



Artificial Intelligence in DDC Translation

Is it love at first sight?





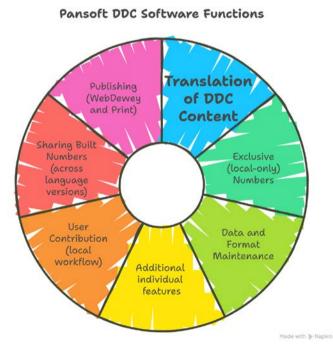
DDC translations

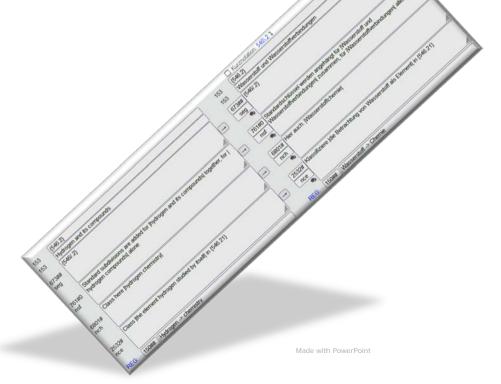
- The DDC has been translated into over 30 languages
- WebDewey language versions/translations currently done and maintained using the Pansoft Translation Software:

Arabic, French, German, Italian, Norwegian, Swedish, Spanish



Uses of the translation software









"Al eats translator jobs"

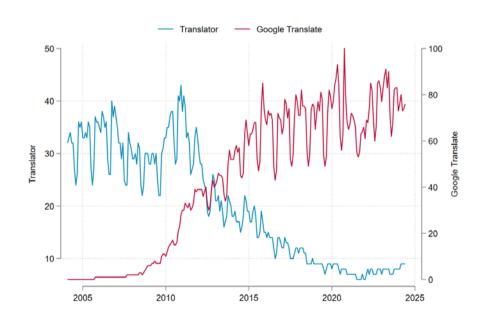


Figure: Google searches for "translator" and "Google Translate", 2004-2024

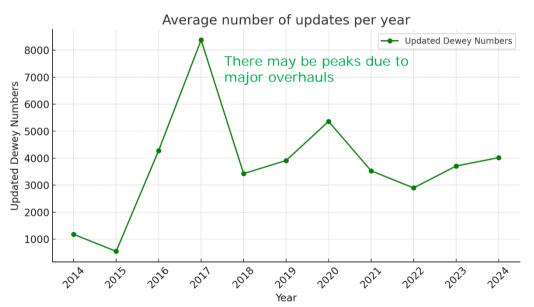
Lost in translation: Al's impact on translators and foreign language skills Carl Benedikt Frey Pedro Llanos-Paredes / 22 Mar 2025

https://cepr.org/voxeu/columns/lost-translation-ais-impact-translators-and-foreign-language-skills





Average amount of DDC updates/year



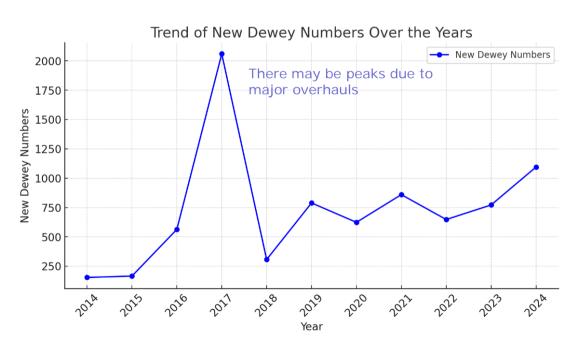
Query for English updates in the German DDC translation software: new, changed, deleted.

Numbers represent updates visible in WebDewey. Does not contain other "non-visible" updates.

Made with ChatGPT



Average amount of new numbers/year



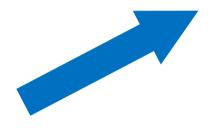
Query for English updates in the German DDC translation software: new DDC numbers

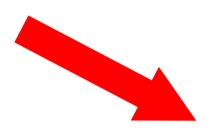


What we are facing today

Continuous increase in DDC updates

The teams (translators, editors) are usually understaffed and this is not likely to change
also due to AI and the hoped-for savings associated with it



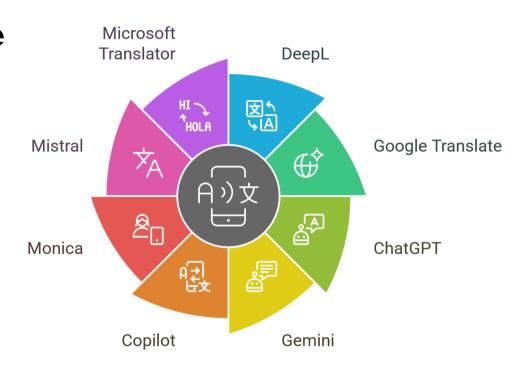




DEUTSCHE NATIONAL BIBLIOTHEK

AI Tools for Translation

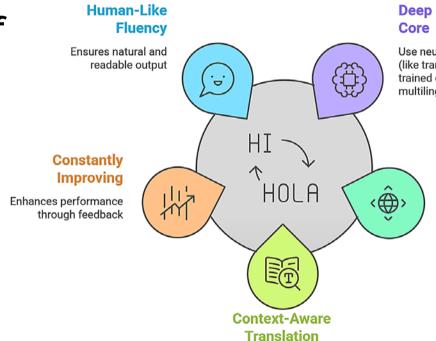
It's Al jungle out there...







Key features of AI translation tools



Deep Learning Core

Use neural networks (like transformers) trained on massive multilingual data

Multilingual & Scalable

Supports multiple languages and handles increasing volumes of text

Understands idioms and sentence meaning





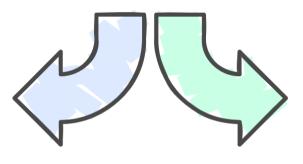
Which AI tool should I use for my task?

Purpose-driven AI Tool

Suitable for specific tasks like translation

Deepl, Google Translate,

...



Generative AI Tool

Ideal for creating new content using prompts

ChatGPT, Gemini, Monica, Mistral, ...





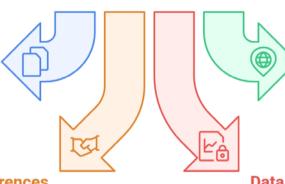
We are the DDC experts.

Consistent Terminology

Terminology control of notes, phrases, topics, captions, Relative Index terms

Cultural Differences

Special treatment of vocabulary for terms used only in the target language



Local Principles

Translation in accordance with local principles of controlled vocabularies (e.g. preferred terms)

Data Integrity

DDC data structure (hyperlinks, subfields, etc.) must not be altered

... and domain knowledge!





DDC text types to be tested for AI usage

Running text: Introduction, Glossary, other secondary text

Notes & phrases in class records, Manual records; class captions

Topics: domain-specific terms; descriptive terms; Relative Index terms, etc.



DEUTSCHE NATIONAL BIBLIOTHEK

Al must learn DDC language from the start!

The better the terminology control, the higher the translation quality,

the higher the AI translation quality.

Approximate The Whole subordinateNumber Class-hereNote Tables Discontinuation ClassHeading caption RelativeIndexTerm Disciplines AddNote toIndex Topics CitationOrder StandingRoom Sections MainClasses to Catalog to Synthesize Subjects institutional Built Number History Note Subfield to Classify Comprehensive Number Including Note Relative Index Built Number NumberBuilding Divisions Interdisciplinary Number Summaries Schedules Manual Note Number-builtNote Standard-subdivisions-are-addedNote StandardSubdivisions