

A brief history of Machine Translation (MT)

<http://blog.systransoft.com/how-does-neural-machine-translation-work/>

- Rule-based approach: attempts to program grammatical and lexical rules. Largely failed and showed how limited grammar is in describing linguistic behaviour.
- Phrase-based approach: attempts to select the best translation of a phrase by estimating probability. Better, but still not much use for quality translations.
- Neural approach: Rule-based, but assesses context through conversion of words to vectors; translation involves taking the most similar context in the target language on the basis of algorithms.

Vector: a quantity possessing both magnitude and direction

Algorithm: a set of rules for solving a problem

A pernicious pitfall

| Original ^α | DeepL ^α | Google ^α | Bing ^α |
|---|---|--|--|
| Fremdsprachen- kenntnisse sind in der heutigen Gesellschaft ¶ unerlässlich: ¶ | Knowledge of foreign languages is essential in today's society. ¶ is indispensable: ¶ | Foreign language skills are in today's society · essential: · · · | In Today's society, foreign language skills are ¶ Essential: ¶ · |

German (ÜPF = Überwachung des Post- und Fernmeldeverkehrs)

| Original | DeepL | Google | Bing |
|--|--|--|--|
| <p>Der Wurm steckt laut den Prüfern schon länger in der Behörde: In einer «Nacht-und-Nebel-Aktion» seien die Fernmeldeüberwacher 2007 per Weisung den EJPD-Informatikern unterstellt worden - ohne sie richtig zu integrieren. Die Folge: «ein hoher Frustrationsgrad» bei den Mitarbeitenden. Die beauftragten Prüfer stellen fest, dass im Verhältnis zwischen ISC und ÜPF Rollen und Verantwortlichkeiten unklar seien. Es fehlten eine Governance und Leistungsvereinbarungen. Die Fernmeldeüberwacher hätten zu wenig Kompetenzen bei der Beschaffung von neuer Technologie, bei der Einstellung von Mitarbeitern und beim Budget. Das heute vom ISC-EJPD wahrgenommene Lieferantenmanagement hingegen sei «chaotisch».</p> | <p>According to the examiners, the worm has been in the authority for quite some time: In a "night and fog action" in 2007, the telecommunications supervisors were instructed to report to the FDJP computer scientists - without properly integrating them. The result: "a high degree of frustration" among employees. The commissioned auditors found that roles and responsibilities were unclear in the relationship between the ISC and the OPF. There was a lack of governance and performance agreements. The telecommunications supervisors had too little competence in the procurement of new technology, in the recruitment of staff and in the budget. The supplier management perceived today by the ISC-EJPD, on the other hand, is "chaotic".</p> | <p>According to the examiners, the worm has been in the authorities for some time: in a "night-and-fog action", the telecommunications supervisors were placed under the instructions of the EJPD computer scientists in 2007 - without properly integrating them. The consequence: "a high degree of frustration" among the employees. The commissioned auditors found that roles and responsibilities in the relationship between ISC and TSP are unclear. There was a lack of governance and service agreements. Telecommunications supervisors have too few skills in acquiring new technology, hiring staff and budget. On the other hand, the ISC-FDJP perceived supplier management is «chaotic».</p> | <p>According to the examiners, the worm has been in the authority for some time: in a "night-and-fog-action" the telecommunication supervisors were 2007 by instruction to the FDJP computer scientists-without properly integrating THEM. The Result: "a high degree of frustration" among the Employees. The mandated auditors note that roles and responsibilities are unclear in the relationship between ISC and ÜPF. There was a lack of governance and performance Agreements. The telecommunication monitors would have too little competence in the procurement of new technology, the hiring of employees and the Budget. however, the supplier management perceived today by the ISC FDJP is "chaotic".</p> |

French

| Original | DeepL | Google | Bing |
|---|---|--|--|
| <p>L'Association suisse des traducteurs, terminologues et interprètes (ASTTI) a le plaisir de vous convier à Berne pour sa nouvelle édition du traditionnel congrès automnal équivalences. Membres ou non membres, tous les professionnels langagiers de Suisse et de l'étranger auront, à cette occasion, la possibilité de réseauter et d'actualiser leur niveau d'information dans un domaine particulièrement intéressant et controversé, soit l'avènement de l'intelligence artificielle (IA) dans le monde de la traduction. Vous pourrez approfondir la question grâce à des exposés retraçant l'historique de ce développement, à la présentation des modes de fonctionnement ainsi qu'aux perspectives de la traduction automatique (TA) et neuronale automatique (NMT).</p> | <p>The Swiss Association of Translators, Terminologists and Interpreters (ASTTI) is pleased to invite you to Berne for its new edition of the traditional autumn congress on equivalence. As members or non-members, all language professionals in Switzerland and abroad will have the opportunity to network and update their level of information in a particularly interesting and controversial field, namely the advent of artificial intelligence (AI) in the translation world. You will be able to explore the issue in greater depth through presentations recounting the history of this development, the presentation of operating modes and the perspectives of machine translation (MT) and automatic neural translation (NMT).</p> | <p>The Swiss Association of Translators, Terminologists and Interpreters (ASTTI) is pleased to invite you to Bern for its new edition of the traditional Autumnal Equivalence Congress. Members or non-members, all language professionals from Switzerland and abroad will have the opportunity to network and update their level of information in a particularly interesting and controversial area, namely the advent of Artificial Intelligence (AI) in the world of translation. You will be able to delve deeper into this issue through presentations on the history of this development, the presentation of the modes of operation as well as the perspectives of automatic translation (MT) and automatic neural (NMT).</p> | <p>The Swiss Association of translators, Terminologists and interpreters (ASTTI) is pleased to invite you to Berne for its new edition of the traditional autumn equivalence congress. Members or non-members, all language professionals in Switzerland and abroad will have the opportunity to network and update their level of information in a particularly interesting and controversial area, namely the Advent of artificial intelligence (ai) in the world of Translation. You will be able to deepen the question with presentations tracing the history of this development, the presentation of the modes of operation and the prospects of automatic translation (TA) and automatic neuron (NMT).</p> |

Italian

| Original | DeepL | Google | Bing |
|---|---|---|---|
| <p>Il gruppo di studio e di informazione Coscienza svizzera e il Dipartimento formazione e apprendimento della SUPSI organizzano per venerdì 1° marzo un incontro dal titolo “La Svizzera nei suoi rapporti con l’italianità e con l’Italia. Cultura, lingua, politica, migrazioni”. Scopo della giornata è approfondire alcuni aspetti problematici dei rapporti della Svizzera con l’italianità e con l’Italia. Nel corso dell’incontro, che si svolgerà a Locarno, interverranno il direttore della rivista di geopolitica Limes Lucio Caracciolo, il professor Renato Martinoni dell’Università di San Gallo e il direttore dell’Osservatorio della vita politica regionale dell’Università di Losanna Oscar Mazzoleni.</p> | <p>The study and information group Swiss Consciousness and the Department of Education and Learning of SUPSI are organising a meeting on Friday 1 March entitled "Switzerland in its relations with Italy and with Italy. Culture, language, politics, migration". The aim of the day is to examine in depth some problematic aspects of Switzerland's relations with Italy and with Italy. The meeting, which will take place in Locarno, will be attended by the director of the geopolitical magazine Limes Lucio Caracciolo, Professor Renato Martinoni of the University of St. Gallen and the director of the Observatory of Regional Political Life of the University of Lausanne Oscar Mazzoleni.</p> | <p>The Swiss Consciousness Study and Information Group and the SUPSI Training and Learning Department organize a meeting on Friday, March 1, entitled "Switzerland in its relations with Italianness and Italy. Culture, language, politics, migration ". The aim of the day is to investigate some of the problematic aspects of Switzerland's relations with Italianness and with Italy. During the meeting, which will take place in Locarno, will intervene the director of geopolitical journal Limes Lucio Caracciolo, Professor Renato Martinoni of the University of San Gallo and the director of the Observatory for Regional Political Life at the University of Lausanne Oscar Mazzoleni.</p> | <p>The study and information group of the Swiss conscience and the training and learning Department of SUPSI organise a meeting entitled "switzerland in its relations with Italian and Italy for Friday 1st March". culture, language, politics, Migrations. " The aim of the day is to deepen some problematic aspects of switzerland's relations with Italian and italy. During the meeting, which will take place in Locarno, the director of the geopolitical magazine Limes Lucio caracciolo, Professor Renato Martinoni of the University of St. Gallen and the Director of the Observatory of regional political life, will Intervene. Of the University of Lausanne Oscar Mazzoleni.</p> |

Back translation (DeepL)

| Original | DeepL translation | DeepL back translation |
|---|---|--|
| <p>Was rattert so spät durch Nacht und Wind, es ist der Vater mit seinem Kind. Vater Karl und Sohn Fritz auf DKW mit Soziussitz.</p> <p>Mein Vater mein Vater, oh siehst du das nicht, ein Schutzmann mit Bleistift und strengem Gesicht. Sei still mein Sohn, das geht uns nichts an, wir haben eine falsche Nummer daran.</p> | <p>What clatters so late through night and wind, it is the father with his child. Father Karl and son Fritz on DKW with pillion seat.</p> <p>My father my father, oh you can't see that, a protective man with a pencil and a stern face. Be quiet my son, it's none of our business, we have a wrong number on it.</p> | <p>Was so spät durch Nacht und Wind klappert, ist der Vater mit seinem Kind. Pater Karl und Sohn Fritz auf DKW mit Soziussitz.</p> <p>Mein Vater, mein Vater, oh du kannst das nicht sehen, ein beschützender Mann mit einem Bleistift und einem strengen Gesicht. Sei still, mein Sohn, es geht uns nichts an, wir haben eine falsche Nummer.</p> |

Back translation (Google)

| Original | Google translation | Google back translation |
|---|---|--|
| <p>Was rattert so spät durch Nacht und Wind, es ist der Vater mit seinem Kind. Vater Karl und Sohn Fritz auf DKW mit Soziussitz.</p> <p>Mein Vater mein Vater, oh siehst du das nicht, ein Schutzmann mit Bleistift und strengem Gesicht. Sei still mein Sohn, das geht uns nichts an, wir haben eine falsche Nummer daran.</p> | <p>What rattles so late by night and wind, it is the father with his child. Father Karl and son Fritz on DKW with pillion seat.</p> <p>My father, my father, oh, you do not see that, a policeman with a pencil and a stern face. Be quiet my son, that's none of our business, we have a wrong number in it.</p> | <p>Was bei Nacht und Wind so spät rattert, ist der Vater mit seinem Kind. Pater Karl und Sohn Fritz im DKW mit Soziussitz.</p> <p>Mein Vater, mein Vater, oh, das sehen Sie nicht, einen Polizisten mit einem Bleistift und einem strengen Gesicht. Sei ruhig, mein Sohn, das geht uns nichts an, wir haben eine falsche Nummer dabei.</p> |

Back translation (Bing)

| Original | Bing translation | Bing back translation |
|---|--|--|
| <p>Was rattert so spät durch Nacht und Wind, es ist der Vater mit seinem Kind. Vater Karl und Sohn Fritz auf DKW mit Soziussitz.</p> <p>Mein Vater mein Vater, oh siehst du das nicht, ein Schutzmann mit Bleistift und strengem Gesicht. Sei still mein Sohn, das geht uns nichts an, wir haben eine falsche Nummer daran.</p> | <p>What rattles so late through night and wind, it's the father with his child. Father Karl and son Fritz in DKW with a social seat.</p> <p>My dad my dad, oh don't you see that, a protector with pencil and strict face. Be quiet my son, we don't care about that, we have a wrong number about it.</p> | <p>Was so spät durch Nacht und Wind weht, ist es der Vater mit seinem Kind. Vater Karl und Sohn Fritz in DKW mit Sozialsitz.</p> <p>Mein Papa, mein Vater, oh siehst du das nicht, ein Beschützer mit Bleistift und strengem Gesicht. Seien Sie ruhig, mein Sohn, das ist uns egal, wir haben eine falsche Nummer.</p> |

Over to you:

Type or copy/paste some text into an online MT application and see what comes out. Try a back translation if you like. Sample texts can be found at <https://app.box.com/shared/uid9yz8m02>

DeepL: <https://www.deepl.com/en/translator>

Google translate: <https://translate.google.com/>

Bing translator: <https://www.bing.com/translator>

Could MT be used in the EFL classroom?

How? What exercises might be devised?