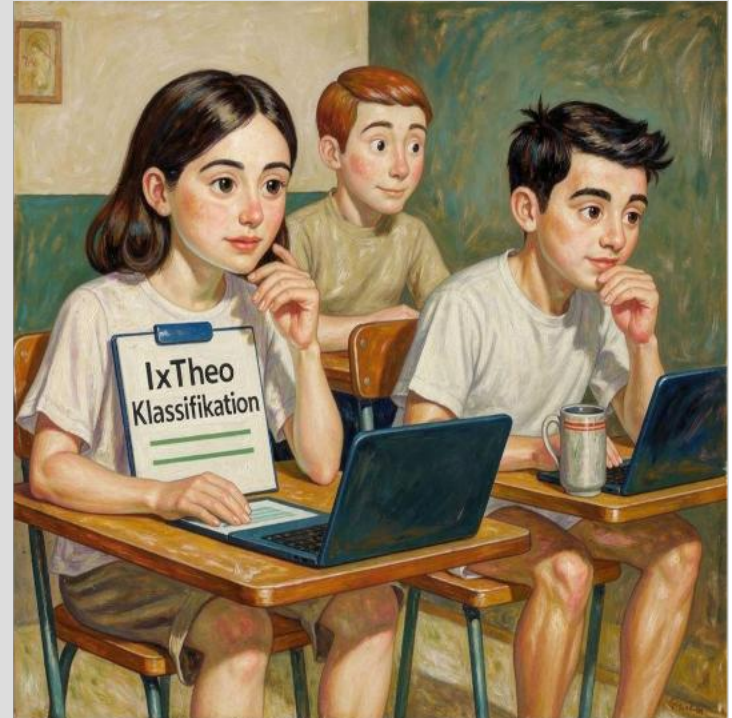


Klassenarbeit: KI-basierte Erschließung im IxTheo

Johannes Riedl

FID-Coffee Lecture

3. Juli 2026



IxTheo

- Theologie-Sicht der kombinierten Instanz für Theologie und Religionswissenschaft
- > 5.3 Millionen Datensätze
- VuFind-basiert





IxTheo (cont.)

● Beispieldatensatz

Christian Languages and Cultural Communication: The Problems, Questions, and Challenges Michel de Certeau Poses to Theological Language Michel de Certeau's work questions the theological discipline surrounding language. Although Certeau does not directly elaborate a theory of theological language, his intellectual project addresses the approaching crisis of the Church in the post-Vatican II era as a symptom of the broader crisis of... Ausführliche Beschreibung	
1. Verfasserin:	Álvarez, Carlos (Verfasst von)  
Medienart:	Elektronisch, Aufsatz
Sprache:	Englisch
Journals Online & Print:	 Online verfügbar.
Fernleihe:	Fernleihe für die Fachinformationsdienste
Veröffentlicht:	2025
In:	Interdisciplinary journal for religion and transformation in contemporary society Jahr: 2025, Band: 11, Heft: 1, Seiten: 15-30
weitere Schlagwörter:	 theological languages  Everyday Life  nominalist rupture  mystical language  desontologization
Online-Zugang:	Volltext (kostenfrei) Volltext (kostenfrei)



IxTheo-Klassifikation

● 14 Hauptgruppen

- A Religionswissenschaft allgemein
- B Einzelne Religionen
- C Christentum
- F Christliche Theologie
- H Bibel; Bibelwissenschaft
- K Kirchen- und Theologiegeschichte; Konfessionskunde
- N Systematische Theologie
- R Praktische Theologie
- S Kirchenrecht
- T (Profan-) Geschichte
- V Philosophie
- X Recht allgemein
- Y Naturwissenschaften allgemein
- Z Sozialwissenschaften



IxTheo-Klassifikation (cont.)

● 142 Untergruppen

- AH Religionspädagogik
- AX Interreligiöse Beziehungen
- AZ Neue Religionen
- B Einzelne Religionen
 - BB Indigene Religionen
 - BC Altorientalische Religionen
 - BD Alteuropäische Religionen
 - BE Griechisch-Römische Religionen
 - BF Gnosis
 - BG Weltreligionen
 - BH Judentum
 - BJ Islam
 - BK Hinduismus, Jainismus, Sikhismus
 - BL Buddhismus
 - BM Chinesischer Universalismus; Konfuzianismus; Taoismus
 - BN Schintoismus
 - BR Altamerikanische Religionen
 - BS Afrikanische Religionen
 - BT Religionen des Südpazifischen Raums
- C Christentum
 - CA Christentum
 - CB Christliche Existenz; Spiritualität
 - CC Christentum und nichtchristliche Religionen; interreligiöse Beziehungen
 - CD Christentum und Kultur
 - CE Christliche Kunst
 - CF Christentum und Wissenschaft
 - CG Christentum und Politik
 - CH Christentum und Gesellschaft
- F Christliche Theologie
 - FA Theologie
 - FB Theologiestudium



IxTheo-Klassifikation (cont.)

● Abdeckung...

IxTheo-Klassifikation

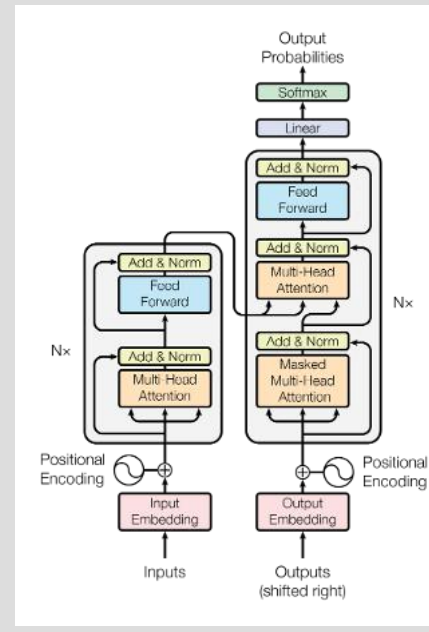
Sortieren **Anzahl Treffer** Alphabetisch Filter

☐ [Unzugewiesen]	83,2 %
☐ HC Neues Testament	112.213
☐ HB Altes Testament	110.247
☐ KDB Katholische Kirche	94.399
☐ SB Katholisches Kirchenrecht	83.328
☐ KAJ Kirchengeschichte 1914-; neueste Zeit	66.005
☐ KBB Deutsches Sprachgebiet	50.019
☐ KDD Evangelische Kirche	46.623
☐ HA Bibel	44.611
☐ CB Christliche Existenz; Spiritualität	42.683
☐ KAH Kirchengeschichte 1648-1913; Neuzeit	36.408
☐ RB Kirchliches Amt; Gemeinde	34.413
☐ KAB Kirchengeschichte 30-500; Frühchristentum	29.824
☐ SA Kirchenrecht; Staatskirchenrecht	29.403
☐ CD Christentum und Kultur	29.025



Gegenstand und Methoden

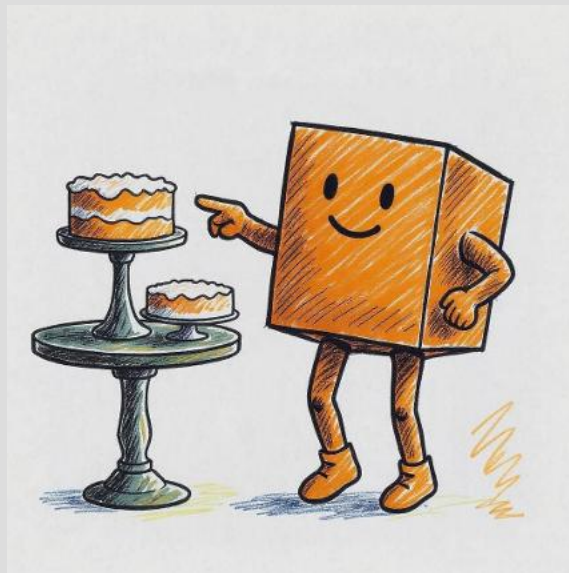
- Multilabel Klassifikation
- Encoder Modelle
- Generative Modelle
- Prompt Engineering
- Finetuning



[1]

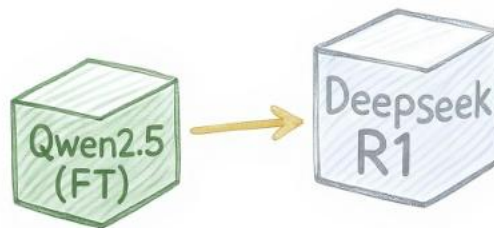
Techniken

- SFT/LoRA:
Modelltraining mit den
"richtigen" Antworten
- RL/DPO:
Modelltraining mit
"guten" und
"schlechten" Antworten



Minimal "Mixture of Agents"

- Kleineres Modell nachtrainieren
- Ergebnisvalidierung mit Reasoningmodell
- Qwen2.5 72B vs. Deepseek R1-0528





Training

- ≈ 10.000 Records für LoRA SFT (Klassen gleichverteilt)
- ≈ 3.000 Records for DPO



Qwen

Relevant Classes

1. **FA Theology**
 - The record is fundamentally about theological language and its implications.
2. **NAA Systematic theology**
 - Theological language is a key aspect of systematic theology.
3. **NBB Doctrine of Revelation**
 - Theological language is closely tied to the doctrine of revelation.
4. **NCG Environmental ethics; Creation ethics**
 - While not directly mentioned, the focus on everyday life and ordinary language can be seen as part of a broader ethical framework.
5. **ZD Psychology**
 - The analysis of mystical language and its dialogical nature can be related to psychological aspects of religious experience.
6. **ZG Media studies; Digital media; Communication studies**
 - The focus on cultural communication and ordinary language aligns with media and communication studies.

Final Selection

- **FA Theology**
 - The primary focus is on theological language and its implications.
- **NAA Systematic theology**
 - Theological language is a key aspect of systematic theology.
- **NBB Doctrine of Revelation**
 - Theological language is closely tied to the doctrine of revelation.
- **ZD Psychology**
 - The analysis of mystical language and its dialogical nature can be related to psychological aspects of religious experience.
- **ZG Media studies; Digital media; Communication studies**
 - The focus on cultural communication and ordinary language aligns with media and communication studies.



Deepseek R1 (final)

Based on the meticulous analysis of the title, the keywords, and the summary, the most relevant ixTheo classification classes are determined as follows:

1. **FA Theology** - Core focus on theological language and its challenges.
2. **NAA Systematic theology** - Central to analyzing theological language structures.
3. **NBB Doctrine of Revelation** - Directly tied to theological language as a vehicle for divine revelation.
4. **CD Christianity and Culture** - Addresses cultural communication and everyday life contexts.

Reasoning for exclusions:- **ZD Psychology** was considered for mystical language analysis but is secondary to theological themes.- **ZG Media studies** was deemed tangential; cultural communication is better covered under CD.- **NCG Environmental ethics** lacks direct support from the content.



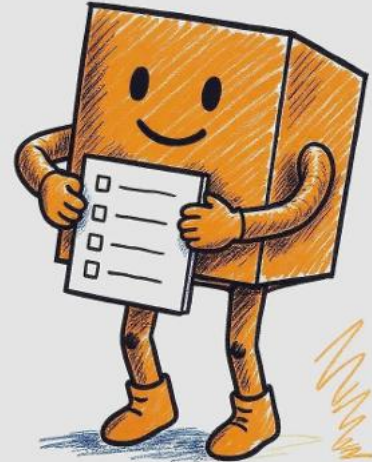
Zwischenstand

- Ergebnisse z.T. plausibel
- Kontrolle des Trainings schwierig
- "Naives" DPO ebenfalls schwierig
- Kosten



Prompt Engineering

- Modelle werden besser
- Human in the Loop / Fehlerkorrektur einfacher
- Kein Lock-In auf ein bestimmtes Modell





Kimi Result (final)

```

1  "classes": [
2    {
3      "class": "AB",
4      "description": "Philosophy of religion; criticism of religion; atheism. The article offers a philosophical critique of theological
      ↳ language, examining epistemological ruptures like nominalism and the desontologization of language, analyzing the crisis of
      ↳ religious discourse from a critical philosophical perspective."
5    },
6    {
7      "class": "CD",
8      "description": "Christianity and Culture. Central to the article is the exploration of Christian theological language in relation to
      ↳ culture, addressing cultural communication, the post-Vatican II cultural crisis, and the relationship between faith expression
      ↳ and cultural historicity."
9    },
10   {
11     "class": "VB",
12     "description": "Hermeneutics; Philosophy. The analysis employs hermeneutical methods to interpret the meaning and function of
      ↳ theological language, examining questions of interpretation, the relationship between language and experience, and the
      ↳ philosophical underpinnings of religious discourse."
13   },
14   {
15     "class": "FA",
16     "description": "Theology. The work directly addresses the domain of Christian theology, specifically focusing on theological
      ↳ language, its structures, its crisis, and its relationship to mystical and ordinary language within the Christian tradition."
17   },
18   {
19     "class": "CB",
20     "description": "Christian life; spirituality. The article extensively engages with mystical language and spirituality as a living
      ↳ discourse that challenges institutional theological language, examining the role of spiritual experience, mysticism, and the
      ↳ 'fable' in shaping alternative modes of religious expression."
21   }]

```



Klassifikationen ähnlicher Einträge

- Embeddings der MARC JSON Records
- Qwen3-Embedding-8B
- Klassifikationen "umliegender" Records



Klassifikationen ähnlicher Einträge (cont.)

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1  "docs": [{
2      "id": "1644067919",
3      "title_full": "Glauben nach dem Traditionsbruch Einblicke in das Werk von Michael de Certeau",
4      "ixtheo_notation": ["CB", "CD", "NBC", "VA"]
5  }, {
6      "id": "1618041150",
7      "title_full": "The word made strange theology, language, culture",
8      "ixtheo_notation": ["NBG"]
9  }, {
10     "id": "1614421110",
11     "title_full": "Words religious language matters",
12     "ixtheo_notation": ["AA", "AB", "AE"]
13 }, {
14     "id": "163888921X",
15     "title_full": "Michel de Certeau y la cuestión del lenguaje",
16     "ixtheo_notation": ["CB", "KDB", "VA"]
17 }, {
18     "id": "1638889287",
19     "title_full": "Michel de Certeau: el demonio y la institución",
20     "ixtheo_notation": ["CG", "CH", "KAH", "KAJ", "KDB", "NBH"]
21 }, {
22     "id": "1638889260",
23     "title_full": "Michel de Certeau lector de san Juan de la Cruz",
24     "ixtheo_notation": ["CB", "CD", "KAH", "KAJ", "KDB"]
25 }, {
26     "id": "1863081798",
27     "title_full": "Kulturen und Spiritualitäten",
28     "ixtheo_notation": ["AD", "AG"]
29 }
30 [...]
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GLM-5.2 (final)

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1  "assigned_classes": [
2    {
3      "code": "CB",
4      "description": "Christian life; spirituality",
5      "explanation": "The article extensively discusses modern mystical language (dialogical and relational) and its potential for a
        ↳ spirituality capable of engaging cultures and everyday life. Certeau's analysis of mystical language as a counterpoint to clerical
        ↳ theological language is central to the argument."
6    },
7    {
8      "code": "CD",
9      "description": "Christianity and Culture",
10     "explanation": "The article addresses inculturation directly: it examines how theological language relates to cultural communication,
        ↳ how the crisis of the Church is linked to the broader crisis of culture and institutions in the West, and how ordinary language and
        ↳ everyday life can serve as the locus for believing subjectivity."
11    },
12    {
13      "code": "FA",
14      "description": "Theology",
15      "explanation": "The article is fundamentally about the theological discipline and its language\u2014questioning how theology speaks,
        ↳ the epistemological consequences of the nominalist rupture for theological language, and the desontologization of the language of
        ↳ Tradition. It addresses theology as a discipline facing a crisis of language."
16    },
17    {
18      "code": "VA",
19      "description": "Philosophy",
20      "explanation": "Certeau's analysis is deeply philosophical, drawing on epistemological consequences of the 14th-century nominalist
        ↳ rupture, the archaeology of the erosion of language, and the philosophical implications of desontologization. The article engages
        ↳ philosophical methods to interrogate theological language."
21    }
22  ]
  
```



Danke

johannes.riedl@uni-tuebingen.de



Literatur

- [1] Ashish Vaswani, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N. Gomez, Łukasz Kaiser, and Illia Polosukhin.
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Mixture-of-Agents Enhances Large Language Model Capabilities
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- [3] Edward J. Hu, Yelong Shen, Phillip Wallis, Zeyuan Allen-Zhu, Yuanzhi Li, Shean Wang, Lu Wang, and Weizhu Chen
LoRA: Low-Rank Adaptation of Large Language Models
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- [4] Rafael Rafailov, Archit Sharma, Eric Mitchell, Stefano Ermon, Christopher D. Manning, and Chelsea Finn
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<https://arxiv.org/abs/2305.18290>, 2024
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<https://huggingface.co/moonshotai/Kimi-K2-Thinking> (2.7.26)



Literatur

[6] GLM 5.2 Huggingface Model Card

<https://huggingface.co/zai-org/GLM-5.2> (2.7.26)

Illustrations generated with FLUX Kontext[max] and FLUX2 Kontext[max]