



МЕЖКУЛЬТУРНАЯ КОММУНИКАЦИЯ И СОПОСТАВИТЕЛЬНОЕ ИЗУЧЕНИЕ ЯЗЫКОВ

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PROTOTYPE IN NEURAL MACHINE TRANSLATION OF PROMOTIONAL TEXTS: ALGORITHMIZATION OF THE SOURCE TEXT¹

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Abstract. The article examines the quality of neural machine translation of promotional texts in the context of digitalization and the active integration of artificial intelligence into multilingual communication. The authors state that source texts should be deliberately optimized for machine translation in order to enhance the quality of translations produced by large language models (LLMs). The empirical material comprises promotional content from the multilingual website of the Singapore-based company Linguise, which develops software solutions for connecting websites to neural machine translation systems, as well as the website of the German hospitality company Traumferienhäuser Schwarzwald – presented by Linguise as a successful case of multilingual logistics. The methodology combines contrastive and translational analysis of source and target texts, aimed at identifying structural, grammatical, and lexical congruence, as well as typical transformations and translation techniques. The results prove that a high degree of predictability and adequacy in neural machine translation is achieved through the prototypization of the source text, including a modular text structure, a fixed sequence of functional blocks, syntactic simplicity, and terminological consistency. It affirms that texts oriented towards a universal international market and devoid of culturally marked and expressive vocabulary exhibit the greatest stability in automatic translation. Based on the analysis, an algorithm for creating an “ideal” promotional source text is proposed, contributing to improved quality of multilingual neural machine translation and a reduced need for post-editing.

Key words: promotional text, machine translation, neural machine translation, artificial intelligence, LLM, algorithmisation, prototype, translational analysis.

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**ПРОТОТИП В НЕЙРОСЕТЕВОМ ПЕРЕВОДЕ ПРЕЗЕНТАЦИОННОГО ТЕКСТА:
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Аннотация. Статья посвящена исследованию качества нейросетевого машинного перевода презентационных текстов в условиях цифровизации и активного внедрения искусственного интеллекта в сферу многоязычной коммуникации. Авторы показывают, что исходный текст должен целенаправленно оптимизироваться для машинного перевода с целью повышения качества результатов, получаемых с использованием больших языковых моделей (LLM). Материалом исследования послужил презентационный контент многоязычного сайта сингапурской компании Linguise, которая занимается разработкой программ подключения веб-сайтов к нейронной системе машинного перевода, и сайт германской компании сферы гостеприимства Traumferienhäuser Schwarzwald, многоязычную логику которого обеспечила и позиционирует как свой удачный проект компания Linguise. Методика включает конфронтативный и транслатологический анализ исходных и переводных текстов, направленный на выявление структурной, грамматической и лексической конгруэнтности, а также типичных трансформаций и переводческих приемов. В результате исследования установлено, что высокая степень предсказуемости и корректности нейросетевого перевода обеспечивается за счет прототипизации оригинала: модульной структуры текста, фиксированной последовательности функциональных блоков, синтаксической простоты и терминологической однородности. Определено, что тексты, ориентированные на универсальный международный рынок и лишенные культурно маркированной и экспрессивной лексики, демонстрируют наибольшую устойчивость при автоматическом переводе. Предложен алгоритм создания «идеального» презентационного оригинала, способствующий повышению качества многоязычного нейросетевого перевода и снижению необходимости постредактирования.

Ключевые слова: презентационный текст, машинный перевод, нейросетевой перевод, искусственный интеллект, LLM, алгоритмизация, прототип, транслатологический анализ.

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Introduction

The involvement of linguistic research in the challenges of scientific-and-technological progress, realized through successive industrial revolutions, became particularly pronounced during the era of Industry 4.0. This stage of civilizational development is characterized by large-scale automation and the introduction of artificial intelligence systems, which are viewed as a prerequisite for the transition to Industry 5.0. The latter is conceptualized as a human-centric, sustainable, and resilient evolution of digital industrial transformation [Ghobakhloo et al., 2024; Vyhmeister, Castane, 2024] and is expected to develop towards cybernetic solutions and human-machine systems.

The advancement of robotics, artificial intelligence, and large language models (hereinafter – LLMs) has brought about a new technological reality in which languages function not only as a means of communication but also as objects of algorithmic processing. Under these conditions, the linguistic interpretation of the principles underlying text “construction” embedded in the functionality of LLMs, as well as planned optimization operations aimed at improving the quality of automated processing, becomes increasingly important. Digitalization gives rise to new types of discourse, transforming the status of language as a tool of social and technological interaction. Texts produced in digital environments represent a combination of verbal

and paraverbal parameters, thus reflecting the specifics of online communication and the structure of digital identity [Potapova, Kuryanova, 2021].

The aim of the present study is to propose a model of an ideal, prototypical source text in the full range of its structural, lexical, and grammatical characteristics, designed to ensure high-quality translation using neural machine translation tools.

The issue of machine translation (hereinafter – MT) quality has been discussed since its emergence in the mid-twentieth century. Neither the growing volume of translated specialized texts nor the relatively limited range of tasks addressed by automated translation has eliminated critical attitudes towards this type of translation. Historical evidence makes it possible to trace the logic of MT development as an instrument of industrial progress.

German translation scholars M. Wolf and O. Czulo conceptualize the history of machine translation as a history of “algorithmic translation,” emphasizing that translators’ efforts to structure the translation process can be traced over a long period. In particular, they refer to the works of Ramon Llull (1232–1316), who developed *ars combinatoria*, a system of formalized combination of basic concepts that made it possible to correlate symbols, letters, and terms relevant for translation from Latin into Arabic [Wolf, Czulo, 2026, pp. 6-7]. Llull is regarded as one of the intellectual forerunners of computer science, as his algorithmic combination of basic concepts represents an early form of formalized language processing [Wolf, Czulo, 2026, p. 7].

The notion of text algorithmisation is associated with the monadology of Gottfried Wilhelm Leibniz (1646–1716), according to which language and perceived reality consist of discrete units and can be described through coding. H. Breger notes that the idea of binary encoding originates with Leibniz and considers him to be a pioneer in the field of future computer sciences [Breger, 2009].

Early ideas of algorithmic language transformation are confirmed by studies of the history of twentieth-century machine translation. Thus, J. Slocum points out that the first MT projects were based on formal rules of linguistic transformation and that the transition to more complex models reflects a persistent attempt to

structure the process [Slocum, 1985]. L. Schwartz stated that concepts of a universal language and symbolic transformations formed the methodological basis of formal approaches to automatic translation [Schwartz, 2018]. L. Dostert described early stages of MT, emphasising the role of coding, analysis, and mechanical operations [Dostert, 1957]. Contemporary research indicates that the evolution of MT – from interlingual and statistical models to corpus-based and neural approaches – reflects continuous algorithmic optimization of translation processes [Mercan, Akgün, Odacıoğlu, 2024].

The twentieth century became an era of active integration of scientific-and-technological innovations into the processes of linguistic “recoding.” Alongside the development of equipment for simultaneous interpreting, several projects of automatic translation machines emerged, developed by G. Artsrouni in France and P. Troyansky in the USSR [Hutchins, 2004]. Troyansky’s ideas were more complex: his three-phase model included analysis of the source word form, transfer through a bilingual lexicon, and synthesis of the form in the target language [Wolf, Czulo, 2026, pp. 13-14].

Post-war developments in MT were shaped by advances in cryptography, including the breaking of the Enigma cipher using the Bombe – an electromechanical device considered a prototype of the computer – and by the principles proposed by W. Weaver in the *Translation Memorandum*, which conceptualized translation as a process of decoding that takes into account context, linguistic logic, and universals [Weaver, 1949].

The idea of transforming the source text according to predefined parameters as a means of translation optimization has a long history. J. Nitzke identifies text types as most suitable for automated translation, including tourism-related texts; however, the purposeful transformation of the source text as a factor influencing MT quality is not addressed in her work [Nitzke, 2026, pp. 106-107].

Controlled transformation of the source text is emphasised in the studies on controlled language. W. Hutchins notes that restricting lexical and syntactic variability increases the predictability of MT output [Hutchins, 1998]. S. O’Brien considers pre-editing as a means of

reducing the volume and complexity of post-editing by enhancing structural transparency and terminological consistency [O'Brien, 2011]. M. Siegel points out that pre-editing reveals defects in the source text, which often serve as sources of translation errors [Siegel, 2018].

Methodologically, this approach correlates with E. Nida's view of translation as a sequence of formalized operations of analysis and meaning reconstruction, oriented towards result reproducibility [Nida, 1964]. In the context of statistical and neural machine translation, this dependence is confirmed by MT research emphasizing the role of structural regularity, domain homogeneity, and standardized terminology of input data [Koehn, 2010]. Although the DIN ISO 18587 standard regulates only the post-editing stage, its provisions implicitly indicate the importance of preliminary text algorithmisation for optimizing machine translation [ISO 18587:2017...].

Thus, the algorithmisation of the source text establishes an integral component of machine translation quality. The following sections will identify specific features of an "ideal" source text that ensure accurate neural machine translation.

Materials and methods

Research material

The research material comprises various sources.

1. **Promotional content of the website of the Singapore-based company Linguise** (<https://www.linguise.com>) operating in the field of neural multilingual communication and machine translation services. The company was founded in 2014 and, since 2019, has been developing software solutions for connecting websites to neural machine translation systems. In 2021, Linguise became publicly available with content management system (hereinafter – CMS) support for WordPress and, subsequently, for Joomla. At present, the company offers translation into more than 85 languages, while the company's own website is available in 18 languages. The focus of the present study is the main section of the website in English (source text), Russian, and German, within the framework of multilinguality understood as a prerequisite for communicative equality in the digital environment [Mityagina,

Novikova, 2025; Mityagina, Novozhilova, Naumova, 2024].

2. **Promotional content of the website of the German hospitality company Traumferienhäuser Schwarzwald** (<https://www.schwarzwald-ferienhaus.net/>), whose multilingual content is provided by Linguise and presented by the latter as a successful case. The website is also available in 18 languages; however, the set of languages differs from that of the Linguise content. The analytical procedures are likewise focused on the main section of the website presented in German (source text), English, and Russian.

Research methodology

The methodology of the study includes the following stages.

1. **Contrastive analysis** of the source and target texts aimed at identifying their structural, grammatical, and lexical congruence (see: [Mityagina, Novozhilova, Shovgenina, 2019]), including:

- identification of linguistic means in the source text that optimize accurate translation into two or more languages;
- identification of linguistic means in the source text that hinder accurate translation into two or more languages.

2. **Translatological analysis** of the source and target texts aimed at identifying types of transformations and translation techniques that ensure accurate translation into more than one language.

3. **Formulation of algorithms for ensuring the quality of multilingual promotional texts** in the format of an "optimal toolkit": text length – text structure – text syntax – lexical composition.

Results and discussion

Promotional content of the Linguise website in English, Russian, and German: prototype implementation

The contrastive analysis of the main section of the Linguise website (<https://www.linguise.com/>) in English (source text), Russian, and German reveals a high degree of macrostructural congruence, confirming the universality of the

source text and its adaptability for multilingual presentation. In all language versions analyzed, the sequence of elements characteristic of corporate promotional texts is preserved: a headline with a positioning slogan, a product description, a list of functional advantages, verbal and/or visual markers of product recognition by users and partners that increase trust and reduce communicative risk for the addressee, as well as a call to action.

In the source version, the informational core is centred around the slogan-appeal:

(1) Translate your website into over 85 languages with unlimited, instant AI translations!

This slogan explicitly conveys the core function of the service to support more than 85 languages and emphasizes the immediacy of translation.

The Russian version of the slogan fully reproduces the semantic and pragmatic content of the English original but syntactically expands it by means of additional elements (original orthography and punctuation are preserved):

(2) Переведите свой веб сайт на более чем 85 языков с помощью неограниченного количества мгновенных переводов на основе искусственного интеллекта!

The norms of the Russian language motivate the use of *с помощью* and *на основе*; however, the phrase *на основе искусственного интеллекта* appears somewhat outdated. A more current and functional equivalent would be *на основе ИИ*.

In the German version, the headline retains the same structural (organizing the homepage content) and semantic load:

(3) Übersetzen Sie Ihre Website in über 85 Sprachen mit unbegrenzten, sofortigen KI Übersetzungen!

Compared to the Russian version, a greater degree of syntactic and lexical parallelism can be observed in this case. It is manifested in the functional and semantic correspondence between *with* and *mit* and in the availability of the term *KI Übersetzungen* within the LLM's lexical inventory.

The structural unity of the text is further manifested in the consistency of functional blocks across all language versions:

(4) **English:** Increase your traffic from Google, Baidu or Yandex search engines by 40%. Perfect AI translation quality. Translate all the major CMS on the market.

German: Steigern Sie Ihren Traffic von den Suchmaschinen Google, Baidu oder Yandex um 40 %. Perfekte KI-Übersetzungsqualität. Übersetzen Sie alle wichtigen CMS auf dem Markt.

Russian: Увеличьте трафик из поисковых систем Google, Baidu или Яндекс на 40%. Идеальное качество перевода ИИ. Переведите все основные CMS на рынке.

The unified organization of the text is complemented by a source-oriented preference for syntactic simplicity: the majority of sentences are simple and consist of short coordinated phrases.

This algorithm is consistently maintained throughout the hypertext: ***We will make the installation for free!*** In the Russian version, this sentence corresponds to *произведем бесплатно!* This type of syntactic compression is also observed in a parallel fragment in both the Russian and German translated texts:

(5) **English:** Get your website translated in 15 minutes **with our high-quality cloud AI translation tool – we will do this for you, free of charge!**

German: Lassen Sie Ihre Website in nur 15 Minuten **mit unserem hochwertigen Cloud-KI-Übersetzungstool übersetzen – und das kostenlos!**

Russian: Переведите свой веб-сайт за 15 минут **с помощью нашего высококачественного облачного инструмента перевода на основе искусственного интеллекта – мы сделаем это для вас бесплатно!**

Syntactic simplicity in the translated texts progresses as far as permitted by the means, norms, and usage of the target language; however, these are insufficient when the LLM continues to employ somewhat outdated correspondences. The English phrase *with high-quality cloud AI translation tool* has a direct equivalent in German, which uses borrowings typical of computer-related slang (*mit unserem hochwertigen Cloud-KI-Übersetzungstool*). In Russian, however, the abbreviation *ИИ* is not employed, resulting in the continued use of the less current *на основе искусственного интеллекта*.

At the lexical level, the English source text is characterized by vocabulary with minimal polysemy. Terminological elements, frequent in this discourse – *AI translations*, *SEO optimized*, *instant*, *CMS integrations*, *85+ languages* – are repeated across different parts of the source text, creating a stable lexical framework for translation. Borrowings from English in their original spelling are also present in the Russian content (e.g., *переводы оптимизированы для SEO*), and lexical congruence across language versions is ensured by the nominative conventions of information technology discourse.

At the same time, the promotional content under analysis contains linguistic elements that complicate automatic translation. Such lexemes include marketing clichés and idiomatic expressions, for example:

(6) Cloud AI translation or Linguae AI specialized model –

a complex terminological unit requiring mediated transfer through explanatory constructions.

(7) Used by some of the biggest companies in the world –

a statement requiring interpretative adaptation for accurate rendering in other languages. In the German and Russian versions, such expressions undergo local transformations with the aim to produce the communicative effect while accounting for the norms of the target audiences.

Translatological analysis: transformations and translation techniques

The translatological analysis of the promotional hypertext indicates the use of stable translation techniques and strategies across the website.

Grammatical structures of the English content are predominantly calqued in translation. English constructions with active infinitives and imperative forms are rendered in Russian and German by equivalent structures. The English call-to-action *Request your free installation now!* is translated into Russian as the infinitival construction *Запросить бесплатную установку сейчас* and into German as a polite imperative *Fordern Sie jetzt*

Ihre kostenlose Installation an!, preserving both the communicative function and the implicit persuasive tone.

In service descriptions, a simple proportional substitution is widely used:

(8) **English:** Our neural automatic translation tool **will elevate** your business online rank, whether you have an eCommerce website, **are** a travel and tourism provider, **international business** or even provide learning solutions for clients across the globe!

German: Unser neuronales automatisches Übersetzungstool **verbessert** Ihr Online-Ranking – egal ob Sie einen Online-Shop betreiben, im Reise- und Tourismussektor tätig sind, **international arbeiten** oder Lernlösungen für Kunden weltweit anbieten!

Russian: Наш инструмент нейронного автоматического перевода **повысит** рейтинг вашего бизнеса в Интернете, независимо от того, есть ли у вас веб-сайт электронной коммерции, **являетесь** ли вы поставщиком путешествий и туризма, **международным бизнесом** или даже предоставляете обучающие решения для клиентов по всему миру!

These examples demonstrate how grammatical and syntactic structures are transferred in the translated versions without significant deviation from the source text. In Russian, the future tense is preserved, whereas in German it is replaced by the present tense, which is typical of German when expressing future events in declarative contexts.

Thus, the German and Russian versions of the Linguae website exhibit a high degree of syntactic conservation: nominal structures of the English source are reproduced without substantial transformations. The absence of complex verbal constructions reduces the need for grammatical transformations and increases the predictability of machine translation.

At the same time, grammatical transformations motivated by asymmetries between language systems are observed. The machine translation system renders the gerund in German and Russian by means of subordinate clauses:

(9) **English:** All translations are SEO-optimized, **making it easier for users to find your content!**

German: Alle Übersetzungen sind SEO-optimiert, **sodass Nutzer Ihre Inhalte leichter finden können!**

Russian: Все переводы оптимизированы для SEO, **что облегчает пользователям поиск вашего контента!**

Terminological transfer in the material under analysis is generally achieved through established equivalents. However, certain complex English terms “burdened” with language-specific derivational and morphological features are transformed with translation techniques:

(10) *SEO optimized translations* → *переводы, оптимизированные для SEO* –

component rearrangement prevents incorrect interpretation.

(11) *KI-LLMs (große Sprachmodelle)* –

the term *LLMs* is accompanied by an explanatory translation. Neither German nor Russian has an equivalent abbreviation; therefore, *LLM* is retained in both languages in combination with an explanation (*große Sprachmodelle*, *Большие языковые модели*).

Internationally used terms (*SEO*, *AI*, *instant translations*) are successfully employed in the German and Russian versions without loss of meaning. However, the presence of such terminological inclusions also leads to violations of terminological uniformity, as double variants occur: *AI-Übersetzung* / *KI-Übersetzung*, *AI-nepeвод* / *III-nepeвод*.

An analysis of evaluative vocabulary in the English, German, and Russian versions of the Linguise website shows that markedness is functional and technologically oriented. It is realized primarily through terminological adjectives (*automatic*, *AI-powered*, *neural*) and standardized marketing formulas (*easy integration*, *seamless integration*), which are reproduced in translation without intensification or reduction of expressiveness. The absence of emotionally evaluative and culturally marked vocabulary indicates a deliberate optimization of the source text for multilingual neural

reproduction and ensures a high degree of lexico-pragmatic congruence across language versions (see Table).

The translational analysis indicates the absence of radical adaptation strategies that could significantly alter the informational structure or communicative orientation of the text. The translation retains its promotional function, which confirms Linguise’s orientation towards a universal international market and the use of a universal textual strategy for multilingual promotional materials produced through machine translation.

Algorithm for ensuring the quality of multilingual promotional texts (prototype)

Based on the analysis of the Linguise website content, an optimal algorithm for ensuring multilingual text quality can be formalized as follows:

– **text length:** modular, syntactically simple blocks allowing autonomous translation with minimal structural rearrangement;

– **text structure:** a strictly fixed sequence of elements ensures uniformity across languages (*slogan* → *description* → *advantages* → *product recognition markers* → *call to action*);

– **syntax:** predominance of active voice, short sentences, and nominal constructions reduces the likelihood of distortion in automatic translation.

– **lexical composition:** a limited, high-frequency set of terms enhances translation stability and reduces polysemy risks; the absence of complex expressive and evaluative vocabulary.

Thus, the structure and content of the Linguise website demonstrate an effective prototype of a text optimized for neural multilingual translation, making it a representative example of corporate multilingual content in the field of automated translation solutions.

Analysis of evaluative vocabulary

English	German	Russian	Comment
<i>easy integration</i>	<i>einfache Integration</i>	<i>простая интеграция</i>	A direct calque with the same degree of evaluation
<i>seamless integration</i>	<i>nahtlose Integration</i>	<i>бесшовная интеграция</i>	The metaphorical element (seamless) is preserved in all languages, but remains blurred and technical
<i>instant translations</i>	<i>sofortige Übersetzungen</i>	<i>мгновенные переводы</i>	The temporal evaluation is conveyed equivalently

***Promotional content of Traumferienhäuser
Schwarzwald in German, English,
and Russian: prototype-based modelling***

The contrastive analysis of the promotional content of the *Traumferienhäuser Schwarzwald* (<https://www.schwarzwald-ferienhaus.net/>) website reveals a combination of emotionally marked vocabulary, descriptions of tourist experience, and local markers associated with a regional tourism discourse. Importantly, both the English and Russian versions of the website are available in the format of a multilingual web presentation, which enables systematic comparative analysis.

In the German source text, the main headline and introductory block constitute an emotionally rich tourist appeal oriented towards the sensory experience of leisure: comfort, wellness, and style of stay:

(12) Die Traumferienhäuser Schwarzwald mit **Sauna, Kamin und Whirlpool** – Sind Sie auf der Suche nach einem Traum Ferienhaus...? Denn wir vermitteln besondere Traumferienhäuser Schwarzwald – und zwar nur die, die uns als Agentur zu 100% überzeugt haben.

In the English version, the key attributes of the accommodation (*sauna, fireplace, whirlpool*) are retained, but the formulation is shortened and transformed into a more universal marketing statement designed to be accessible to an international audience:

(13) The 'Black Forest dream holiday homes' with sauna, fireplace and whirlpool... Because we provide special dream holiday homes in the Black Forest – and only those that have convinced us 100% as an agency.

In the Russian version, the introductory paragraph preserves the semantic framework of the source text but is adapted to the expectations of a Russian-speaking audience, primarily through the nomination of the offered services:

(14) Дома мечты Шварцвальда с сауной, камином и гидромассажной ванной. Вы ищете апартаменты мечты с сауной или частный дом для отдыха в стиле шале...

Thus, all three versions contain comparable semantic blocks, while differing in their degree of expressiveness and detail explicitness.

The **English version** tends towards a rationalized description of tourist facilities by emphasizing accessibility, universality, and core accommodation benefits. The **Russian version** reflects the same core propositions but more frequently employs adapted collocations (*дом мечты, комфортный отдых*), which reduces the culturally specific colouring of the source text.

Translatological analysis

The translatological analysis of the multilingual website hypertext reveals that lexical and stylistic congruence between the source and translated texts is disrupted by the extensive use of neutralization, which is characteristic of automatic translation systems not oriented towards localization:

(15) German (source text):

– Das Haus ist sehr schön und liegt idyllisch mitten im Wald.

– ...Mit wunderschönem Blick auf das Bergpanorama im Schwarzwald.

– Ein hervorragend ausgestattetes Haus, schön eingerichtet...

– Wir hatten eine superschöne Zeit ...

– ...Hat alles, was das Herz begehrt.

English:

– The accommodation is very comfortable and well-equipped.

– ...With a stunning view of the Black Forest.

– Fantastic holiday home! ...Superbly equipped...

– A true haven for relaxation...

– ...Everything you could wish for.

Russian:

– Дом очень красив и расположен идиллически в лесу.

– ...С прекрасным видом на горный пейзаж Шварцвальда.

– Прекрасно оборудованный дом, красиво обставленный...

– Мы провели превосходное время...

– ...Имеет всё, что может пожелать сердце.

When the German-language content of the *Traumferienhäuser Schwarzwald* website is considered as the source text, it becomes evident that it realises a discourse strategy typical of regional tourism: moderate positive evaluation combining descriptiveness with emotional appeal. Evaluative vocabulary in the German original is primarily expressed through qualitative adjectives (*schön, idyllisch, hervorragend*) and stable

colloquial-positive formulas (*superschöne Zeit, alles, was das Herz begehrt*), which appeal to the subjective experience of leisure while remaining within communicative norms.

The English version demonstrates a systematic transformation of evaluative semantics: German descriptive-and-evaluative constructions are often reinterpreted in favour of a universal, marketing-oriented discourse. This manifests itself in intensified evaluation (*hervorragend* → *fantastic*), a shift of focus from local natural characteristics to functional benefits (*idyllisch* → *comfortable, well-equipped*), and the replacement of colloquial evaluations with metaphorical nominations (*superschön* → *a true haven for relaxation*). At the same time, it should be noted that literal rendering occasionally results in a certain artificiality of expression.

Thus, the English translation does not so much reproduce the stylistic profile of the German original as adapt it to the expectations of a global tourist audience, for whom universal markers of comfort and emotional well-being are of primary importance. The Russian version, by contrast, in most cases demonstrates a high degree of lexico-semantic congruence with the German source text. Evaluative adjectives and figurative formulas are frequently translated literally (*idyllisch* → *идиллически*; *was das Herz begehrt* → *что может пожелать сердце*), which may result in stylistic artificiality and reduced promotional effectiveness. At the same time, epithets whose literal translation would violate collocational norms are replaced by semantically close but largely neutral equivalents (*hervorragend* → *прекрасно*), which also contributes to a decrease in expressiveness: colloquial or intensifying elements of the German original lose their stylistic markedness, and the intended communicative effect is not fully achieved.

Conclusion

The conducted study demonstrates that the quality of neural machine translation of promotional texts is largely determined by the parameters of the source text, which, under conditions of using large language models, functions as a prototype for multilingual reproduction. Contrary to the widespread notion of the “self-sufficiency” of neural translation

systems, the results of the analysis confirm the necessity of deliberate algorithmisation of the source text as a key factor in translation optimization.

The contrastive analysis of multilingual promotional content reveals a stable correlation between the degree of structural and lexico-grammatical organization of the source text and the level of congruence across translated versions. The texts organised into modular blocks with a fixed sequence of functional elements demonstrate high predictability in translation and minimal divergence between language versions. Syntactic simplicity, the predominance of nominal constructions, and active voice usage contribute to a reduction in grammatical transformations and ensure the reproducibility of the promotional function of the text across languages.

Lexical analysis shows that terminological homogeneity and the use of frequent, low-polysemy nominations significantly enhance the stability of neural machine translation. At the same time, the inclusion of expressive, metaphorical, and culturally marked vocabulary characteristic of tourism discourse leads to the neutralization of evaluative meanings, stylistic losses, and shifts in communicative effect in translated versions, especially when oriented towards a global audience.

The translational analysis confirms the dominance of calquing and simple proportional substitution as the core techniques of neural machine translation, indicating a high degree of formalization of this discourse type, provided that prior prototyping of the source text is applied. The proposed algorithm – *text length* – *text structure* – *text syntax* – *lexical composition* – may be considered a practice-oriented model for designing multilingual promotional content and is of relevance for translators, localisation specialists, and developers of digital communication solutions employing AI technologies.

NOTE

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