INTERSENTENTIAL ANAPHORIC USE OF PERSONAL PRONOUNS IN ENGLISH DISCOURSE

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The present article is concerned with the determination and descriptive analysis of the basic patterns of intersentential anaphoric use of personal pronouns in J. Galsworthy's The Man of Property.

The purpose of this study is to examine the textual functions of personal pronouns drawing upon the theoretical assumptions of the science of text linguistics. The complexity of the relationship between the pronoun and its antecedent determines the distinction between simple and complex patterns of the intersentential anaphoric use of personal pronouns. Simple patterns serve the examination of the distances between the pronoun and the antecedent. The patterns in the given corpus demonstrate abundant instances of antecedent shifts which encumber the resolution process and thus allow us to consider the ambiguous relationships between the pronoun and the antecedent.

1. Introduction

Until recently the status of a text has been widely discussed from a variety of theoretical perspectives. The insights of the eminent scholar M. A. K. Halliday (1976) offer an unparalleled in-depth coverage of many aspects of a text. The most recent investigations base their analyses on the communicative perspective and view the text as a *communicative occurrence* (Beaugrande 1981). The communicative aspect of textuality incorporates a multiplicity of explorative issues such as text planning and pronominalisation, computational approach to text processing, semantic factors in pronoun resolution, text and discourse theories, and many others. The system explicated by Halliday & Hasan (1976) and the theoretical assumptions of Beaugrande (1981) are common reference sources for such enquiries.

Anaphora resolution is one of the most active research areas in the analyses of language processing (Hess 1990; Walker 1997; Hitzeman 1998; Palomar 2001; Mitkov 2002). Since the present study aims to determine the criteria for distinguishing between patterns of anaphoric pronoun use, reference resolution requires differentiation between anaphoric and cataphoric relations. Anaphora indicates the kind of relationship when a grammatical substitute, e.g. a pronoun, is used to refer to a preceding noun phrase. Cataphora is defined as the use of a grammatical form, e.g. a pronoun, to refer to a following noun phrase. Huddleston & Pullum (2002) refer to the relations as retrospective and anticipatory anaphora, respectively.

The basic factor that gave an impulse to the present investigation was the applicability of centering theory (CT) to the study of pronouns. Text linguists and computational researchers have tried to

resolve pronouns applying the basic assumptions of centering theory (CT) which originally appeared in the context of psycholinguistic research on anaphora resolution in natural language processing. Centering theory claims that for each utterance in a discourse there is precisely one entity which is the centre of attention (*topic* by Beaugrande 1981). This is also referred to as the *backward-looking centre* (Kibble 2001). There is a preference for consecutive sentences within a text segment to keep the same entity as the centre and preferentially realize it as subject. Other researchers, Strube& Hahn (1999), supplemented the primary CT by introducing a new topic or centre, which is in a prominent position. In their model, there is a shift when a new entity is introduced, and the previous centre is retained through pronominalisation.

The present study attempts to provide a classification of patterns of anaphoric pronoun use across sentences. It seeks to examine the gradual expansion of a simple pattern and determine the possible distance between the pronoun and the antecedent taking into account the number of anaphors sequentially following the antecedent. It also intends to describe the patterns of antecedent intervention within one text segment and examine ambiguous types of relationship between the pronoun and the antecedent.

2. Materials and methods

The research was carried out within the scope of eight hundred patterns of anaphoric pronoun use selected from J. Galsworthy's *The Man of Property*. The investigation is limited to patterns incorporating 3rd person pronouns.

This study takes *a backward-looking approach* (Beaugrande 1981), i.e., the basic procedure in the present analysis is looking at preceding stretches of a text from the vantage point of the current pronoun in order to resolve anaphoric reference.

The major aim of the research is to determine the criteria for distinguishing between simple and complex patterns of anaphoric pronoun use. Basically for this reason, the paper consists of two parts. The first part examines the features of simple patterns of anaphoric pronoun use. The other is concerned with the features of complex patterns of anaphoric pronoun use.

3. Results and discussion

3.1 Features of simple patterns of anaphoric pronoun use

The least intricate pattern of pronoun arrangement after the antecedent is the distribution of pronouns after an entity to which they refer in an orderly sequence. By the orderly arrangement of pronouns after an antecedent are meant the occurrences such as *Soames... ... he...his; he...he. Irene... . ... her...her...her...she*. Within the range of pronoun sequences of this kind, it is possible to distinguish between shorter and longer stretches of pronouns following the antecedent as well as to determine the extent of variability in the number of pronouns present within one sentence. The least complicated pattern can be characterized as the one in which the antecedent is followed by one pronoun located in the immediately following sentence.

In the corpus examined, the antecedent was generally referred to by a single pronoun. If the number of pronouns following an antecedent in the immediate stretch of a text is regarded as the criterion for the complexity of a pattern, it may be supposed that with an increase in the number of pronouns referring to the same antecedent the complexity of the pattern of anaphoric pronoun

use reaches a higher level. The third stage towards the complexity of the patterns of anaphoric pronominalisation is the occurrence of three pronouns in an orderly sequence after the antecedent.

Another infrequent pattern involved four occurrences of the pronoun after the antecedent. As the sequence of the pronouns following one antecedent gradually expanded, the previous patterns had to be logically supplemented by the fifth, sixth, seventh and eighth member referring through quite a lengthy chain of preceding pronouns to one and the same antecedent. It is possible to assume that together with an increase in the number of pronouns referring to the same antecedent in the immediate stretch of a text, the possibilities for all the pronouns to be employed in one sentence significantly decrease due to purely grammatical factors. It becomes obvious that the text is devoid of any such structural constraints and at least at a theoretical level it seems that in anaphoric pronoun use it might be complicated to determine the boundaries of the sequential pronoun occurrences after an antecedent in the immediately following stretch of a text. The boundaries of any pattern then in a way may be dependent on the next antecedent which, as it were, marks the beginning of a new pattern of anaphoric pronoun use.

The complex patterns of anaphoric pronominalisation were found to expand up to thirty pronouns following an antecedent in an orderly sequence. The introduction of a new antecedent marked a boundary between two separate stretches of a text, each of which had their own peculiar pronoun arrangements. It may be observed that with an increase in the number of pronouns sequentially following an antecedent, a larger number of pronouns were used within one sentence.

It is quite difficult to determine whether the number can be counted as a sound criterion for the complexity of a pattern. On the one hand, it may be supposed that the increasing number of pronouns after an antecedent do not change the relationship between the antecedent and the pronoun. It is quite easily understood by the text-user that the pronoun chain is a kind of an expanded variant of a single and a simple way of creating cohesion in a text. On the other hand, it might be supposed that with an increase in the number of pronouns referring to the same antecedent, the complexity of the pattern reaches a higher level in the sense that a wider span of attention has to be employed so as not to divert and misinterpret any of the abundant elements of a chain (Frank 2003; Halliday 1995; Huddleston 2002; Kibble 2001; Korbayova 2002; Strube 2001; Walker 1997). If the length of a pattern may be counted as the complexity factor, the number of successive pronouns remains a significant criterion in examining other patterns of anaphoric pronoun use in a text.

3.2 Features of complex patterns of anaphoric pronoun use

Other uses of anaphoric pronominalisation incorporated the patterns whose complexity degree was largely conditioned by the antecedent intervention, or shift, within one text segment. It should be mentioned that the majority (57%) of the patterns possessed the feature of being complex due to the occurrence of antecedent intervention. Within a wide range of such patterns, it was possible to distinguish between less complex and more complex models. Less complex patterns occurred more frequently (80%) than their more complicated counterparts (20%).

Antecedent intervention determined the length of a pattern. Hence, the more antecedents were introduced within a pattern, the greater the possibility was to develop a chain of pronoun reference, because the intervening antecedent brought with itself a new space for reference development. The simplest pattern of antecedent shift showed the predominance of two antecedents within a single stretch of a text:

(1) *Again June answered... . Old Jolyon made a movement of relief. She had risen and looked down at him, ...he was, he could not frown away...p.299*

When *gender criterion* (Rose 2002) could be relied upon, it was not complicated to relate the anaphor to the appropriate antecedent. However, when it was not applicable, the process of the proper pronoun resolution was obstructed. If all the pronouns in the sequential flow belonged to the same gender, any sudden shift may have resulted in decreased understanding of relations between the pronoun and the entity it coreferred with. Readers may initially interpret the pronoun that follows a new antecedent as coreferent with it, but are, in any case, forced to reanalyze the relations in the sequence if necessary:

(2) *Again it seemed to Soames that the butler was looking curiously at him. His composure gave way. 'What are you looking at?'he said.* p.181

It might be assumed that if the sentence '*What are you looking at?' he said.* were not present, the pronoun *his* could be interpreted as either referring to *Soames* or *butler.* However, ambiguity is avoided since the writer provided sufficient material in the text so as not to mislead the reader. It is interesting to observe the pronoun and antecedent relationship in the following model:

(3) *Bosinney evaded the question. Soames smiled superciliously. ...he said... . They found little else to say to each other, but on the way to the station Soames asked...* p.114

Two antecedents are introduced in separate sentences in the form of proper names. The pronoun *he* may refer to either of the antecedents. There is one factor that aids in determining the right relationship between the anaphor and the antecedent. It is possible to ground one's judgement on the *recency criterion* (Rose 2002) and maintain that the more recent antecedent is, the more likely it is it will be pronominalised. Thus *he* may refer, according to this criterion, to the second antecedent in a sequence of sentences.

The pronoun *they*, which refers to both antecedents at a time, might be interpreted in two ways. First, it may be regarded as a purely anaphoric item referring to *Bosinney* in the first and *Soames* in the second sentence. If there were not the coordinate clause containing the recurrent antecedent *Soames*, it would be possible to maintain that the pronoun *they* in the given stretch of the text functions anaphorically. However, the coordinate clause ...*but on the way to the station Soames asked* repeatedly introduces the antecedent and initiates another interpretation of the textual function of the pronoun *they*. Referring to both antecedents at a time, it points back to *Bosinney* anaphorically, and it points forward to *Soames* (in the coordinate clause) cataphorically. However, only an anaphoric relation creates texture, since it is established between sentences and not within one and the same sentence. Thus it may be concluded that the pronoun *they* used in the pattern described above may perform two textual functions at a time. On the one hand, it may be the component creating cohesion between sentences. On the other hand, it is employed to establish cohesion within a sentence.

The combinations of pronouns following two antecedents in a pattern were sometimes characterized by a more or less equal number of anaphors pointing to respective antecedents. However, in some patterns of anaphoric pronoun use a shift occurred to establish only one anaphoric link between a newly introduced antecedent and its pronoun.

(4) *...Irene's face. ...she said. ...rested on her. ...she said... . James rose... . ...he said. ...his tall, lank figure before her, he raised..., her bosom, ...her beauty...* p. 82

The latter pattern demonstrates that the ratio of pronouns referring to *Irene* and to *James* is six to three. As regards this pattern, it should be noted that the antecedent that occupied the primary

position in a pattern was normally followed by a number of pronouns which was twice or three times as large as the number of pronouns referring to the antecedent that intervenes.

(5) *Swithin smiled... ...he had read...his mind. Taking his glass, he held it away from him, ...he was...he was going... . Then, placing it to his lips, he took a sip. ...he said, ...his nose...* p.131

While the antecedent *glass* corefers with the pronoun *it* and establishes a single instance of the anaphoric link, the antecedent *Swithin* is linked to eleven pronouns.

The pattern of two distanced antecedents was found to possess the structure of pronoun and antecedent arrangement in which the intervening antecedent was not referred to by an individual cohesive element.

(6) *...young Jolyon. He fixed his eyes on Bosinney. They looked at each other.* p.157

The intervening antecedent *Bosinney* is referred to by the pronoun *they* which at the same time corefers with the initial antecedent of a pattern, *young Jolyon*. In other patterns the two antecedents occurred together. Under appropriate conditions they were combined in the following way: *young Jolyon and Bosinney... . ....they....* . Antecedents occurring in diverse positions and referred to by a common cohesive element are termed *split antecedents* (Huddleston & Pullum 2002).

The pattern of two antecedents demonstrates one more alternative way of judging the relationship between the antecedents and their anaphors. In a chain of pronouns, elements obviously refer to two different antecedents. However, only one antecedent is present within a given pattern of anaphoric pronominalisation.

(7) *...went on Swithin. He had touched his horses...to get her... . But she had looked back, and she had not answered his first question, neither had he been able to see her face – she had kept it hanging down.* p.132

Although in the above pattern we do not find the antecedent to which the pronoun *she* could refer, the reader determines it with ease basing his/her knowledge on the previously read stretches of a text. The pronoun *she* refers to one of the main women characters, and due to its prominence in the preceding passages of the text, it might become unnecessary to rename it directly through the use of the appropriate noun phrase. Also, a special effect is achieved by the writer by means of placing the antecedent in the position remote enough but possible for the text-user to perceive and establish proper relations between coreferring parts. Considering such patterns of anaphoric pronoun use actually means finding out how patterns are intertwined among themselves. As can be seen, between the pronoun *she* and its antecedent there are a number of intervening patterns of anaphoric pronoun use. Since these patterns claim diverse types of characterization, it is no use describing an extremely lengthy stretch of the text in order to demonstrate the coreferent relationship between the pronoun *she* and its remote antecedent. Such observations help to arrive at the conclusion that there might not exist a definite criterion for determining the boundaries of a single pattern of anaphoric pronoun use, or at least it might be quite complicated to define the limits of a pattern. If we hold that a pattern of anaphoric pronoun use consists of a certain number of definitely stated antecedents and a certain number of pronouns possessing respective reference, it is possible under the latter conditions to pass on to considering a pattern which includes three antecedents.

Although in the majority of cases the pattern comprised antecedents denoting three diverse entities, it often consisted of two elements denoting the same person, object or process. The two elements were identical noun phrases or denoted the same person or object but were expressed by means of synonymous noun phrases.

(8) *And old Jolyon bethought... . ...he said...he repeated...his solemn self-justification... . If June had known...had made him desert his son,...was taking him... . But he began...her silence. June slid...his knee. She thought...she did not see, ...she did not care...* .p.298

In this example the noun phrase *June* is mentioned twice. The pattern could be considered complete with the first occurrence of the noun *June* unless there was one more link to the proper noun phrase *old Jolyon* after the second introduction of *June*. The following example also illustrates the tendency of reference for the first antecedent be extended over succeeding antecedents and their anaphors.

(9) *Swithin opened.... He would like... After all, he said... When he was...he had had, ...his carriage...his life. Four-in-hand Forsyte they called him. His T-cart, his horses. ...get hold of them...given him, ...he had kept them... . ...his shaven square old face, he rolled his head in his stand-up collar.* p.127

The noun phrases *Swithin* and *Four-in-hand Forsyte* denote the same person. The third antecedent in the pattern is *horses*, and it establishes two anaphoric links by means of two occurrences of the pronoun *them* occurring in the immediately following sentence. It is quite difficult to determine the antecedent with which the rest of the personal pronouns corefer. The interpretation of the pronouns following the noun phrase *Swithin* does not produce any inaccuracies. This stretch of the text might even be regarded as a separate pattern of anaphoric pronoun use belonging to the group of the least intricate ones since it lacks intervening antecedents. The next chain of pronouns also has its own antecedent which is *Four-in-hand Forsyte*. However, if the reader were to interpret the relation of pronouns to this antecedent, the understanding who the *Four-in-hand Forsyte* is might not be full without reference to the first antecedent of the given stretch of the text. That is why the whole pattern might be regarded as constituting a single whole and the antecedent *Four-in-hand Forsyte* is not necessary in order to perceive that the majority of the pronouns refer to *Swithin*, which is the main antecedent within a given stretch of the text. Moreover, repetition is characteristic of the first antecedent in a pattern rather than the second one. This could account for the increased communicative value of the primary antecedent.

Although at first sight it is not absolutely clear what restrictions on the degree of pattern extension are, the number of antecedents within a pattern cannot be limitless. One condition for the pattern to be regarded as a single whole is the occurrence of uninterrupted links through the use of pronouns. Personal pronouns can be regarded as forms which establish boundaries among patterns of anaphoric pronoun use in discourse.

4. Concluding remarks

The corpus examined revealed two patterns of pronoun use: simple and complex. Simple patterns can be regarded as the ones in which pronouns establish sequential anaphoric links with one antecedent. In the given corpus the chain incorporated thirty pronouns sequentially following one and the same antecedent in a stretch of a text.

However, the sequential flow of identical references was disturbed by the introduction of a new antecedent. The larger part (57%) of the corpus analysed comprised complex patterns demonstrating various ways of antecedent intervention, which consequently accounted for the ambiguous types of relationship between the pronoun and the antecedent. There were from two to eighteen antecedents in a pattern that can be considered as intervening. All the intervening antecedents constituted a single pattern due to the occurrence of uninterrupted links through the use of pronouns.

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TARPSAKININIS ANAFORINIS ASMENINIŲ ĮVARDŽIŲ VARTOJIMAS

D. Bartkutė

S a n t r a u k a

Įvardis vartojamas kuriant rišlumo standartus atitinkantį tekstą. Pats įvardis ir ta nominacija, į kurią įvardis nurodo, tarpusavyje sukuria koreferencinį ryšį, kuris analizuojamas pagal keletą to ryšio kompleksiškumą lemiančių kriterijų. Kompleksiškumas atsiranda, nes įvardis išlaiko didesnį ar mažesnį vienos referencijos kontinuumą. Tai leido išskirti tarpsakininius anaforinius asmeninių įvardžių vartojimo modelius. Sudėtingumo atžvilgiu, jie sudarė dvi grupes. Paprastuose modeliuose įvardžiai, išsidėstę po daiktavardinės frazės, sukūrė nepertraukiamą ryšį tarp pirminės nominacijos ir referencinio elemento. Sudėtingesnės analizės reikalavo modeliai, kuriuose ryšys tarp daiktavardinės frazės ir įvardžio buvo suardytas įsiterpus naujai daiktavardinei frazei į jau egzistuojantį tekstinių nuorodų kontinuumą.