International Journal of Arts and Social Science
ISSN: 2581-7922,
Volume 9 Issue 6, June 2026

A Comparative Study of Term Translation Based on the COCA Corpus—Taking "NEV" and "EV "as Examples

Li He[1], Xianghong Zeng[2]
(College of Foreign Languages/ University of Shanghai for Science and Technology, China)

ABSTRACT: *The research and development of new energy vehicles has become a key area in the 21st-century automotive industry. As technical exchanges in this sector intensify globally, the demand for accurate translation of professional texts and related terminology continues to grow. This study focuses on the official Chinese translation "New Energy Vehicle (NEV)" and the internationally prevalent term "Electric Vehicle (EV)". Utilizing the Corpus of Contemporary American English (COCA) as an empirical data source, this research explores the global acceptance and usage of these two terms through a comparative analysis of their frequency distribution, contextual characteristics, and collocational patterns. The findings reveal that "EV" holds an absolutely dominant position in general English, whereas "NEV" is a highly China-specific and peripheral term. Based on these results, the paper proposes a targeted translation strategy framework: "NEV" should be retained in official documents where policy accuracy is paramount; in general texts intended for effective communication, priority should be given to "EV" or an explanatory translation to optimize cross-cultural communication outcomes.*

KEYWORDS - *COCA Corpus, EV, NEV, terminology translation, translation strategy*

I. INTRODUCTION

The term "new energy vehicle" possesses both technological and political-policy attributes. Whether it can be effectively translated for a global audience becomes a key issue. The official translation "New Energy Vehicle (NEV)" aims to accurately convey national policy connotations. However, translators often face a dilemma in practice: should they strictly follow the official translation to maintain "fidelity," or adopt the internationally common "Electric Vehicle (EV)" to achieve "accessibility"?

Traditional translation studies have mostly relied on qualitative analysis or case studies, lacking a macroscopic, quantitative examination of how terms are actually used in the target language. To address this gap, this study introduces corpus linguistics methods, shifting the research perspective from the source text to the target language context. We utilize the Corpus of Contemporary American English (COCA), a large balanced corpus, to conduct an empirical comparative analysis of "NEV" and "EV," aiming to answer the following questions: (1)What are the significant differences in the frequency and distribution of "NEV" and "EV" in general English? (2)What are the characteristic features of the typical contexts in which these two terms appear? (3)What specific implications do these differences have for making reasonable translation choices across different text types?

[1] Li He, Graduate Student of Foreign Language School, University of Shanghai for Science and Technology; Research field: translation and technology.

[2] Xianghong Zeng, Corresponding author, D.A.，Associate Professor of Foreign Language School, University of Shanghai for Science and Technology；Research field：translation and culture.

II. LITERATURE REVIEW

Against the backdrop of growing attention to new energy vehicle development, Ling Xue et al. (2024) argue that for China to understand the international technological trends in new energy vehicles, it must grasp the linguistic characteristics of English texts in this industry to achieve accurate Chinese translation. Research on automotive text translation has primarily focused on the linguistic features and Chinese translation of traditional automotive English texts. This research mainly concentrates on the translation and usage of related professional terms supported by certain data, reflecting its underlying implications and insights to some extent.

Guo Xinyu (2024) notes that the Corpus of Contemporary American English (COCA), created by Mark Davies in 2008, is sometimes also called the "Brigham Young University series corpus." With a capacity of 1 billion words, containing 20 million words each year from 1990 to 2019, it is the world's largest online balanced English corpus. COCA is easy to operate and quick to search, providing ordinary users with 20 free queries per day, making it a very important tool for English language researchers, teachers, and students. Baker (1995) proposed that corpus-based translation studies advocate for a data-driven approach to observe translation phenomena, viewing translation as a linguistic behavior occurring within the socio-cultural context of the target language and emphasizing the exploration of translation norms and conventions. In the field of terminology translation, Aixela (1996) proposed strategies for handling "culture-specific items," including conservation (e.g., literal translation, transliteration) and substitution (e.g., generalization, synonymy). "NEV" can be seen as a "culture-specific item" achieved through "literal translation," aiming to introduce China's policy concepts authentically into the target language.

Existing research often focuses on the classification and systematization of translation strategies, with insufficient attention paid to the adaptability and actual application of cross-contextually transplanted terms within the target language ecology. This includes core issues such as their degree of acceptance among target language groups, usage scenarios, and dissemination paths. In fact, large native-speaker corpora like COCA, with their vast amounts of authentic language data, provide an ideal empirical vehicle for observing the cross-cultural adaptation effects of such terms. Their core value lies in helping researchers move beyond empirical judgments to extract patterns of term usage from objective data, thereby providing more solid empirical support and theoretical basis for term selection and decision-making in translation practice.

III. METHODOLOGY

3.1 Research corpus

This study employs the Corpus of Contemporary American English (COCA) as its research tool. COCA contains over 1 billion words of text and evenly covers genres such as spoken language, fiction, popular magazines, newspapers, and academic journals. It is widely recognized as one of the corpora that best represents the full picture of American English.

3.2. Research Procedure

This study uses COCA as the data source and conducts a comparative analysis of the node words "NEV" and "EV" through the following three steps: Frequency and Distribution Analysis: Using COCA's "Chart" function, the two terms are searched separately to obtain their overall frequency and distribution data across different registers for a macroscopic comparison of their general usage. Collocation Analysis: Using the "Collocates" function with a span set to “-4” to “+4”, the top 20 words significantly co-occurring with the node words (sorted by MI value) are extracted. By comparing the collocation tables, the differences in semantic prosody between the two terms are analyzed. Finally, the typical contexts and grammatical structure patterns (colligation) in which they appear are summarized to deeply explore their usage conditions.

During the research process, it was found that directly searching for "EV" yields results mixed with many words and usages unrelated to new energy. This requires users of the corpus to be familiar with its operation. This study used the "Collocates" function, setting the position of collocates and specifying the span within this function. This allows retrieval of only instances where "EV" and "electric" appear adjacent, thus filtering out other irrelevant uses.

IV. RESULTS

4.1 Frequency and Distribution

The COCA query results show a clear contrast:

EV: Has a total frequency of 413 occurrences and is widely distributed across all genres. The frequency is particularly high in blogs, magazines, and newspapers, indicating it is a mature, core vocabulary item in social discourse.

NEV: Has a total frequency of 1,199 occurrences. Its appearance is mostly concentrated in newspaper genres reporting on China's automotive industry or energy policies.

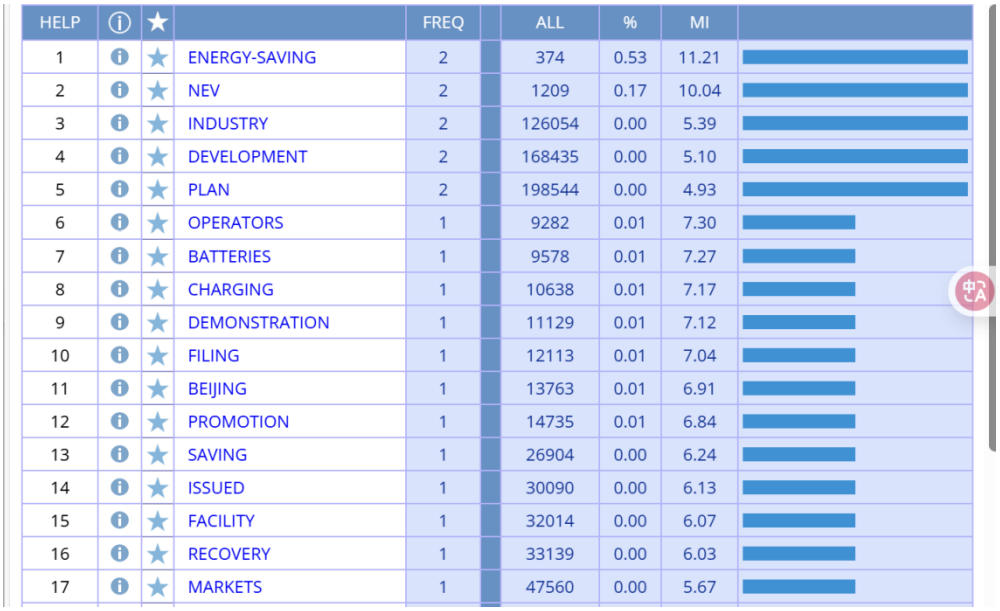
Table 1: Frequency and Distribution of "EV" and "NEV" Across Registers in COCA

	A Comparative Table of the Frequency and Distribution of "EV" and "NEV" Across Different Registers in COCA									
	Statistical Item	Total Frequency	Blog	Web	Program	Spoken	Fiction	Magazine	Newspaper	Academic
EV	Frequency	413	84	60	11	23	4	136	66	29
	Proportion by Register (%)	100	20.3	14.5	2.7	5.57	0.97	32.93	15.98	7.02
NEV	Frequency	1,199	60	80	117	73	48	177	495	149
	Proportion by Register (%)	100	5	6.7	9.8	6.09	4.00	14.76	41.28	12.43

The data in Table 1 shows that the distribution of "NEV" is extremely concentrated, dominating in newspapers and academic articles. This strongly indicates that the core function of "NEV" is to serve news reports and policy research; it is a typical "top-down" policy term. At the same time, the data also shows that the distribution of "EV" is relatively balanced and market-oriented, with the highest proportions in blogs and magazines. Magazines typically contain in-depth reports, product reviews, and popular science articles, suggesting that this term is more often used in technical discussions, market analysis, and consumer-oriented content. It is a "bottom-up" market and technology term.

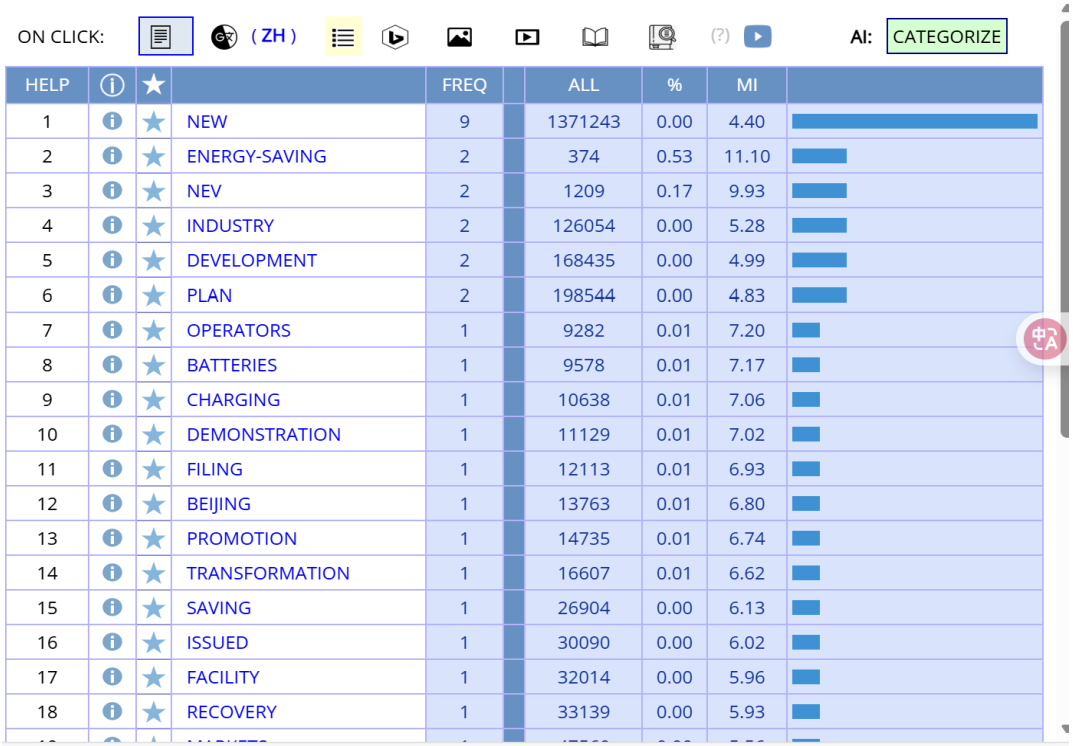
4.2 Contextual Analysis

Liu Qingchun (2025) proposed that the restoration of the source language context is not an equivalent replication of the original text's context, nor does it fall within the debate over the relative merits of literal versus free translation. It is an expedient strategy that comprehensively considers multiple factors in the context, emphasizing the maximum transplantation of the source language's cultural context into the target language context, enabling target language readers to smoothly activate the cultural elements within the translated text context, thereby achieving a transformation between the dual contexts. This directly emphasizes that in the field of translation, to achieve a certain translation effect, considering context is necessary. This study analyzed the contextual features of the two terms "EV" and "NEV", mainly examining the contexts in which each is appropriate.



HELP			FREQ	ALL	%	MI
1		ENERGY-SAVING	2	374	0.53	11.21
2		NEV	2	1209	0.17	10.04
3		INDUSTRY	2	126054	0.00	5.39
4		DEVELOPMENT	2	168435	0.00	5.10
5		PLAN	2	198544	0.00	4.93
6		OPERATORS	1	9282	0.01	7.30
7		BATTERIES	1	9578	0.01	7.27
8		CHARGING	1	10638	0.01	7.17
9		DEMONSTRATION	1	11129	0.01	7.12
10		FILING	1	12113	0.01	7.04
11		BEIJING	1	13763	0.01	6.91
12		PROMOTION	1	14735	0.01	6.84
13		SAVING	1	26904	0.00	6.24
14		ISSUED	1	30090	0.00	6.13
15		FACILITY	1	32014	0.00	6.07
16		RECOVERY	1	33139	0.00	6.03
17		MARKETS	1	47560	0.00	5.67

Figure 1: List of significant collocates for the node word "EV" in COCA



ON CLICK: (ZH) AI: CATEGORIZE

HELP			FREQ	ALL	%	MI
1		NEW	9	1371243	0.00	4.40
2		ENERGY-SAVING	2	374	0.53	11.10
3		NEV	2	1209	0.17	9.93
4		INDUSTRY	2	126054	0.00	5.28
5		DEVELOPMENT	2	168435	0.00	4.99
6		PLAN	2	198544	0.00	4.83
7		OPERATORS	1	9282	0.01	7.20
8		BATTERIES	1	9578	0.01	7.17
9		CHARGING	1	10638	0.01	7.06
10		DEMONSTRATION	1	11129	0.01	7.02
11		FILING	1	12113	0.01	6.93
12		BEIJING	1	13763	0.01	6.80
13		PROMOTION	1	14735	0.01	6.74
14		TRANSFORMATION	1	16607	0.01	6.62
15		SAVING	1	26904	0.00	6.13
16		ISSUED	1	30090	0.00	6.02
17		FACILITY	1	32014	0.00	5.96
18		RECOVERY	1	33139	0.00	5.93

Figure 2: List of significant collocates for the node word "NEV" in COCA

Table 2: Comparative Summary of "EV" and "NEV" Terminology and Translation Analysis

Analytical Dimension	EV (Electric Vehicle)	NEV (New Energy Vehicle)
Core Attribute	General technical and product term	Characteristic policy and industrial term
Etymology & Collocation	Strongly associated with technical and market-related vocabulary such as battery, charging, market	Strongly associated with policy and regional vocabulary such as energy-saving, industry, development, Beijing
Main Applicable Contexts	Technical discussion; market & consumption; public science popularization	Policy release & interpretation; industrial analysis; international news coverage

Based on data retrieved from the COCA corpus, Figures 1 and 2 were obtained, and a summary Table 2 was created. The content can be summarized as follows: (1) Contextual features of "EV": Its concordance lines show that "EV" is used naturally to describe diverse topics such as technical performance, market competition, user preferences, and environmental benefits. For example: "Battery technology remains the key bottleneck for EV range." This indicates that EV is a technically neutral, functional vocabulary item deeply integrated into the English discourse of technology and economics. (2) Contextual features of "NEV": The concordance lines for "NEV" present a highly consistent context. For example: "China's NEV market continues to expand, driven by generous government subsidies." It can be seen that NEV always co-occurs with words like "China", "government policy", and "subsidies". Its function is not for general technical discussion but as a label specifically referring to "automotive terminology defined within China's policy framework".

V. TRANSLATION IMPLICATIONS AND PRACTICAL STRATEGIES

Based on the target language usage picture provided by COCA, a context-sensitive decision-making model for terminology translation can be constructed:

Translation Strategy for Policy-Oriented Texts

When translating Government Work Reports, white papers, official policy interpretations, etc., prioritize "NEV". In such texts, the core function of translation is to accurately and completely convey the policy definition and political connotations of the source language. Using "NEV" respects and maintains national discursive power and represents the highest embodiment of the "fidelity" principle in the translation of political documents.

Translation Strategy for General Texts

In the translation of news reports (non-pure policy forwarding), tourism promotion, popular science articles, international business materials, etc., prioritize using "EV" or adopt "explanatory translation". In such texts, the core function of translation is to achieve effective communication and information dissemination. Forcibly implanting a term unfamiliar to the target audience ("NEV") would create comprehension barriers. Therefore, within a specific context, leveraging cultural background can better achieve communicative effect.

Implications

The above strategies highlight that there is no universal rule for translating China-specific policy terms. Instead, translators should adopt a context-sensitive approach that balances two key goals: preserving the policy's core meaning in official documents, and ensuring cross-cultural intelligibility in general communication. This flexible framework provides a practical guide for similar terminology translation scenarios.

VI. CONCLUSION

Through an empirical analysis using the COCA corpus, this study elevates the translation issue of "NEV" and "EV" from a subjective debate over strategies to an objective examination of target language usage realities. The findings indicate that "NEV" is a highly context-bound "policy dialect" in the English-speaking world, whereas "EV" is the general-purpose language for most contexts.

Therefore, the translator's task should not be a mechanical choice between two options, nor a simple word-for-word conversion. Instead, it requires a comprehensive analysis within a specific context and cultural background to produce discourse acceptable to the target readers. Translators need to flexibly position their choices between the two poles of "being faithful to the source language policy" and "serving the target audience", based on text type, translation purpose, and reader profile. This study powerfully demonstrates the indispensable role of large general corpora in translation teaching and practice. They provide the ability to step outside the limitations of the source text, re-evaluate and calibrate one's translation behavior from the perspective of target language reception, ultimately helping to tell China's story more clearly and effectively to the world.

REFERENCES

[1] M. Baker, Corpora in translation studies: An overview and some suggestions for future research, Target, 7(2), 1995, 223-243.
[2] J. F. Aixela, Culture-specific items in translation, in R. Álvarez & M. C. África Vidal (Eds.), Translation, power, subversion (Multilingual Matters, 1996) 52-78.
[3] M. Davies, The Corpus of Contemporary American English (COCA), 2008-, Available online at https://www.english-corpora.org/coca/.
[4] Xue Ling and Xiaoqing Jia, Linguistic features of new energy vehicle English and strategies for Chinese translation, Chinese Science & Technology Translators Journal, 38(1), 2025, 8-12.
[5] Xinyu Guo, A comparative study of synonyms based on COCA corpus: Taking "agree" and "approve" as examples, Overseas English, 20, 2024, 49-52.
[6] Qingchun Liu, Ethical considerations in the translation of central government documents from the perspective of cultural context, Journal of Hubei Normal University (Philosophy and Social Sciences Edition), 45(5), 2025, 138-144.