

## A Case Study of Lexical Cohesion in English Economic Texts

In 1960s the emergence of text linguistics overcame the limitation of sentence-oriented study and elevated the study of language from sentence level to textual level.

Previously a lot of emphasis has been placed on the sentence as a self-contained unit, thus neglecting the ways a sentence may be used in connected stretches of language and presenting language as sets of sentences. Nevertheless, many examples of text linguistics demonstrated awareness of the shortcomings, and recognition of the text as an obvious tool of communication developed.

The notion 'text' has helped to extend the system of linguistic levels put forward by modern linguistic theories that are based on the sentence. This extension has facilitated understanding and explicating of a number of textual issues, among which are cohesion and coherence and their relevance to such problems as text typology. It has also made it possible to shed better light on a number of problems that have suffered certain shortcomings, when based on analyses at the sentence level. These problems include issues related to translation studies and foreign language teaching.

A text is one of the main elements that play a significant role in communication.

"A text is made up of sentences, but there exist separate principles of text-construction, beyond the rules for making sentences" [1: 36]. A text is considered an extended structure of syntactic units, such as words, word groups, clauses and textual units, marked by both coherence and completion whereas a non-text consists of random sequences of linguistic units such as sentences, paragraphs, or sections in any temporal and/or spatial extension [2: 23]. So, it is evident that alongside with the term 'text' linguists define the notion of 'discourse'. The term *discourse* refers to verbal communication in its situational and social context. In investigating the three levels of discourse organization (cohesion, coherence and genre), cohesion and coherence are analyzed in the individual texts. These texts belong to a certain genre, which places them into context. Cohesion is thus one of the text properties that contribute to the organization of discourse. The term refers to the connectedness of the surface elements in the text. Cohesion is the network of lexical, grammatical, and other relations which link various parts of a text. These relations or ties organize and, to some extent, create a text, for instance, by requiring the reader to interpret words and expressions by reference to other words and expressions in the surrounding sentences and paragraphs. M. Halliday and R. Hasan identify five main cohesive devices in English: reference, substitution, ellipsis, conjunction, and lexical cohesion.

It has been emphasized since the early cohesion studies conducted by M. Halliday and R. Hasan in 1976, that cohesion is sensitive to the varieties of discourse. Certain cohesive links occur more typically in certain varieties of discourse than others: referential cohesion is a characteristic type of narrative discourse making up participant chains; ellipsis is typical of dialogical texts; conjunction is a favored cohesive link in the genres of academic discourse. While distribution of the cohesive types strongly differs in different genres, lexical cohesion is present in the cohesion structure of all the types of the discourse. Along with reference, ellipsis/substitution and conjunctive relations, lexical cohesion is said to formally realize the semantic coherence of texts, where lexical cohesion typically makes the most substantive contribution (around fifty percent of a text's cohesive ties are lexical) [3: 75]. Lexical cohesion is commonly viewed as the central device for making texts hang together experientially, defining the aboutness of a text (field of discourse).

Lexical cohesion is more closely aligned with coherence structure in information-oriented (thematically structured) texts. Therefore it is extremely dominant in the genre of economic discourse. As a scientific text is typically a representation of the results of linguo-cognitive procession of information, terminology ranks first among the lexical cohesive means used to form the lexical chains. It is a significant tool of actualizing identity, opposition, embodiment relations, relations between the whole and the part and is a means of temporal, spatial and causal arrangement of text coherence. Terms' definitions have great cohesive power as texts usually abound with repetitions of their semantic components or main information characteristics that are dynamic actualizers of cohesive potential of a term in contact-local and local-distant connections.

We distinguish the following categories of lexical cohesive relations: (1) repetition, (2) systematic semantic relations: hyponymy meronymy, synonymy, antonymy, (3) collocation. E.g.:

(1) **Factors of production** are the inputs used to produce goods and services. The two most important **factors of production** are capital and labor. ... [3 sentences] ... In this chapter we take the economy's **factors of production** as given. ... [4 sentences] ... We also assume here the **factors of production** are fully utilized – that is, that no resources are wasted [4: 44].

(2) Let's look at the flows of dollars from the points of view of these **economic actors**. **Households** receive income and use it to pay taxes to the government, to save through the financial markets, and to consume goods and services. **Firms** receive revenue from the sale of goods and services and use it to pay for the factors of production. The **government** receives revenue from taxes, uses it to pay for government purchases, and, if it spends more than it receives, borrows the deficit in the financial markets [4: 43].

In this very example we can observe a hyponymy between the words *economic actors*, *households*, *firms* and *government* that is rather often used in economic discourse to establish semantic connections. Thanks to such extra

semantic components a piece of writing possesses a deeper meaning, has greater explanatory power and conveys its special writing purpose.

(3) *The next step economists usually take is to add the supplies of individual households across the economy, while noting the special aspects of **labour** and labour markets. In many instances, individuals cannot vary the hours of **work** that they supply; at best, they can choose between **working** or not working at all. Most labour contracts specify a standard working time (length of the work-week, days of leave per year). It is a matter of 'take it or leave it'. Sometimes **workers** are better off not working at all [5: 73].*

As it is seen from the example collocation might not be limited to a pair of words. Collocation plays a crucial role in developing one's viewpoint intensely and acts as a thread of the text.

Often, lexical cohesion occurs not simply between pairs of words but over a succession of a number of nearby related words spanning a topical unit of the text. These sequences of related words are called *lexical chains*. There is a distance relation between each word in the chain, and the words co-occur within a given span. Lexical chains do not stop at sentence boundaries, connecting a pair of adjacent words or range over an entire text. They tend to delineate the portions of the text that have strong unity of meaning.

Lexical cohesive patterns differ due to the type of the economic discourse (articles, lectures and textbooks, scientific research papers, diploma papers, reports, reviews etc.). While repetition generally appears to be the dominant means to establish lexical cohesion in all of these genres, the relative frequency of more complex relations, such as hyponymy or meronymy may depend on the type of the text.

The translator is faced with either maintaining or altering the cohesive patterns used in the source text. E.g.:

*The production function reflects the **available technology**. That is, the **available technology** is implicit in the way this function turns capital and labour into **output**. If someone invents a better way to produce a good, the result is more **output** from the same amounts of capital and labour [4: 45]. – Виробнича функція відображає **наявну технологію**, за допомогою якої ресурси перетворюються в **товари та послуги**. Якщо хто-небудь придумає ліпший спосіб виробництва певного блага, то результатом буде збільшення кількості **блага**, яку отримують з попередньої кількості праці і капіталу [6: 76].*

The example shows that in the source text cohesion is achieved by means of repetition, while in the target text we observe reference (*наявну технологію – якої*) and synonymy (*товари та послуги – блага*), which is an illustration of the fact that usage of a great number of repetitions to maintain cohesion is less common for Ukrainian information-oriented texts in comparison with English ones.

Invariably, a translator must decide whether the coherence patterns can successfully be transferred into the target language or need to be altered in some form in order to adhere to the accepted norms of the language.

### Literature

1. Fowler, R. Language in the news: discourse and ideology in the press. – London: Routledge, 1991. – 254 p.
2. Werlich, E. A text grammar of English. – Heidelberg: Quelle & Meyer, 1976. – 315 p.
3. Halliday, M., Hasan, R. Cohesion in English. – London: Longman, 1976. – 374 p.
4. Mankiw N. Gregory. Macroeconomics. – N.Y.: Worth Publishers, 1992. – 514 p.
5. Burda, M., Wyplosz, Ch. Macroeconomics: a European text. – 3. ed. – Oxf. : Oxford UP, 2001. – 572 p.
6. Манків Грегорі Н. Макроекономіка: Підручник для України: Пер. з англ. / Степан Панчишин (наук.ред.пер.). – К. : Основи, 2000. – 588 с.