A Study Comparing the Advertising Language Ability of ChatGPT-4o and Kimi in the Translation Beauty Industry

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Abstract:

This paper explores the ability of ChatGPT-4o and Kimi to translate advertising slogans for different beauty brands. Both AI tools are translated with the ICIO framework and the same background knowledge supplement. Through the comparison of the results of translation, research find out the similarities and differences between the two types of AI translation. Translation can be judged in terms of coherence, the communication of its emotion, and whether it reflects the deep. And the combination of the advantages of human translation and machine translation will provide more accurate and insightful translations in the future. By setting up questionnaires and interviews, the research can explore the similarities and differences between the two AI tools to translate specific text with more "humanized" characteristics in the future and improve the translation level of text translation. At the same time, this study still has some limitations in the selection and classification of advertising languages, and future studies can further explore the methods of translating domain-specific texts and promote the improvement of translation quality.

Keywords: Generative AI tools; Translate; Advertising slogan; Beauty industry.

1. Introduction

With the continuous progress of the times, different generative artificial intelligence tools have developed rapidly, making most of the text of humanities and social sciences can be directly translated instead of artificial. For most of these generative AI tools, the author chose ChatGPT-4o and Kimi as research objects. Both ChatGPT-4o and Kimi have been widely trained in the language corpora, and can understand and use multiple languages. Their translation level is also improving with the continuous update of the algorithm data, which is representative.

It is not easy to translate the beauty industry advertising language rich meanings, and the essence of translation is how to perfectly deliver the deep meaning to customers. For example, the research needs to consider the following aspects:

How to make a more appropriate and creative translation while ensuring the original meaning? Can machine-translated advertising slogans connect product concepts to customers? Advertising words often have a specific emotion and tone. Can machine translations convey this accurately?

These considerations are one of AI's important challenges in translating text in specific areas. Therefore, although humans are in the era of science and technology, and artificial intelligence technology has been greatly improved, the author believes there is still a large space for text translation in the face of a specific context. Therefore, the author hopes to investigate further the advantages and shortcomings of current generative AI tools in translating texts in specific fields and combine the advantages of artificial translation with generative AI tools to obtain a more accurate and rich, high-quality translation.

Research questions:

(1) What are the similarities and differences between the translation results of the two AI models when translating advertisements?

(2) What is the difference between manual translation and machine translation?

Research meaning:

1. Improve the quality of translation: By comparing the translation performance of different generative artificial intelligence tools to identify which tools are more accurate and reliable in translation in specific fields and make the translation results more in line with expectations to choose the most appropriate tools to improve the quality of translation.

2. Meet specific needs: Text in different fields has its specific terms and contexts. Comparing different generative AI tools can find the most suitable translation solution for the needs of specific fields.

2. Literature Review

At present, many scholars and experts have mentioned the lack of "humanized" translation in artificial intelligence translation, which will give the translated text a sense of distance from people [1]. From the language perspective, the internal development of symbolic computing language gradually shows a trend of simplification, making the natural language more and less innovative [2]. At the same time, some scholars have pointed out in their research that translation cannot be completely replaced by artificial intelligence, and translators should have autonomy [3, 4]. Combined with the research of other scholars, it can be seen that there is algorithmic bias in machine translation (for example, judges will default to males, and teachers will default to females). If only relying solely on machine translation text, there will be data leakage various ethical problems, and even extreme cases where the translation is inconsistent with reality [5, 6]. Moreover, from the perspective of language, the internal development of symbolic computing language gradually shows a trend of simplification, which makes natural language more and less innovative [7, 8]. However, it is worth learning that AI translation makes the translated text more creative, enriching its content and promoting the transmission of meaning [9, 10, 11].

3. Research Method

3.1 Study Design

3.1.1 Study steps

First of all, the author plan to give ChatGPT-4o and Kimi the same instruction structure (ICIO) ("I" is Instruction; "C" is Context; "I" is Input data; "O" is Output data) and the same background knowledge supplement to gradually guide these two generative artificial intelligence tools to translate the same beauty industry advertising language. These advertising slogans in the beauty industry come from the products of different well-known companies worldwide, and the author selected 20 of them to investigate. These advertising slogans are short but rich in meaning, to examine whether artificial intelligence tools can translate these advertising slogans well. In the next step, the research will compare the translation of ChatGPT-4o and Kimi. Later, the author will use the form of a questionnaire to collect data from the public and interview the public to ask about their comments on the slogan of the beauty industry through the two generative AI tools.

The ICIO instruction was selected for the following reasons:

1. Have clarity. This framework is clearer and easier to understand than others.

2. This instruction is flexible. This framework also makes adding or modifying new instructions easier to meet new needs and changes.

The criteria for examining whether excellent artificial intelligence tools are as follows:

1. Is there a more appropriate and creative translation while ensuring the original intention?

2. Is the product concept related to customers?

3. Does it accurately convey the specific tone or emotion of the slogan?

According to the above three criteria, the research can get the advantages and disadvantages of each model in translation, compare their similarities and differences, and further conclude that the current generative AI tools are excellent in text and still need efforts in translating specific fields. In the future, humans can promote the interaction between humans and computers to attain high-quality translation.

4. Research Conclusion

A total of 40 people participated in the survey, including 15 boys and 25 girls. Through the data survey results of the questionnaire, the author found great differences in the translation and comparison data of some topics, and the translation of some questions was quite flat. The survey data are shown in Table 1.

Table 1. A Table Comparing the Advertising Language Ability of ChatGPT-4o and Kimi in the Translation Beauty Industry

Title serial number	Advertising language original sentence	The Translation of Kimi	Translation of ChatGPT-4o	Number of Kimi supports	Number of ChatGPT-4o supports	Kimi support rate	ChatGPT-4o support rate
1	Enriching Women's Lives	Bloom the glory of women	Moisten the hearts of women	32	8	80%	20%
2	Your light from my presence	Shine for me	My presence reflects your brilliance	31	9	77.5%	22.5%

3	Dare to Chase, Dare to Love	chase love bravely	Chasing dreams, Dare to love	7	33	17.5%	82.5%
4	Marine Embrace, Nature's Restoration	The embrace of the ocean, the healing of nature	Embrace the sea, natural restoration	30	10	75%	25%
5	Beautiful skin for life	Beautiful skin Lifelong company	Skin trip Beautiful metamorphosis	22	18	55%	45%
6	Start Ahead	Start and ahead of the future	Leading to a new era of beauty	18	22	45%	55%
7	Timeless elegance	Eternal Beauty, inextinguishable beauty	Excellence in perpetuity be really a most unusual and quite individual beauty	22	18	55%	45%
8	Beauty is Who You Are	Beauty is true to me	Beauty is your true nature	28	12	70%	30%
9	The One	The only choice	One of a kind	27	13	67.5%	32.5%
10	Your light, defined by you	The light of self Self-shaping	Light up your unique brilliance	26	14	65%	35%
11	To be or become	Existence, or growth	That is, it will become	14	26	35%	65%
12	The Purity of Nature	The purity of nature	Nature is true	14	26	35%	65%
13	Opium for Women	Drunk woman incense	Deadly temptation	12	28	30%	70%
14	Beauty with Heart	Beauty is born by the heart	Start from the heart Beautiful without boundaries	23	17	57.5%	42.5%
15	In order to be irreplaceable, one must always be different	Unique self irreplaceable	Achievement is extraordinary Must first extraordinary	23	17	57.5%	42.5%
16	Because I'm worth it	I am extraordinary	I deserve it	18	22	45%	55%
17	Be Unique, Be You	Personality by you	Beauty lies in oneself	19	21	47.5%	52.5%
18	Beauty from Within	Beauty, from the inside out	Beauty of the heart	40	0	100%	0%
19	Because you're worth it	Be noble because of you	Because of your self-worth	27	13	67.5%	32.5%
20	Beautifully Gentle	The beauty of delicacy	Gentle to beautiful	20	20	50%	50%

The paper can demonstrate from the table that Kimi's   translation is better than the translation of ChatGPT-4o

(Kimi won 12 questions, and ChatGPT-4o won 7 questions). According to the above translation criteria, if the literal translation of the original text is simply done, as in question 18, the public is difficult to accept the translation results only from the surface. The research can find Kimi and ChatGPT-4o translation beauty makeup industry have in common is that they are trying to slogan for a more brief and rich deep translation, are as far as possible to translate the slogan itself want to convey to the customer emotion and connotation, but because the degree of different so will affect the public preferences.

Moreover, in the interview, the research found that most people think that the difference between Kimi and ChatGPT-4o translation may be in the degree to which they try to connect the product brand concept with customers. Many people believe that in the age of AI, the translation of specific texts cannot rely solely on AI tools. Therefore, the author believes that it is very necessary and meaningful to promote the integration of humans and machines in the future.

5. Research Discussion

Through the above research, humans can apply the advantages of translation reflected by artificial intelligence tools in practice and combine the advantages of artificial to obtain a higher translation level. For instance, humans can use AI to make final touches or rewrites on the translated text, enriching the meaning and creativity of the article. At the same time, this study has many deficiencies, such as the choice of advertising language, which can also be a more detailed classification. In the future, the study can conduct deeper research and continue to explore where the translation of artificial intelligence tools and artificial translation can be innovatively integrated or transformed.

6. Conclusion

In the new era, translation technology has rapidly developed and innovated. The author believes that the progress of science and technology is one of the reasons for promoting the transformation of the translation mode and making the translation mode more intelligent and automatic. At present, artificial intelligence's translation level is gradually gaining the ability to translate texts more creatively and use rhetoric. At the same time, the need for translators for artificial intelligence translation technology has also been greatly improved, which also brings opportunities and challenges to future translation work. In the future, humans should promote human-computer interaction, give full play to the subjective initiative combined with objective reality, and interpreter maintain their objective and rationale while also accepting the development of new artificial intelligence translation technology, focusing on "quantity" while also paying attention to the improvement of "quality", so that the translation technology and the quality of the translation text constantly updated. For example, human can use AI to make final touches or rewrites on the translated text, enriching the meaning and creativity of the article. Lastly, this study still has some limitations in the selection and classification of advertising languages, and future studies can further explore the methods of translating domain-specific texts and promote the improvement of translation quality.

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