Mosaic of Translation Teaching: Textual Competence[1]

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Abstract

The present study is based on the interrelation of translation studies, pedagogy and technology in order to develop students' textual competence by identifying efficient teaching practices in translator training. Textual competence involves also the understanding and application of various sign systems in contemporary digital texts for meaning representation, thus underlying the transdisciplinary status of Translation Studies as its scope of research has been expanded to cognitive science, neurolinguistics, psycholinguistics, information and communication technologies, computational linguistics, and information processing. The constant search for novel approaches to text analysis and the continuous improvement of the existing teaching strategies are necessary to develop students' ability to effectively decode and convey meaning within a required context. Nowadays development of textual competence is mostly based on the improvement of such skills of students as professional competence and special text analysis to be able to decode meaning at different levels.

The authors present a mosaic of teaching activities that are proposed taking into account skills and abilities that translation students need to develop from the perspective of continuously changing modes of communication. The research findings can serve as the source of inspiration for developing study modules within such study courses as Text Analysis Methods, Stylistics and Editing in the framework of the theory of translation.

Keywords: translator training, textual competence, digital text, text analysis tools, efficient translation practices

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[1]   The present text includes material from https://ebooks.rtu.lv/wp-content/uploads/sites/32/2024/07/PD_Oksana-Ivanova.pdf

1. Introduction

Translation Studies may be defined as an efficient study of the theory and application of translation practice. It has initially been interrelated with philosophy, classical and digital rhetoric, linguistics, literature, pedagogy and cultural studies, thus revealing interdisciplinary aspects of the discipline. However, with the advent of new technologies, in the 21st century it has acquired a transdisciplinary status. Therefore, in the current situation and with the future perspective in mind translator training should be implemented taking into account constantly developing technological trends and increasing professional competence. The development of communication and information technologies has increased the significance of text linguistics that focuses on the text organisation, communicative functions and structure. Contemporary text linguistics involves not only the standards of textuality, text typology, information structure, but also corpus linguistics and digital rhetoric, including the use of various digital tools that facilitate the analysis of different text types.

Textual competence may be considered a central concept in translation teaching. At present, growing degree of information density in contemporary digital texts and the influence of information and communication technologies require evaluating the existing and proposing new methods relevant to translation teaching and learning. To investigate how new methods of encoding, conveying and decoding of meaning at different levels affect contemporary professional communication, it is necessary to examine how text creation practices change from traditional activities to multimodal productions in the digital environment.

The paper aims at reviewing the concept of textual competence, taking into account the changing nature of professional communication (i.e., the production of digital texts) and the advances in computational text analysis. The awareness of skills and abilities that comprise textual competence will result in an understanding of the activities that should be applied in translator training in order to develop students' textual competence. The findings and recommendations of the study can be used within such study courses as, for example, Text Analysis Methods, Stylistics and Editing with the framework of the theory of translation.

The paper is organised as follows:

Section 2 reviews the concept of textual competence as a component of the translation competence model as well as proposes a detailed classification of textual competence.

Section 3 introduces to digital texts as different ways of information representation, focusing on the main principles of digital text organisation.

Section 4 examines computational text analysis as a set of quantitative techniques and digital tools, summarising their main features and functionalities, as well as specifying text analysis tools that are appropriate both in the process of translator training and in the translator professional environment.

Section 5 proposes sample activities aimed at developing students' textual competence based on the findings of previous sections.

Section 6 concludes the research by making recommendations with regard to textual competence development and proposing further areas of research.

2. Investigating Textual Competence

Understanding of the nature of translation competence is of high importance in translator training since it allows identifying the areas that should be considered in translation teaching. Although translation competence has been studied by many translation scholars, they have not still reached a consensus on the definitions and constituents of translation competence. In the present article, the authors accept the definition proposed by Gregory M. Shreve. Translation competence is "an endless process of building and rebuilding knowledge, evolving through exposure to a combination of training and continuous practical experience and leading to changes in the way that translators actually conceive of translation" (Shreve, 1997: 125). In other words, acquisition of translation competence is based on life-long learning that shapes our perception and understanding of such crucial concepts within Translation Studies as meaning and context, relevance and quality, information processing.

Within various translation competence models proposed, scholars distinguish textual competence as a constituent of translation competence and view it as *the competence of text reception and analysis* (Nord 1991), *the competence of source text processing* (Hatim and Mason 1997), *textual competence* (Cao 1996; Neubert 2000; Schäffner 2000); *bilingual sub-competence* that consists of pragmatic, sociolinguistic, *textual*, grammatical and lexical elements (PACTE 2017).

Interpretation of the concept of textual competence constantly changes and, therefore, it demands additional investigation. Due to the advancement of information and communication technologies, the concept acquires new characteristics and evolves into a multi-faceted model. Traditionally, textual competence is characterised as "the knowledge of the conventions for joining utterances together to form a text according to rules of cohesion and rhetorical organisation" (Cao, 1996: 331). It refers to one's ability to comprehend the overall conceptual and rhetorical structure of the text. Neubert (2000: 6), for instance, describes textual competence as the translator's ability to sensitize and internalize the normative usages and arrangements that words and structures follow when they feature in texts. In the latter definition, an emphasis is placed on the ability to analyse and create different text types in different domains of knowledge. According to Hurtado (2017), textual competence involves the capacity to recognize different textual typologies, their functions, structure, and textual markers. The translation scholar emphasises the need to develop textual analysis skills because "translation is not situated on the level of language but rather the level of parole" (ibid.: 3). To sum up, textual competence is seen as a set of knowledge and skills that contribute to an understanding of the text as a global entity.

Based on the professional experience in specialised translation teaching, the authors of the present study maintain that textual competence involves:

1. the ability to recognise and establish the structure of the source and target texts;
2. the ability to understand traditional genres and novel digital genres;
3. the knowledge of multimodal resources (i.e., awareness of different resources for meaning creation and their affordances);
4. the ability to identify the texture of the source text (cohesion, coherence, intentionality, acceptability, informativity, situationality and intertextuality);
5. the ability to recognise and use such rhetorical strategies as time order, space order, order of importance, comparison / contrast, analogy, and illustration;
6. the ability to determine the role and effect of rhetorical devices (such as metaphor, metonymy, simile, personification, etc.) in the source text and the ability to efficiently apply them in the target text;
7. the ability to obtain a quantitative representation of the digital text using appropriate text analysis tools and the ability to interpret the statistical results through close reading;
8. background knowledge (i.e., previous experience or prior knowledge).

Within the present research, the activities proposed for the development of students' textual competence will be based on the above-mentioned considerations.

3. Digital Texts: Infinite Ways for Meaning Representation

Digital revolution has changed the traditional text structure and promoted its modularity and multilinearity. According to Hillesund (2005), digitalization of the word obviously represents transformation. It changes all parts of the text cycle and it even changes the text itself. For example, text is becoming shorter and more fragmentary. This transformation calls for in-depth research into new methods of creating a text in the digital environment. The present section will examine the definitions of digital text and reveal its characteristic features.

The digital environment requires different considerations with regard to text organization. Discussing different ways of information representation, Van der Weel (2012: 59) uses the term "modality" and defines it as "a data type". The author describes the text as "a system for the inscription of linguistic utterances by means of characters that both pre-dates the book and survives it" (ibid.: 60). A digital text may be a linear text in digital format […], a nonlinear text with hyperlinks […], a text with integrated media […]; and a text with response options […] (Dalton and Proctor, 2008: 300).

Technologies have promoted the use of different modes to transmit information and the digital environment, in its turn, has changed the modes of creating meaning, thus leading to multimodality of digital texts. It has become acknowledged that the interaction of various modes allows creating new meanings. Therefore, to achieve effective communication, it is suggested to combine modes since some meanings are characteristic of particular modes that have their own potentials and/or limitations.

Being literate in the digital environment involves the understanding of the way different modalities are combined to create meaning (Snyder 2002). People have to learn to decode meaning of the iconic systems, i.e., signs, symbols, pictures, words present in the digital text. For example, political cartoons that represent a rich source of information usually imply double meaning that is presented visually, linguistically, or using the combination of both modes (Liepa et al. 2021). To understand the hidden meaning, it is important to be aware of the main elements and tools used to convey the message. Therefore, Luke (2000) argues that meaning-making from the multiple linguistic, audio, and symbolic visual graphics of digital text means that the user must possess knowledge of traditional and new genres or representational conventions, cultural and symbolic codes.

The main organization principles of digital texts are the following:

- interactivity (focus on the most important information);
- self-selective reading mode (users navigate based on their needs and preferences);
- style is different throughout the content provided (as there are usually more than one author);
- multimodality;
- regular update of the content (i.e., dynamic – changes are frequently made);
- non-linearity (the content is presented in any possible order on the website, e.g., alphabetically by author or title, etc.) (for more information see Iļinska & Ivanova 2020).

On the basis of the aforementioned content organization principles, it is possible to distinguish the main features of the digital text. Apart from traditional text features (such as titles, subtitles, bullets, quotations, pictures etc.), the digital text may also include hyperlinks, audio, video, interactive maps, diagrams, comment/note options etc. These features should be taken into account as they create the meaning of the whole text. Meaning creation is achieved through the focus on the structure of the text that helps writers draw reader's attention to most significant information (for discussion see Chatti 2020). If translators focus only on one aspect, for example, terminological consistency based on a segment-by-segment analysis of the text, they may fail to establish the cohesion of the target text (Pym 2011). Therefore, the features of the digital text should not be examined in isolation but as a united whole.

4. Computational Text Analysis

With the development of information and communication technologies, the tools available to translators take on new significance. The digital environment promoted the creation of digital texts, which in turn required appropriate production, storage, analysis and editing tools in order to facilitate their processing. Various computer programs developed for text analysis are widely used nowadays in textual studies and applied language research. The present section of the paper provides an overview of the text analysis tools that can be successfully applied in translator training.

In automatic text processing, computational text analysis refers to a set of digital tools and quantitative techniques that employ the power of mainframe computer and software to analyse digital texts. Computational text analysis allows identifying and analysing large-scale patterns and revealing emerging trends within a discipline concerned. In literary studies, for example, computational techniques are applied to generate types of characters from large text collections (Bamman et al. 2014), to analyse the text-internal dynamics of inter-character relationships (Chaturvedi et al. 2016), or to build a "stylistic portrait" of character types (Brooke et al. 2017).

Text analysis tools can be broadly divided into two large groups: text summarisation tools and advanced text analysis tools. The former category comprises word frequency calculation, collocation identification, concordance (the contexts of a given word or a set of words), N-grams (common two-, three-, etc.- word phrases), entity recognition (identifying names, places, time periods, etc.). While advanced text analysis tools deal with document categorisation, genre identification, corpora comparison, analysis of language use over time (Google ngram viewer), terminology extraction, topic modelling, opinion mining, visualisation of specified text features.

Statistics tools. These tools provide different statistical information on the text that can save translator's time and make the translation process more effective. For example, *Text Analyzer* is a recommended option for getting text-related statistics, such as text complexity level, word frequency, word count, repeating words, minimal/maximal sentence length, etc.

Word-lists and keyword tools. The simplest type of computational analysis to be performed using corpus is to count words and determine words that occur with higher frequency. Computer applications are able to divide the text into smaller chunks and later rearrange these elements according to definite criteria in a matter of seconds. Word-list and keyword analysis views the text on a vertical axis. The process of developing word-lists "changes the object being considered radically from a text which can be read linearly to some other form which will give rise to important insights, pattern recognitions or teaching implications" (Scott and Tribble 2006: 12). Computer programs can sort the elements of the text in order of frequency, alphabetical order etc. In the process of word-list creation, one may distinguish two kinds of units: word types and word tokens, where type is relevant to a particular word that is taken into consideration only once, while token covers all of its occurrences in the corpus. Word-lists enable one to analyse the lexical structure of the text. Word-lists may also be applied to the analysis of keywords, which reflect the main idea of the text, ignoring insignificant details. The authors suggest using *TextSTAT* tool that reads text files and HTML files from the Internet and generates a word frequency list from the files. There is also *TextAnalyst* which is an open source tool that makes a semantic network of the interrelated themes within the text.

Concordances. Concordance tools (such as *AntConc, Voyant Tools, Wmatrix, Netlytic*) analyse the text horizontally, breaking the text into horizontal lines and

contexts. These programs allow retrieving from the text a specific sequence of characters of any length, e.g., a word, part of a word, or a phrase (McEnery and Hardie 2012: 35). This type of analysis focuses on concordance, collocation and cluster. In the text, the elements are never used separately, they are connected by lexical, grammatical and semantic relationships. Nouns and verbs are organised into hierarchies based on the hypernymy and hyponymy relations. Adjectives and nouns are represented as maps of related words, often with cluster heads that are found in antonymic relations. All these concepts share the notion of context, because, in contrast to word-lists and keyword tools, words are examined in their authentic environment. Concordance tools allow determining patterns characteristic of a particular text. These patterns are called co-occurrence. These tools calculate a measure of co-occurrence by evaluating two indicators: the likelihood that the words in a collocation occur together and the likelihood that the words in a collocation are independent. To sum up, concordance analysis is used to identify common categories of representation of a particular phenomen / concept.

Sentiment analysers. Sentiment analysis tools determine the emotional tone behind words. In general, sentiment analysis involves extracting attitudinal information such as sentiment, opinion and viewpoint, mood and emotion. The overall sentiment expressed by a paragraph, phrase, or word is referred to as polarity, which can be measured using a sentiment score. This rating can be calculated for the text or for a single phrase. Scores can be positive, indicating a positive sentiment, or negative, demonstrating a negative sentiment. Their strength reflects the length of the sentiment, i.e., larger character lengths have larger values.

Sentiment analysis is classified into:

- fine-grained sentiment analysis, which groups polarity categories into the following parts: very positive, positive, neutral, negative, very negative;
- emotion detection such as happiness, disappointment, anger, sadness etc.;
- aspect-based sentiment analysis, which focuses on a particular aspect or features for which users provide positive or negative feedback;
- multilingual sentiment analysis is a complex process as it includes many pre-processing and resources available online that help identify user's sentiment irrespective of location or language difference.

The most common features of these tools include: sentiment at the text level (general emotional tone); sentiment at the sentence level (specific sentiment of each sentence); identification of opinions and facts (ability to distinguish between objective and subjective information); detection of irony; identification of polarity of views (rating from very negative to very positive); determination of agreement and disagreement. For example, *Leximancer* is a concept mapping and sentiment analysis tool. To provide concept mapping, the tool produces a grid of concepts; for sentiment analysis, it identifies the frequency of concepts with a built-in thesaurus of sentiment terms. Software for sentiment analysis *OpinionFinder* performs subjectivity analysis based on the lists of words that indicate subjectivity.

Topic modeling software (e.g., MALLET) identifies short and informative descriptions of each text in a large collection. Topic modeling software works both with a single text and corpus and searches for patterns in the use of words. A topic from the perspective of a computational machine is a list of words that occur in statistically meaningful ways. Topic modeling is applied to traditional and novel genres, for example, news articles, scientific papers, digital libraries, twitter etc. Usually results are visualised as a list of words associated with each topic along with the relations between topics and documents.

Stylometry software. Stylometry is concerned with the quantitative study of writing style, such as authorship verification. It establishes the relationship between the writing style in texts and meta-data about the texts (date, genre, gender, authorship). It is widely applied in forensic contexts and historical research. As a rule, stylometric analysis involves the following stages: (1) pre-processing, (2) feature extraction, (3) statistical analysis, and (4) visualisation of results. Software *Stylometry with R (stylo)* is useful in the statistically stylistic analysis of texts, e.g. with respect to authorial writing style. To evaluate the internal stylistic coherence of works, *stylo* allows specifying a sampling size (expressed in words), i.e., it is possible to divide texts into consecutive parts.

Visualization tools. These tools employ various data visualization techniques, such as charts, plots, diagrams, and maps to meet specific needs. In the theory of multimodality, visualization has received increasing attention in recent years as a major resource for meaning representation. Visualization can help identify relevant information and make grounded conclusions. The tool suggested under this category is *InfraNodus*. It converts text and data into a visual summary that can provide a translator with the scheme of logical relations among units in the text, thus revealing the key points of the text. The tool visualizes the connections between the co-occurrences in the text. The words that have similar meaning or those that occur more often are grouped into separate clusters using unique colours. The program also provides analytical features, which enable the user to understand meanings and identify contexts, generate new ideas on how to translate the text.

The choice of text analysis tools depends on the research task. Before selecting a tool to use, it is recommended to consider what results are needed to be obtained from a given corpus. It should also be bore in mind that textual analysis software is changing quickly. The types of tools outlined above can be combined in different ways depending on the research task, for example, statistics tools can be used together with visualisation tools. The new possibilities to text analysis provided by digital tools show a rich potential that should be employed in the teaching process of novice translators in order to understand, convey or create additional, often implicit, meanings.

5. Mosaic of Activities: Textual Competence and Text Analysis Tools

To develop students' textual competence, the authors of the paper propose a range of activities aimed at analysing various aspects of different texts. The proposed learning activities focus on promoting the students' understanding of various contexts and media in which texts are created and perceived, as well as fostering decision making with regard to the translation strategy to be adopted in the process of target text creation.

Taking into account the constituents of textual competence outlined in Section 2, the authors of the paper distinguish the following broad categories of text analysis:

- thematic environment (subject of the text, the principles of content organisation);
- overall structure of the text (the use of rhetorical strategies);
- meaning relationships (identifying links at the linguistic and conceptual levels of the text);
- special language (terms, professionalisms, abbreviations, slang, nonce formations);
- literary language (the use of rhetorical devices such as metaphor, metonymy, simile, personification, etc. to masterfully strengthen the text);
- sentiment (the application of positive / neutral / negative expressions to demonstrate the attitude to the topic / idea communicated);
- multimodality (the use of different sign systems for meaning representation).

The identified categories for text analysis serve for the design of learning activities, which can be divided into groups depending on their overall purpose.

Activity 1: Identifying Communicative Intention

The aim of the analysis: to establish the relationship between the communicative purpose of the text and the semiotic resources used by the author of the text.

The tasks: (1) to determine the type and genre of the text; 2) to identify the main features of the text; (3) to interpret and summarise findings.

Procedure:
- Focus on the selected text.
- Define the type and genre of the text and substantiate your decision. List the main features of the text using text analysis tools.
- Determine the author's attitude to the audience, using sentiment analysis. Support your finding with specific examples from the text.
- Identify techniques and methods used by the author to capture interest of the reader.
- Identify modes (and their function) that are used in the text to convey meaning.
- Illustrate the key findings using visualisation tools.

Learning outcomes:
Students are able to extract the required information from the text and interpret it. Students demonstrate an understanding of modes employed by the author to reach a certain communicative intention.

Activity 2: Identifying Texture of the Text

The aim of the analysis: to examine the interrelationship among informativity, acceptability, situationality and intertextuality of the text.

The tasks: (1) to determine the intention of the text; 2) to identify the level of informativity of the text; (3) to reveal the role of intertextual references in terms of the acceptability of the text by the reader.

Procedure:

- Focus on the selected text.
- Identify keywords, use WordCloud software to verify your findings. Identify the field of the terms.
- Determine style and tone used in the text. Use a sentiment analysis tool to substantiate your findings.
- Determine the types of arguments and techniques of effective argumentation used in the text. Use a concordance tool to substantiate your findings.
- Identify the compositional features of the text.
- Identify rhetorical strategies and devices, as well as determine their role in the text.

Learning outcomes:

Students are able to identify informativity, acceptability, situationality and intertextuality of the text using functionalities of text analysis tools.

Activity 3: Analysis of Scientific Articles in the Sector of Real Estate
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The aim of the analysis: to explore the structure (content and form) of scientific articles at the micro and macro levels.

The tasks: (1) to select ten recent scientific articles addressing the real estate sector; (2) to identify common themes, trends, and conventions in scientific writing in a particular domain of knowledge; (3) to interpret and summarise findings.

Procedure:

- Focus on the selected texts in the sector of real estate.
- Make a statement about how the selected texts represent a particular domain of knowledge and comply with the conventions of scientific writing. Use text analysis tools to collect evidence from the texts. Support your finding with specific examples from the texts.
- Summarise the key findings with regard to the conventions of scientific writing and the common themes and trends in the real estate sector.

Learning outcomes:

Students are able to evaluate the content of scientific writing. Students demonstrate an understanding of the structure of scientific articles.

Activity 4: Focus on Contexts

The aim of the analysis: to examine how differences in context (purpose / reader) affect an author's presentation of a subject.

The tasks: (1) to identify similarities and differences in three texts written by the same author about the same subject for a different purpose / reader; (2) to synthesise information from multiple sources.

Procedure:
- Focus on the selected texts, all written by one author.
- Make a statement about how the different situational contexts affected author's choice of language, tone, text structure, style, evidence, including examples from the texts. Use text analysis tools to identify keywords, collocations in the context, reveal patterns in the use of words, as well as evaluate attitudinal information provided in the texts. Support your finding with examples from the texts.
- Summarise the key similarities and differences across the texts.

Learning outcomes:

Students are able to determine the relationship between the context and an author's presentation of a subject. Students demonstrate an understanding of the author's choice of language, tone, text structure, style.

Activity 5: Focus on Visual Elements

The aim of the analysis: to determine the efficient ratio between textual information and visual elements in the website design.

The tasks: (1) evaluate the website design, in general, and the function of visual elements, in particular; (2) to determine the role of visual elements in website design.

Procedure:
- Focus on the chosen website.
- Make a statement about what makes the website look up-to-date or outdated.
- Test whether the menu is easy to navigate. Support your findings with specific examples.
- Evaluate whether the content is easy to perceive visually. Determine how colours can facilitate the reading process.
- Determine how visual elements promote the reader experience navigating the website.
- Summarise the findings with regard to the balance between textual information and visual elements of websites.

Learning outcomes:

Students are able to analyse such features of digital texts as format, colours, symbols, icons, lighting, and sound effects and determine their function and meaning in the digital text.

Students can gain new experience from digital texts. The conventions specific to a particular type of digital texts determine its content, purpose and audience. Choice in text structure and language features defines a text type and shapes its meaning. It is important that students consider form and content in greater detail. They should know the conventions or, in other words, the accepted practices, norms, methods and structure of both textual and non-textual information so that they can evaluate how an author has obeyed these conventions or deviated from them.

Learning activities may consist of reading and interpreting different digital genres by using a variety of text analysis tools. Principles of digital text analysis refer to the information search process, reading and writing activities that involve students in the interpretation and creation of meaning in the digital environment. Students should be informed about the learning outcomes to be achieved, i.e., to be able to analyse texts at different levels.

The proposed learning activities allow achieving a holistic goal of translator training, i.e., through performing an in-depth and comprehensive analysis of various texts, students master the process of translation, in which a wide range of students' skills and abilities is involved.

6. Concluding Remarks

Digital technologies have promoted the development of various resources that help translators improve the efficiency, consistency and quality of their translations. Computational text analysis offers novel approaches to processing information in translator training. Therefore, translation instructors should make use of the opportunities provided by technologies. Efficient translator training approach demonstrates that new technologies should be used alongside traditional methods of teaching to create an appropriate learning scenario.

Development of textual competence allows responding to challenges posed by changes in the contemporary practice of text production in the digital environment. The study does not provide an exhaustive list of activities but instead formulates guidelines for activities and provides some examples of how to develop textual competence through analysing texts with the help of text analysis tools.

The following recommendations for translation instructors to develop students' textual competence via the use of text analysis tools are formulated based on the authors' experience.

Recommendation 1: Determine the aim of text analysis activity

As examined in the paper, text analysis tools have been developed for a wide range of purposes and applications. Specifying the aim of analysis (which can range from in-depth research intended to discover general trends to authorship determination of individual texts) will result in meaningful and specific findings. Since different text analysis tools provide different results, defining the aim of text analysis will also ensure that the appropriate tool is used to complete a learning activity.

Recommendation 2: Formulate relevant and topical research questions

Taking into account that every day a large volume of data is generated in the digital environment, there are endless opportunities to collect and analyse texts. Learning activities should focus on given (what is already known) and new information (what should be acquired). In other words, the relevant research question makes a learning activity meaningful to students, at the same time demonstrating the potential of text analysis tools in the exploration of evolving trends / concepts / phenomena.

In further research, the authors intend to determine metaphoricity of the language of science in particular domains of knowledge such as, for example, economics and management, information technologies and telecommunications. To verify the assumptions, the authors plan to examine the possibilities of text analysis tools with regard to the identification of metaphorical language. The results of the research will be applied in translator training in order to enable students to make reasonable decisions on the retention or omission of metaphors in the target text.

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