

# Translation Strategies for Economic Diagrams Under the Guidance of Functional Translation Theory

ZHAN Yuxian, NI Xiaoshan

University of Shanghai for Science and Technology, Shanghai, China

This paper focuses on the translation of diagrams in the German economics work *Management in Small and Medium-Sized Enterprises*, employing Reiss's functional translation theory. It primarily analyses translation strategies for vocabulary, titles, and units in economic diagrams. As a visual medium closely related to the content of the text, ensuring consistency between the source text and the translated text, as well as effectively handling elements such as diagram titles, coordinate units, and annotations to clearly convey the original information, is the core issue addressed in this study. The paper begins with an overview of the main achievements of Reiss's functional translation theory, followed by an analysis of the importance, classification, and challenges of diagram translation in economic texts. On this basis, the study proposes a series of specific translation solutions, summarizing different strategies at the lexical and syntactic levels to achieve a more accurate transmission of information.

**Keywords:** functional theory, diagram translation, information text translation, German-Chinese translation

## Introduction

In 1971, Reiss established the theory of functional translation, categorizing texts into three types based on their communicative functions: informative, expressive, and operative texts. In later developments, a fourth type—multimedia text—was added. Reiss pointed out that different translation strategies should be adopted according to the corresponding language functions, linguistic features, and the emphasis of each text type.

The scope of translation practices has significantly expanded today, no longer confined to the literary field. Instead, greater focus is now placed on the translation of economic and technical texts, which dominate contemporary translation activities. The German work *Betriebswirtschaftslehre der Mittel- und Kleinbetriebe* contains a large number of economic terms and diagrams. In translating this work, it is essential not only to accurately convey the author's profound insights into enterprise management but also to appropriately handle the many diagrams it contains.

Based on Reiss's functional translation theory, the diagrams in this work are classified as informative texts. Therefore, the translation process should adopt strategies specific to informative texts. This paper explores how

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ZHAN Yuxian, Bachelor's degree, College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai, China.

NI Xiaoshan (Corresponding author), Dr., associate professor, College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai, China.

to ensure the consistency of information, logical coherence, and formal accuracy between the source text and the translation by analysing the translation of vocabulary, titles, and units within the diagrams.

## **Translation of Diagrams and Its Challenges**

### **An Introduction to *Betriebswirtschaftslehre der Mittel- und Kleinbetriebe***

The German work *Betriebswirtschaftslehre der Mittel- und Kleinbetriebe* is regarded as a classic in the field of small and medium-sized enterprise (SME) management. Through a comprehensive analysis of the definition, economic significance, management strategies for various functional departments, and the unique challenges faced by SMEs, the book provides readers with a thorough and in-depth framework of knowledge on SME management.

### **The Function and Importance of Diagrams**

Diagrams play a crucial role in the transmission of information. On the one hand, they visually and intuitively present data, trends, or structures, enabling readers to quickly grasp and comprehend key information. On the other hand, the combination of diagrams with textual information enhances readers' overall understanding. Various types of diagrams, such as distribution charts, bar charts, flowcharts, and structural diagrams, can clearly reveal relationships and trends within data, helping readers gain deeper insights into the content.

In *Betriebswirtschaftslehre der Mittel- und Kleinbetriebe*, the advantages of diagrams are fully utilized. By incorporating various types of visual aids, economic information is presented in a more vivid and intuitive manner. The diagrams primarily include explanatory illustrations, block diagrams, flowcharts, and structural diagrams, along with a smaller number of bar charts, line charts, and pie charts. The use of diagrams avoids the verbosity often caused by textual descriptions, highlights the key points of the content, and deepens the understanding of the accompanying text. Moreover, it allows readers to comprehend abstract economic concepts more profoundly, thereby better grasping the essence of economic theory.

### **Classification of Diagrams**

Based on Reiss's classification system, diagrams can be divided into three major categories: informative, expressive, and operative. In the translation practice of the German economic work *Management of Small and Medium-Sized Enterprises*, most diagrams focus on presenting intuitive data and management processes. A key characteristic of informative texts is the presentation of objective facts, with strong logical language and a focus on content rather than form. Therefore, the diagrams in this book can be classified as informative texts and translated according to the translation principles applicable to informative texts.

### **Characteristics of Diagrams**

Informative diagrams serve as intuitive visual representations of information, data, and knowledge. Their key components include titles, units, data, and annotations. Both the information within the diagram's framework and the smaller textual elements, such as units and annotations act as carriers of information. Therefore, during the translation process, equal focus must be placed on both the form and content of the diagrams. The form emphasizes consistency in the diagram's format, while the content pertains to the textual information contained within the framework.

### **Challenges in Translating Diagrams in Management**

**Presence of numerous technical terms.** Technical terms refer to specialized concepts within specific fields, carrying strong domain-specific characteristics. The same term may have completely different meanings across

various disciplines or industries, and technical terms are only applicable within their respective professional contexts. Diagrams in this book contain a significant number of economic terms. Within the broad framework of economics, there exist unique terminologies that may differ in meaning depending on the context or text. Therefore, special attention must be paid to the translation of technical terms to ensure accuracy and clarity.

For example, the following terms:

Klein-und Mittelbetriebe (KMU)—中小企业

Betriebswirtschaftslehre (BWL)—企业经济学

Wettbewerbsfähigkeit—竞争力

Finanzierung—融资

Personalwirtschaft—人力资源管理

Internationalisierung—国际化

Corporate Governance—公司治理

Outsourcing—外包

Operatives Management—运营管理

Projektmanagement—项目管理

Marktanalyse—市场分析

Kundenzufriedenheit—客户满意度

Erfolgsrechnung—损益表

Bilanzanalyse—资产负债表分析

**Differences in units.** In diagram data, units serve as supplementary components and play a crucial role in conveying information accurately. In most cases, the units used in European and American countries differ from those used in China. When these units appear in economic diagrams, it is necessary to convert them appropriately to ensure that Chinese readers can accurately understand their meaning.

In German, the units “Million” (million) and “Milliarde” (billion) differ significantly from the unit representation commonly used in China. Additionally, the handling of the German currency unit, the euro (€), requires special attention. Besides these two German units, sometimes units may also be represented in written form within diagrams, which must also be accurately translated during the translation process.

### Theoretical Guidance for Translating Charts

Based on Reiss’s (Reiss) functionalist translation theory, texts are clearly classified into three categories: informative, expressive, and operative types. Given that most charts in *Management in Small and Medium-Sized Enterprises* can be categorized as informative texts, the translation of these charts strictly adheres to the characteristics of informative texts to ensure accuracy and effectiveness.

#### Functionalist Translation Theory

Functionalist translation theory, developed by German scholars in the 1970s, provides a series of translation frameworks, among which Reiss’s text typology theory and Vermeer’s skopos theory are the most influential. Reiss advocates for pursuing “equivalence” at the textual level in translation practice, emphasizing the importance of the purpose and function of the source text in text classification theory. She categorizes texts based on communicative functions into three types: informative, expressive, and operative. With the advancement of media, a fourth text type—“multimedia texts”—emerged.

Informative texts primarily provide “pure” factual information, such as data, knowledge, and opinions. These texts are characterized by strong logical coherence and content-oriented clarity. When translating such texts, the target text must remain faithful to the source text, ensuring the correct and complete reproduction of its content.

Expressive texts are influenced by aesthetic factors, where text format plays a decisive role in meaning and aims to evoke an aesthetic experience for readers. These texts, often creative works, prioritize form and the author’s intent. Translators should “imitate” the original format and remain loyal to its aesthetic expression.

Operative texts focus on achieving effects beyond content and form, aiming to influence the reader's reaction. Translating these texts involves "adaptation", which may include altering content or format to elicit a similar response from the target audience.

### The Guiding Role of Functionalist Translation Theory

Reiss's text typology theory provides a solid foundation for translation strategies. Functionalist translation theory offers practical guidance for chart translation, particularly when handling different types of charts. By identifying the text type, translators can adopt more precise and effective strategies. For informative texts, Reiss highlights specific principles that translators must follow.

Charts, with their highly condensed nature, belong to the category of informative texts. Their core purpose is to convey information accurately. As a result, the translator's degree of freedom in this type of text is relatively limited. Specifically, the translation of informative charts should be source-oriented, ensuring that the target text faithfully and completely reproduces the content of the original text.

## Translation Strategies for Charts

### Translation of Chart Content

The core objective of informative texts is to convey information accurately. Since the original information has already been visualized through charts, the translator must remain strictly faithful to the content and structure of the original charts during the translation process.

**Literal translation.** In addition to the specialized terms mentioned earlier, charts often contain numerous proper nouns, such as names of people and places. During the translation process, these established names of locations and countries do not require special handling; they simply need to be correctly rendered.



Figure 1. Number of hidden champions per million inhabitants.

Figure 1 is a typical bar chart, where the names of countries are listed on the left side of the chart, and the corresponding numerical data are clearly provided on each bar. Therefore, no extensive processing is required; the translator only needs to render the country names in sequence through direct translation.

**Accurate translation of technical terms.** Compared to general vocabulary, technical terms require a higher degree of precision and must strictly adhere to the conventions of their respective disciplines or industries. In professional fields, terminology often has established translations. Therefore, it is advisable for translators to consult glossaries to confirm the correct target-language equivalents. This approach ensures that the translated terms accurately convey the original information and eliminates any ambiguity or misunderstanding.

Example 1: Finanzierungswege für KMU

Translation: 中小企业的融资途径

In Example 1, Finanzierung in the context of economics means “financing”, so Finanzierungswege should be translated as “financing channels”. Additionally, KMU is an abbreviation for Klein- und Mittelbetriebe (small and medium-sized enterprises). During translation, particular attention must be paid to abbreviations, as they often represent institutions or key technical concepts. Translators should first determine the specific meaning and then render it accurately in the target language.

Example 2: Die SWOT-Matrix

Translation: 优势/劣势和机会/威胁分析 (SWOT分析)

In Example 2, the term “SWOT” originates from English and, upon initial research, it is often referred to as the “SWOT Matrix”, a method frequently used for corporate strategy development and competitor analysis. However, directly translating it as “道斯矩阵” (Daosi Matrix) would likely confuse readers unfamiliar with the term. Further research reveals that “SWOT” stands for strengths, weaknesses, opportunities, and threats. This analysis is a structured method for evaluating an organization’s internal strengths and weaknesses, as well as its external opportunities and threats.

When a technical term like “SWOT” appears for the first time, it is crucial to provide its detailed meaning rather than leaving it vague or unexplained, ensuring that readers can clearly understand the concept.

### Translation Strategies for Titles

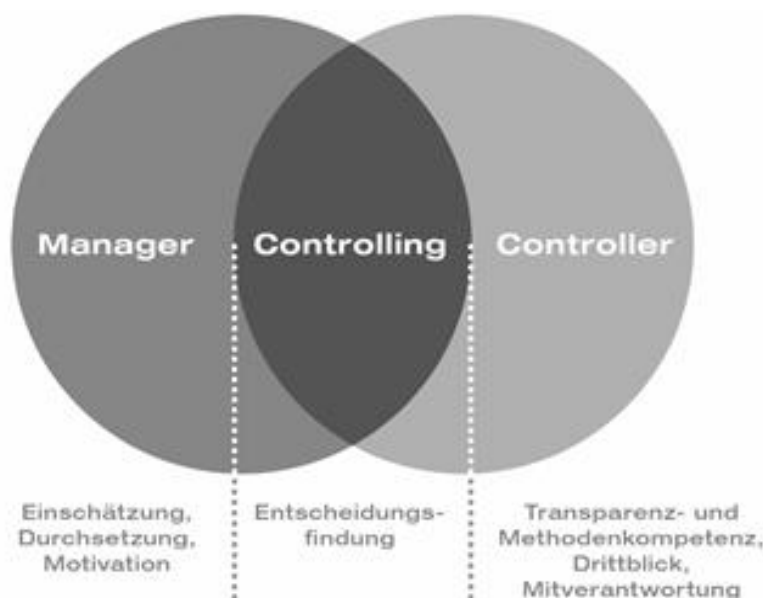
When readers engage with charts, the title is often the first element they notice. Therefore, how to accurately and concisely convey the information in chart titles becomes a critical issue for translators.

Due to linguistic and cultural differences between German and Chinese, some loss of meaning, redundancy, or unclear expression may inevitably occur during translation. To address this, translators must ensure that the translated titles align with the reading habits of the target audience while remaining faithful to the original content. By employing three primary strategies—adding supplementary information, omitting redundant elements, and concise adaptation—translators can render titles in a way that allows readers to quickly grasp the key points of the chart.

**Addition of supplementary information.** Adding supplementary information does not imply arbitrary inclusion of new content but involves functional translation based on the original text. The goal is to effectively process the original message while staying faithful to its meaning.

For instance, in Figure 2, the title “Controlling als Manager und Controller” could be literally translated as “Controlling as Manager and Controller”. However, this literal rendering distorts the intended meaning conveyed

by the chart. From the visual content of the chart, it is clear that controlling represents the shared functions of both manager and controller.



**Abbildung 1:** Controlling als Manager und Controller  
(Quelle: Gänßlen et al. [2013], S. 59)

*Figure 2.* Controlling as manager and controller.

To ensure that target readers better understand the chart's meaning, supplementary information needs to be added during translation. A more appropriate translation would be: "Controlling as the Overlapping Function Between Managers and Supervisors".

While the term "overlapping function" does not explicitly appear in the original text, including it enhances the clarity and comprehensibility of the chart. This addition supplements the chart's meaning and simplifies its interpretation for readers, providing a clearer understanding of the content.

**Omission.** While translation emphasizes fidelity, a strictly literal translation can often result in a rigid and awkward rendering that loses the flexibility and liveliness of the original. This approach may also fail to align with the skopos theory, which stresses the purposefulness of translation. Therefore, it is sometimes necessary to omit or simplify certain words to make the translation more natural and appropriate for the target readers.

Example 3: Der Weg zur marktorientierten Unternehmensstrategie

Translation: 以市场为导向的企业战略

The original literal translation would be "The Path to a Market-Oriented Business Strategy". However, in Chinese, the word "path" is often associated with political contexts, such as "The Path of Socialism With Chinese Characteristics". In economic texts, the phrase "path to strategy" is redundant, as "strategy" itself already conveys the intended meaning. Therefore, we opted to omit "path" and translate the phrase as "Market-Oriented Business Strategy", making it more concise and better aligned with the linguistic habits of the target audience.

**Concise adaptation.** During translation, there are instances where the meaning of the original text can be faithfully conveyed while also ensuring greater readability for the target audience. Given the requirements of

information-oriented texts, the translation process may involve adjustments to structure or word order to enhance fluency.

Example 4: Ursachen bzw. Einflussfaktoren der Internationalisierung (in einer statischen Perspektive)—ein Bezugsrahmen.

Translation: (在静态视角下的)国际化的原因及影响因素的框架体系

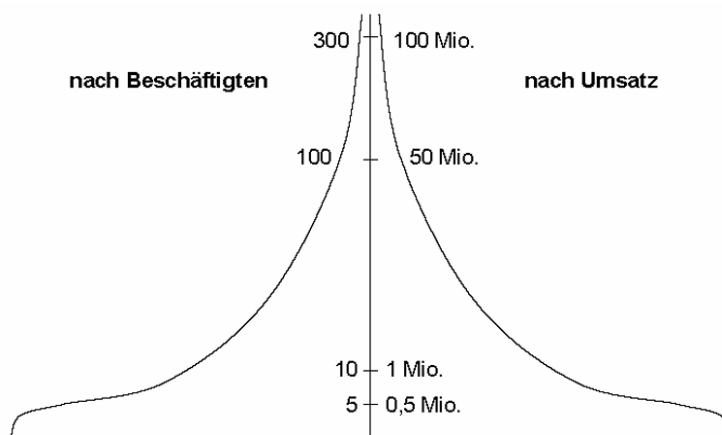
The literal translation of the original title would be: “Causes and Influencing Factors of Internationalization (Static Perspective)—A Reference Framework”. While accurate, the use of multiple punctuation marks, especially the dash (—), disrupts the flow of the title and introduces an explanatory tone that is less suitable for the target audience.

To address this, the translation was adapted to: “Framework of Causes and Influencing Factors of Internationalization (From a Static Perspective)”. This version eliminates the explanatory function of the dash by integrating the “static perspective” as a modifying phrase. It not only aligns with the structural requirements of the target language but also mirrors the framework-like structure of the chart, resulting in a more concise and fluent title.

### Translation of Units

The handling of units plays a critical role in the translation process, as even the slightest error can result in miscommunication of information. Therefore, translators must carefully analyze and accurately convert units in charts to ensure the precision and reliability of the translation.

For example, in Figure 3, translation of units on the vertical axis:



**Abbildung 1:** Unternehmensgrößenstruktur nach Beschäftigung und Umsatz  
(Quelle: Mittelstandsinstitut Niedersachsen 1986)

*Figure 3.* Company size structure by employment and turnover.

In German, the abbreviation “Mio” refers to “million”. However, a literal translation, such as rendering 0.5 Mio as “0.5 million” or 50 Mio as “50 million”, may sound awkward or unnatural in Chinese. To adapt this for the target audience, the units need to be processed. Specifically, 0.5 Mio should be translated as “500,000” and 50 Mio as “5 million”.

Furthermore, based on the title of the chart, it is clear that the curve pertains to the number of employees and sales revenue. The units on the right side represent sales revenue, while the left side denotes number of

employees. During the translation process, it is essential to include appropriate labels, such as “人数” (number of people) and “欧元” (euros), above the respective axes to ensure the chart conveys accurate information.

For another type of table, as illustrated in Table 1:

Table 1

*Example of an Industry-Related Definition of Class Boundaries for the Size Characteristics “Number of Employees” and “Turnover”*

Branche und Größenklasse	Größenklasseneinteilung	
	nach Beschäftigten	nach Umsatz
<b>Industrie</b>		
klein	bis 49	bis 1 Mio. €
mittel	50–499	500 und mehr
groß	1 Mio. – 12,5 Mio. €	12,5 Mio. € und mehr
<b>Handwerk</b>		
klein	bis 2	bis 50.000 €
mittel	3–49	50.000–1 Mio. €
groß	50 und mehr	1 Mio. € und mehr

When every category within a table involves units, a straightforward translation of all numbers and units can result in redundancy and clutter. Instead of translating each occurrence, a more streamlined approach is to indicate the unit in the column header or the general category. This method enhances clarity and ensures a cleaner, more organized presentation of the data.

During the translation process, units can be indicated in the general category header, and then the corresponding numbers can be entered into a newly constructed table. This approach ensures a more concise and clear presentation. Additionally, words like “bis” (up to) or “und mehr” (and more) in tables can be replaced with mathematical symbols. This further simplifies the information and highlights key points, as illustrated in Table 2.

Table 2

*Segmentation of Enterprises in Different Industries According To the Characteristic “Number of Employees” and the Characteristic “Sales”*

行业 and 规模等级	等级划分标准	
	雇员数量 (人)	销售额 (万欧元)
工业		
小型	< 49	< 100
中型	50 ~ 499	100 ~ 1250
大型	≥ 500	≥ 1250
手工业		
小型	< 2	< 5
中型	3 ~ 49	5 ~ 100
大型	≥ 50	≥ 100

## Conclusion

Functionalist translation theory is a “result-determines-cause” approach in translation studies, valued for its practical applicability, particularly in the translation of economics. Different translation methods should be applied to different text types to achieve targeted results. For the same economic principles, a good translation can yield better outcomes. Economic texts often feature various types of charts and diagrams, each requiring



specific translation strategies. Therefore, during the translation process, it is essential not only to adhere to the principles of faithfulness, functionality, and conciseness, but also to align with Chinese linguistic conventions.

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