Approaches to studying discourse coherence

Over the recent decade there has been an increasing concern for investigating the nature of discourse coherence, which refers to the linking of ideas to make it a unified and meaningful whole. The purpose of the present research is to identify the theories and instruments applied to studying different aspects of coherence, examined at the level of sentences, paragraphs and texts.

To begin with, one should distinguish between text and discourse, the former being the verbal record of a communicative act, while the latter is a dynamic process of communication itself. Both are closely interrelated, and coherence is one of their fundamental properties. In this respect, the study of discourse coherence is expected to relate to that of text coherence.

In fact, the term "cohesion" is often used to deal with text coherence, and cohesive devices are explicit linguistic means of expressing connection between individual sentences, or passages. According to Haliday and Hasan [2], continuity from one sentence to another is provided by lexicogrammatical phenomena, namely reference, substitution, ellipsis, conjunction, and lexical cohesion, contributing to choosing the words which are related to each other semantically in various ways to form ties in a text.

Reference deals with a semantic relation between items in a text, so that one refers to the other, containing specific information for retrieval. It can be classified into personal, demonstrative, and comparative reference. Personal reference suggests using personal pronouns, possessive determiners and possessive pronouns to mark the role played in the communication process. For example, first person is usually the speaker's reference to him/herself, second person is the speaker's reference to a listener, and third person is the reference to those who are neither speaker, nor listener. Demonstrative reference is a form of

verbal pointing; selective nominal demonstratives, adverbial demonstratives, and the definite article locate persons or objects, involved in communication, both in space and time. Comparative reference is represented by general comparison, which expresses likeness or unlikeness between things (*such*, *different*, *the same*, *similar*, *the other*), and particular comparison, which highlights comparability between things, especially in terms of quantity or quality (*more*, *fewer*, *better*, *equally good* etc.) [2, p. 31-84].

Substitution, or the replacement of one item by another, can be of three types, namely nominal one(s), verbal do, and clausal so, depending upon the grammatical function of the substitute item.

Ellipsis, which is the omission of the item, can be interpreted as another form of substitution in which the item is replaced by nothing. In the case of ellipsis there is a presupposition at the level of words and structure that the item is to be understood anyway.

Conjunction is a different type of semantic relations, specifying the manner in which what is to follow is connected to what has been encountered in the discourse before. Such relations between sentences and paragraphs can be grammatically realized by means of connectives, adverbs, prepositional phrases, and semantically fall into four broad categories: additive (*and, furthermore, besides*, etc.), adversative (*but, yet, however, despite*, etc.), causal (*therefore, for this purpose, because of, as a result*, etc.), and temporal (*next, at first, before, at the same time, previously*, etc.) [2].

Lexical cohesion comprises reiteration, which means the repetition of a lexical item, the use of a general word to refer back to a lexical item, and the use of synonyms, near-synonyms, or superordinates, as well as collocation, that is association between lexical items which tend to regularly co-occur [2, p. 288].

As we can see, cohesion is achieved by grammatical means (reference, substitution, ellipsis), lexis (reiteration, collocation), or both (conjunction).

The use of cohesive devices, however, does not necessarily produce coherence of a text, and in practice communication may take place without overt, linguistically-signalled cohesion. What matters in addition to syntactic-semantic relations between sentences is the logic-semantic relation established between propositions that make up the thematic structure.

Propositional or coherence relations, which describe how parts of a discourse combine to form larger chunks and eventually the whole structure, have been investigated in the framework of Rhetorical Structure Theory (RST), firstly introduced by Mann and Thompson (1988), and then adapted and developed further by Marcu (2000), Kehler (2002) and others. In RST, an entire text is analyzed as a hierarchical structure built of basic clausal units, which enter into coherent relations of different types. The relations are illustrated in a diagram (schema), in which an arrow labelled with the name of the relation points a span of the text called the "nucleus", and the span from which it points away is called the "satellite". Spans, related so that one has a specific role relative to the other, can be composed of more than one unit. "Nuclei" are viewed as the most important parts of a text, while "satellites" support the nuclei, and are secondary. Thus, relations may be "multinuclear", that is equally important, or "nucleus-satellite". Based on functional and semantic criteria, they are defined in terms of four fields: constraints on the nucleus; constraints on the satellite; constraints on the combination of nucleus and satellite; and the effect, which is the intention of the speaker/ writer in presenting the discourse [5, p. 421-427].

Originally, there were twenty-four relations defined in RST, classified by the effect intended by the text producer, and divided into subject matter relations (elaboration, evaluation, interpretation, cause, circumstance, solutionhood, restatement, summary, etc.), which provide information and are recognized by the reader, and presentational relations (motivation, background, justify, concession, antithesis, evidence, enablement), which increase the inclination on the part of the reader, such as positive regard, belief, ability and desire. This corresponds to the binary classification developed by Teun A. van Dijk, who

distinguishes between semantic relations that hold between denoted facts, and pragmatic relations that hold between speech acts [6, p. 3].

At present RST relation inventories are open, and the number of coherence relations is often extended and modified. Wolf and Gibson (2005), for instance, define four broad classes of

- 1) resemblance (similarity, contrast, example, generalization, elaboration);
- 2) cause-effect (explanation, violated expectation, condition);
- 3) temporal (essentially narration);
- 4) attribution (reporting and evidential contexts) [8, p. 118].

Each relation type is typically associated with some lexical and phrasal cues, syntactic constructions, and cohesive devices. Coordinating and subordinating conjunctions, other connective expressions, like adverbials, prepositions, and prepositional phrases, that signal relational coherence are referred to as discourse markers [6, p. 6]. However, enablement, evaluation, elaboration, solutionhood are found to be never marked, while background and summary are rarely marked [5, p. 437]. Thus, the presence of relations between propositions may not be signalled in an explicit way, making the research of discourse coherence quite a challenging task.

In this connection one cannot but refer to the concepts of local and global coherence. The former is considered as microstructure which connects explicit text propositions while the latter provides a link between the text and the macrosocial context of its production and reception [1, p. 297]. Thus, to discover discourse coherence it is not enough to study lexical and propositional cohesion, there must be more than the text alone under consideration, namely the world knowledge of both text-producer and the intended audience about forms and functions of communicative interaction (social and communicative competence, genre expectations, etc.) as well as the time and place of text-production (mode of communication), and the function of the text (communicative purpose) [7].

Global coherence at the higher level of discourse is studied in terms of genre analysis, which lies in describing generic structures as a number of generic moves (Swales 1990) that determine the occurrence of certain coherence relations, and the ways of expressing them. Although the move is introduced as a functional unit to identify the communicative purpose of the genre as a whole, rather than a grammatical unit, such as a clause or paragraph, the analysis of move structure is often accompanied by an analysis of the typical linguistic features displayed [4].

Knowing what syntactic structures, lexical items, and images – say, metaphors or personification – serve achieving the communicative purpose(s) helps interpretation of the discourse. The specific linguistic aspects employed to have a certain influence upon addressee's inferential processes in identifying the communicator's intention are commonly classified as rhetorical strategies of narration, exposition, argumentation, description, instruction and so on. For example, the expository move structure is Situation, Problem, Solution, and Evaluation [3, p. 95]. Rhetorical strategies, however, may occur in different genres for different communicative purposes so that a comprehensive research of the interrelations between local and global coherence is required.

As we can see, the approaches are not independent of each other so that coherence can be actually identified at three levels of discourse organization, namely that of generic structures, coherence relations, and linguistic realization of signalling these relations, both explicitly and implicitly.

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