

Very short assessment of DeepL

Kai-Uwe Carstensen

Recently, I came across a new book on text/discourse coherence by Gerd Fritz¹ that has a chapter reviewing the capacities and limitations of OpenAI's text-generating system GPT-3. I found this interesting, because it is always difficult to judge the abilities of such new AI software hyped by investor-seeking praisals without being an insider that knows the real limits of this new-era natural language processing (NLP) technology.

When we considered using [DeepL \(https://www.deepl.com/translator\)](https://www.deepl.com/translator) (a corresponding new-era machine translation Software) for the translation of [our project website \(https://www.dmw-projekt.de\)](https://www.dmw-projekt.de) from German to English (which, by the way, was not my idea), it immediately came to my mind that it would be interesting to take a look at the results and discuss/comment them shortly.

Let me first emphasize that this is not about just criticizing or even bashing such software. I am deeply impressed by the progress that has been made by NLP technology in terms of efficiency and quality, which was unthinkable some decades, even still some years, ago (see my language technology overview on www.kai-uwe-carstensen.de). And yet, being based on surface-oriented, input-output correlating mechanisms, these techniques implement some form of behaviourism that was replaced by the cognitive paradigm (and Cognitive Science) in the midst of the last century, where the role of neuro-cognitive structure, organization and architecture was highlighted. However, Good-Old-Fashioned AI (GOFAI) failed to deliver effective high-quality nlp technology that the new era seems to provide. For users of the new software it is therefore interesting to know exactly what it is able to achieve and where the limits or pitfalls are.

To cut a long story short, the translations are smooth, adequate and correct to an extent that is astonishing. This is due to the fact that necessary structural adaptations characteristic for higher-quality translations are made. It is interesting to observe, however, that exactly these rearrangements are error-prone. As expected, wrong or inadequate translation occurs because of the intricacies of specialist terminology and missing domain knowledge. So, what you get is nice and good, but non-perfect, results.

The conclusion to be drawn is simple and clear: the use of DeepL needs supervision, as the results need revision and cannot, in any case, be trusted in detail. Straightforward use is therefore forbidden for high-quality purposes, but more than good enough for anything else.

In the following, I will address specific aspects of DeepL translations² using tables where the first column lists the German original text part, the middle the DeepL translation, and the right the putative/possible correct translation. While the corresponding terms/constructions are marked yellow, the correction in the third column is marked green.

¹ Fritz, Gerd (2022): *Coherence in Discourse. A Study in Dynamic Text Theory*. Linguistische Untersuchungen Bd. 16 (Giessen University Library Publications). DOI: <http://dx.doi.org/10.22029/jlupub-791>.

² My thanks to Marius Albers for prepping the data.

Wrong choice of terms

Der Dialektatlas Mittleres Westdeutschland (DMW)	The Dialect Atlas of Central West Germany (DMW)	The Dialect Atlas of Middle West Germany (DMW)
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Role of the specific lexical equivalent for the acronym not recognized

Dialektologisch gesehen umfasst das DMW-Gebiet den westfälischen, den niederfränkischen und den ripuarischen Raum und daneben auch kleinere Gebiete des Moselfränkischen, des Mittel- bzw. Zentralhessischen sowie des Ostfälischen .	In dialectological terms, the DMW area includes the Westphalian, the Lower Franconian and the Ripuarian areas and, in addition, smaller areas of Mosel Franconian, Middle or Central Hessian and East Franconian .	In dialectological terms, the DMW area includes the Westphalian, the Lower Franconian and the Ripuarian areas and, in addition, smaller areas of Mosel Franconian, Middle or Central Hessian and East Faelian [or so].
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Idiosyncratic wrong term (? , cp. "Westphalian")

Die Erhebungsorte ,	The survey sites ,	The places of interview [or so],
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Inadequate choice

oder die dialektalen bzw. standardfernen Entsprechungen für hochdeutsche/standarddeutsche Ausdrücke zu erfragen.	or to inquire about the dialectal or non-standard equivalents for High German/standard German expressions.	or to inquire about the dialectal or non-standard equivalents of High German/standard German expressions.
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Inadequate choice

Bereits während der Aufnahme werden die Äußerungen der Gewährsperson mithilfe des Programms SpeechRecorder so vorgeschnitten, dass genau die Form, die relevant ist, erfasst ist.	Already during the recording, the utterances of the respondent are pre-cut with the help of the program SpeechRecorder in such a way that exactly the form that is relevant is recorded .	Already during the recording, the utterances of the respondent are pre-cut with the help of the program SpeechRecorder in such a way that exactly the form that is relevant is captured .
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Inadequate choice

Der DMW erschließt ein Gebiet , in dem	The DMW opens up an area in which	The DMW deals with/ is concerned with/ treats an area [or so] in which
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Inadequate choice for specific source term/construction

Angesichts des rapiden Rückgangs des Niederdeutschen	In view of the rapid decline of Low German	Given the rapid decline of Low German
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Not future-related, but past-related

Der Rückgang der dialektalen bzw. standardfernen Varietäten ist ganz wesentlich eine Folge gesellschaftlicher Veränderungen des 20. Jahrhunderts. Er geht einher mit dem Wandel	The decline of dialectal or non-standard varieties is essentially a consequence of social changes in the 20th century. It goes hand in hand with the change of	The decline of dialectal or non-standard varieties is essentially a consequence of social changes in the 20th century. It comes with/cooccurs with the change of
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Bad choice (the source is negatively connotated, the translation has a positive connotation)

Über Heimatvereine [...] werden potentielle Gewährspersonen kontaktiert	Potential informants are contacted via local history societies	Potential informants are contacted via homeland clubs [???
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“Heimat” is not necessarily oriented towards local history

Ortsfestigkeit [von Personen]	strength of their place [of persons]	Local steadfastness (extent of association with a place in terms of heritage and corresponding local dialectal competence) [of persons]
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Completely wrong term, which is quite untranslatable anyway

Die dialektalen Ausdrücke werden mithilfe eines Fragebuchs [...] computergestützt erhoben	The dialectal expressions are collected by computer with the help of a questionnaire	The dialectal expressions are collected by computer with / using a questionnaire
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Inadequate construction

Wrong structural equivalent

Ziel ist die systematische Erhebung sowie Auswertung und Interpretation von dialektalen bzw. standardfernen Sprechweisen	The aim is the systematic survey as well as evaluation and interpretation of dialectal or non-standard ways of speaking	The aim is the systematic survey as well as evaluation and interpretation of dialectal, or non-standard, ways of speaking
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No coordination here; “bzw.” marks an alternative

(vgl. auch D ialekte im DMW)	(cf. also d ialects in the DMW)	(cf. also D ialects in the DMW)
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“Dialekte im DMW” is title of section: not recognized

Grundlage für die Recherche sind die durch Georg Wenker im 19. Jahrhundert erhobenen Orte.	The basis for the research is the locations surveyed by Georg Wenker in the 19th century.	The locations surveyed by Georg Wenker in the 19th century are the basis for the research.
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German structure (subject at the end) not recognized

wird durch ein für das Projekt entwickeltes Programm unterstützt, mit dem eine effiziente Verarbeitung der großen Datenmenge durch spezielle Bearbeiter*innen möglich ist.	is supported by a program developed for the project , with which an efficient processing of the large amount of data by special editors is possible	is supported by a program developed for the project with which an efficient processing of the large amount of data by special editors is possible
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Restrictive relative clause

Wrong lexico-syntactic choice

In den insgesamt etwa 1000 Erhebungsorten werden in den nächsten Jahren jeweils zwei Personen i. Allg. im Alter von 70 Jahren und älter befragt	In the total of about 1000 survey locations, two persons generally aged 70 and older will be interviewed in each of the next few years	In the total of about 1000 survey locations, two persons each, generally aged 70 and older , will be interviewed in the next few years
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Floating quantifier wrongly placed (and translated), “in the total” is strange

In den insgesamt etwa 1000 Erhebungsorten werden in den nächsten Jahren jeweils zwei Personen i. Allg. im Alter von 70 Jahren und älter befragt	In the total of about 1000 survey locations , two persons generally aged 70 and older will be interviewed in each of the next few years	In each of the approx. 1000 places of interview , two persons, generally aged 70 and older , will be interviewed in the next few years
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Even better translation

In einem Teil der Orte werden zudem jeweils zwei Befragungen mit Personen der Kinder- bzw.	In one part of the locations, two interviews will also be conducted with persons of the children's or grandchildren's generation	In one part of the locations, two interviews each will also be conducted with persons of the children's or grandchildren's generation
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Enkelgeneration (ca. 30 bis 45 Jahre) durchgeführt.	(approx. 30 to 45 years of age).	(approx. 30 to 45 years of age).
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Floating quantifier disregarded

Der DMW erschließt ein Gebiet, in dem seit den mehr als 100 Jahre (1876 und 1887) zurückliegenden Untersuchungen von Georg Wenker (1852-1911) die dialektalen bzw. maximal standardfernen Sprechweisen (Varietäten) nicht mehr großräumig erfasst wurden. Geographisch gesehen erweitert er den [...] Raum	The DMW opens up an area in which the dialectal or maximally non-standard ways of speaking (varieties) have not been recorded on a large scale since the investigations of Georg Wenker (1852-1911) more than 100 years ago (1876 and 1887). Geographically, he extended the area	The DMW opens up an area in which the dialectal or maximally non-standard ways of speaking (varieties) have not been recorded on a large scale since the investigations of Georg Wenker (1852-1911) more than 100 years ago (1876 and 1887). Geographically, it extends the area
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Wrong coreference (it is the DMW that extends), and wrong tense adaption

Geographisch gesehen erweitert er den bereits durch moderne Sprachatlanten erfassten Raum nach Nordwesten (vgl. Abbildung 2). Dies sind südlich der Benrather Linie (vgl. auch Dialekte im DMW) gelegene, mitteldeutsche Gebiete und es sind [...] Gebiete	Geographically, he extended the area already covered by modern linguistic atlases to the northwest (cf. Figure 2). These are areas south of the Benrath Line (cf. also dialects in the DMW), which are Central German, and they are areas	Geographically, he extended the area already covered by modern linguistic atlases to the northwest (cf. Figure 2). This concerns areas south of the Benrath Line (cf. also dialects in the DMW), which are Central German, as well as areas
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Bad choice ("These"), wrong choice ("they") due to coreference/demonstrative

fächert sich die <i>Benrather Linie</i> hier auf. Die Dialektologie spricht deshalb auch vom <i>Rheinischen Fächer</i> .	the Benrath line fans out here. Dialectology therefore also speaks of the Rhenish fan.	the Benrath line fans out here. Therefore, this is called Rhenish fan in Dialectology.
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Translation too close to source

Wrong/No/unnecessary translation

SBS Sprachatlas von Bayerisch-Schwaben. 14 Bde. (1995-2009)	SBS Sprachatlas von Bayerisch-Schwaben. 14 vols. (1995-2009)	SBS Language atlas of Bavarian-Suebia [??]. 14 vols. (1995-2009)
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Sudden non-translation

Dies gilt insbesondere für die Dialekte des Niederdeutschen, die spätestens seit den 1950er Jahren wohl nur im Ausnahmefall an die Kinder weitergegeben wurden.	This is especially true for the dialects of Low German, which have been passed on to children only in exceptional cases since the 1950s at the latest.	This is especially true for the dialects of Low German, which – since the 1950s at the latest – have probably been passed on to children only in exceptional cases.
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Modal particle (“wohl”) omitted

die Konsonanten p, t, k (Plosive/Verschlusslaute) zu pf, ts, kch (Affrikaten/Verschlussreibelaute) bzw. f, s, ch (Frikativen/Reibelaute)	the consonants p, t, k (plosives/final sounds) were 'shifted' to pf, ts, kch (affricates/final sounds) and f, s, ch (fricatives/fricatives),	the consonants p, t, k (plosives/closure sounds) were 'shifted' to pf, ts, kch (affricates/closure fricatives) and f, s, ch (fricatives/friction sounds),
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Wrong translation of theoretical terms

nd. „maken“ vs. hd. „machen“, nd. „Dorp“ vs. hd. „Dorf“	nd. "maken" vs. hd. "machen", nd. "Dorp" vs. hd. "village."	Low German "maken" vs. High German "machen", Low German "Dorp" vs. High German "Dorf."
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“nd”/“hd” not translated (abbreviations of theoretical terms); unnecessary/wrong translation of quoted term

die vielfach als Reduktionsformen (Verschleifungen, Verkürzungen) von ursprünglichen standardsprachlichen Ausdrücken zu verstehen sind	which in many cases are to be understood as reduction forms (Verschleifungen, Verkürzungen) of original standard language expressions	
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Sudden non-translations