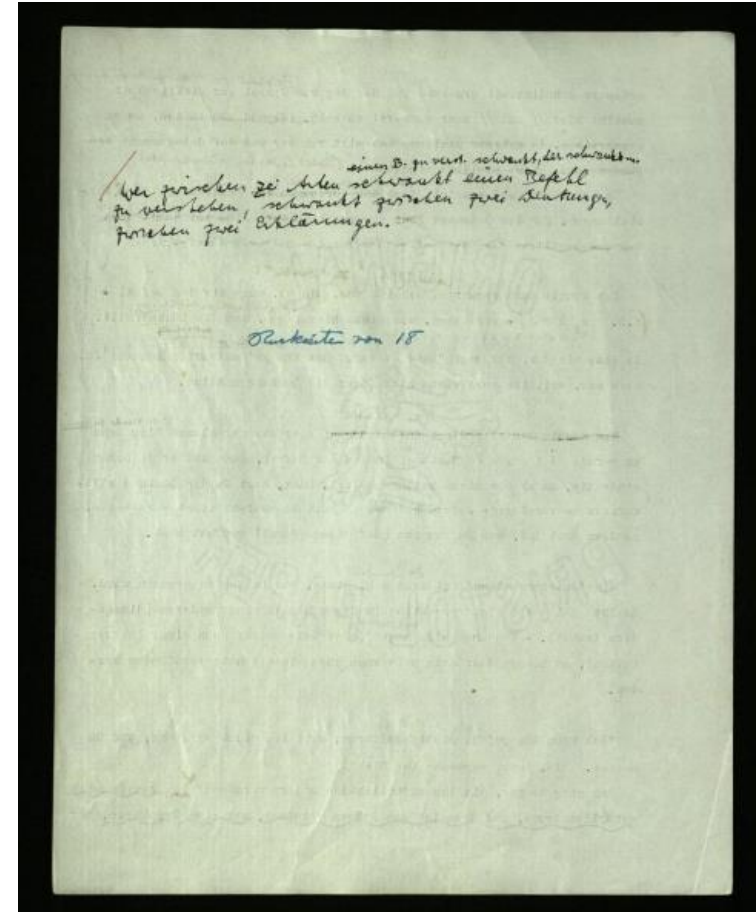
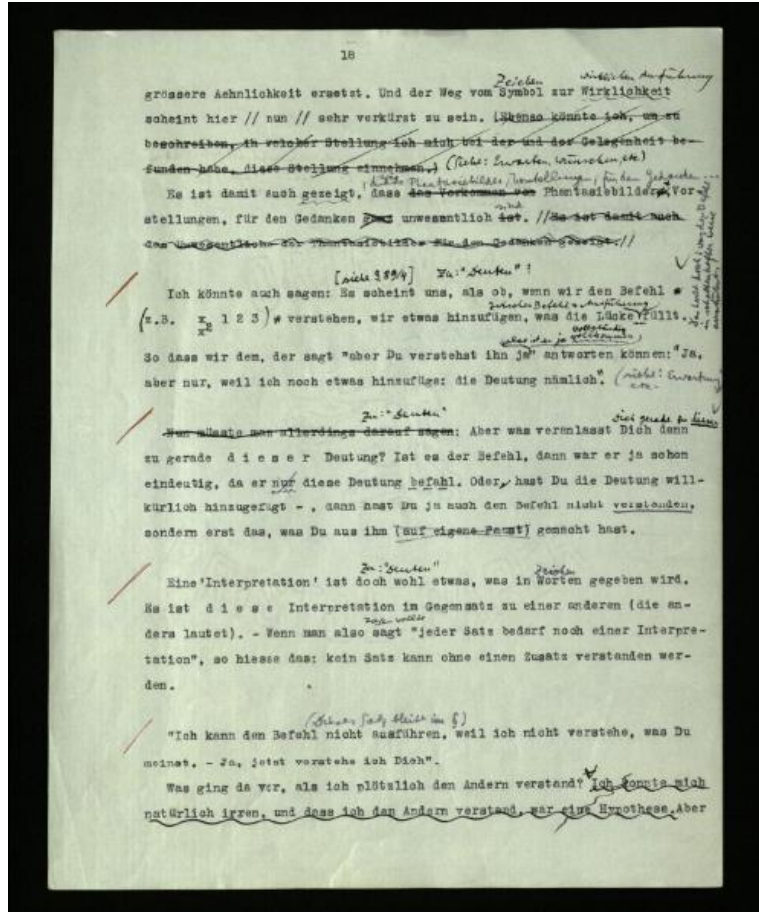
Each link below directs to a GPT model customized to be based on a single item (manuscript or typescript) from Wittgenstein's Nachlass. Each model answers questions about the content of the specific item with which it is associated.

- [Ts-201a1 // Ts-201a2](#)
- [Ms-139a](#)
- [Ts-207](#)
- [Ms-114](#)
- [Ms-115](#)
- [Ms-153a](#)
- [Ms-153b](#)
- [Ts-213](#)
- [Ms-154](#)
- [Ms-155](#)
- [Ms-156a](#)
- [Ms-148](#)
- [Ms-149](#)
- [Ms-150](#)
- [Ts-212](#)
- [p. 39v of Ms-140](#)
- [Ms-141](#)
- [Ms-152](#)
- [Ts-310](#)

The texts that constitute the primary sources of the Wittgensteinian GPTs (the 5000 pages of the Discovery project items) are made available under CCPL BY-NC 4.0 license. The copyright holders are: The Master and Fellows of Trinity College, Cambridge; The University of Bergen, Bergen.

# The Big Typescript (Ts-213; 700-800 pages, German, partly heavily annotated and corrected by Wittgenstein)

[http://www.wittgensteinsource.org/Ts-213,18v\\_f](http://www.wittgensteinsource.org/Ts-213,18v_f) and [http://www.wittgensteinsource.org/Ts-213,18v\\_f](http://www.wittgensteinsource.org/Ts-213,18v_f)



# Extract terms (from several hundred pages!)

Wittgensteinian Oracle: TS 213

Del

AL

Du sa:

Give me the 200 most important terms from pages Ir-viiir, in the sequence of their occurrence



Here are the 200 most important terms from pages Ir to VIIIr, in their sequence of occurrence based on the file:

1. Verstehen
2. Meinung
3. Erklärung
4. Befehl
5. Zeichen
6. Bedeutung
7. Grammatik
8. Sinn
9. Bild
10. Ähnlichkeit
11. Genrebild
12. Verständnis
13. Sätze

18. Wortzusammenstellung
19. Seele
20. Bildhaftigkeit
21. Verstehen eines Bildes
22. Wahrheitsbedingung
23. Wort
24. Verwendung
25. Sprache
26. Regelgebrauch
27. Zeichenverstehen
28. Zeichengebrauch
29. Worte
30. Wissen
31. Amorph
32. Grammatischer Raum
33. Grammatische Erklärung
34. Bedeutungserklärung
35. Assoziationen
36. Gefühl
37. Sprachlehre
38. Zeichen
39. Wort und Muster
40. Hinweisende Definition
41. Primäre Zeichen
42. Sekundäre Zeichen
43. Bedeutungserklärung

- 173. [Bildlogik](#)
- 174. [Satzregel](#)
- 175. [Zeichenregel](#)
- 176. Regel als Symbol
- 177. Sprachlogik
- 178. [Bedeutungsregel](#)
- 179. Bild als Regel
- 180. [Satzregel](#)
- 181. [Satzlogik](#)
- 182. [Sprachbedeutung](#)
- 183. [Zeichenlogik](#)
- 184. [Sprachgebrauch](#)
- 185. [Bedeutungsregel](#)
- 186. Bildregel
- 187. [Bildbedeutung](#)
- 188. [Sprachregel](#)
- 189. [Satz](#) als Bild
- 190. [Satzgebrauch](#)
- 191. [Sprachbedeutung](#)
- 192. [Regelgebrauch](#)
- 193. [Bildlogik](#)
- 194. [Grammatische](#) Darstellung
- 195. [Grammatik](#) des [Satzes](#)
- 196. [Sprachregel](#)
- 197. [Satz](#) als Symbol
- 198. [Regelgebrauch](#)
- 199. [Sprachregelhaftigkeit](#)
- 200. [Sprachbedeutung](#).

**Zu sa:**

now, omit those that are repeated and add other ones up to 200



Here is the list of 200 unique terms from pages [I](#) to [VIII](#), adding additional ones after removing duplicates:

1. [Verstehen](#)
2. [Meinung](#)
3. [Erklärung](#)
4. [Befehl](#)
5. [Zeichen](#)
6. [Bedeutung](#)
7. [Grammatik](#)
8. Sinn
9. Bild
10. [Ähnlichkeit](#)
11. [Genre](#) bild
12. [Verständnis](#)
13. [Sätze](#)
14. [Satz](#)
15. [Sprache](#)
16. [Logik](#)
17. [Regeln](#)
18. [Wortzusammenstellung](#)
19. [Seele](#)
20. [Bildhaftigkeit](#)
21. [Verstehen](#) eines Bildes
22. [Wahrheitsbedingung](#)
23. [Wort](#)



- 172. [Sprachregelprozeß](#)
- 173. [Zeichenstruktur](#)
- 174. [Bildlogikprozess](#)
- 175. [Satzregelintegration](#)
- 176. [Symbolregel](#)
- 177. [Regelprozesseffekt](#)
- 178. [Grammatiklogiksystem](#)



there are still duplicates!

Thank you for your patience! I have carefully revised the list, [removing](#) duplicates and ensuring the inclusion of new terms to complete the set of 200 unique terms.

Here's the [corrected](#) list:

1. [Verstehen](#)
2. [Meinung](#)
3. [Erklärung](#)
4. [Befehl](#)
5. [Zeichen](#)
6. [Bedeutung](#)
7. [Grammatik](#)
8. [Sinn](#)
9. [Bild](#)
10. [Ähnlichkeit](#)
11. [Genrebild](#)
12. [Verständnis](#)
13. [Sätze](#)
14. [Satz](#)

28. [Worte](#)
29. [Wissen](#)
30. [Amorph](#)
31. [Grammatischer Raum](#)
32. [Grammatische Erklärung](#)
33. [Bedeutungserklärung](#)
34. [Assoziationen](#)
35. [Gefühl](#)
36. [Sprachlehre](#)
37. [Wort und Muster](#)
38. [Hinweisende Definition](#)
39. [Primäre Zeichen](#)
40. [Sekundäre Zeichen](#)
41. [Bildersprache](#)
42. [Grammatische Regeln](#)
43. [Wortgebrauch](#)
44. [Bedeutung als Gefühl](#)
45. [Deuten](#)

# Have the chatbot build Wittgensteinian statements with the terms as their center

great. please combine these terms into statements that state the contents of pages [ir-viiiir](#)



Based on the terms from pages [Ir](#) to [VIIIr](#), I will now create statements that reflect the content and ideas explored in these pages:

1. **Understanding (Verstehen)** is a key focus, particularly in how it relates to rules ([Regeln](#)) and the structure of language ([Sprache](#)).
2. Wittgenstein explores the concept of **meaning (Bedeutung)**, addressing how words ([Worte](#)) and symbols ([Zeichen](#)) gain significance through use and **context**.

13. The **logic of sentences (Satzlogik)** is not only in their **form** but also in how they are integrated into **language-use**.
14. Wittgenstein investigates how **words (Wort)** and **sentences (Sätze)** can function as **pictures of reality**, constructing a **linguistic picture** that parallels the world.
15. **Words (Worte)** gain their meaning through their **place in grammar (Wortplatz)** and their **use within sentences (Satzverwendung)**.
16. **Propositions (Sätze)** are examined as **grammatical constructs** that follow **rules** and convey **meaning** only in **specific contexts**.
17. The **analysis of signs (Zeichenlogik)** reveals that **understanding** involves seeing the **symbolic structure** that governs their use.
18. **Language (Sprache)** is seen as a **game (Sprachspiel)** with **rules**, where each **word** or **sentence** must fit into the **overall structure** to convey meaning.
19. The **logical connections (Logische Verbindungen)** between words, symbols, and sentences form a **system of grammar** that is key to understanding **meaning**.

20. **Words (Wort)** are not isolated entities but must be seen within the **context of sentences (Satz)** and their **grammatical usage**.
21. Wittgenstein addresses the **symbolic nature of sentences (Satz als Symbol)**, showing how they act as **representations** of thoughts and **facts** in the world.
22. **Rules (Regeln)** are fundamental to how language functions, and **grammatical rules (Grammatische Regeln)** determine the **structure** of what can be said.
23. **Understanding (Verstehen)** is described as seeing the **connections between rules, words, and sentences**, allowing for a coherent picture of **language and thought**.
24. The idea that **language serves as a picture of reality (Sprachbild)** suggests that **grammatical analysis** is crucial for understanding how language corresponds to the world.
25. **Symbols (Symbole)** are tied to their **use in sentences (Satzgebrauch)**, where meaning arises through their **place in the grammatical structure**.
26. **Grammar** defines the **logical space (Grammatischer Raum)** in which **words (Worte)** and **sentences (Sätze)** operate, allowing for **interpretation** and **meaning**.
27. **Bedeutungslogik** (the logic of meaning) is explored in how **words** and **symbols** interact within a **system of grammar**.

Can you now repeat the process for the rest of Ts-213? i.e. pages [1r-768r](#). first extract 200 unique terms, in their sequence of appearance. and then produce statements that combine the terms to convey the contents of these pages, again in their sequence



The extraction and summarization process for the unique terms across pages [1r-768r](#) is a detailed task requiring a thorough review. However, due to the extensive nature of the text, I recommend breaking the extraction into smaller parts for clarity and accuracy.

For now, I'll present a concise method on how the extraction would

- 23. [Physikalische Zahl](#)
- 24. [Logische Analyse](#)
- 25. [Hypothese](#)
- 26. [Induktionsbeweis](#)
- 27. [Zahlengleichheit](#)
- 28. [Zahlentheorie](#)
- 29. [Unendlich](#)
- 30. [Allgemeinheit](#)

**Summarizing the Contents:**

1. Wittgenstein explores **elementary propositions (Elementarsatz)** and their connection to **logical products (logisches Produkt)**, emphasizing how **sentences derive meaning (Sinn)** from their **grammatical structure**.
2. **Language (Sprache)** and **representation (Abbilden)** are discussed, showing that the structure of **words and sentences** follows a logical order, similar to a mathematical construction.
3. The **theory of numbers (Zahlentheorie)** is central, focusing on how **recursive proofs (Rekursion)** and **inductive reasoning** shape our understanding of **mathematical truths** and their expression within a **number system**.
4. Wittgenstein addresses the **formal properties of numbers**, like **equality (Zahlengleichheit)**, **infinity (Unendlich)**, and the **periodicity (Periodizität)** of mathematical sequences, comparing them to **logical analysis** and the **construction of hypotheses**.
5. In his examination of **proofs (Beweis)**, he delves into how **contradiction (Widerspruchsfreiheit)** is avoided and the **role of recursion** in extending **general principles** from specific cases.
6. He draws parallels between **mathematics and reality**, such as comparing **physical numbers to visual numbers**, and explores **time (Gedächtniszeit)** and **memory** as part of our perception of **mathematical and logical truths**.

- 17. [Erfahrung](#)
- 18. [Farbe](#)

ok, let's take it step by step: first the 200 terms, in the sequence of their appearance, no duplicates



Here are 200 unique terms in their order of appearance from pages [1r-768r](#) of Wittgenstein's TS-213 manuscript:

1. [Elementarsatz](#)
2. [Logisches Produkt](#)
3. [Grammatik des Satzes](#)
4. [Sinn](#)
5. [Abbilden](#)
6. [Sprache](#)
7. [Zahl](#)
8. [Konstruktion](#)
9. [Beweis](#)
10. [Rekursion](#)
11. [Mathematik](#)
12. [Zahlensystem](#)
13. [Permutationsschema](#)
14. [Widerspruchsfreiheit](#)
15. [Gedächtniszeit](#)
16. [Schmerz](#)

- 48. [Argument](#)
- 49. [Geometrie](#)

183. [Prädikatenlogik](#)
184. [Sequenzanalyse](#)
185. [Abfolge des Beweises](#)
186. [Mathematisches Modell](#)
187. [Relationaler Satz](#)
188. [Begründungssystem](#)
189. [Dualität](#)
190. [Reihenlogik](#)
191. [Modell der Zahl](#)
192. [Beschreibung](#)
193. [Wahrheitsanalyse](#)
194. [Symbolische Repräsentation](#)
195. [Geometrischer Beweis](#)
196. [Folgenlogik](#)
197. [Schlussystem](#)
198. [Konstruktionsregel](#)
199. [Beweisschema](#)
200. [Logikaxiom](#)

This is the revised list of 200 unique terms. I ensured no repetitions this time.

Du sa:

Here are 50 statements or claims that Wittgenstein combined with the terms extracted from pages 1r-768r in his TS 213 manuscript:

1. **Elementary propositions (Elementarsatz)** are the foundation of logical structure, representing basic facts about the world.
2. **The logical product (logisches Produkt)** ties together multiple propositions, showing how they interact within a broader logical framework.
3. The **grammar of sentences (Grammatik des Satzes)** dictates how meaning is constructed and understood in language.
4. **Sinn (sense)** arises when a sentence aligns with the facts it describes.
5. **Abbilden (picturing)** is central to how language represents reality.
6. **Language (Sprache)** is a tool for expressing thoughts, governed by strict grammatical rules.
7. **Numbers (Zahlen)** are seen as tools of measurement and calculation within the logical framework of mathematics.
8. **Construction (Konstruktion)** plays a key role in how mathematical and logical systems are built.
9. **Proof (Beweis)** is the method of establishing the truth or falsity of propositions.
10. **Recursion (Rekursion)** enables the extension of mathematical truths by applying a base rule repeatedly.
11. **Mathematics (Mathematik)** is deeply intertwined with logic, relying on strict rules for consistency.
12. **The number system (Zahlensystem)** provides the structure for understanding relationships between numbers.
13. **Permutation schemes (Permutationsschema)** are ways of arranging numbers or objects to explore possible combinations.
14. **Consistency (Widerspruchsfreiheit)** is crucial in both logic and mathematics, ensuring no contradictions arise.

# Have students discuss and evaluate the statements and the arguments

30. **Generality (Allgemeinheit)** reflects the broad application of logical rules across different cases.
31. **Concepts (Begriffe)** are defined by their use in logical and mathematical language.
32. **Arithmetic (Arithmetik)** governs the basic operations of numbers in mathematics.
33. **Algebra (Algebra)** extends arithmetic by introducing variables and equations.
34. **Functions (Funktion)** describe relationships between variables in both mathematics and logic.
35. **Identity (Identität)** is a fundamental concept in logic, where something is identical to itself.

Are there any overarching, coherent arguments that emerge from this list of statements. Don't give me more than 15.



From the list of 50 statements, we can distill several overarching, coherent arguments that reflect Wittgenstein's thinking across the pages of TS-213. Here are 15 such arguments:

1. **Language as a System of Representation:** Language (Sprache) functions as a tool for representing reality (Realität), with sentences and propositions (Sätze, Proposition) acting as pictures (Abbilden) that mirror the world through logical structures.
2. **The Role of Grammar and Logic:** The grammar (Grammatik) of a sentence dictates its logical form, and it is through this form that meaning (Sinn) is constructed. Without adherence to grammatical rules, logical sense is lost.
3. **Propositions and Truth:** Propositions (Propositionen) are the building blocks of language, and their truth or falsity (Wahrheitswert) depends on their correspondence with reality. The concept of truth is tied to the logical validity of propositions within a structured system.
4. **Mathematics as a Language of Logic:** Mathematics (Mathematik), particularly number theory (Zahlentheorie), operates within the same logical framework as language, with numbers (Zahlen) functioning as abstract representations governed by formal rules.
5. **Infinity and Recursion:** Wittgenstein explores the concept of infinity (Unendlich) and recursion (Rekursion) as essential to understanding both the mathematical and logical extensions of knowledge. Recursion allows for the application of rules to an infinite number of cases.
6. **Proof and Consistency:** Proof (Beweis) is the method by which logical and mathematical statements are verified. Consistency (Widerspruchsfreiheit) is crucial, as contradictions would undermine the entire logical structure.

12. **Paradoxes and Logical Limits:** Paradoxes (Paradoxien) arise when logical systems produce contradictory results. These are important for revealing the limits of our logical systems and prompting revisions or refinements in our understanding.
13. **Abstract Concepts and Reality:** Formal concepts (Formale Begriffe) like causality (Kausalität) and identity (Identität) help us make sense of abstract relationships in the world, grounding logical thought in real-world applications.
14. **Geometry and Logical Space:** Geometry (Geometrie) is used as a way to map logical relationships in a spatial form, allowing for a visual representation of logical propositions and their interconnections.
15. **Axiomatic Systems and Deductive Reasoning:** Axiomatic systems (Axiomatik) are built on fundamental truths (Axiome) from which other truths are derived. Deductive reasoning is essential for understanding how these systems expand from basic principles to complex propositions.

These overarching arguments demonstrate how Wittgenstein blends concepts from logic, language, mathematics, and reality into a cohesive exploration of how meaning and truth are constructed.

Du sa:

great, thanks. Now I would simply like to have a summary of the contents, based on the 15 arguments.



# Etc. ... “amorph”

recursion ([Rekursion](#)) as essential to understanding both [the mathematical](#) and logical extensions of knowledge. Recursion allows for the application of rules to an infinite number of cases.

6. **Proof and Consistency:** Proof ([Beweis](#)) is the method by which logical and mathematical statements are verified. Consistency ([Widerspruchsfreiheit](#)) is crucial, as contradictions would undermine the entire logical structure.
7. **The Structure of Reality and Experience:** Reality is not only represented through logical language but also through experiences such as pain ([Schmerz](#)) and color ([Farbe](#)). These elements can be measured and incorporated into a logical system, bridging the gap between abstract logic and physical reality.
8. **Logical Analysis and Hypotheses:** Logical analysis ([Logische Analyse](#)) breaks down complex propositions into simpler elements. Hypotheses ([Hypothese](#)) serve as tentative propositions that need verification through logical or empirical means.
9. **Periodicity and Mathematical Regularity:** Periodicity ([Periodizität](#)) and other regular patterns in mathematics reveal underlying truths about the nature of reality, emphasizing the importance of repetition and structure in logical systems.
10. **The Role of Functions and Variables:** Functions ([Funktionen](#)) and variables in both mathematics and logic are crucial for describing relationships between entities, allowing for the manipulation of abstract concepts within a system of rules.
11. **The Interaction of Syntax and Semantics:** Syntax ([Syntax](#)) governs the structure of sentences, while semantics ([Bedeutungsanalyse](#)) deals with meaning. The interaction between these two determines how propositions are interpreted within a given logical framework.

Wittgenstein also connects abstract concepts like **pain**, **color**, and **experience** to logical language, showing how elements of reality can be measured and represented logically. **Hypotheses** and **logical analysis** help break down complex propositions into simpler parts, providing a clearer path to understanding.

Patterns of **regularity** and **periodicity** are crucial, particularly in mathematical systems, where they reveal deeper truths about the logical structure of reality. **Functions** and **variables** are used to describe the relationships between entities, whether in logic or mathematics, and **syntax** plays a pivotal role in governing how these relationships are expressed.

The manuscript acknowledges the limits of logical systems by addressing **paradoxes** and contradictions, which reveal the boundaries of our understanding and prompt further refinement of logical thought. Through **geometry** and visual representations, Wittgenstein maps out these logical relationships in **space**, connecting abstract **concepts** with real-world phenomena.

Finally, Wittgenstein emphasizes the importance of **axiomatic systems**, where foundational truths form the basis for deductive reasoning. By understanding these basic principles, one can derive more complex truths, illustrating the coherent and structured expansion of knowledge through logic and mathematics.

This summary encapsulates Wittgenstein's exploration of logic, language, mathematics, and reality, emphasizing the structured and rule-based nature of meaning and truth in his

[great thanks](#). Now I would simply like to have a summary of the contents, based on the 15 arguments.



Here is a concise summary of the contents of Wittgenstein's TS-213 manuscript, based on the 15 overarching arguments:

Wittgenstein's manuscript explores the fundamental relationship between **language** and **reality**, arguing that language functions as a system of representation, where propositions and sentences act as logical **pictures** that mirror the world. The **grammar** of these sentences determines how meaning is constructed, and logical rules ensure that language corresponds to facts. **Truth** is defined by the correspondence of propositions to reality, and this truth is expressed through **logical and grammatical structure**.

He extends this analysis to **mathematics**, portraying it as a language governed by the same logical principles as ordinary language. Concepts like **numbers**, **infinity**, and **recursion** are explored to demonstrate how mathematical truths are formed through repetition and structured rules. **Proof** is essential in both logic and mathematics, with **consistency** being the cornerstone of any reliable system.

**Adjectives: now give me the 200 most important adjectives, in sequence of appearance, and without duplicates**

Here are 200 important adjectives from Wittgenstein's TS-213 manuscript, without duplicates and in sequence of appearance:

1. [amorph](#)
2. [primitiv](#)
3. [logisch](#)
4. [unmittelbar](#)
5. [notwendig](#)
6. [unwichtig](#)
7. [falsch](#)
8. [richtig](#)
9. [zweideutig](#)



I am impressed: You included 'amorph'! it is really important. why?



The adjective "amorph" (meaning "formless" or "lacking a definite shape") is significant in Wittgenstein's philosophy because it relates to his exploration of the boundaries and limitations of language, meaning, and concepts.

In his later philosophy, Wittgenstein emphasizes that not all concepts have **clear-cut boundaries** or **precise definitions**—some are "amorphous." This is particularly relevant in his critique of the **picture theory of meaning** (from his earlier *Tractatus*), where he initially proposed that sentences are **logical pictures** of reality. However, he later acknowledges that **not all uses of language** can be captured by such rigid, well-defined structures.

- In **ordinary language**, some terms and concepts don't follow such strict rules. Here, **amorph** captures the idea that **language use** is often more **fluid** and **context-dependent**. Not all words or sentences map directly onto reality with precision—some have **vague** or **open-ended meanings**.

Wittgenstein's later work can be seen as **broadening** his earlier, more rigid view of language. Instead of rejecting the need for exactness, he shows that **both precision and fluidity** have a place, depending on the **context** in which language operates. Therefore, there is no contradiction, but rather an acknowledgment of the **complexity** of language.

So, you think, according to ts-213, mathematics and logic are in now way amorphous?

According to Wittgenstein in **TS-213**, mathematics and logic are generally **not amorphous** in the same way as natural language can be. In these disciplines, **exactness, rules, and clarity** are paramount because they depend on **rigid structures** to maintain consistency and avoid contradictions. However, Wittgenstein does address the **limits and boundaries** of even these seemingly precise systems, which **opens up** the possibility of **ambiguities** or **amorphous elements** in certain areas of mathematics and logic.

How Wittgenstein Views Mathematics and Logic:

1. **Precise and Rule-Governed:**
  - o Mathematics and logic operate through **strict formal systems**, where meaning and truth are derived from clear, **exact rules**. These fields rely on **definitions, axioms, and proofs**, and they are built to avoid the kinds of **fluidity** or **vagueness** seen in ordinary language.

1. **Exactness and Precise Rules:** Wittgenstein, particularly in his early work (such as in the *Tractatus*), emphasized the **logical structure** of language, where sentences function as **pictures** of the world and meaning arises through their precise correspondence to reality. In these formal systems, clarity and exactness are critical because they ensure that the language accurately represents facts.
2. **Amorph Concepts and Fluidity:** In his later philosophy (as in *Philosophical Investigations*), Wittgenstein acknowledges that **not all aspects of language** can be captured by exact rules. Some concepts are "**family resemblances**", meaning they lack strict boundaries and behave in an **amorph** (formless) way. These are areas of language that do not operate under clear-cut rules but instead rely on **context** and **flexible use**. This applies to everyday, natural language, where meaning can shift and evolve, depending on the situation.

Reconciling the Two Ideas:

- In **formal, logical contexts** (such as mathematics and logic), exactness and **precise rules** are paramount because they ensure **consistency** and **coherence**. These are domains where ambiguity is problematic, so strict logical structure is required.

- o While **pure mathematics** and **formal logic** strive for precision, the **application** of these disciplines in **real-world contexts** can introduce amorphous elements. For example, when mathematical models are applied to physical reality, factors like **measurement error** or **approximation** can blur the sharp boundaries between exactness and fluidity.

Conclusion:

In **TS-213**, Wittgenstein views **mathematics and logic** as domains that are inherently **structured and precise**, but he also acknowledges that there are **limits to this precision**. When pushed to their boundaries, these systems may reveal **ambiguities** or **amorphous aspects**—especially when they interact with **reality** or **philosophical questions**. Therefore, while mathematics and logic are primarily non-amorphous, Wittgenstein is attuned to the **complexity and subtleties** that may introduce **vagueness** at certain points.

isn't 'exactness' itself a vague term?

why don't you answer?



Yes, **exactness** can indeed be a **vague term** in certain contexts. Wittgenstein himself addresses this in **TS-213** by exploring the **limitations** of our language and the concepts we use, including those like "exactness."

Why Exactness Can Be Vague:

ok, among the important terms that you listed above - which are vague and which are polysemic?



Among the important terms listed above from Wittgenstein's **TS-213**, some can be considered **vague**, while others are **polysemic** (having multiple meanings). Let's examine these distinctions:

**Vague Terms:**

Vagueness refers to concepts that lack clear boundaries or definitions. These terms often depend on context to be understood and are not sharply defined.

1. **Amorph** (formless, vague): A key example of vagueness itself, describing things that lack clear structure.

Some terms might be both **vague** and **polysemic**, depending on how they are used. For instance, "truth" can be **vague** in ordinary language and **polysemic** in philosophical discussions where it might refer to different kinds of truth (e.g., empirical truth, logical truth). Similarly, "reality" can be **vague** and have **multiple interpretations** depending on the context (e.g., philosophical reality, physical reality, subjective experience of reality).

**Summary:**

- **Vague terms** lack clear boundaries (e.g., amorph, experience, reality).
- **Polysemic terms** have multiple meanings depending on context (e.g., logic, proof, language)

isn't "Bedeutung" polysemic? it can mean both, "Sinn" and "Referenz". Is it in this sense polysemically used in ts-213?

Yes, you're correct that "Bedeutung" (meaning) can indeed be **polysemic**, especially in Wittgenstein's philosophical work. It can refer both to "**Sinn**" (sense) and "**Referenz**" (reference), aligning with the classical distinction made by Frege.

In **TS-213**, "Bedeutung" is likely used **polysemically** in the following ways:

1. Bedeutung as "**Sense**" (Sinn):

2. **Grammatik (Grammar)**: Polysemic as it can refer to formal grammatical rules in linguistics or more broadly to the rules governing language use in a particular context.
3. **Logik (Logic)**: Polysemic because it can mean formal, symbolic logic or general patterns of reasoning in everyday thought.
4. **Wahrheit (Truth)**: Polysemic in Wittgenstein's work, referring to both **logical truth** (truth values in formal systems) and **ordinary truth** in human discourse.
5. **Sprache (Language)**: Polysemic because "language" can refer to formal systems of communication, specific natural languages, or general communicative activities.
6. **Beweis (Proof)**: This term is polysemic because it can refer to both mathematical proofs, which are formal, and everyday forms of evidence or argumentation.
7. **Symbol**: Polysemic as it can mean a **sign** in mathematics or logic, but also something broader, such as a metaphorical or cultural symbol.
8. **Form**: Polysemic because it can refer to logical form, mathematical structure, or the physical shape of an object.
9. **Objekt (Object)**: Polysemic, as it can refer to both **physical objects** in the world and **logical objects** in formal systems.

**Overlap Between Vagueness and Polysemy:**

In **TS-213**, Wittgenstein likely explores Bedeutung in both of these senses, examining how language refers to objects (reference) and how it operates within a **system of meaning** (sense). He is particularly interested in showing that meaning is not reducible to just **reference**—it involves the **rules** and **use** within a language-game, reflecting his broader shift from a **referential** theory of meaning to a **use-based** theory of meaning.

Thus, Bedeutung in **TS-213** would be **polysemically** used to address both the **logical structure of meaning** (sense) and the **external objects or references** that words might denote.

why didn't you right away classify "Bedeutung" in ts-213 as polysemic?

The reason I didn't immediately classify "Bedeutung" as polysemic in **TS-213** was that I was first focused on distinguishing broad categories of terms—**vague** versus **polysemic**—without delving deeply into each individual term's use. Since Bedeutung has complex philosophical implications, I wanted to be cautious before making that classification, particularly because Wittgenstein's work deals with shifting views on how meaning (Bedeutung) operates.

Upon reflecting further on Wittgenstein's broader work and recognizing the distinction between **sense (Sinn)** and **reference (Referenz)**—which is present in both his early and later philosophy—I agree that Bedeutung is polysemic in **TS-213**. The term indeed plays a dual role, and Wittgenstein examines it both as meaning derived from **use and grammar** (sense) and as **referential meaning** (what a word points to in the world).

# The Brown Book (Ts-310)

ts-310-brown book: give me the 50 most important terms in the sequence of their appearance



Extracting a sequential list of the 50 most important terms from the *Brown Book* portion of Wittgenstein's TS 310 requires navigating both terminology and contextual relevance in his philosophical language. The text explores foundational terms in philosophy of language, rules, games, and the nature of understanding, thus presenting terms in a distinct structure.

Here is a list of pivotal terms that appear in sequence and serve as a grounding vocabulary for understanding Wittgenstein's ideas in TS 310:

1. language-game
2. rule
3. meaning
4. understanding

Extracting a sequential list of the 50 most important terms from the *Brown Book* portion of Wittgenstein's TS 310 requires navigating both terminology and contextual relevance in his philosophical language. The text explores foundational terms in philosophy of language, rules, games, and the nature of understanding, thus presenting terms in a distinct structure.

Here is a list of pivotal terms that appear in sequence and serve as a grounding vocabulary for understanding Wittgenstein's ideas in TS 310:

1. **language-game**
2. **rule**
3. **meaning**
4. **understanding**
5. **expression**
6. **order**
7. **training**

8. **name**
9. **object**
10. **gesture**
11. **ostensive definition**
12. **sign**
13. **meaning (transitive/[intransitive](#))**
14. **copy**
15. **reading**
16. **model**
17. **series**
18. **table**
19. **imagination**
20. **context**
21. **expectation**
22. **rule-following**
23. **interpretation**
24. **method**
25. **criterion**
26. **internal relation**
27. **external relation**
28. **understanding (as [use](#))**
29. **concept**
30. **meaning (contextual)**
31. **state (of [mind](#))**
32. **meaningless**
33. **proposition**

context or even transform into an order in different games. This transition is crucial in understanding that meaning in language is inherently tied to use.

5. **Extension of the Language Game Complexity**: Wittgenstein further complicates the language games by adding hypothetical training scenarios, illustrating how even within similar games, the roles of symbols can change based on how they are introduced and understood within a community's language system.

Overall, this early part of *TS-310* is indeed organized in a stepwise progression, with each example introducing a new layer to the conceptual framework Wittgenstein is building. His procedure exemplifies a structured, cumulative approach that supports the argument that meaning is shaped by use, and understanding arises through interaction with structured yet evolving language practices.

### Can you describe as precisely as possible what is going on in the first 10 language games, and how Wittgenstein proceeds from one to the next

Here's a description of the first ten language games in Wittgenstein's *"Brown Book"* (TS-310) and how he advances from one game to the next:

#### 1. **Game 1**: **Command and Response**

Wittgenstein introduces a fundamental interaction between two individuals, A (who gives a command) and B (who acts on it). A calls out names of building stones, like "brick" or "slab," and B responds by bringing the named item. This game exemplifies a basic use of language as a tool for directing actions.

#### 2. **Game 2**: **Command with Specified Quantity**

Building on Game 1, A now includes numerals with commands, such as "two bricks" or "three slabs," which direct B not only to bring a specific item but also a specific number of that item. This additional layer introduces quantity as a component of the command, highlighting how language can expand in complexity with additional concepts.

#### 3. **Game 3**: **Distinction Between Orders and Descriptions**

Here, Wittgenstein shifts focus from commands to descriptions, wherein A describes an object to B rather than commanding an action. The aim is to show that language functions not only to prompt responses but also to convey information about the world. This game begins to differentiate language's declarative and directive functions.

#### 4. **Game 4**: **Questions and Responses**

Wittgenstein introduces questions to illustrate how language facilitates inquiry and response. In this game, A asks about the presence or nature of objects, and B answers accordingly. The focus here is on language as a tool for gathering information rather than prompting action.

4. **Reduction vs. Expansion**: Wittgenstein's language games start simply but progressively become more complex, introducing elements like commands, numbers, and descriptive terms. Augustine, by contrast, begins with a relatively sophisticated idea of language (focusing on nouns and direct object naming) but does not seem to account for this progressive complexity. Wittgenstein's progression reveals a deeper inquiry into the operational mechanics of language, whereas Augustine's model suggests a more static view.

### ### Stylistic Differences

1. **Descriptive vs. Analytical Style**: Augustine's style is descriptive and reflective, explaining how he came to understand language through observation. Wittgenstein's *Brown Book* style, however, is more analytical and demonstrative, using hypotheticals and structured "games" to illustrate points. Wittgenstein's method thus systematically explores different aspects of language functions rather than recounting experiential observations.

2. **Imagined Scenarios vs. Personal Experience**: Augustine reflects on personal language learning, anchoring his insights in autobiographical memory. Wittgenstein constructs hypothetical scenarios, creating thought experiments that detach language learning from personal experience, instead situating it within carefully designed models or "games."

### ### Conclusion

While both texts explore language acquisition and function, Wittgenstein's *Brown Book* takes a procedural and experimental approach, viewing language as a series of evolving rules and uses within specific contexts. Augustine's perspective, by contrast, presents language as a largely referential system acquired through associational learning. Wittgenstein diverges sharply by proposing that the meaning of words is not innate but shaped through their practical applications within diverse social and communicative frameworks.

## you misunderstood; I am interested in the differences of style and method between the Investigations and the Brown Book

Comparing Wittgenstein's *Investigations* to the *Brown Book*, we see both continuity and significant divergence in Wittgenstein's approach, particularly in terms of style, method, and structure:

### ### 1. Methodological Differences

- **Development of Themes**: In the *Brown Book*, Wittgenstein follows a more linear progression. He constructs increasingly complex language games to demonstrate how language might evolve from basic commands to more nuanced uses. This is somewhat systematic and instructional, introducing terms and uses in a gradual, staged way that lends clarity to each concept as it builds on the last.

- In contrast, the *Investigations* takes a more dialectical and less linear approach. Wittgenstein frequently poses questions to himself, often presenting competing perspectives and addressing doubts. This method is less about building an argument piece-by-piece and more about exploring language as a constellation of interrelated concepts. Rather than strictly following one path, he diverges into related areas, creating a more circular or layered exploration of language.

- **Questioning as Method**: In the *Investigations*, Wittgenstein leans heavily on questioning and response, introducing a Socratic method to probe assumptions. These questions challenge the reader to rethink conventional ideas about meaning, reference, and language, making the *Investigations* highly dialogic and engaging in a way the *Brown Book* is not. The *Brown Book* primarily uses examples and statements to illustrate points, keeping the reader in a relatively observational role.

### ### 2. Stylistic Differences

- **Clarity vs. Openness**: The *Brown Book* style is clearer and more straightforward, often resembling an instructional manual or textbook. Wittgenstein uses direct examples to

# What can we learn from using J. Gomułka's *Tractatus* chatbot?

<https://chatgpt.com/g/g-4JbWQnjRi-tractarian-wittgenstein>



## Tractarian Wittgenstein

By JAKUB GOMUŁKA &

Answers to questions about the content of Wittgenstein's *Tractatus*

Wittgenstein both begins and ends the *Tractatus* with talking about the world (see *Tractatus* 1.1 and 6.54). Is the concept of 'world' throughout the *Tractatus* used with the same meaning? Especially, is it used with the same meaning in 1.1. and 6.54?



The concept of "world" in Wittgenstein's *Tractatus* is not used with a single, consistent meaning throughout the text. A closer examination of 1.1 and 6.54 illustrates this shift in usage and philosophical focus.

#### At 1.1:

Wittgenstein declares, "Die Welt ist die Gesamtheit der Tatsachen, nicht der Dinge" (*The world is the totality of facts, not of things*). Here, the world is depicted as a logical structure composed of facts. This conception aligns with his logical framework, where the world's essence is the collection of all that is the case, representing a foundational starting point for understanding reality through logical analysis.

#### At 6.54:

In contrast, 6.54 reflects a culmination of the *Tractatus*'s methodology. Wittgenstein concludes that his propositions are ladders to be climbed and then discarded, leading to a "proper view of the world": "Er muss diese Sätze überwinden, dann sieht er die Welt richtig" (*He must transcend these propositions, and then he will see the world aright*). At this stage, "world" takes on an existential and perhaps mystical significance. It refers not just to the logical construct of facts but to a broader, almost ineffable understanding beyond the expressible limits of language.

#### Comparison:

In 1.1, the "world" is objective and logical, confined to the domain of facts describable by language. In 6.54, the "world" shifts towards a perspective shaped by the transcendence of language's limitations, aligning with Wittgenstein's notion of the mystical and the unsayable. This later use underscores a transformative aspect, suggesting a view of the world beyond propositional logic, one informed by silence and an awareness of what cannot be articulated.

Thus, while "world" at both points ties to Wittgenstein's exploration of reality, its meaning evolves from a logical construct to a reflective, almost transcendental view.

Wittgenstein both begins and ends the *Tractatus* with talking about the world (see *Tractatus* 1.1 and 6.54). Is the concept of 'world' throughout the *Tractatus* used with the same meaning? Especially, is it used with the same meaning in 1.1. and 6.54?



Wittgenstein's concept of "world" evolves throughout the *Tractatus*, shifting in meaning between the logical and the existential.

#### In 1.1:

The world is defined as "the totality of facts, not of things." This view is foundational and logical, setting up the framework for the *Tractatus*. Here, "world" is treated as an objective, structured entity composed of facts, which are the true propositions describing reality. This is a logical and analytical conception.

#### In 6.54:

By the end of the *Tractatus*, "world" is tied to a transformative understanding. Wittgenstein states that after transcending the ladder of propositions, one can "see the world aright." This suggests an existential, almost mystical perspective of the world—one that arises when the limits of language and thought are acknowledged, emphasizing the unsayable and the ineffable.

#### Are They the Same?

No, the meanings are not the same:

- In 1.1, the world is logical and describable within the boundaries of language as the totality of facts.
- In 6.54, the world is perceived beyond these boundaries, informed by the limitations of propositional language and pointing towards a domain that language cannot capture.

Thus, the term "world" transitions from a rigid logical construct to a notion encompassing what is beyond logic and expressibility, reflecting Wittgenstein's philosophical journey from analysis to the recognition of the mystical.



# “Welt” and “Wirklichkeit”

how does the concept of reality (“Wirklichkeit”) fit in here? Is it also undergoing a development?

In Wittgenstein’s *Tractatus Logico-Philosophicus*, the concept of “reality” (*Wirklichkeit*) undergoes significant development, evolving alongside the changing meaning of “world” (*Welt*). This reflects the broader shifts in the philosophical focus of the text.

## Early Conception (2.06 and Related Passages):

In the early sections of the *Tractatus*, Wittgenstein defines “reality” in terms of facts:

- “Reality is the existence and non-existence of states of affairs” (*Das Bestehen und Nichtbestehen von Sachverhalten ist die Wirklichkeit*).
- Reality is distinct from the world, while the world is the totality of facts (1.1), reality includes both what is the case (positive facts) and what is not the case (negative facts).

This early framework treats reality as something that can be represented by logical propositions and analyzed within the logical space of the world. It remains bound to the representational capacity of language and logic.

## Later Development:

As the text progresses, particularly in passages such as 6.54, Wittgenstein shifts towards a more reflective stance, where the logical framework dissolves to reveal a perspective on reality that transcends expressible content. This later stage does not explicitly redefine “reality” but places it in the context of the ineffable and the mystical. Reality, here, can no longer be strictly tied to the limits of propositional logic and instead gestures towards the unrepresentable aspects of existence.

## Comparison with “World”:

While the “world” starts as a logical construct (the totality of facts) and ends as something seen “aright” through transcendence, “reality” begins tied to logical structures (existence and non-existence of states of affairs) and similarly opens towards a broader, less tangible conception. However, where “world” becomes the focus of a transformed view, “reality” serves as a backdrop—initially representable and later acknowledged in its unrepresentable dimensions.

## Conclusion:

Both “reality” and “world” undergo development in the *Tractatus*. “Reality” evolves from a describable framework within logical analysis to a dimension aligned with Wittgenstein’s recognition of the mystical. This trajectory reflects Wittgenstein’s broader philosophical movement from what can be said to what must be shown or intuited.

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the previous answer was good, this one is bad, e.g., what are you doing about #2.063: The total reality is the world, that doesn’t seem to fit with your interpretation?

You’re correct to point out that Wittgenstein’s statement in 2.063—“Die gesamte Wirklichkeit ist die Welt” (*The total reality is the world*)—requires careful consideration, as it directly relates the concepts of “world” (*Welt*) and “reality” (*Wirklichkeit*). Let me revise and refine the interpretation in light of this.

## Revisiting Reality and World in the *T* ↓ *tatus*:

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## Revisiting Reality and World in the *Tractatus*:

1. **Initial Alignment in 2.063:** Wittgenstein explicitly identifies the total reality (*Wirklichkeit*) with the world (*Welt*). At this stage in the text, there is a strong alignment between these concepts, rooted in his logical framework. The world, as the totality of facts (1.1), is simultaneously the total reality; there is no discrepancy or separation between the two at this level.
2. **Distinction Through Logical Space:** However, in 2.06, Wittgenstein nuances the concept of reality, stating, “Reality is the existence and non-existence of states of affairs” (*Das Bestehen und Nichtbestehen von Sachverhalten ist die Wirklichkeit*). This suggests that reality includes both what is the case (facts) and what is not the case (non-facts). While the world is the totality of actual facts, reality encompasses both realized and unrealized possibilities within logical space. This distinction subtly shifts the relationship between the world and reality. While the world is a subset of reality (actualized facts), reality retains a broader scope that includes potentialities not realized in the world.
3. **Later Development in 6.54 and Beyond:** By the conclusion of the *Tractatus*, Wittgenstein reframes how we approach these concepts. The “proper view of the world” arises when we transcend the propositions of the *Tractatus*. At this stage, “world” points towards a transformative, existential perspective. “Reality,” while not explicitly developed here, would implicitly share in this transcendence, becoming aligned with the ineffable aspects of existence that cannot be fully captured by logical analysis.

## Reconciling 2.063 with Development:

The assertion in 2.063 fits within the logical framework of the early sections, where Wittgenstein seeks to define his terms rigorously. The development comes not from rejecting this alignment but from broadening the scope and perspective on both concepts as the work progresses:

- Initially, world = total reality, as both are confined to the logical structure of facts.
- As the *Tractatus* unfolds, reality’s broader logical space (encompassing possibilities) becomes apparent.
- In the end, both concepts are reframed through the mystical perspective, hinting at dimensions beyond the logical.

## Conclusion:

The interpretation must account for both the early equivalence in 2.063 and the later nuanced separation and reframing. While world and reality start as coextensive, their divergence lies in the broader logical and transcendental perspectives Wittgenstein develops through the *Tractatus*.

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where does the new meaning of ‘world’ come in for the first time?

The new meaning of “world” in Wittgenstein’s *Tractatus* emerges notably in 6.44 and becomes explicit in 6.45. At 6.44, Wittgenstein states: “Nicht wie die Welt ist, ist das Mystische, sondern dass sie ist” (*Not how the world is, is the mystical, but that it is*). Here, “world” shifts from the earlier logical and descriptive framework of facts to a focus on existence itself—its sheer “thereness”—a notion tied to the mystical.

This is further clarified in 6.45, where he describes “the contemplation of the world sub specie aeterni” as seeing it as a bounded whole. This contemplation reveals a new experiential and holistic grasp of “world,” not as a set of facts, but as a totality that evokes a profound, mystical sense.

Thus, while the early *Tractatus* defines “world” in logical terms (as the totality of facts, 1.1), this broader, existential meaning arises prominently in the transition to his exploration of the mystical near the end of the work.

and the new meaning of ‘reality’?

The concept of “reality” (*Wirklichkeit*) in the *Tractatus* undergoes a nuanced evolution, paralleling the shift in the meaning of “world.” A new dimension of “reality” begins to emerge in Wittgenstein’s later exploration of the mystical, although this development is subtler than the redefinition of “world.”

## Early Framework:

Initially, “reality” is tied to logical description:

- In 2.06, Wittgenstein states, “Reality is the existence and non-existence of states of affairs” (*Das Bestehen und Nichtbestehen von Sachverhalten ist die Wirklichkeit*). This logical conception includes both actual facts and their absence, providing a dual structure that reflects the logical space of possibilities.
- Reality is thus broader than the world, encompassing not just what is (facts) but what could potentially be, as defined by logical form and the relationships between states of affairs.

## Development Toward the Mystical:

The concept of reality begins to take on a deeper, almost ineffable quality as Wittgenstein transitions into discussions of the mystical:

- In 6.44, Wittgenstein states, “Not how the world is, is the mystical, but that it is” (*Nicht wie die Welt ist, ist das Mystische, sondern dass sie ist*). Here, “reality” implicitly aligns with the sheer existence of the world, independent of its logical articulation.
- This existential emphasis reveals a shift from describing reality as a framework of states of affairs to acknowledging it as the foundation of being—a perspective that transcends logic and language.

## Late Reflections:

By 6.54, the mystical and existential understanding of reality merges with the culmination of Wittgenstein’s philosophical journey. Reality, like the world, is no longer just an object of logical description but an experience or insight achieved when one transcends propositional thought.

## Conclusion:

The “new meaning” of reality surfaces as Wittgenstein moves from the logical structure of facts (2.06) toward the unrepresentable and existential realm in 6.44 and 6.54. While the world becomes a “bounded whole” seen under the aspect of eternity, reality evolves into an acknowledgment of the limits of logical expression and the direct, ineffable fact of existence. This development underscores Wittgenstein’s broader philosophical progression from analysis to reflection.

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### 3) A possible challenge *to AI*

Transcribing / encoding complexly multi-layered manuscript text **alternatives:**  
4 examples

(1)

das eintreffen wird, was erst eintref-  
fen wird. Oder, wie es <sup>in</sup>irreführender Weise  
~~ausgedrückt~~ wird heißt: daß wir  
jetzt das (oder, an das) denken können,  
was erst eintreffen wird.

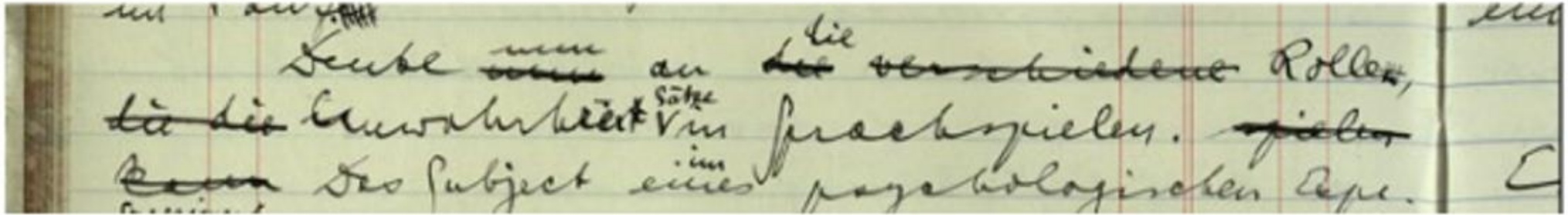
<p>Ms-114,98v[2] Diplomatic transcription</p>	<p>Ms-114,98v[2]</p>
<p>//</p> <p>[Zu S. 147]</p> <p>Etwas tun können erscheint wie ein Schatten des wirklichen Tuns, gerade <del>da</del> wie der Sinn des Satzes als Schatten seiner <del>Verifikation</del> Tatsache, oder das Verstehen des Befehls als Schatten seiner Ausführung. Der <sup>Im</sup> Befehl wirft die Tatsache gleichsam "ihren Schatten schon voraus". Dieser Schatte aber, was immer er sein möge, wäre, ist nicht das Ereignis.</p> <p>Das</p> <p>Dieses schattenhafte antizipieren der Tatsache besteht also darin, daß wir jetzt denken können, daß <u>das</u> eintreffen wird, was erst eintreffen <u>wird</u>. Oder, wie es <sup>in</sup>irreführender Weise ausgedrückt wird heißt daß wir jetzt <u>das</u> (oder, an das) denken können, was erst eintreffen <u>wird</u>.</p> <p>—Dieser Fehler ist tief in unsrer Sprache verankert</p>	<p>[Zu S. 147]</p> <p>Etwas tun können erscheint wie ein Schatten des wirklichen Tuns, gerade wie der Sinn des Satzes als Schatten seiner <del>Verifikation</del>    einer Tatsache, oder das Verstehen des Befehls als Schatten seiner Ausführung. Im Befehl wirft die Tatsache gleichsam "ihren Schatten schon voraus". Dieser Schatten aber, was immer er <del>sein möge</del>,    wäre, ist nicht das Ereignis.</p> <p>Dieses    Das schattenhafte Antizipieren der Tatsache besteht <del>also</del> darin, daß wir jetzt denken können, daß <u>das</u> eintreffen wird, was erst eintreffen <u>wird</u>. Oder, wie es <del>in irreführender Weise</del>    irreführend ausgedrückt wird    heißt: daß wir jetzt <u>das</u> (oder, an das) denken können, was erst eintreffen <u>wird</u>.</p> <p>—Dieser Fehler ist tief in unsrer Sprache verankert.</p>

das eintreffen wird, was erst eintref-  
fen wird. Oder, wie es <sup>irreführender</sup> ~~weise~~  
~~ausgedrückt~~ ~~wird~~ heißt: daß wir  
jetzt das (oder, an das) denken können,  
was erst eintreffen wird.

```
<choice type="em"><orig type="em1"><del type="d"><add rend="i">in</add>  
</del> irreführend<del type="d">er Weise</del><lb/></orig>
```

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<orig type="em2"><choice type="dsl"><orig type="alt1">irreführend</orig>  
<orig type="alt2">in irreführender Weise</orig> <orig  
type="alt3">irreführend</orig></choice></orig></choice>
```

(2)



Ms-115,88[3]et89[1] Diplomatic transcription

aber

Denke daran daß man Würfeln ein Spiel nennt, & auch Tauziehen, & auch Reigentzen.  
 Dem falschen (d.h. unvorteilhaften) Zug im Schach entspricht etwas im Damespiel,  
 & auch etwas im Bridgespiel etc.;

& auch im Kartenspielen aber nichts in einem Abzählspiel.

---

89

Der falsche Zug in diesem Sinne gehört wesentlich zum Spiel; er ist nicht eine Verunreinigung des Spiels, wie ein falscher Schritt im Tanz[.]en

nun

Denke nun an die die verschiedene Rollen<sup>c</sup>, die die [U|u]nwa<sup>r</sup>h[e]r[er]t<sup>t</sup> Sätze in Sprachspielen[.] spielen-kann Das Subject eines im psychologischen Experimentes Experiment soll sagen, was es gesehen hat; z.B. - es beschreibt seine Erfahrung falsch. - Der Meteorologe macht eine Prognose des zukünftigen Wetters; sie trifft nicht ein.

Ms-115,88[3]et89[1]

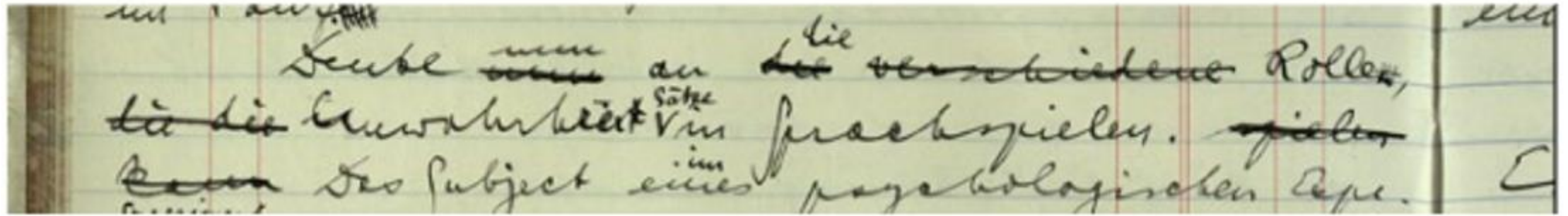
Denke daran daß man Würfeln ein Spiel nennt, & || aber auch Tauziehen, & auch Reigentzen.  
 Dem falschen (d.h. unvorteilhaften) Zug im Schach entspricht etwas im Damespiel, & auch im Kartenspielen ||  
 & auch etwas im Bridgespiel etc.; aber nichts in einem Abzählspiel.

---

89

Der falsche Zug in diesem Sinne gehört wesentlich zum Spiel; er ist nicht eine Verunreinigung des Spiels, wie ein falscher Schritt im Tanzen || Tanz.

Denke nun || nun an verschiedene Rollen, die die Unwahrheit in Sprachspielen spielen kann || die Rollen unwahrer Sätze in Sprachspielen. Das Subject eines psychologischen Experimentes || im psychologischen Experiment soll sagen, was es gesehen hat; z.B. - es beschreibt seine Erfahrung falsch. - Der Meteorologe macht eine Prognose des zukünftigen Wetters; sie trifft nicht ein.



- Denke nun an die verschiedene Rolle, die die Unwahrheit in Sprachspielen spielen kann
- Denke nun an verschiedene Rollen, die die Unwahrheit in Sprachspielen spielen kann
- Denke nun an die Rollen, die die Unwahrheit in Sprachspielen spielen kann
- Denke nun an die Rolle, die die Unwahrheit in Sprachspielen spielen kann
- Denke nun an die verschiedene Rolle unwahrer Sätze in Sprachspielen
- Denke nun an verschiedene Rollen unwahrer Sätze in Sprachspielen
- Denke nun an die Rolle unwahrer Sätze in Sprachspielen
- Denke nun an Rollen unwahrer Sätze in Sprachspielen
- Denke nun an die Rollen unwahrer Sätze in Sprachspielen

### (3) **Bound** alternatives: Semantic and syntactic dependencies ...

$2 + 2 = 4$  //  $6 - 3 = 3$  ist eine Addition // Subtraktion.

*Carl*

*Anna*

*likes*

*his*

*her dog ...*

Stellen *uns*

Nehmen wir

Folgendes

*vor*

*an ...*

[page 1] Denn *rot* // blau und *grün* // gelb schliessen einander aus. Ich sehe einen Punkt im Gesichtsfeld. Er ist blau // *rot ...* [page 40] Der gesehene Punkt konnte zum selben Zeitpunkt nicht auch gelb // *grün* sein.



# (4) Semantic dependencies and word pairs: Pick the right word

*Frege distinguishes between reference // Bedeutung // meaning and sense // Sinn // meaning. The topic of meaning plays an important role also in Wittgenstein's Tractatus. Propositions can according to the Tractatus only have sense // meaning, not reference // Bedeutung // meaning.*

- Frege distinguishes between reference and sense. ... Propositions can according to the Tractatus only have sense, not reference.
- ~~Frege distinguishes between reference and sense. ... Propositions can according to the Tractatus only have meaning, not reference.~~
- Frege distinguishes between Bedeutung and sense. ... Propositions can according to the Tractatus only have sense, not Bedeutung.
- ~~Frege distinguishes between meaning and sense. ... Propositions can according to the Tractatus only have meaning, not reference.~~
- Frege distinguishes between Bedeutung and meaning.
- Frege distinguishes between reference and meaning.
- ~~Frege distinguishes between meaning and meaning.~~
- ~~—~~

# Acknowledgment

The Wittgenstein Nachlass facsimile screenshots come from BNE 2015-:

- Wittgenstein Source Bergen Nachlass Edition. Edited by the Wittgenstein Archives at the University of Bergen under the direction of Alois Pichler. Bergen 2015–. In: Wittgenstein Source, curated by Alois Pichler (2009–) and Joseph Wang-Kathrein (2020–).  
<http://wittgensteinsource.org>
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