



# „Fachliteratur und KI“

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# Disclaimer

- Neue Tools entstehen, andere verschwinden
- In 2-3 Wochen möglicherweise schon wieder veraltet
- Z.B. GPTs
- Rechtliche Lage teils unklar

Wichtig:

- Bei allen Tools Ergebnisse kontrollieren, gegenchecken

# Ziel der Lecture

- Zeigen, was jetzt (23.11.2023) möglich ist
- Einordnen, wo es noch Grenzen gibt
- Lust machen aufs Ausprobieren
- Möglichst nur wenige Werkzeuge vorstellen

# Fachliteratur & KI



# Use-Cases

- Einstieg in ein Thema
- Weitergehende Exploration eines Themas
- Zusammenhänge visualisieren: Wer zitiert wen?
- Literatur finden, schnell überblicken
- Literatur verstehen:
  - Mit Artikel(n) chatten
  - zusammenfassen lassen
  - erklären lassen
  - übersetzen lassen

# Welche Tools?

- Noch kein Kanon erkennbar: Welche Tools werden sich durchsetzen?
- Chat GPT bleibt außen vor: Nur spezialisierte Tools
- Ausprobieren, was schon geht
- Welches Tool passt zu meinem Workflow
- Welche Datenbasis deckt am besten die Literatur in meinem Fach ab?
- Wo kann ich anfangen?
  - Übersichtsseiten am Ende verlinkt

# Einstieg in ein Thema





# Perplexity

The screenshot shows the Perplexity AI website interface. On the left is a sidebar with the Perplexity logo, a 'New Thread' button with a keyboard shortcut 'Ctrl I', and navigation links for Home, Discover, Library, and Login. A prominent 'Sign Up' button is also present. Below these is a 'Try Pro' section with a 'Learn More' link. At the bottom of the sidebar are icons for Download, a close button (X), and a chat icon.

The main content area features the headline 'Where knowledge begins' and a large search input field with the placeholder text 'Ask anything...'. Below the input field are search filters for 'Focus' and 'File', a 'Copilot' toggle switch, and a submit button with a right arrow. A 'Try asking' button is centered below the input field. A horizontal list of search suggestions follows, including 'history of Argentina', 'unique colorado flowers', 'checkout time w hotel cdmx', 'how to center a div', 'brown dog name ideas', 'healthy restaurants in sf', and a mathematical query 'd/dx x^2 y^4, d/dy x^2 y^4'. At the bottom of the main area are links for 'Try Pro', 'Careers', 'Labs', and 'Blog', along with a help icon (question mark) in a dark circle.



# Perplexity



Anonymous 1 Like



New Thread Ctrl I

Home

Discover

Library

Login

Sign Up

Try Pro

Upgrade to Claude-2 or GPT-4, boost Copilot uses, and upload more files.

Learn More

## The history of the Nokia ringtone

### Sources

Did you know the original Nokia ringtone comes...

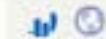
classicfm · 1

Nokia tune - Wikipedia

wikipedia · 2

Where Nokia's Ringtone Originally Came From? - ...

youtube · 3



View 2 more

### Answer

#### History of the Nokia Ringtone

The original Nokia ringtone, also known as the "Grande Valse," is derived from a piece of Spanish classical guitar music composed by Francisco Tárrega in 1902. The ringtone was first heard in a Nokia 1011 advert in 1992 and was later renamed the "Nokia tune" in 1998, becoming Nokia's flagship ringtone <sup>1</sup> <sup>2</sup>. The tune was shaped by an English musician called Thomas

Ask follow-up...

Copilot

[www.perplexity.ai](http://www.perplexity.ai)

# Semantic Scholar

Sign In


Create Free Account



## SEMANTIC SCHOLAR

A free, AI-powered research tool for scientific literature

Search 214.916.704 papers from all fields of science

Search 

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# Semantic Scholar



SEMANTIC SCHOLAR

intonation \tone languages\

Search 🔍

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About 26,400 results for "intonation \tone languages\"

Fields of Study ▾

Date Range ▾

Has PDF

Author ▾

Journals & Conferences ▾

Sort by Relevance ▾



## Intonation in African Tone Languages

L. Downing Annie Rialland Linguistics · 7 January 2016

The volume brings together two-underinvestigated areas of intonation typology. While tone languages make up to 70 percent of the world's languages, only few have been explored for intonation. And...

Expand

👍 53 📄 Publisher 📌 Save 🗣️ Cite

## Intonation in Tone Languages:

P. E. Ejele Linguistics · In the Linguistic Paradise · 19 February 2019

📄 Publisher 📌 Save 🗣️ Cite

## Handling Prosody and Tone Languages

L. Aliou M. W. W. Linguistics · 2019

[www.semanticscholar.org/](http://www.semanticscholar.org/)

# Consensus



beta

Sign up

Sign In



Ask a question, get conclusions from research papers

Ask a research question



Try Searching:

does creatine help build muscle?

what are benefits of mindfulness?

<https://consensus.app>

# Consensus

The screenshot displays the Consensus app interface. At the top, there is a search bar with the query "Does fish oil improve mood?". To the right of the search bar are "Sign up" and "Sign In" buttons. Below the search bar, there are buttons for "Synthesize", "Filter", "Save search", and "Share". A blue banner indicates that the features are in Beta and not 100% accurate. The main content is divided into two panels: "Summary" and "Consensus Meter".

**Summary** (Top 10 papers analyzed):  
Some studies suggest that fish oil can improve mental health in specific populations, such as adults with depression and children with depressive disorder, while other studies show no substantial effect on mood in the general adult population or in patients with ischemic stroke.

**Consensus Meter** (15 papers analyzed):

Response	Percentage
Yes	53%
Possibly	7%
No	40%







16 highly relevant results


<https://consensus.app>

Export csv




# Consensus



 beta      

 **Omega-3 polyunsaturated fatty acids and mood disorders** • Yes

Fish oil, especially EPA, appears to improve depressive patients or bipolar patients in depressive phase when given at 1-2 g/day, and prevents depressive recurrences in bipolar patients.

Oléagineux, Corps gras, Lipides | P. Astorg et al. | 1 citations | 2007

 **Observational Study**

  Study Snapshot Save Cite Share

 **Applications of Fish Oil Supplementation for Special Operators.** • No

Fish oil supplementation has minimal impact on mood states.

# Consensus

## Affordable Plans for Intuitive & Reliable Research

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- ✓ Unlimited AI-powered filters
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Current plan

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Everything in Free plus...

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- ✓ Unlimited Consensus Meters
- ✓ Unlimited Study Snapshots
- ✓ Bookmarks
- ✓ And more features on the way!

Upgrade plan

### Enterprise

**Custom**

Everything in Premium plus...

- ✓ Manage accounts for your organisation
- ✓ Share bookmarks and lists with your team
- ✓ Integrate with your research library
- ✓ And much more. Reach out to help us shape the enterprise product!

Contact sales

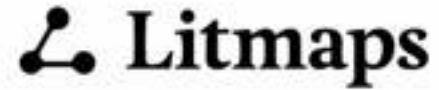
<https://consensus.app>



# Netzwerke visualisieren



# Litmaps



About ▾

Features

Pricing

Pricing

Blog

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# Discover the world of Scientific Literature

🔍 Search by keyword, author, DOI, Pubmed ID or arXiv ID

<https://app.litmaps.co/>

# Litmaps

**Litmaps**

- Seed
- Discover
- Map

Welcome!

Sign up for a free account to access more Litmaps features.

Create Free Account

Sign In

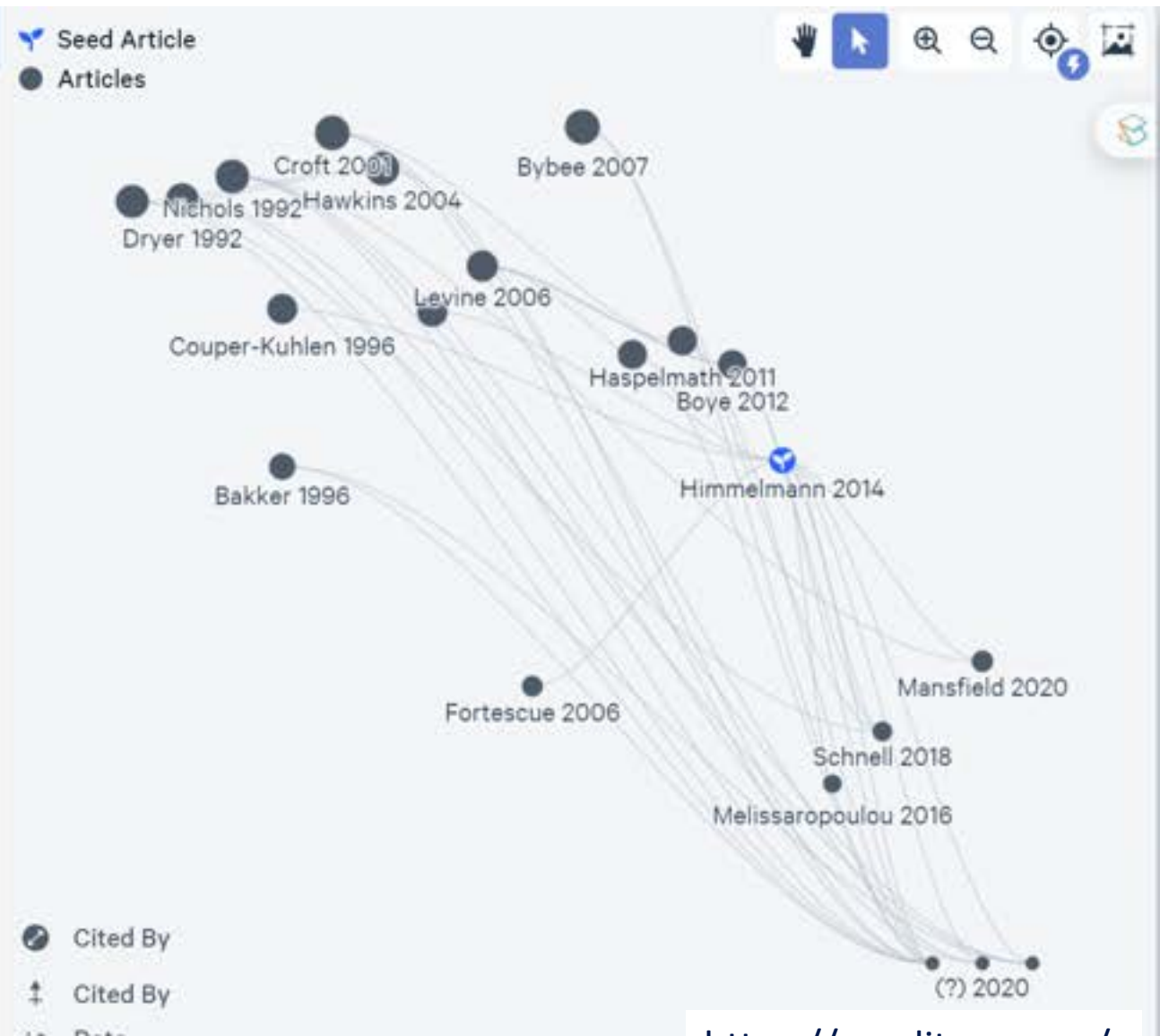
Back Seed Map

Asymmetries in the prosodic phrasing of function words: Another look at the suffixing preference  
Himmelmann, 2014

Discover 20 more related articles Save...

What's this? Seed Map Articles

- CATEGORY CLUSTERING: A PROBABILISTIC BIAS IN THE  
● Mansfield, 2020 – Language  
99 85 ⇄ 14
- Edinburgh Research Explorer Revisiting the suffixing preference  
● (?), 2020  
99 37 ⇄ 0
- Prosody in conversation : interactional studies



# Litmaps

The screenshot displays the Litmaps web application interface. On the left is a navigation sidebar with options: Seed, Discover, Map, Your Library, Recent Activity, Support, What's New, and Documentation. The main area is titled "Unsaved Search" and includes filters for "Top Connected" (5 Inputs, 0 Outputs), search terms "suffixing preference" and "language processing", and a time filter set to "All Time". Below the filters, a list of search results is shown, including "Cognitive and linguistic biases in morphology learning" (Finley, 2018), "Fitting Linear Mixed-Effects Models Using lme4" (Bates, 2015), and "Enchronymy" (Enfield, 2022). On the right, a network visualization shows a central cluster of papers connected to a ring of peripheral papers. The central cluster includes "Seifart 2018" and "Himmelmann 2014". The peripheral ring includes "Pycha 2015", "Finley 2018", "Harris 2021", "Hahn 2022", "Enfield 2022", "Easterday 2021", "Seifart 2018", "Bates 2015", "Goldman-Eisler 1968", and "Sapir 1955". A legend indicates that blue circles represent "Results" and black circles represent "Inputs".

**Search Filters:**

- Top Connected: 5 Inputs, 0
- Search: suffixing preference, language processing
- Time: All Time, Recent Only, Custom...

**Search Results:**

- Cognitive and linguistic biases in morphology learning.**  
● Finley, 2018 - Wiley Interdisciplinary Reviews: Cognitiv...  
Details 99 133 ⇄ 7
- Fitting Linear Mixed-Effects Models Using lme4**  
● Bates, 2015 - Journal of Statistical Software  
Details 99 39 ⇄ 54.2k
- Enchronymy.**  
● Enfield, 2022 - Wiley interdisciplinary reviews. Cogniti...  
Details 99 94 ⇄ 5

**Network Visualization:**

- Central Nodes: Seifart 2018, Himmelmann 2014
- Peripheral Nodes: Pycha 2015, Finley 2018, Harris 2021, Hahn 2022, Enfield 2022, Easterday 2021, Seifart 2018, Bates 2015, Goldman-Eisler 1968, Sapir 1955, Cutler 1985, Hawkins 1988



# Litmaps

License type Commercial Educational

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<p><b>Free</b></p> <p>Free</p> <hr/> <ul style="list-style-type: none"><li>• Basic Discover</li><li>• 20 Discover inputs</li><li>• No search monitoring</li><li>• 1 Litmap</li><li>• 100 articles per Litmap</li></ul> <p>Active</p>	<p><b>Litmaps Pro</b> ✓</p> <p>€46 / month</p> <hr/> <ul style="list-style-type: none"><li>• Advanced Discover filters</li><li>• Unlimited Discover inputs</li><li>• Weekly Search Monitoring</li><li>• Unlimited Litmaps</li><li>• Unlimited articles per Litmap</li></ul> <p>Selected</p>
--	---

# Connected Papers



## DeepFruits: A Fruit Detection System Using Deep Neural Networks

Prior works

Derivative works

List view

Filters

More

### Origin paper

DeepFruits: A Fruit Detection System Using Deep Neural Networks

Inkyu Sa, ZongYuan Ge, Feras Dayou... 2016

Convolutional Neural Networks (CNN) for Detecting Fruit Information Using...

Fouzia Risdin, P. Mondal, Kazi... 2020

Automatic Fruits Classification System Based on Deep Neural...

Khadija Munir, A. I. Umar, Waqas... 2020

Deep fruit detection in orchards

Suchet Bargoti, J. Underwood 2016

Automated Bell Pepper Harvesting using Robotic Vision System

Silpa Ajith Kumar, S. Nikhila, J. S... 2019



## DeepFruits: A Fruit Detection System Using Deep Neural Networks

Inkyu Sa + 4 authors C. McCool

2016, Italian National Conference ...

732 Citations

Save

Open in: PDF, PDF, DOI, G, M

This paper presents a novel approach to fruit detection using deep convolutional neural networks. The aim is to build an accurate, fast and reliable fruit detection system, which is a vital element of an autonomous agricultural robotic platform; it is a key element for fruit yield estimation and automated harvesting. Recent work in

# Infranodus

The screenshot displays the Infranodus web application interface. At the top, there is a navigation bar with a hamburger menu, the page title "infranodus\_home\_page", a "SIGN UP" button, a "basic mode" toggle, a "visible graph" dropdown, a search query input, and the "InfraNodus" logo with user and refresh icons. Below the navigation bar, a filter bar shows "Filter: All Statements (146 | 100%)". A central network graph is visualized with nodes and edges. Four clusters are highlighted with dashed boxes and numbered: 1. Text Network Analysis (yellow), 2. Cognitive Ecological Thinking (green), 3. AI Generative Modeling (purple), and 4. Research Discourse Process (teal). Nodes labeled "research", "market", "network", "idea", "generate", "work", and "cognitive" are visible. On the left, a support page snippet reads: "Check out our support pages, so you can see how to create the new network graphs, how to read and interpret them, how to discover the hidden patterns in your data and share the results of your research. 4 months ago". A vertical sidebar on the right contains various icons for analysis and visualization. At the bottom, there are buttons for "info", "add", and "import", along with a "project notes" icon and a "high-level ideas" indicator.



# Weitere Visualisierungstools

- <https://openknowledgemaps.org/>
- <https://www.mymap.ai/>
- <https://www.researchrabbit.ai>

# Literatur finden & verstehen



# Explain paper

The screenshot displays the Explainpaper web application. At the top left, the logo 'Explainpaper' is visible. On the top right, there are navigation links for 'Upgrade', 'Dashboard', and 'Upload', along with a user profile icon. The main content area is split into two columns. The left column shows the paper's metadata: 'Editor-in-Chief: Bharath Chandrasekaran', 'Editor: Chao-Yang Lee', and the DOI 'https://doi.org/10.1044/2022\_JSLHR-21-00607'. The right column shows the paper's abstract, which discusses a tutorial on conducting systematic reviews with meta-analysis, including a 'Method' section and 'Results/Conclusions'. Below the abstract, two paragraphs of text are visible, starting with 'Replicability is essential to scientific progress...' and 'There has been a rapid growth in the number of systematic reviews...'. On the right side of the interface, there is a control panel with tabs for 'Paper', 'Explain', and 'Chat'. The 'Explain' tab is active, showing a yellow highlighted text box with the sentence: 'The data set and R codes are offered as publicly...ehavioral and social sciences research in general'. Below this, there is a slider to 'Customize your explanation' (marked 'BETA') set to 'Middle Schooler'. At the bottom of the panel are two buttons: 'Explain' and 'GPT-4 Explain', with a note 'Upgrade to Pro for GPT-4' below the second button.

Explainpaper

Upgrade Dashboard Upload

100% 1 / 22

Editor-in-Chief: Bharath Chandrasekaran  
Editor: Chao-Yang Lee  
[https://doi.org/10.1044/2022\\_JSLHR-21-00607](https://doi.org/10.1044/2022_JSLHR-21-00607)

...the purpose of this tutorial is to provide an overview and guidance on how to address the key elements for conducting a high-quality systematic review with meta-analysis.  
**Method:** This tutorial describes practical guidelines to conduct systematic review and meta-analysis for researchers who are interested in learning and applying the method. Drawing on previous meta-analytic reviews of second-language learning as illustrative examples, it discusses the methodological choices and judgment calls in each step of the review and analysis process. As a hands-on tutorial, it uses a published data set concerning the role of talker variability in speech training studies as a running example to elucidate the statistical process and interpret the results of meta-analysis with freely available R software.  
**Results/Conclusions:** This tutorial provides a walk-through of the methodological choices, controversial issues, and common practices in conducting systematic reviews and meta-analyses. The data set and R codes are offered as publicly accessible supplementary materials (<https://osf.io/e9bk1/>) for replication and practice, which we hope will motivate more applications in the speech, language, and hearing sciences field as well as behavioral and social sciences research in general.

Replicability is essential to scientific progress. However, conflicting findings on a particular research topic are not uncommon in the behavioral and social sciences (Camerer et al., 2018; Open Science Collaboration, 2012). Sometimes, opposite directions or trends in the target measures are found for the effect of interest in health-related fields, which can lead to controversies and confusion to inform intervention decisions and advance theories. Systematically reviewing and analyzing the literature with

There has been a rapid growth in the number of systematic reviews and meta-analyses in various fields (e.g., Chalmers & Fox, 2016; Macleod et al., 2014; Plonsky & Oswald, 2015). Despite its increasing popularity, conducting or even interpreting a systematic review with meta-analysis can be challenging due to the lack of regular curricular coverage and complicated technical aspects implemented in a variety of software programs (Gøtzsche et al., 2007). Importantly, although the advantages of systematic

Paper Explain Chat

The data set and R codes are offered as publicly...ehavioral and social sciences research in general

Customize your explanation BETA

Middle Schooler

Explain GPT-4 Explain

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# Explain paper

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# Semantic Scholar: Semantic Reader

## 4.7 Effect of Direct Parallel Data

In this section, we explore two ways of leveraging available parallel data to improve zero-shot translation quality, similar in spirit to what was reported in [10]. For our multilingual architecture we consider:

- Incrementally training the multilingual model on the additional parallel data for the zero-shot directions.
- Training a new multilingual model with all available parallel data mixed equally.

For our experiments, we use a baseline model which we call “Zero-Shot” trained on a combined parallel corpus of English $\leftrightarrow$ {Belarusian( $\{B\}$ ), Russian( $\{R\}$ ), Ukrainian( $\{U\}$ )}. We trained a second model on the above corpus together with additional  $R\leftrightarrow\{B,U\}$  data. We call this model “From-Scratch”. Both models support four target languages, and are evaluated on our standard test sets. As done previously we oversample the data such that all language pairs are represented equally. Finally, we take the best checkpoint of the “Zero-Shot” model, and run incremental training on a small portion of the data used to train the “From-Scratch” model for a short period of time until convergence (in this case 3% of “Zero-Shot” model total training time). We call this model “Incremental”.

As can be seen from Table 7, for the English $\leftrightarrow$ X directions, all three models show comparable scores. On the Russian $\leftrightarrow$ {Belarusian, Ukrainian} directions, the “Zero-Shot” model already achieves relatively high BLEU scores for all directions except one, without any explicit parallel data. This could be because these languages are linguistically related. In the “From-Scratch” column, we see that training a new model from scratch improves the zero-shot translation directions further. However, this strategy has a slightly negative effect on the English $\leftrightarrow$ X directions because our oversampling strategy will reduce the frequency of the data from these directions. In the final column, we see that incremental training with direct parallel data recovers most of the BLEU score difference between the first two columns on the zero-shot language pairs. In summary, our shared architecture models the zero-shot language pairs quite well and hence enables us to easily improve their quality with a small amount of additional parallel data.

Table 7: BLEU scores for English $\leftrightarrow$ {Belarusian, Russian, Ukrainian} models.

	Zero-Shot	From-Scratch	Incremental
English $\rightarrow$ Belarusian	16.85	17.03	16.99
English $\rightarrow$ Russian	22.21	22.02	21.92

### Skimming Highlights

AI-generated highlighting to support skimming

Back

#### Enable Skimming

Show automatically-generated highlights

##### Goals (10 highlights)

Paper objectives are highlighted in blue.

Example: In this work, we propose...

##### Methods (32 highlights)

Methods used are highlighted in orange.

Example: The methods used

# Scispace

## Do hours worth of reading in minutes

Discover latest papers published till Octo

 Literature Review

NEW

 Extract data from PDFs






 Read with AI Copilot

 Paraphraser

 Discover Papers for your research

TRY NEW AI SEARCH 

Try asking or searching for:

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-  [Why are aging Covid patients more susceptible to severe complications?](#)
-  [How does social media affect the college selection process?](#)
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-  [What is the significance of higher-dimensional algebra?](#)

# Scispace

 Insight from top 5 papers

 English (en) ▼

 Saved searches (1)

Intonation in tone languages is an area of research that has shown overlap between tone and intonation. Traditionally, tone languages use pitch changes to distinguish morphemes, while intonation languages use meaningful pitch changes at the sentence level. However, recent research has argued that tone languages also make use of intonation, defined as meaningful alternations in pitch across the sentence. Similarly, intonational melodies in some non-tonal languages show tonal behavior. This suggests that there is no clear-cut distinction between tone and intonation languages, and that they can be classified along a typological continuum. For instance, Mandarin Chinese is a tone language that also has stress, similar to intonation languages like German or English.<sup>[1]</sup>

Was this helpful?    Ask a follow up

Add columns (2) ▼

PDF

Open Access

[More filters](#)

Sort by: Relevance ▼

 CSV 

## Papers (10)

Journal Article • DOI 

[Intonation in tone languages](#)

 William J. Samarin

01 Jun 1952 • African Studies

9 Citations



 Ask Copilot

## Insights

The paper discusses the importance of studying intonation in tone languages, stating that intonation can be as important as lexical forms in expressing meaning.

## Open questions

- Intonational features have been discussed in African tonal languages.
- Intonation in tone language description.

 Copilot

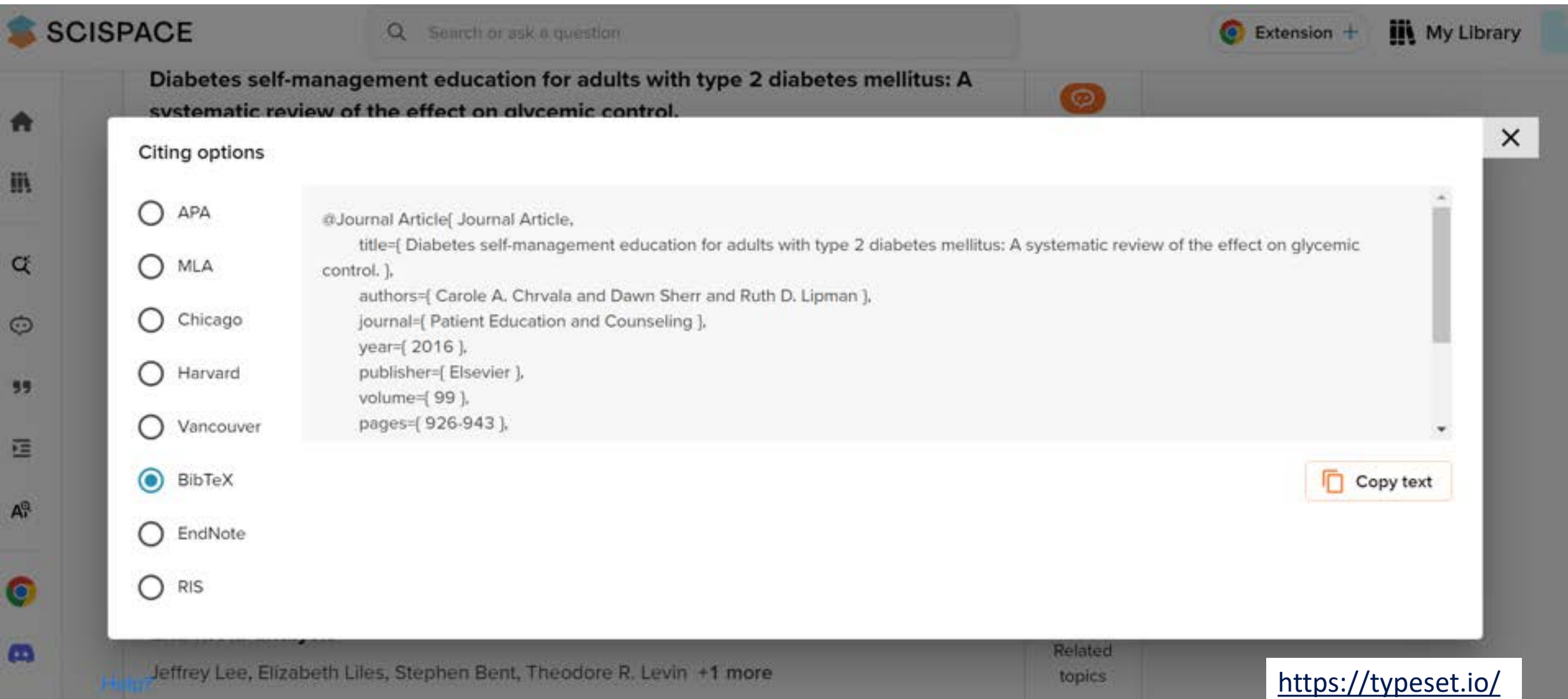
<https://typeset.io/>



# Scispace

No.	Title	insights	limitations	literature_su	methods_us	References	Citations	Authors	Op
1	Systematic Review Methodology: Conducting	Systematic reviews are considered the gold	#NAME?						
2	- Gaps or limitations in the exis	#NAME?							
3	#NAME?	transparent	and reproducible."	- Detailed description of search strategy, inclusion/exclusion criteria, study selecti					
4	#NAME?	accuracy	and transparency."		undefined	true	Journal Artic	http://www.10	
5	2 Can ChatGPT Write a Good Boolean Query for Systematic Review Literature								
6	Search?"	The paper investigates the effectiveness of CI	#NAME?						
7	- Uncertainty about the impact	#NAME?							
8	- Highlights caveats and challer	#NAME?							
9	#NAME?	refinement	and exploitation"		undefined	true	Posted Conte	http://arxiv.10	
10	3 Can ChatGPT Write a Good Boolean Query fo	The paper discusses the use of ChatGPT for	#NAME?						
11	- Not suitable for widespread u	#NAME?							
12	- Identifies potential value and	#NAME?							
13	- Identified potential value for rapid reviews"			Shuai Wang,	false	Proceedings Article	10.1145/353	03.02.2023	
14	4 Review of systematic reviews	The paper discusses the advantages and dis	#NAME?						
15	- Lack of broad clinical perspec	#NAME?							
16	- They help in evaluating and a	#NAME?							
17	- Overview of systematic reviews"			undefined	false	Book Chapter	10.1201/978	28.11.2022	
18	5 From standard systematic reviews to living systematic reviews								Claudia Breu fa
19	6 A new measure to assess the systematicity of the abstracts of reviews self-identifying as systematic reviews								Alvine Boaye fa
20	7 A checklist-based approach to assess the systematicity of the abstracts of reviews self-identifying as systematic reviews								Alvine Boaye fa

# Scispace Export via „Cite“, einzeln



The screenshot shows the Scispace interface with a search bar at the top containing the text "Search or ask a question". The main content area displays the title of a journal article: "Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glyceimic control." Below the title, a modal window titled "Citing options" is open. This window lists several citation styles: APA, MLA, Chicago, Harvard, Vancouver, BibTeX (which is selected), EndNote, and RIS. To the right of these options, a text box contains the BibTeX citation code: 

```
@Journal Article{ Journal Article,  
  title={ Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glyceimic control. },  
  authors={ Carole A. Chrvala and Dawn Sherr and Ruth D. Lipman },  
  journal={ Patient Education and Counseling },  
  year={ 2016 },  
  publisher={ Elsevier },  
  volume={ 99 },  
  pages={ 926-943 },
```

 A "Copy text" button is located at the bottom right of the modal window. At the bottom of the page, the authors "Jeffrey Lee, Elizabeth Liles, Stephen Bent, Theodore R. Levin +1 more" are listed. A URL "https://typeset.io/" is visible in the bottom right corner.

SCISPAC

Search or ask a question

Extension + My Library

Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glyceimic control.

Citing options

- APA
- MLA
- Chicago
- Harvard
- Vancouver
- BibTeX
- EndNote
- RIS

```
@Journal Article{ Journal Article,  
  title={ Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glyceimic control. },  
  authors={ Carole A. Chrvala and Dawn Sherr and Ruth D. Lipman },  
  journal={ Patient Education and Counseling },  
  year={ 2016 },  
  publisher={ Elsevier },  
  volume={ 99 },  
  pages={ 926-943 },
```

Copy text

Jeffrey Lee, Elizabeth Liles, Stephen Bent, Theodore R. Levin +1 more

Related topics

<https://typeset.io/>

# Scispace Copilot auf Deutsch

The screenshot displays the Scispace Copilot interface. On the left, a document titled 'Author Manuscript' is open, showing a section on 'Synthesis Literature and the Role of Meta-reviews'. The text discusses the importance of meta-reviews in scientific research, citing Bastian, Glasziou, & Chalmers (2010) and Ioannidis (2016). It explains that meta-reviews pull together existing synthesis literature and can have a significant influence on research, practice, and policy. The document also lists three primary aims of a meta-review: 1. Describe the role(s) of meta-reviews and the primary reasons why they should be conducted; 2. Present appropriate options for addressing meta-review challenges; 3. Outline areas for advances in meta-review synthesis methods.

On the right, the Copilot interface is visible, showing a search language dropdown menu. The menu is currently set to 'German (de)' and lists several other languages: Telugu (te), Thai (th), Turkish (tr), Ukrainian (uk), Urdu (ur), Uzbek (uz), Vietnamese (vi), and Welsh (cy). The 'Uzbek (uz)' option is highlighted. Below the language menu, there is a search bar with the text 'Write your question' and a 'NEW' button.

2 / 24

Explain math & table

120%

Copilot Notes

German (de)

Search language

Telugu (te)

Thai (th)

Turkish (tr)

Ukrainian (uk)

Urdu (ur)

Uzbek (uz)

Vietnamese (vi)

Welsh (cy)

Help?

<https://typeset.io/>



# Scispace Copilot: Explain Table

The image shows a screenshot of the Scispace Copilot interface. On the left, there is a sidebar with navigation icons. The main area displays a document with a search bar at the top and a toolbar with options like 'Explain math & table' and '106%'. The document text discusses systematic reviews and meta-analysis. A table is highlighted in the text, and a chat window on the right shows the Copilot's response explaining the table's content. The chat window also includes a 'Notes' section and a 'Write your question...' input field.

**Systematic Review and Meta-Analysis: What and Why**

Evidence-based practice is fundamental to the speech, language, and hearing field and theoretical development in all related disciplines. However, researchers and health professionals are generally faced with massive expansion of research output in peer-reviewed journals, conferences and workshops, and unpublished dissertations and theses that may report disparate and conflicting findings on the same clearly defined research question due to differences in participant characteristics, tasks, experimental materials, and measurement methods/tools. To add to the complexity, some studies may strictly use a randomized controlled design, whereas others may be observational studies where randomized controlled trials may not be practical or ethical, which makes it more difficult to

studies to provide a quantitative summary of research findings using statistical tools (Borenstein et al., 2009; Glass, 1976; Schmidt & Hunter, 2015). Specifically, meta-analysis sets quantitative systematic reviews apart from qualitative narrative reviews. Note that some meta-analyses are not systematic reviews because the search process is not based on prespecified eligibility criteria. Likewise, a systematic review may not necessarily use meta-analysis. For instance, a limited number of primary studies may be insufficient to produce statistically meaningful findings of synthesis.

Although systematic review and meta-analysis are generally expected to comply with the recommended standards and norms (Borenstein et al., 2009; Cooper et al., 2019; Hedges & Olkin, 1985; Hunter & Schmidt, 2004; Lipsey & Wilson, 2001; Rosenthal, 1984), there exists a high degree of methodological and reporting variability (Dieckmann et al., 2009; Sherriff et al., 2009). Protocols have been developed to provide guidelines for conducting systematic review and to standardize result reporting, and one of the widely used protocols is known as the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher et al., 2009). The PRISMA includes a checklist of 27 items (see Appendix A) and a template flow diagram. An example of the flow diagram is shown in Figure 1, which presents the number

**Table 1. Number of published narrative review versus systematic/meta-analysis (including systematic scoping) review articles in three main American Speech-Language-Hearing Association journals, namely, the *Journal of Speech, Language, and Hearing Research (JSLHR)*, *American Journal of Speech-Language Pathology (AJSLP)*, and *American Journal of Audiology (AJA)* in the period of 2017-2021.**

Journal	Review article type	2017	2018	2019	2020	2021
JSLHR	Narrative	9	7	1	5	7
	Systematic/meta-analysis	4	8	2	9	13
AJSLP	Narrative	2	5	5	10	3
	Systematic/meta-analysis	4	2	7	10	13
AJA	Narrative	0	1	2	1	3

**Explain the text**

Table 1. Number of published narrative review versus systematic/meta-analysis (including systematic scoping) review articles in three main American Speech-Language-Hearing Association journals, namely, the *Journal of Speech, Language, and Hearing Research (JSLHR)*, *American Journal of Speech-Language Pathology (AJSLP)*, and *American Journal of Audiology (AJA)* in the period of 2017-2021.

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AJSLP	Narrative	2	5	5	10	3
	Systematic/meta-analysis	4	2	7	10	13
AJA	Narrative	0	1	2	1	3

10:24 AM

- The highlighted text is a table that shows the number of published narrative review articles

Explain Abstract of this paper in 2 lines, Wf +18 more ^

Write your question...

<https://tvnset.io/>

# Scispace Copilot: Explain Math

Explain math & table

130%

$$I^2 = \frac{Q - (k - 1)}{Q} \times 100 \quad (1)$$

with  $Q$  (see Hedges & Olkin, 1985) defined as

$$Q = \sum w_i (ES_i - \bar{ES})^2, \quad (2)$$

where  $\bar{ES}$  represents the overall effect size, and  $w_i$  and  $ES_i$  stand for the weight and effect size from the  $i$ th study. Higgins et al. (2003) suggest that  $I^2$  values of 25%, 50%, and 75% represent small, moderate, and high degrees of heterogeneity. Given that  $I^2$  represents the proportion of total variation in effect sizes that is attributable to between-study variance  $\tau^2$  (see Valentine et al., 2010), random-effects power can be estimated with small, moderate, or large degrees of heterogeneity assumed.

Instead of manual computation, reviewers can use the `power.analysis` function in the `dmetar` package (Harrer et al., 2021) in R was used to conduct a random-effects prospective power analysis. For a running example, we are interested in the effectiveness of talker variability on L2 phonetic learning. Thus, we calculate the standardized mean difference (SMD) as the effect size that is commonly used to investigate causal relationships between constructs or the effectiveness of interventions.

In the L2 literature, Plonsky and Oswald (2014) suggest that the magnitude of effect size around 0.4 is considered

power analysis depends on the abovementioned, which may not be correct. For example, if the proportion of available studies may be higher than expected, or the population effect size might be higher than the reviewers have estimated, both of these factors can increase the power. The second is that if there is a need for data synthesis, meta-analysis is better than other available methods that are based on limited assumptions and on less transparent processes.

Before the implementation of systematic reviews, it is recommended to develop and register the review protocol in a database to protect from duplication and ensure transparency. The protocol usually contains methodological strategies for conducting the review. There are many registry databases available, such as the International Prospective Register of Systematic Reviews (http://www.crd.york.ac.uk/PROSPERO/), the Cochrane Register of Systematic Reviews (http://www.cochrane.org/), the Campbell Collaboration (https://campbellcollaboration.org/) containing reviews in the social sciences, and the PROSPERO database in the Cochrane Library initially used for research question to be registered in a registry. Some reviews in the Cochrane Library require this preliminary step and do not require registration. Research protocols can be registered in scientific journals as well, such as the *Systematic Reviews* journal.

Copilot Notes English (en)

Standard High Quality

Save as note Follow up

Explain the text

$$I^2 = \frac{Q - (k - 1)}{Q} \times 100$$

10:26 AM

- The highlighted text presents an equation that calculates the value of  $I^2$ .

Explain Abstract of this paper in 2 lines, With 18 more

Write your question...



# Scispace Plugin

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APIK Journal of Internal Medicine Articles Search Advanced Search

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REVIEW ARTICLE

## An Introduction to Systematic Reviews and Meta-Analyses

Rao, Shripada C.<sup>1,2</sup>

Author Information

APIK Journal of Internal Medicine 11(3):p 141-146, Jul-Sep 2023. | DOI: 10.4103/ajim.ajim\_36\_23

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en

Chat Literature Review

Standard High Quality

### Key Takeaways from the Webpage:

- Systematic reviews and meta-analyses are considered to provide a high level of evidence in health-care research. They can be used as a lens through which other types of studies should be seen. [1]
- Thorough literature search is essential in the conduct of systematic reviews. Important databases to conduct literature search include PubMed, Embase, CINAHL, Grey Literature,

What is the purpose of this webpage?, 1 +7 more

Write your question...

<https://typeset.io/>

# Scispace citation generator

## APA citation generator

Sit back and relax. Let SciSpace give you instant and accurate APA citations

Webpage Journal Article Book Book Chapter

 My References 2

fish oil

Search

Citation Style: APA : American Psychological Association 7th edition

Journal Article Title - Fish liver oil v. fish oil

Journal Name -

Contributing Authors - Db Hutchinson

Volume - 139

Issue - 11

Pages -

URL -

Main Citation:

Hutchinson, D.. (1988). *Fish liver oil v. fish oil*. 139(11).

In-text citation:

(Hutchinson, 1988)



# Pricing

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- ✓ Limited Literature Review searches
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### Premium

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20





per month; billed annually

Get started


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- ✓ Unlimited Copilot messages
- ✓ Unlimited Literature Review searches
- ✓ Unlimited Paraphraser outputs
- ✓ Early access to new features
- ✓ Priority customer support





# Scite

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**Welcome to scite!**  14%

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 200	 20	 2	 22
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- Reference Checks
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- Alerts
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# Scite assistant

The screenshot displays the Scite Assistant web interface. At the top, there is a navigation bar with the logo "assistant by scite Beta", an "Install extension!" button, and links for "Product", "Discover", "Pricing", and "Blog". A search bar on the left contains the query "what are examples of intonation in tone languages?". The main content area shows a generated response in a light blue box, followed by a list of references on the right. The interface includes various icons for navigation and actions.

assistant by scite Beta

Install extension!

Product Discover Pricing Blog

what are examples of intonation in tone languages?

Intonation in tone languages is a complex phenomenon that involves the interaction of lexical tones and sentence-level intonation. In Mandarin Chinese, for example, native speakers find it easier to identify intonation on sentences with a final falling tone, while it is more difficult on sentences with a final rising tone (Yuan, 2011). This suggests that there is an interaction between lexical tone and intonation at the phonological level. Additionally, in tone languages such as Gulmancema, Moore, and Ncam, intonation is characterized by targets located on lengthened vowels at the end of utterances (Rialland, 2005). This demonstrates how intonation is realized in specific tonal languages.

Furthermore, research has shown that in tonal languages like Mandarin, both lexical tone and sentence intonation are primarily signaled by fundamental frequency (F0) (Liu et al., 2021). This highlights the importance of F0 in conveying both lexical and intonational meaning in tone languages. Additionally, the neural correlates of intonation and lexical tone have been found to exhibit cross-linguistic commonalities in processing, while also showing dissociations for

References

Reference #1

"...Question intonation was easier for native speakers to identify on a sentence with a final falling tone and more difficult to identify on a sentence with a final rising tone, suggesting that tone identification intervenes in the mapping of F(0) contours to intonational categories and that tone and intonation interact at the phonological level...."

Section: Abstract

Perception of intonation in Mandarin Chinese  
Jiahong Yuan<sup>1</sup> 2011  
*The Journal of the Acoustical Society of America*

31 9 45 4

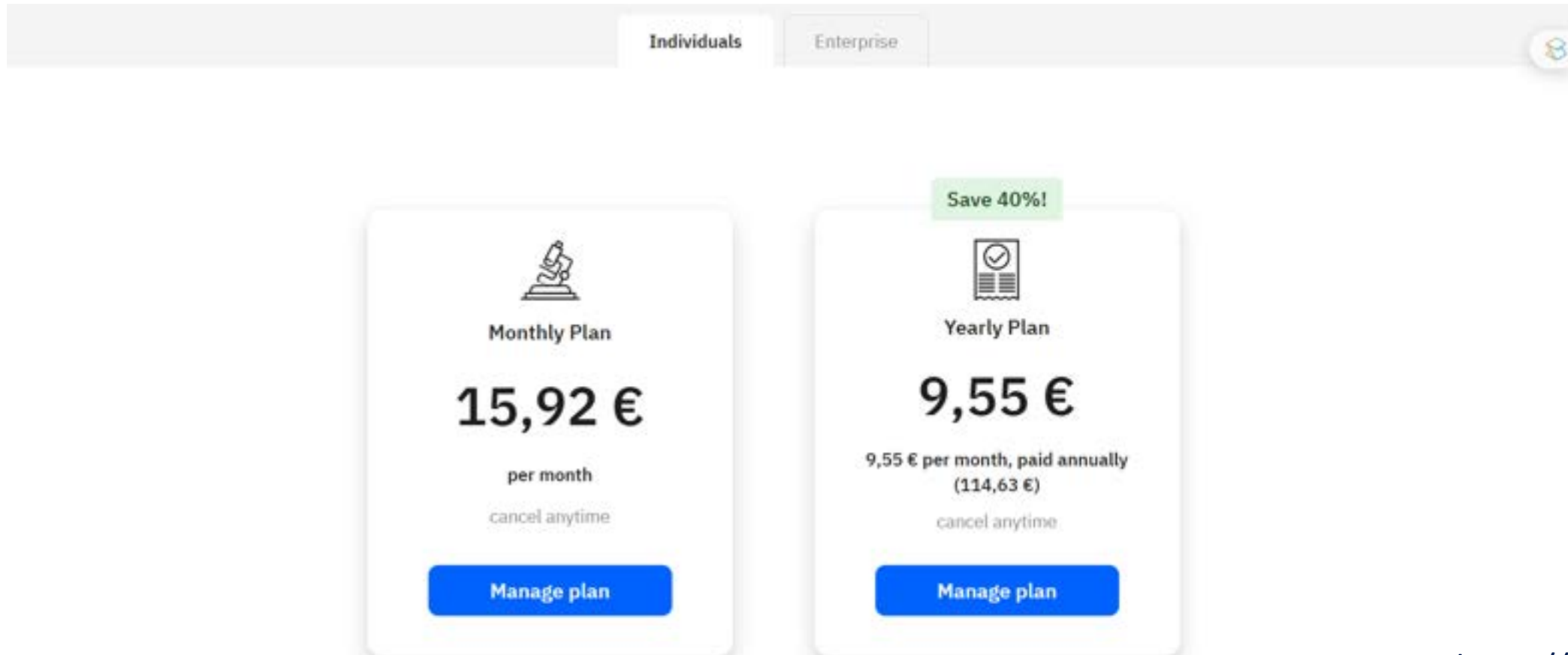
View full text Add to dashboard

What do you need help with?

<https://scite.ai/>

# Pricing

- 7 Tage free trial



The screenshot shows a pricing page for Scite.ai. At the top, there are two tabs: "Individuals" (selected) and "Enterprise". Below the tabs, there are two pricing cards. The left card is for the "Monthly Plan" and features a microscope icon. It displays a price of 15,92 € per month, with the text "cancel anytime" and a blue "Manage plan" button. The right card is for the "Yearly Plan" and features a document icon with a checkmark. It has a green "Save 40%!" badge at the top. The price is 9,55 €, with the text "9,55 € per month, paid annually (114,63 €)" and "cancel anytime", and a blue "Manage plan" button.

Plan	Price	Additional Info
Monthly Plan	15,92 €	per month, cancel anytime
Yearly Plan	9,55 €	9,55 € per month, paid annually (114,63 €), cancel anytime



# Ähnliche Tools

- <https://elicit.com/>
- <https://www.researchrabbit.ai/>

# PrivateGPT

Was, wenn ich meine Papers nicht ins Netz laden will oder darf?

- Lokales Set-up, das ich auf meinem Rechner laufen lassen kann
  - Kann mit Dokumenten chatten
  - Etwas komplizierter als eine Webseite öffnen
  - Braucht leistungsstarken Rechner
- 
- Z.B.: <https://github.com/imartinez/privateGPT>

# Fazit



# Fazit

- **Positiv:**
    - **Browsen und Explorieren**
    - Großes Potential
  
  - **Negativ:**
    - Neue Tools, Tools verschwinden
    - Ändert sich schnell
    - Nicht reproduzierbar, intransparent
    - Nicht immer einfach, die Referenzen aus dem Interface herauszubekommen
    - Dubletten, Interface nicht immer ganz ausgereift
- > Ganz gut, aber noch nicht sehr gut



# Reproduzierbarkeit?

- Gleiche Frage, ein Tag später:



# Fazit

- **Positiv:**
    - **Browsen und Explorieren**
    - Großes Potential
  
  - **Negativ:**
    - Neue Tools, Tools verschwinden
    - Ändert sich schnell
    - Nicht reproduzierbar, intransparent
    - Nicht immer einfach, die Referenzen aus dem Interface herauszubekommen
    - Dubletten, zu weit entfernte Artikel, Interface nicht immer ganz ausgereift
- > Ganz gut, aber noch nicht sehr gut

# Fazit

Nicht geeignet als:

- Als alleiniges Suchtool
- Ersatz für eigenes Sichten und Lesen

Ausprobieren:

Forschungsfrage aus dem eigenen Fachgebiet stellen und sehen, was produziert wird.

Danke für die  
Aufmerksamkeit!





# Wo kann ich anfangen?

## Übersichtsseiten:

- <https://www.futuretools.io/>
- <https://www.futurepedia.io/>
- <https://theresanaiforthat.com/>

## Kuratierte Listen von Tools für akademisches Arbeiten:

- <https://www.vkkiwa.de/ki-ressourcen/>
- <https://www.unidigital.news/>
- <https://tamu.libguides.com/c.php?g=1289555>

# Vorgestellte Tools

Perplexity AI, <https://www.perplexity.ai/>, 23.11.2023  
Semantic Scholar, (AI2), <https://www.semanticscholar.org/>, 23.11.2023  
Consensus, <https://consensus.app>, 23.11.2023  
Litmaps, <https://app.litmaps.co/>, 23.11.2023  
Connected Papers, <https://www.connectedpapers.com>, 23.11.2023  
InfraNodus, (Nodus Labs), <https://infranodus.com>, 23.11.2023  
Open Knowledge Maps, <https://openknowledgemaps.org/>, 23.11.2023  
My Map, <https://www.mymap.ai/>, 23.11.2023  
Research Rabbit, <https://www.researchrabbit.ai>, 23.11.2023  
Explain Paper, [www.explainpaper.com](http://www.explainpaper.com), 23.11.2023  
Scispace, (PubGenius) <https://typeset.io/>, 23.11.2023  
Scite, <https://scite.ai/>, 23.11.2023  
Elicit, <https://elicit.com/>, 23.11.2023  
Private GPT, <https://github.com/imartinez/privateGPT>, 23.11.2023

# Bilder

Alle Bilder sind erstellt mit Ideogram (<https://ideogram.ai>)  
von Gabriele Schwiertz, 20.11.2023