

## Deictic Elements as Means of Text Cohesion and Coherence in Academic Discourse

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### Abstract

The article presents the results of the research aimed at analyzing some functions and features of deictic elements in academic discourse in English. The material under analysis covers 20 academic texts written by English-speaking linguists. In the article it is proved that in academic discourse deictic elements can operate only within the fixed scheme of deictic coordinates, which has got three main elements: deictic center, deictic element, and antecedent/subsequent element. Out of this scheme deictic elements fail to fulfill referential procedure. All deictic elements in academic discourse are divided into two big groups: conventional deictic elements and endemic ones. The result of the research shows that conventional deictic elements in most cases provide text cohesion (within small text units, such as adjoining sentences); whereas endemic deictic elements tend to serve for text coherence (in larger text units, such as paragraphs, chapters, etc.). Thus, deictic elements can be considered important units providing text-building.

**Keywords:** *Deictic element, Theory of deixis, Academic discourse, Text cohesion, Text coherence*

### Introduction

Academic discourse differs from other types of discourse by its lexical, syntactical and stylistic features. Among the lexical peculiarities of academic discourse, it is worth mentioning deictic elements, whose functions and forms in academic discourse may differ from the ones in texts of other styles and genres. In the 20<sup>th</sup> century deictic procedure in fiction texts and oral speech was deeply analyzed and well described in academic research; whereas specific features of deictic procedure in academic texts has not been observed yet. Fiction texts reflect real life situations, which take place within temporal and 3-dimensional spatial coordinates. That is why deictic elements in fiction texts function the same way they function in the real physical coordinate system, which depend much on a speaker's location and time of speech producing. In comparison with fiction texts, academic texts have nothing to do with temporal and 3-

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dimensional spatial coordinates in which real life situations take place: these texts function within fixed textual coordinates, which makes it simpler to analyze the mechanism of deictic procedure. This fact explains why we decide to concentrate on the deictic procedure in academic texts precisely.

Moreover, fixed textual coordinates serve for text cohesion and text coherence. Taking into account the requirement for academic texts to contain precise and accurate ideas with a single meaning, we assume that deictic elements can serve to provide text cohesion and coherence, alongside with other lexical units. Thus, the goal of the research is to analyze the characteristics of deictic procedure in academic discourse in order to elicit its text-building functions. The text material of the research covers 20 academic discourse texts in English, the content of which lies in the field of linguistics, and the theory of deixis in particular.

### **Method**

The linguistic texts under analysis present unique material as they cover various aspects of the theory of deixis and at the same time contain deictic elements to be analyzed. In other words, such texts can be used as both a source of theoretical material and a source of lexical units the research is aimed at. All the texts under analysis are research articles written by English-speaking linguists.

The first step of the analysis was collecting data samples: deictic elements of various types. During the second stage we classified all the deictic elements into the following groups: conventional deictic elements (personal and demonstrative pronouns) and 'endemic' deictic elements, which can be found primarily in academic discourse (specific adjectives, adverbs and adverbials). Then all the deictic elements were analyzed in terms of their capacity to perform the text-building function.

### **Results and Discussion**

As a philological and linguistic notion, “deixis” appeared in the Ancient times but became an object to research only at the end of the 20<sup>th</sup> century (Bühler, 1982; Cruse, 2000; Lyons, 1977; Marmaridou, 2000; Bittman & Russell III, 2016). The research of the first part of the 20<sup>th</sup> century was devoted to summarizing the theoretical background on deixis issues, which allowed the researchers to introduce detailed definitions of this notion.

*“Deixis is the location and identification of person, objects, events, processes and activities being talked about, or referred to, in relation to the spatiotemporal context*

*created and sustained by the act of utterance and the participation in it, typically, of a single speaker and at least one addressee” (Lyons, 1977).*

*“Deixis is «pointing» (from Greek) <...> The concept is regarded as comprising lexical items that make little or no sense without some information about the position of the speakers in relation to their world and to what they are saying” (Ruthrof, 2000).*

In other words, deixis is the speech function of lexical elements that do not name objects and notions but point at them. Thus, nomination and deixis are considered two different mechanisms of referential procedure. In speech, deixis is realized through deictic elements, the most widely-spread of whose are personal and demonstrative pronouns, which point at objects, rather than name them.

Since deixis is considered one of the basic mechanisms of referential procedure, we should comment on what we mean by referential procedure in this paper. Referential procedure here is a semantical link between lexical units (words) and objects of the real world (referents). D. Alan Cruse (2000) defines reference as one of the most important and basic aspects of linguistic system, which allows a person to keep in touch with the outer world through speech.

*“Reference is one of the most fundamental and vital aspects of language and language use, namely, the relations between language, as a medium of communication between human beings, and the world, about which we communicate” (Cruse, 2000).*

We might assume that in academic discourse the mechanism of referential procedure differs in case of nomination (provided by notional words) and in case of deixis (provided by deictic elements). This assumption is based on the fact that notional words possess denotation meaning, whereas deictic ones do not.

It is worth mentioning that the mechanism of deictic procedure has been actively studied in fiction texts, which reflect real or real-like situations, with the system of spatial and time coordinates. In this regard, the deictical procedure has never been examined in texts of academic prose (articles, research papers, thesis, etc), which fulfill a different function and have a number of differential characteristics. We believe these characteristics inevitably influence the way deictic mechanism works. Thus, studying parameters of deictic procedure in texts of academic prose will complete the notion of deixis and provide a more detailed scheme of deictic coordinates.

Even though there are plenty of classifications of deixis types, we can identify the types mentioned by researchers most often: personal, spatial and temporal types of deixis (Cruse, 2000; Fillmore, 1998; Marmaridou, 2000; Bondarenko, 1998; Vinogradov, 1947; Kibrik, 1983; Srebryanskaya, 2003; Waters & Russell 2016). The three types of deixis mean, respectively, pointing at objects, places and time points. In case of deixis in academic discourse, all the three types operate under so-called contextual deixis, whose effectiveness depend on fixed textual coordinates. The main elements in the scheme of deictic coordinates are deictic center (a deictic element itself), deictic vector (pointing at textual elements that are placed in either preceding or subsequent context), and antecedent/subsequent elements of the text (referents). For example:

*Among **these** is the distinction between expressions which are linked immediately to the speech act...*

***It** has either been ignored by those who do not want to deal with **it** or respectfully but rather consistently mishandled by those who know something must be done about **it** but are struggling to determine exactly what.*

The demonstrative pronoun 'these' and the personal pronoun 'it' here fulfill the deictic function in the text. We can see the abstract deictic vector pointing at some element of the preceding/antecedent context. However, without the textual units the deictic elements point at it is impossible to get the meaning of the phrases in (1) and (2). Let us find these textual units:

(1a) *Bühler presents and discusses various basic features of language and concepts which are relevant to its investigation. Among **these** is the distinction between expressions which are linked immediately to the speech act...*

(2a) *For years, meaning has been treated like nuclear waste by theoretical linguists. **It** has either been ignored by those who do not want to deal with **it** or respectfully but rather consistently mishandled by those who know something must be done about **it** but are struggling to determine exactly what.*

The underlined words and phrases give us the third missing element of the scheme of deictic coordinates – the antecedent element the deictic elements 'these' and 'it' point at: 'various basic features of language and concepts' and 'meaning'. Identifying all the three elements appears to be the obligatory requirement for effective referential procedure in case of contextual deixis in academic discourse. If at least one of the elements (deictic element, deictic vector or antecedent/subsequent element) is missing (as we see in (1) and (2)), referential procedure fails.

Let us bring up more examples illustrating the deictic procedure in academic discourse, in which deictic elements refer to textual units (lexemes, word combinations or paragraphs) placed in either preceding or subsequent context:

(3) *Leading on from the discussion of grammatical phenomena at the end of the **previous** section, in **this** section we illustrate Hanks's view...* ('previous' refers to the section preceding the one containing the deictic element; 'this' refers to the section containing the deictic element)

(4) *This suggests that the notion that demonstratives like 'you' can be used non-deictically may be problematic – a suggestion that we'll pick up **later** when we look at real uses of deictics in extended talk.* ('later' refers to the subsequent sections of the article/book)

Thus, deictic procedure in academic texts works within fixed deictic coordinates, which cover contextual extracts of any size: from the very sentence containing a deictic element to a whole text.

Analyzing the deictic procedure in academic discourse, we should focus on endemic deictic elements, which were first mentioned by Korovina (2013), she defines deictic elements as “*речевые единицы, встречающиеся исключительно в текстах научного регистра речи и являющиеся таким образом своеобразными маркерами данного речевого регистра*” [rechevye edinicy, vstrechajushhiesja iskljuchitel'no v tekstah nauchnogo registra rechi i javljajushhiesja takim obrazom svoeobraznymi markerami dannogo rechevogo registra] (= speech units that can be found primarily in academic discourse and therefore serve as specific markers of this functional style of texts).

Examples of endemic deictic elements in academic discourse are the following adjectives, adverbs and adverbials: *hereafter*, *in the previous chapter*, *above-mentioned aspects*, *the following reasons*, *in the last section*, etc. As we can see all these elements are unable to point at their referents out of the scheme of deictic coordinates.

*“Координаты дейктических систем могут размещаться в пределах небольших отрезков текста, а именно, в соседних предложениях или в одном абзаце. Не исключено расположение дейктического antecedента на достаточно большом контекстуальном расстоянии от дейктического центра, то есть в пределах целой главы, всей статьи или книги”* [Koordinaty dejkticheskikh sistem mogut razmeshhat'sja

v predelah nebol'shikh otrezkov teksta, a imenno, v sosednih predlozhenijah ili v odnom abzace. Ne isključeno raspoloženie dejktičeskogo antecedenta na dostatočno bol'shom kontekstual'nom rasstožanii ot dejktičeskogo centra, to est' v predelah celoj glavy, vsej stat'i ili knigi] (Coordinates of deictic systems can be placed within short text units, namely in adjoining sentences or the same paragraph. However, antecedent elements can be placed quite far from a deictic center: for example, within a chapter, article or book) (Kirdeyashkina & Korovina, 2016).

Pointing at other elements of a text, deictic elements help connect phrases and sentences. This fact allows us to suggest deixis serve for text coherence and text cohesion. First of all, we should define the difference between text cohesion and text coherence, since in many works the two terms are used as synonyms.

Text coherence has always considered the main category of text-building that provides the unity of form and meaning. The category of text coherence is widely discussed in the works of Russian and foreign linguists such as Arutyunova (1972), van Dijk (1977), Galperin (2006), Milevskaya (2003), Moskalskaya (1981), Halliday and Hasan (1976) and others). The principal thesis on which the theory of text-building is founded states the following: a text does not exist without text coherence. According to Milevskaya (2003):

*“связность — необходимое условие успешности коммуникации: бессвязный текст не может быть адекватно декодирован адресатом”* [svyaznost' – neobhodimoe uslovie uspešnosti kommunikatsii: bessvyazny tekst ne mozhet byt' adekvatno dekodirovan adresatom] (coherence is an obligatory requirement for effective communication: an incoherent text cannot be properly understood by the recipient).

Thus, the mechanisms of text coherence can be found at different levels of text structure.

The term “cohesion” was introduced in linguistics by Halliday and Hasan (1976) in their paper “Cohesion in English”. They define text cohesion as a set of “the means whereby elements that are structurally unrelated to one another are linked together, through the dependence of one upon another for its interpretation” (Halliday & Hasan, 1976). The more narrow definition of text cohesion is given by van Dijk (1977), who states that text cohesion is formed through elements providing links between two (or more) adjacent sentences. van Dijk (1977) also defines the difference between text coherence and text cohesion, saying that text cohesion operates in linear local context, whereas *“coherence is a semantic property of discourse, based on the*

*interpretation of each individual sentence relative to the interpretation of other sentences*". In other words, many linguists take cohesion as the necessary condition for coherent discourse.

Taking all the above-mentioned opinions into account, we can claim that both text cohesion and text coherence deal with interrelated text elements: in a text interpretation of an element is based on its relation to other elements. The best example of such a relation is the deictic procedure in academic texts: each deictic element must refer to an element of precedent or antecedent context (a referent).

In case referents of deictic elements are placed in so-called mini-context (consisting of the sentence containing a deictic element, one preceding sentence and one subsequent sentence), deictic elements realize text cohesion: they make linear connection within small text units (word combinations and sentences).

*(5) How remarkable it is that what the logic of the ancient grammarians and modern formal logic say about the deictic words fits, in crucial respects, so neatly together. **The former** stated that deictic words, unlike naming words, provide no 'what-determination', and **the latter** denies that as conceptual signs they are as simple to define objectively as other words.*

In (5) '*the former*' and '*the latter*' are deictic elements, fulfilling referential procedure through the antecedent elements (the underlined phrases in the first sentence). Thus, the deictic elements here provide text cohesion and help avoid tautology. It is worth mentioning that according to the statistics in most cases text cohesion is realized through conventional deictic elements (personal and demonstrative pronouns).

As it was said above, deictic coordinates can be placed within both small and large text units (adjoining sentences, paragraphs, chapters, articles, etc). In case of adjoining sentences deictic elements provide cohesion; whereas in case of larger text units the text-building function of deictic elements differs and results in text coherence. Text coherence is considered one of crucial factors of text unity, since it provides links between bigger text units (paragraphs, chapters, etc.). In academic texts deictic elements are often used to refer to other parts of a text (*later, in the previous section, mentioned above, earlier, etc.*).

*(6) As noted **previously**, Givon would have morphological affixes derive from frequently co-occurring syntactic elements.*

(7) *It is now possible to address the three problems which were described at the beginning of this chapter.*

(8) *We shall return to these experiments in the next chapter, but for now let us note that...*

(9) *In the following paragraphs, Bühler extensively discusses Briggmann's theory of the Indoeuropean deictic system.*

(10) *There are additional senses that apply to syntactic forms that derive from deictics by means discussed earlier in this chapter.*

Extracts (6) – (10) illustrate the type of deixis that is specific to academic discourse. We call it 'intratextual deixis' – the type of deixis in which deictic elements point at any other parts of a text. Intratextual deixis can be rarely seen in fiction texts, for example. Along with other lexical means, intratextual deictic elements serve for text coherence as they connect text elements placed not in adjacent sentences, but in more distinct parts of a text (paragraphs, chapters, etc.). Also, it should be mentioned that unlike text cohesion text coherence is realized primarily through endemic deictic elements, rather than through conventional ones. In spite of this difference, deictic elements are able to provide both text cohesion and text coherence.

### Summary

To sum up, deixis is considered one of the referential mechanisms, alongside with nomination. In academic discourse deictic procedure operates within the fixed scheme of deictic coordinates: deictic center, deictic vector and antecedent/subsequent element (which lies in either preceding or subsequent context). All deictic elements in academic discourse can be divided into two groups: conventional deictic elements, which can be seen in texts of various styles and genres, and endemic deictic elements, which are used primarily in texts of academic discourse.

### Conclusion

One of the main functions fulfilled by deictic elements in texts of academic discourse is text-building. Soul in ordinary discourse is a set of consciousness motives (and at the same time the basis) of a living being, the antithesis of body and matter concept (Zamaletdinov, 2006; Zamaletdinov et al., 2014). Deictic elements are especially effective in avoiding tautology and providing text cohesion and text coherence. The fixed scheme of deictic elements helps to achieve text cohesion and coherence throughout a whole article/text. Therefore, providing text



cohesion and text coherence, deixis can be considered a significant mechanism of text-building. In theoretical implementation, the results of the research seem to be valuable for developing deixis theory. In terms of practical use, the research can give material for designing software dealing with text-building.

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