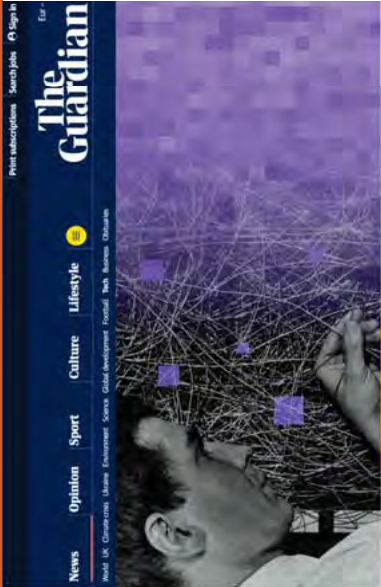


2. Large Language Models: Visualisation



How AI chatbots like ChatGPT or Bard work - visual explainer

<https://www.theguardian.com/technology/ng-interactive/2023/nov/01/how-ai-chatbots-like-chatgpt-or-bard-work-visual-explainer>

2. Large Language Models: Linguistic calculations

What is a **tidy** thing to eat pasta with?

A **tidy** thing to eat **pasta** with **is**

What is a **nice** thing to eat pasta with?

A **nice** thing to eat **pasta** with **is**

What is a **tidy** thing to eat pasta with?

A **tidy** thing to eat **pasta** with **is** a **fork**.

What is a **nice** thing to eat pasta with?

A **nice** thing to eat **pasta** with **is** **pesto**.

First the LLM weights all the relationships between all the words it knows, in thousands of dimensions, based on its immense corpus of training data. But then, crucially, it looks at what words have come before and reweights those associations. It is possible that within the model's computations, "tidy" has a close relationship with "utility" and "tools" and that informs the output.

Indeed the word "with" itself will be reweighted by the preceding terms to lie closer to one set of its alternatives, such as "using", "by means of". In the second sentence "nice", it seems, has relationships with "taste" and "flavour" and the word with gets reweighted to lean closer to its other alternative, "accompanied by".

2. Large Language Models: Linguistic calculations

The words, and in some cases parts of words, such as the plural marker "s" or the prefix "un-", are stored in the model as **tokens**. Each **token** is represented not as a sequence of letters, but as a **vector**, a sequence of numbers.

A transformer is a mathematical process that recalculates the vector for each **token**, that is, it assigns new distances between each pair of **tokens**, based largely on what other **tokens** are in the utterance. If you ask "What is a tidy thing to eat pasta with?" and in a different chat "...? What is a nice thing to eat pasta with?" the LLM will start typing its answer.

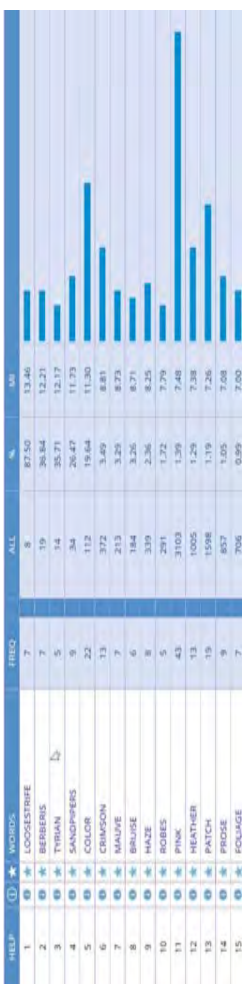
The basic predictive text in SMS apps, in contrast, only really has one dimension; what is the word which comes next. But crucially an LLM is still, deep down, only figuring out what word - or sequence of words - is most likely to come next. It can do so much better than predictive text for two related reasons: "transformers" and "attention".

The sibling s are un happy



<https://www.english-corpora.org/mutualInformation.asp>

BNCweb



2. Large Language Models: Linguistic Principles „collocates“

SEARCH

WORD

CONTEXT

ACCOUNT

See in iWeb

Collocates

Clusters

Topics

KWIC

HELP

alcohol

(NOUN)

2202

BLOG

WEB

TV/M

SPOK

PIC

MAG

NEWS

ACAD

1. a liquor or brew containing alcohol as the active agent 2. any of a series of volatile hydroxyl compounds that are made from hydrocarbons by distillation

alcohol

alcoholic

alcoholism

alcohol-related

alcohol-free

alcohol-based

blood-alcohol

TOPICS (more)

drinking, drug, liquor, substance, cocaine, abuse, smoking, addiction, marijuana, heroin, smoking, consumption, drink, beer, drunk, treatment, excessive, use, harmful

COLLOCATES (more)

NOUN

drug, use, abuse, consumption, tobacco, problem, blood, level

VERB

drink, consume, rub, avoid, abuse, smell, smoke, associate

ADJ

fetal, excessive, illegal, heavy, moderate, illicit, smoking, related

ADV

eg. ie, prenatally, voluntarily, negatively, excessively, moderately, capita

RELATED WORDS

alcoholic, alcoholism, alcohol-related, alcohol-free, alcohol-based, blood-alcohol

2. Large Language Models: SWOT Analysis ChatGPT in education



Farrokhnia et al. 2024: 468

3. Brainstorming: Ask Gemini ethical issues

Large Language Models (LLMs) are powerful tools, but their use in research articles raises some ethical concerns. Here are some key areas to consider:

Authorship and Credit: Who gets credit for research findings when an LLM helps generate content? Should the LLM be a co-author? How much human oversight is needed? These are open questions that can blur the lines of traditional authorship. Oxford study on LLM responsibility [invalid URL removed]

Transparency and Reproducibility: Research relies on being able to repeat and verify findings. If an LLM is involved in data analysis or literature review, how can researchers ensure transparency about the LLM's role and limitations? Can others replicate the research if they don't have access to the same LLM?

Bias and Accuracy: LLMs are trained on massive amounts of data, which can reflect societal biases. These biases can be unknowingly incorporated into research articles, leading to skewed or inaccurate findings. Researchers need to be aware of these potential biases and take steps to mitigate them.

Overtrust and Misinformation: It's easy to be impressed by an LLM's ability to generate text. However, LLMs can still produce factually incorrect or misleading content. Researchers need to critically evaluate the LLM's outputs and avoid uncritically accepting them as truth.

These are just some of the ethical considerations surrounding LLM use in research. As this technology continues to develop, researchers and publishers will need to grapple with these issues and develop best practices for ethical and responsible LLM use.

3. Brainstorming: Ask ChatGPT4 ethical issues

Using Large Language Models (LLMs) for research articles raises several ethical considerations that researchers should carefully address. Here are some key ethical issues:

1. Bias and Fairness
2. Plagiarism
3. Authorship and Attribution
4. Privacy and Confidentiality
5. Manipulation and Misinformation
6. Impact on Academic Publishing
7. Environmental Impact
8. Equitable Access

Addressing these ethical issues requires a combination of **awareness, transparency, accountability, and proactive measures** to mitigate potential risks and promote responsible use of LLMs in research articles.

4. Research applications: Specialized writing

social media		„Artificial Intelligence“		„Office“	
chatbots		Large Language Models (LLMs)			
Teacher		Researcher for Ac. Writing (+critical thinking) NOT Data Processing & Analysing, Outreach, etc. (cf. Ray 2023, Farrokhnia et al. 2024)			
Lecture Planning	Skills Practice	Specialised Concepts	Publishing Conventions	Academic Style	
Course-Curriculum-	„Rules“, etc. Translation		abstract title key words	metadiscourse	

4. Research Publishing: the Art of Prompting

1. Title		Suggest a title for this research journal abstract	
2. Abstract		Suggest a 300 word abstract for this title: Using large Language Models to write Research articles	
3. Keywords		Suggest 5 keywords for this research journal abstract	
4. Introduction		Write an (historical?) introduction for this research journal abstract	
5. Literature Review		Write a literature review for this research journal abstract	
6. Methodology		Which methodologies can I use for this article?	
7. Case Study or Analysis		Find 3 case studies for this issue	
8. Discussion		Which conclusions may I arrive at in this article?	
9. Conclusion		Which 10 references are crucial for this article?	
10. References			

4. Research: GPT4 Research Article Structure

Research articles in digital humanities typically follow a structure that combines traditional humanities scholarship with innovative digital methodologies and tools. While the specific structure may vary depending on the nature of the research and the preferences of individual researchers or journals, here's a prototypical structure commonly used in digital humanities research articles:	
1. Title Page	https://token.ujk.edu.pl/volumes/volume-16/
2. Abstract	TOKEN 16 (2023)
3. Keywords	Special issue: Patterns of Language Variation and Change in Academic Writing
4. Introduction	Guest editors: Josef Schmied (Chemnitz University of Technology), Marina Bondi (University of Modena and Reggio Emilia), Olga Dontcheva Navratilova (Masaryk University) and Carmen Pérez-Llantada (University of Zaragoza)
5. Literature Review	
6. Methodology	
7. Case Study or Analysis	
8. Discussion	
9. Conclusion	
10. References	
11. Appendices (if applicable)	
This structure provides a framework for organizing research articles in digital humanities, integrating traditional humanities scholarship with innovative digital methodologies and technologies. Researchers should adapt and refine this structure to fit the specific requirements and conventions of their discipline, as well as the aims and scope of their research projects.	

4. Research Applications: ask GPT to “improve it”??

1. Structural Overhaul (Advanced Clarity)	https://www.instagram.com/ireel/DKtWueNuPvI?gsh=Z3dnZWNRt3l0MMWNR
“Rewrite the following content using a layered structure with clear headings, subheadings, and concise bullet points. Emphasize logical flow, prioritize clarity, and ensure seamless readability across complex or technical concepts.”	
Instructional Style: Modular formatting, high-level coherence.	
2. Tone Optimization (Intent-Driven Refinement)	
“Revise this content to elevate its tone to suit a [choose: professional conversational persuasive emotional humorous luxury] audience. Enhance vocabulary and sentence rhythm while preserving clarity, intention, and brand alignment.”	
3. Audience Alignment (Persona-Tailored Rewrite)	
“Refactor this content to directly address [insert audience personal. Adjust language style, emotional resonance, and specificity of examples to match the reader's pain points, desires, and level of awareness.”	
4. Persuasion Amplifier (Conversion-Driven Enhancement)	
“Strengthen this content using persuasive frameworks -add urgency, scarcity, proof, and emotional triggers to improve conversions. Optimize calls-to-action and psychological anchors for buyer readiness.”	
5. Brand Voice Deepening (Signature Style Matching)	
“Revise this text to reflect [insert brand]'s distinct voice. Match its pacing, phrasing, and tone. Infuse storytelling and consistent brand energy while preserving the original intent.”	
6. SEO & Discoverability Enhancer (Search-Optimized Rewrite)	
“Revise this content to improve searchability and discoverability across platforms. Integrate high-intent keywords, optimize for algorithmic relevance (Instagram, TikTok, YouTube, or Google-specify one), and ensure the language aligns with trending queries while maintaining natural readability.”	

Based on the findings from the case studies and the literature review, several conclusions can be drawn **regarding the utilization of Large Language Models (LLMs) in research article composition**:

- Enhanced Writing Efficiency and Productivity:**
 - LLMs offer researchers a powerful tool for streamlining the writing process, leading to increased efficiency and productivity.
 - Researchers using LLMs can generate coherent and contextually relevant text more quickly, enabling them to produce research articles in a more timely manner.
- Facilitated Interdisciplinary Collaboration**
- Improved Writing Creativity and Exploration**
- Ethical Considerations and Challenges**
 - The use of LLMs in research article composition raises important ethical considerations related to bias mitigation, plagiarism prevention, and authorship attribution.
 - Ethical guidelines and safeguards are essential to ensure responsible use of LLMs and mitigate potential risks associated with bias, plagiarism, and data privacy.
- Opportunities for Future Research and Development**

In conclusion, the integration of LLMs into research article composition holds immense potential for enhancing writing efficiency, promoting interdisciplinary collaboration, and fostering creativity in the scholarly community. However, it is crucial for researchers to navigate the ethical considerations associated with LLM-assisted writing responsibly and transparently. By critically evaluating the opportunities and challenges of LLMs in academic writing, researchers can harness their transformative potential to advance knowledge and scholarship in the digital age.

Englisch (Britisch)

Vorschläge Varianten

Änderungen anzeigen

58

Änderungen austauschen

The fast development of AI opens up new possibilities for learning and using foreign languages. Although tools like ChatGPT, Bard, Perplexity, or DeepL are currently free, their applications need to be learned to use them effectively for personal or professional needs. In this course, we will explain the basics of the most common AI tools (often called "stochastic parrots"). We'll apply these tools to various types of English texts, such as travelogues, book reviews, summaries, etc., and discuss the results generated by AI. We don't write - we improve. We don't translate - we compare versions. This course is suitable for anyone who wants to create foreign-language texts, especially at an advanced level, either for personal or professional purposes.

The rapid development of artificial intelligence is opening up new possibilities for development of AI

New opportunities for learning and using foreign languages are opening up with the rapid development of AI

The rapid development of artificial intelligence is opening up new possibilities for

The rapid development of AI presents new opportunities for learning and utilising foreign languages. While tools such as ChatGPT, Bard, and **formal tentative** are available at no cost, it is necessary to gain an **understanding** of their applications in order to utilise them effectively for personal or professional purposes. This course will present **specific positive** **specific verbose?** fundamental concepts associated with the most prevalent AI tools, which are often referred to as "stochastic parrots". The course will apply these tools to a variety of English texts, including **less personal** reviews, summaries, and others. The results generated by AI will be discussed. Rather than writing, the focus will be on improving existing texts. Rather than translating, the objective will be to compare versions. This course is suitable for anyone who wants to create foreign-language texts, especially at an advanced level, for personal or professional purposes.

explicit

25

UNIVERSITÄT
DUISBURG
ESSEN
VIRTUeller
KOLLEG

IntroductionLLMsBrainstormingResearch ApplicationsDevelopmentsConclusions

22/40

4. Research Publishing: Improve AI Proposals

DeepL

Write

Ämteiden

Optimierte Texte mit DeepL Write

Änderungen anzeigen

58

Änderungen austauschen

The fast development of AI opens up new possibilities for learning and using foreign languages. Although tools like ChatGPT, Bard, Perplexity, or DeepL are currently free, their applications need to be learned to use them effectively for personal or professional needs. In this course, we will explain the basics of the most common AI tools (often called "stochastic parrots"). We'll apply these tools to various types of English texts, such as travelogues, book reviews, summaries, etc., and discuss the results generated by AI. We don't write - we improve. We don't translate - we compare versions. This course is suitable for anyone who wants to create foreign-language texts, especially at an advanced level, either for personal or professional purposes.

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25

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VIRTUeller
KOLLEG

IntroductionLLMsBrainstormingResearch ApplicationsDevelopmentsConclusions

24/40

4. Research Applications: hype on Social Media, Youtube, etc

<https://www.youtube.com/watch?v=O60Ha2woAZI>

YouTube

Suchen

Ämteiden

The fastest way to do your literature review with AI

Academic English Now

144.000 Abonnenten

Alle

Von Academic English Now

Lerninhalte

Ämteiden

Why Your Dissertation Committee Choice Might ...

1:34

14.4k Aufrufe · vor 3 Wochen

Narrative Review is Systematic Review How to Write a Narrat...

1:34

14.4k Aufrufe · vor 3 Wochen

Don't Use AI to Paraphrase Until ...

1:34

14.4k Aufrufe · vor 3 Wochen

3. UNGLAUBLICH NÜTZLICHE AI-Tool für die Forschung in...

1:34

14.4k Aufrufe · vor 3 Wochen

Literature Review Writing 2021: How to write a literature reve...

1:34

14.4k Aufrufe · vor 3 Wochen

4. Research

AI TOOLS YOU NEED TO KNOW

Create by Rene Remsik @aitrendz.xyz



4. Research

50 AI tools for teachers



4. Research Applications: “Literature Review”

Finding papers	 Litmaps  Bohrium
Reading papers	 enago Read  scholarly
Writing literature review	 grammarly  Paperpal  Overleaf
Data extraction	 SciSummary Assistant  EvidenceHunt
Data Analysis	 NVIVO  Julius  myData
Managing references	 Mendeley  Zotero  x9
Critical analysis	 Connected Papers  scite_  ResearchPal
Create First Draft	 AnswerThis  arXiv  PubMed
Find references	 Google  thesify  TRINKA
Proofread your paper	 Journal Review  Sage
Select relevant journal	

4. Research Applications: “Literature Review”

<https://www.instagram.com/p/DQhghePAkLs/?igsh=M5MA%3D%3D>

4. Research Applications: “recommended AI tools” PhD

PhD life is tough, but the right AI tools can save you HOURS of stress and effort. From writing and coding to organizing and analyzing, these 7 hottest PhD-friendly AI tools are absolute game changers!

1 | Litmaps - Literature Discovery & Visualization

- This helps Ph.D students map out a research landscape and find key, often missed, papers quickly.

An AI-powered academic search engine that instantly finds evidence-based answers from peer-reviewed scientific papers.

- 3 SciSpace - All-in-One Research Platform
<https://scispace.com/>

- literature review and citation generation.

- It helps structure content, autocompletes text and provides real-time feedback and citation management in over 2 600 styles

- management in over 2,600 styles.
- 5** NotebookLM - Source-Grounded Research & Synthesis
<https://notebooklm.google/>

- Works exclusively with your uploaded sources. It generates insights, outlines and summarises from your own documents.

4. Research Applications: “recommended AI tools” PhD

Chatbots, Agents, and LLMs: A Synergistic Relationship

relationship of chatbots, agents and LLMs

Summary of top 4 papers

Recent research highlights the significant impact of Large Language Models (LLMs) on conversational AI, enhancing chatbots and virtual assistants across various industries (Parasita & Alam, 2023). LLM-based chatbots have set new standards in AI, offering improved natural language understanding and generation capabilities (Duan et al., 2024). These models excel at capturing linguistic nuances and context, leading to more human-like interactions and adaptability across diverse tasks (Gazoual & Alam, 2023). Benchmarking LLM-powered chatbots is crucial for assessing their performance, with the proposed L24 benchmark showing promising results in evaluating accuracy and usefulness (Bhargava et al., 2023). While LLMs have demonstrated improvements in chatbot response quality compared to traditional rule-based approaches, a combination of methods is suggested as the best way forward (McFarlat et al., 2023). Despite their advancements, challenges such as ethical considerations and biases remain important areas for ongoing research and development (Gazoual & Alam, 2023; Duan et al., 2024).

Abstract summary

This paper provides a comprehensive survey on the evolution and deployment of applications, and the challenges involved.

A Complete Survey on LLM-based AI Chatbots

Sunil Kumar Duan

arXiv.org

2024-11-14

DOI ID

Add new step

LLMs for Conversational AI: Enhancing Chatbots and Virtual Assistants

LLMs, Generative AI & AI have significantly enhanced the capabilities of chatbots.

What do you plan to do with Paperpal Today?

Enhance language, academic tone and rephrase my text

210 M+ sentences perfected

Support my writing with citations and well-researched content

250 M+ research articles repository

Get writing suggestions, outlines, and use my notes to write

413K suggestions provided

Improve Writing

Research & Cite

Help me Write

I am here to explore

CONNECTED PAPERS

ShareFollowAboutPricingLog in

Explore academic papers in a visual graph

Build a graph

Search by keywords, paper title, DOI or another identifier

ResearchRabbit

SearchLibrary

small language models

Van Nguyen, 2024

A Survey of Small Language Models

arXiv.org

Small Language Models (SLMs) have become increasingly important due to their efficiency and performance to perform various language tasks with minimal computational resources, making them ideal for various settings including on-device, mobile, edge devices, among many others. In this article, we present a comprehensive survey on SLMs, focusing on their architectures, training

Wang, 2024

A Comprehensive Survey of Small Language Models in the Era of Large Language Models: Techniques, Enhancements, Applications, Collaboration with LLMs, and Trustworthiness

arXiv.org

Large language models (LLMs) have demonstrated emergent abilities in text generation, question answering, and reasoning, facilitating various tasks and domains. Despite their proficiency in various tasks, LLMs like PaLM 540B and Llama-3.1 405B face limitations due to large parameter sizes and computational demands, often requiring cloud API use which raises privacy concerns.

5. Developments: Small → Tiny Language Models

TinyStories: How Small Can Language Models Be and Still Speak Coherent English?
Ronen Eldan, Yuanzhi Li

Language models (LMs) are powerful tools for natural language processing, but they often struggle to produce coherent and fluent text when they are small. Models with around 125M parameters such as GPT-Neo (small) or GPT-2 (small) can rarely generate coherent and consistent English text beyond a few words even after extensive training. This raises the question of whether the emergence of the ability to produce coherent English text only occurs at larger scales (with hundreds of millions of parameters or more) and complex architectures (with many layers of global attention). In this work, we introduce TinyStories, a synthetic dataset of short stories that only contain words that a typical 3 to 4-year-olds usually understand, generated by GPT-3.5 and GPT-4. We show that TinyStories can be used to train and evaluate LMs that are much smaller than the state-of-the-art models (below 10 million total parameters), or have much simpler architectures (with only one transformer block), yet still produce fluent and consistent stories with several paragraphs that are diverse and have almost perfect grammar, and demonstrate reasoning capabilities. We also introduce a new paradigm for the evaluation of language models: We suggest a framework which uses GPT-4 to grade the content generated by these models as if those were stories written by students and graded by a (human) teacher. This new paradigm overcomes the flaws of standard benchmarks which often requires the model's output to be very structured, and moreover provides a multidimensional score for the model, providing scores for different capabilities such as grammar, creativity and consistency. We hope that TinyStories can facilitate the development, analysis and research of LMs, especially for low-resource or specialized domains, and shed light on the emergence of language capabilities in LMs.

Subjects: **Computation and Language (cs.CL)**, Artificial Intelligence (cs.AI), Machine Learning (cs.LG)
Cite as: [arXiv:2305.07759 \[cs.CL\]](https://arxiv.org/abs/2305.07759)
(or [arXiv:2305.07759v2 \[cs.CL\]](https://arxiv.org/abs/2305.07759v2) for this version)
<https://doi.org/10.48550/arXiv.2305.07759>

5. Developments: compare shared results of 11 LLMs

EYE2.AI

what are small language models and how can I use them in PhD writing

SHARED RESULTS

Small language models are compact AI models with fewer parameters

They require less computational power and can run on personal devices

Use them for idea generation and brainstorming research questions

ChatGPT 0.2s

Small language models are AI models designed to understand and generate human-like text but with fewer parameters and less computational power compared to large models like GPT-4. They are faster, require less memory, and can be run on personal devices, making them more accessible for individual use.

How can you use small language models in PhD writing?
Idea Generation: They can help brainstorm research questions, hypotheses, or topics.
Drafting: Assist in writing sections of your thesis by generating text based on your input.
Summarization: Condense long articles or papers into concise summaries.
Paraphrasing: Help rewrite sentences or paragraphs to improve clarity or avoid plagiarism.
Language Support: Improve grammar, style, and coherence in your writing.

LLAMA 0.2s

What are small language models?
Small language models, also known as compact or lightweight language models, are AI-powered language processing tools that are designed to be smaller, faster, and more efficient than their larger counterparts. They are typically trained on smaller datasets or use pruning techniques to reduce their size while maintaining their language understanding capabilities. These models are often used in applications where computational resources are limited, such as mobile devices, embedded systems, or web browsers. They can also be useful for PhD writing, as they can provide quick language suggestions, grammar corrections, and even help with writing style and clarity.
How can I use small language models in PhD writing?
Here are some ways you can utilize small language models to enhance your PhD writing:
Language suggestions and corrections: Small language models can help

5. Developments: a chain of tools?

<https://www.instagram.com/reel/DPK5NVQEbI/?igsh=MMhpN3F2bW4xdKIwaA%3D%3D>
Search topic in Perplexity → sources
→ Copy top 20 links into Notebook LM
→ Customize Video Overview + Define your Learning Goals
→ Creates a video course with all slides

Small Language Models to avoid energy/overuse
vs.
Multiple Language Models to avoid hallucinations and biases

5. Developments: compare shared results of 6 major LLMs

Example: Lmarena, app.chathub.gg
“the developments of the concept of metaphor since the seminal work by Johnson/Lakoff with 30 references” brings good results:

GPT-5.1

prepare 20-40 tailored entries with annotations and links/DOIs where available.
Would you like the references output in a particular citation format, annotated, or narrowed to a specific sub-area (e.g., neurocognitive, corpus/computational, cross-cultural)?

Claude-Sonnet-4.5

30. Macha, J. (2013). Conceptual Metaphor Theory and Classical Theory. *Philosophical Studies*, 3(1), 105-120. (Accessible via philarchive.org/archive/MCHCMT)
31. Kövecses, Z. (2005). *Metaphor in Culture: University and Variation*. Cambridge University Press.

Gemini 2.5 Pro

Approach: Modou de Gruyter
30. Yu, N., & Deesen, K. (2023). Global bibliometric analysis of conceptual metaphor research over the past 40 years. *PLOS ONE*, 18(2), e0281292. (Bibliometric overview; see also Stanenkov et al., 2019, on DMT in Language and Cognition).

Minotaur Large

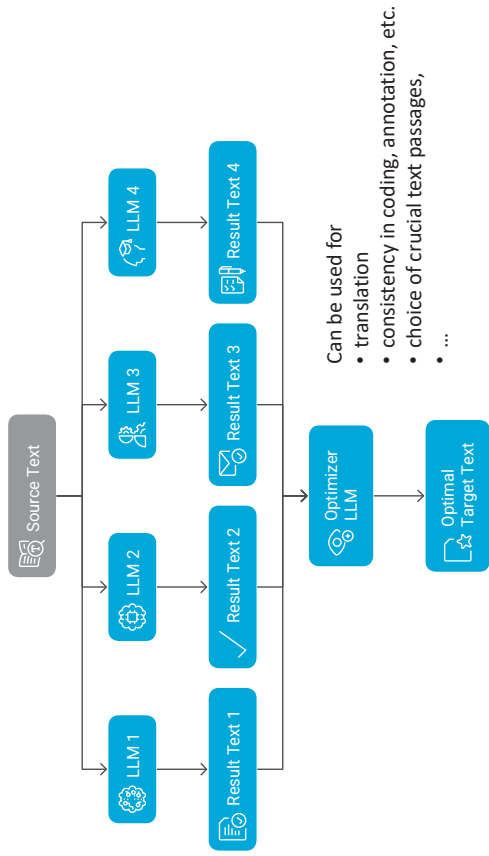
(1999). *Philosophy in the Flesh: The Embodied Mind & Its Challenge to Western Thought*. Basic Books.
These references and developments illustrate the rich and evolving landscape of metaphor research since Lakoff and Johnson's seminal work.

DeepSeek-V3.2

Discourse: Cambridge University Press (A comprehensive overview of applied approaches).
This trajectory shows that metaphor has evolved from a linguistic curiosity to a central topic in cognitive science, with ongoing debates ensuring it remains a vibrant area of research.

Meta 4

• Semino, E. (2008). *Metaphor in Discourse*. Cambridge University Press. |
<https://doi.org/10.1017/9780521875666>



Aktay, S., S. Gök, D. Uzunoglu (2023). ChatGPT in education. *Türk Akademik Yayınlar Dergisi (TAY Journal)* 7(2), 378-406.

Claude AI (2024). How to write a research paper with Claude AI. <https://claudeai.uk/how-to-write-a-research-paper-with-claude-ai/>

Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. (2024). A SWOT analysis of ChatGPT: Implications for educational practice and research. *Innovations in Education and Teaching International* 61(3), 460–474. <https://doi.org/10.1080/14703297.2023.2195846>

Johannesson, P. (2024). *Writing Your Thesis with ChatGPT. Research, Scholarship and Academic Writing in the Age of Generative AI*. <https://writingyourthesiswithchatgpt.wordpress.com/>.

Skrabut, St. (2023). *80 Ways to Use ChatGPT in the Classroom: Using AI to Enhance Teaching and Learning*. StanSkrabut.

Schmied, J. (2026). Specialised Discourse with Agents? Beyond ChatGPT in Academic English. Olga Dontcheva-Navratilova; O. and R. Povolná (eds.). Analytical Perspectives on Text Analysis. Palgrave Macmillan.

Schmied, J., Atabekova, A., Freddi, M., Radić, N. (2026). Conceptualising Innovations and Developments in Language Teaching and Learning: The Way Forward. Radić, N., et al.

Schmied, J., M. Bondi, O. Dontcheva Navratilova, & C. Pérez-Llantada (eds.) (2023). Patterns of Language Variation and Change in Academic Writing. Special Issue. *TOKEN: A Journal of English Linguistics* 16. <https://token.ujk.edu.pl/volumes/volume-16/>

Suriano, R., Plebe, A., Acciai, A., & Fabio, R. A. (2025). Student interaction with ChatGPT can promote complex critical thinking skills. *Learning and Instruction*, 95, 102011.

In the end, the AI user decides – and is responsible!

- Copyright issues are still unclear?
<https://noyb.eu/en/chatgpt-provides-false-information-about-people-and-openai-cant-correct-it>
- In academic writing and publishing, all aids and resources used must be specified clearly!
e.g.
<https://stm-assoc.org/document/recommendations-for-a-classification-of-ai-use-in-academic-manuscript-preparation/>

What you do not have to reveal!

Use of AI in the preparation of academic manuscripts (*)	Description of the activity	Examples of the activity	Activity does NOT include
1 Refinement, correction, editing or formatting the manuscript to improve clarity of language (**)	Machine tools were used to suggest language improvements within the manuscript	Using spell checkers, grammar checkers and similar tools (e.g. Microsoft 365's built-in editing tools) to refine text written primarily by humans	Using AI tools to generate text from prompts or generate summaries of text; using AI tools to analyse or summarise textual documents as part of the research process
9 Presentation of any kind of content generated by AI tools as though it were original research data/results from non-machine sources (***)	AI tools were used to create data, text, images, graphs, spectra, or other content that is presented as though it were original research data/results collected or analysed from other, non-machine sources	Any content generated wholesale by AI tools without any basis in original research data/outputs presented as though it is based on original data/results	Using AI tools to visualise original research data/results (activity 6); carrying out research on the outputs of generative AI (in which case outputs generated by the AI being studied can be considered research data)

Recent Developments in GenAI: From Large to Multiple and Small Language Models? Applications for PhD Students



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