

Difficulties of Determining and Distinguishing Anaphoric and Cataphoric References Faced by Iraqi EFL University Learners

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Chapter One

١,١ The Problem

This study is about the importance of anaphoric and cataphoric references for EFL learners. Most of these learners face difficulty in determining and distinguishing anaphora and cataphora correctly since they have a close interfered grammatical relationship. Anaphora has many grammatical forms that are difficult to be determined by the learners; the same thing with cataphora. It may have many grammatical rules that are difficult to be distinguished. This study contains a theoretical background for anaphora and cataphora, the ambiguous grammatical rules, and the differences between them.

١,٢ Aims of the Study

This study aims at finding out the difficulties that Iraqi EFL learners face in determining and distinguishing anaphora and cataphora. It stands on the ambiguous uses and grammatical rules of these two concepts since they have atypical grammatical rules.

١,٣ Value of the Study

It is valuable for teachers to determine the problems their learners face with these two concepts so they can overcome these problems.

١,٤ Limits of the Study

This study is limited to a theoretical background and a practical application of cataphoric and anaphoric references. The practical application contains a test which has been applied on Fourth year students in Department of English/ College of Education Safy Al-Dean at University of Babylon for the academic year ٢٠١٠-٢٠١١. After collecting the subjects' responses; statistical means have been applied to find the percentage of Iraqi EFL who master cataphora and anaphora.

١,٥ Definitions

١,٥,١ Anaphoric Reference: Anaphora can be defined as a relation between two linguistic elements, in which the interpretation of one (called an anaphor) is in some way determined by the interpretation of the other (called an antecedent) (Huang, ٢٠٠٧: ١). It is backwards in the text. An anaphoric word/phrase points backwards in the text, i.e. you find out what an anaphoric word/phrase refers to by looking at the preceding context. Words that are typically anaphoric are personal pronouns, possessive determiners, definite and demonstrative determiners, and demonstrative pronouns. A personal pronoun, for example, often has anaphoric reference, i.e. you have to look at the preceding context to see what it refers to. In the example, *she* has anaphoric reference:

١. Ann was studying for her exams. She found it difficult to concentrate. (Hasselgard et al. , ٢٠٠١: ١).

١,٥,٢ Cataphoric Reference: Cataphora is a Greek word that has come from ' kataphora ' in the ١٩th century. It means a forward reference or backwards pronominalization in a text (Doyle, ٢٠٠٦: ١). For example:

٢. When I first met him, John Smith was wearing a very ugly T-shirt.

Chapter Two

Theoretical Background

٢,١ Anaphora (Anaphoric Reference)

It is a term used in grammatical description for the process or result of a linguistic unit deriving its interpretation from some previously expressed unit or meaning (the antecedent) (Crystal, ١٩٩٧: ١٩). Anaphoric reference is one way of marking the identity between what is being expressed and what has

already been expressed. In such a sentence as "he did that there." each word has an anaphoric reference (i.e. they are anaphoric substitutes or simply anaphoric words): the previous sentence might have been "John painted this picture in Bermuda", for instance, and each word in the response would be anaphorically related to a corresponding unit in the preceding context. Anaphora is often contracted with cataphora, and sometimes with deixes⁽¹⁾ or exophora⁽²⁾ (where the words refer directly to the extralinguistic situation). It may, however, also be found subsuming both forwards and backwards referring functions.

Thus, anaphora can be defined as a relation between two linguistic elements, in which the interpretation of one (called an anaphor) is in some way determined by the interpretation of the other (called an antecedent). In terms of syntactic category, anaphora falls into two main groups: (i) NP-, including N-, anaphora, and (ii) VP-anaphora. From a truth-conditional, semantic point of view, anaphora can be divided into five types: (i) referential anaphora, (ii) bound-variable anaphora, (iii) E[vans]-type anaphora, (iv) anaphora of "laziness," and (v) bridging cross-reference anaphora (Huang ٢٠٠٥: ٢-٧).

٢.٢ Problems of Anaphora

Anaphora is one of the most complex phenomena of natural language, the source of fascinating problems in its own right. It has long been regarded as one of the few "(extremely good probes) (Chomsky ١٩٨٢: ٢٣) in furthering our understanding of the nature of the human mind, and thus in facilitating an answer to what Chomsky (١٩٨١, ١٩٩٥) considers to be the fundamental problem of linguistics" (Huang, ٢٠٠٥: ٢٨٨), mainly, the logical problem of language acquisition - a special case of Plato's problem. In particular, certain aspects of anaphora have repeatedly been claimed by "Chomsky (١٩٨١) to present evidence for the argument that human beings are born equipped with some internal, unconscious knowledge of language, known as the language faculty" (ibid). Anaphora has been shown to interact with syntactic, semantic, and pragmatic factors. Consequently, it has provided a testing ground for competing hypotheses concerning the relationship between syntax, semantics, and pragmatics in linguistic theory. Anaphora clearly involves syntactic, semantic, and pragmatic factors. Although it is generally acknowledged that pragmatic factors play an important role in discourse anaphora, it is equally widely held that only syntactic and semantic factors are crucial to intrasentential anaphora.

٢.٣ Cataphora (Cataphoric Reference)

Sometimes a pronoun such as *he*, *she*, *it* finds its reference in the following context. For example:

١. If she wants to, Nora can be charming.

The pronoun '**she**' is cataphoric, here, since it substitutes for its antecedent '**Nora**'. The sentence exhibits cataphoric ellipsis, since '**she wants to**' is understood as '**she wants to be charming**'.

The definite article '**the**' is said to have cataphoric reference when the exact reference of the noun phrase is specified after the definite article (typically in noun phrases with post modification) (Hasselgard et al., ٢٠٠١: ٣). For example:

٢. He always raves about the Sunday dinners his mother used to cook.
(Ibid.)

On the whole, cataphoric reference is associated with formal written English. Also, it generally occurs only where the pronoun is at a lower level of structure than its antecedent (where 'level' is understood by reference to level of branching on a tree diagram). Thus, in the following two examples the pronoun is a constituent in a relation clause:

٣. Those who most deserve it rarely seen to suffer defeat. Melville well knew that to the men who sailed in her, a whaler was anything but a pleasure boat.
(Quirk et al., ١٩٨٧: ٣٥١)

In the following example, the cataphoric pronoun appears as a part of the complement of an initial prepositional phrase. For example:

٤. On his arrival in the capital, the Secretary of State declares support for the government.
(Ibid.)

Cataphoric reference can also be illustrated with demonstrative determiners (Campsall, ٢٠٠٦: ١), as in:

٥. I longed to play the piano when I was a child; but in those days my parents could not afford an instrument.
(Ibid: ٣٧٥)

٢,٤ Problems of Cataphora

There are many exceptions, particularly in journalistic writings where there is occasional use of cataphoric pronouns which appear in non-inferior positions. For example:

٦. Failure of his latest attempt on the world record has caused heavy financial loss to the backers of daredevil balloonist Felix Champ.

(Quirk et al., ١٩٨٧: ٣٥٢)

Examples of genuine cataphoric reference were rare in the corpus. This is not surprising, given that the unmarked anaphoric reference is still a source of textual cohesive difficulty at this level of interlanguage development. Judging by the example of "My Favorite Bar or Restaurant," the plural near demonstrative '**those**' emerges at an apparently very early stage of interlanguage in the formation of cataphoric non-cohesive reference. Other typical examples of this type of non-cohesive reference included: '**those of gothic church; those of Shakespeare's; those who are enrolled in the science high school; those who had different political orientations; those who have dreams; those who need help; those within cultural circles; and those who agree with**' [sic]. The genre of interlanguage writing containing the most examples of cataphoric reference was that of advice to the reader. One example of cataphoric reference involving the demonstratives, for example, occurred in a paragraph on the subject of how to cure a hangover (Murphy, ١٩٩٩: ١):

٧. At first, one preventive measure is this: Never drink enough to get really drunk.
(Ibid.)

The second example occurred in a paragraph dealing with the recent spate of deadly fires in public spaces in Korea in which the writer employs the notion of moral hazard to explain the apparent indifference to safety on the part of many public officials:

"The word 'moral hazard' is defined like this: "Moral hazard arises when individuals, in possession of private information, take actions which adversely affect the probability of bad outcomes"
(Ibid.)

The main point to make about these examples is that they tend to confirm the general idea developed in the discussion of synonyms and near-synonyms: These interlanguage samples tend to develop broad rhetorical patterns of textual coherence. It is then within these broadly defined patterns that finer cohesive relations begin to emerge. In each of these examples, the particular genre is important. The genre gives to the interlanguage text abstract rhetorical possibilities for cataphoric reference. Depending on the sophistication of the writer's interlanguage, this abstract rhetorical possibility may be activated. There are two main points to make about this. The first is that cataphoric reference in the corpus is nonetheless rare, even in those paragraphs dealing with the description of process in which it might be expected. The second point is that when it occurs, the cataphoric reference is resolved quickly, indeed, in each of the three cases cited, intra-sententially (ibid.).

٢,٥ The Relation between Anaphora and Cataphora

Anaphora is a feature of grammatical structure referring back to something already expressed; the pronoun in '**When Mary saw John, she waved**' is anaphoric (Crystal, ١٩٨٧: ٣٦). Another example of anaphora is:

٨. I really liked the salmon; that was the best I've ever tasted.
(Maxwell and Clandfield, ٢٠٠٦: ٥)

Where cataphora does occur, anaphora is also possible so that we can equate two

synonymous sentences (Quirk et al., ١٩٨٧: ٣٥١). For example:

٩. Before he joined the navy, Gerald made peace with his family.
(Ibid.)

In this sentence, the positions of pronoun and antecedent are reversed. Sometimes this reversing of cataphora with anaphora is impossible. This happens when the cataphoric pronoun appears as a part of the complement of an initial propositional phrase, as in 'Lucy thinks she understands me' which doesn't mean 'she thinks Lucy understands me'. While 'she' can easily corefer to 'Lucy' in the first sentence such coreference is impossible in the second one, so that here 'she' and 'Lucy' must be understood to refer to two different types. For example:

١٠. He told the story like this: 'once upon a time...'
(Quirk et al. , ١٩٨٧: ٣٤٥)

The near demonstrative 'this\ these' can have both cataphoric and anaphoric reference, while the distant demonstrative 'that\ those' can have only anaphoric reference.

Anaphoric reference tends to predominate in the interlanguage texts exhibiting the least cohesion. One upshot of this is that sophisticated interlanguage texts will exhibit less imbalance in their ratios of anaphoric and cataphoric reference. In other words, examples of cataphoric cohesion, which may involve the use of either 'this' or 'here', will begin to emerge at higher levels of interlanguage development. In all likelihood, however, the emergence of cataphoric reference will consist largely in instances of what Halliday and Hasan refer to as grammatical cataphoric reference. In other words, the majority of instances of structural cataphora -- "the simple realization of a grammatical relationship within the nominal group" -- will be non-cohesive, even in high level interlanguage texts (Halliday & Hasan, ١٩٧٦, ٦٨). Though highly revealing as examples of collocational fluency, structural cataphora is not an example of a cohesive tie and does not enter into the formation of texture. In contrast, examples of genuine cataphoric reference, though occurring with relative infrequency, may be evidence for the relative sophistication of a given sample of interlanguage. There is a necessary caveat, however. Particular genres appear to offer different possibilities for actualizing lexical and grammatical arrangements. Process paragraphs, for example, are an obvious example of a paragraph genre that allows for the actualization of genuine cataphoric reference. In this sense, it may prove more useful to analyze sub-corpora of particular genres in an effort to isolate more quickly the difference between texts with developed texture and those that employ compensatory strategies for achieving more limited forms of cohesion (Hasselgard et al. , ١٩٩٩: ٢).

The distinction between anaphora and cataphora is rarely examined critically in the grammar textbooks. Quirk *et al.* (١٩٨٥: ٣٤٧) offer the following explanations: "... we distinguish between anaphoric and cataphoric uses of a ٣rd person pronoun, according to whether the element with which it co-refers (the antecedent) precedes or follows it."; and, also, in the same previous reference (ibid, p: ٣٥١). Cataphoric reference occurs less frequently than anaphoric reference, and under limited conditions. Where it does occur, anaphoric reference is also possible, so that we can equate two synonymous sentences, such as, the two following examples in which the positions of pronoun and antecedent are reversed:

١١. Before he joined the Navy, Gerald made peace with his family. (*Cataphoric reference*)
١٢. Before Gerald joined the Navy, he made peace with his family. (*Anaphoric reference*)
(Ibid: ٣٥١)

This explanation takes no account of the fact that a sentence may be preceded by prior text. The following example would be cataphoric by Quirk *et al.*'s criterion, but is, arguably, anaphoric in its natural context:

١٣. In addition to his five famous novels and collection of short stories available as Penguins, E.M. Forster has published about fourteen other works...
(Emmott, ٢٠٠٦: ٦)

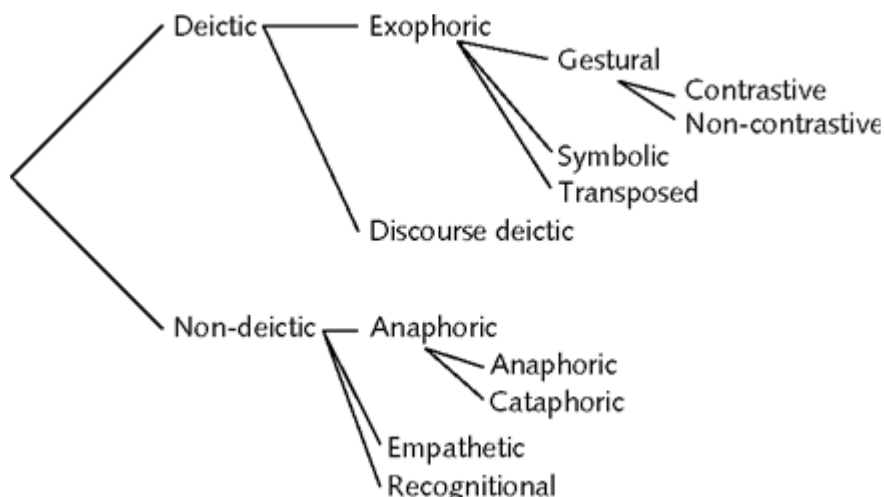
The pronoun 'his' precedes the name 'E.M. Forster' in this particular sentence, as 'he' precedes 'Gerald' in Quirk *et al.*'s example. The biography has, however, begun with the statement that 'Edward Morgan Forster was born in London in ١٨٧٩' and the intervening text contains a succession of

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anaphoric pronouns. The pronoun 'his' can be interpreted automatically if we have already read the preceding text and can therefore be analyzed as anaphoric to the antecedent noun phrase 'Edward Morgan Forster' in the first sentence rather than cataphoric to the succeeding 'E.M. Forster' in the sentence cited previously.

Notes

(۱) **Deixis (Deictic)**: Deixis is the study of deictic or indexical expressions in language, like you, now, today. It can be regarded as a special kind of grammatical property instantiated in the familiar categories of person, tense, place, etc. (Huang, ۲۰۰۷: ۳). It is a term used in linguistic theory to subsume those features of language which refer directly to the personal, temporal or locational characteristics of the situation within which an utterance takes place, whose meaning is thus relative to that situation; e.g. now/then, here/there, i/you, this/that are deictics ('deictic' or exophoric words). Deixis is analogous to the philosophical notion of indexical expression. The term is also used for words which refer backwards or forwards in discourse (anaphora and cataphora respectively), e.g. 'that, the following, the former'. this is sometimes known as discourse (or text) deixis, which should be distinguished from social deixis, the encoding of social distinctions that relate to participant roles (speaker-addressee, etc.), as encountered in such matters as pronouns, honorifics, vocatives and forms of address. The notion of deixis has proved to be fruitful in several areas of linguistics, especially in pragmatics, and in language acquisition studies, where some investigators view the learning of these items by children as constituting a significant feature of early development (Crystal, ۱۹۹۷: ۱۰۷). The following examples illustrate the distinctions involved (Huang, ۲۰۰۷: ۸):



Here are examples for every distinction:

۳. "Give me that book" (exophoric: book available in the physical context)
۴. "I hurt this finger" (exophoric gestural: requires gesture or presentation of finger)
۵. "I like this city" (exophoric symbolic: does not require gesture)
۶. "I broke this tooth first and then that one next" (gestural contrastive)
۷. "He looked down and saw the gun: this was the murder weapon, he realized" (transposed)
۸. "You are wrong". That's exactly what she said" (discourse deictic)
۹. "It sounded like this: whoosh" (discourse deictic)
۱۰. "The cowboy entered. This man was not someone to mess with" (anaphoric)
۱۱. "He went and hit that bastard" (empathetic)
۱۲. "Do you remember that holiday we spent in the rain in Devon?" (recognitional)

(Ibid.)

(۲) **Exophoric Reference (Exophora)**: A term used by some linguists to refer to the process or result of a linguistic unit referring directly (i.e. deictically) to the extralinguistic situation accompanying an utterance, e.g. 'there, that, her'. Exophoric reference is usually contrasted with endophoric reference, subclassified into anaphoric and cataphoric references. (Crystal, ۱۹۹۷: ۱۴۳).

Endophoric Reference (Endophora): A term used by some linguists to refer to the relationships of cohesion which help to define the structure of a text; it is contrasted with exophoric relationships, which do not play a part in cohesion, and where the interpretation requires reference to the extralinguistic situation. endophoric relations are divided into anaphoric and cataphoric types. (Ibid: ۱۳۶).

Chapter Three

The Test

Introduction

To overcome these difficulties the researcher applies a test on the Fourth Class learners in Department of English at College of Education Safy Al-Dean/ University of Babylon for the academic year ٢٠١٠-٢٠١١, then she analyzes the results by using statistical analyses to find these difficulties.

٣,١ Test Objectives and Design

The present test has been constructed primarily to investigate the extent to which Iraqi EFL university learners master anaphoric and cataphoric references. It is a diagnostic test which is used in assessing the strengths and weaknesses encountered by Iraqi EFL university learners in using these references. A diagnostic test is designed to determine the degree to which the specific instructional objectives of the course have been accomplished. The phenomena contains two fields anaphoric and cataphoric references, thus, the test must have items that correspond with the same fields that consist the phenomena that being studied. The test is designed to measure the recognition level. It contains (٢٠) items; (١٢) items are anaphora only, (٧) are cataphora only while (١) item holds cataphora and anaphora ultimately. The test has been designed in such away because anaphoric reference has more complicated and difficult forms than cataphora.

٣,٢ Population and Sample

The population of the current study is the Iraqi EFL learners of University of Babylon ٢٠١٠-٢٠١١; as detailed in the following table:

Table (١)
The Population

College	Class	No. of Students
College of Education/ Safy Al-Dean	Fourth	٧٥

Sampling was conducted according to **cluster random sampling** by randomly selecting one college (Safy Al-Dean) and from that college ٥٠ students of the fourth academic year (٢٠١٠-٢٠١١) were randomly selected (as shown in table ١). They were ١٠ males and ٤٠ females. They are native speakers of Arabic who have been studying EFL for eight years in general and four years at the Department of English. There were no students whose native language is other than Arabic or who have had a language contact with native speakers of English are excluded from the sample, because students from other countries other than Iraq may have English language background different from that background of Iraqi students. Also, repeaters have been excluded. Their average age is twenty-two years old.

The topic under study has been taught in their third year of study at the university while the test has been applied at the fourth year students because they are more proficient and the most advanced learners of English at the university level before graduation. The textbook adopted, which they have studied, is *A University Grammar of English* by Quirk and Greebaum (١٩٧٣).

Table (٢)
The Sample

College	Department	Class	No. of Sample	Age	Native Language	Male	Female
Safy Al-Dean	English	Fourth	٥٠	٢٢	Arabic	١٠	٤٠

٣,٣ Validity

Since the researcher's main concern in this study is to measure the pupils' ability in distinguishing anaphoric and cataphoric references at the recognition levels, the techniques and items are carefully constructed so as not to give space to other grammatical aspects of language to be tested other than anaphora and cataphora. Hence validity is ensured as Brown (١٩٩٦: ٢٣١) indicates that validity is

“the degree to which a test measures what it claims, or purports, to be measuring.”

There are several indexes of validity, one of them is content validity. Modern trends in measurement and evaluation tend to use content validity in achievement test other than the rest of fields of measurement; giving the fact that it requires determining the content of the study phenomena thoroughly. It is mentioned that determining the content thoroughly can only be done with achievement test because the syllabus and its sub classifications is well defined (book or books that contain units or chapters with well-known relative significance). In phenomena other than achievement, the content itself is subject to discussion and change according to the researchers' understanding and perception of the phenomena being studied.

Another important index of validity is concrete validity which refers to the validity of the construction of the test, its fields, items, and scoring. There are several types of concrete validity; one of those is item discrimination.

٣,٣,١ Item Discrimination

Item discrimination indicates the degree to which an item separates the students who performed well from those who performed poorly. These two groups are sometimes referred to as the high and low scores or upper and lower-proficiency students. There are different percentages for such groups. Anastasi (٢٠١٠: ١٣٠) states that the best percentage is (٢٧) percent for each group is the best percentage. Because this number accomplishes the best group size and the best variance. In this procedure, the performance of subjects from both upper and lower groups is compared by using independent-sample t-test. If the upper group scores significantly higher than the lower group in any given item; then the item can discriminate subjects of upper and lower groups which is inconsistency with the total score of the test (Howitt and Cramer, ٢٠٠٠: ١٣٦).

A. Anaphora Discrimination

T-test has showed that there is a significance difference between upper groups and lower groups for all items, but item number (٦) has showed no significance in its anaphoric section (since it is dual with cataphora). Table (٣) shows the calculated t values for all items.

Table (٣)
T Value for Anaphora Items

No. of Item	T value
١	٤,١٦٣
٣	٤,١٦٣
٦	١,٤٧٢
٧	٤,١٦٣
٨	٣,٦٠٦
٩	٣,٦٠٦
١١	٣,١٢٢
١٢	٣,٦٠٦
١٤	٣,٦٠٦
١٦	٣,١٢٢
١٧	٤,١٦٣
١٨	٤,٨٣٧
٢٠	٣,٦٠٦

B. Cataphora Discrimination

T-test has showed that there is a significance difference between upper groups and lower groups for all items. Table (٤) shows the calculated t values for all items.

Table (٤)
T Value for Cataphora Items

No. of Item	T value
٢	٢,٢٨٠
٤	٣,١٢٢
٥	٤,١٦٣
٦	٣,١٢٢

١٠	٤,٨٣٧
١٣	٣,٦٠٦
١٥	٤,١٦٣
١٩	٣,٦٠٦

٣,٤ Reliability

One of the characteristics of a good test is reliability. It is defined by Brown (١٩٩٦: ١٩٢) as “the extent to which the results can be considered consistent or stable.” To ensure that, a definite scoring scheme has been used (section ٣,٦). Furthermore, the instructions of the test have been clearly explained to the subjects. There are different methods for estimating the reliability of a test, as Burns (٢٠٠٠: ٣٤٠-٣٤٤) says, such as: **test-retest, two equivalent forms, split-half, Kurder-Richardson method and Cronbach's Alpha** (which is the method adopted to estimate the reliability of the present test).

Chronbach's Alpha is an index for internal reliability often used to measure internal reliability in tests that contain inconsistent components (Swerdlik, ٢٠٠٩: ١٤٩). The reliability coefficient for anaphora is (٠,٩٢) while for cataphora is (٠,٩٠) which both mean that the test shows satisfactory reliability indexes.

Chapter Four Data Analysis

Introduction

It is an undeniable fact that all learners make errors and that these errors can be spotted, analyzed, classified and interpreted in order to find the solutions. These errors have been spotted by the test in Chapter Three. Analysis, classification and interpretation will be discussed in this chapter. All these processes will give some insights into the nature of the difficulties that Iraqi EFL university learners encounter in determining and distinguishing anaphoric and cataphoric references.

٤,١ Discussion of the Results

This section presents the statistical results of the subjects' responses on the test items with regard to the comments on each table. The statistical analysis shows the range of the correct answers which determine the subjects' mastery of anaphora and cataphora. The researcher has used Chi-Square test formula to find out the number of observed and expected correct, incorrect responses and their percentages. These results are necessary to fulfill the aims of the study.

٤,١,١ Subjects' Responses on the Anaphora Items

This question measures the subjects' responses at the recognition level, where the subjects are required to determine which items are anaphora. The following table represents the number of the observed and expected correct and incorrect responses with their rates of each item:

Table (٣)
Subjects' Responses
On the Anaphora Items

No of Items	Observed Correct Responses	%	Expected Correct Responses	Observed Incorrect Responses	%	Expected Incorrect Responses
١	٩	١٨	٢٥	٤١	٨٢	٢٥
٣	٨	١٦	٢٥	٤٢	٨٤	٢٥
٧	٨	١٦	٢٥	٤٢	٨٤	٢٥
٨	٧	١٤	٢٥	٤٣	٨٦	٢٥
٩	٧	١٤	٢٥	٤٣	٨٦	٢٥
١١	٦	١٢	٢٥	٤٤	٨٨	٢٥
١٢	٧	١٤	٢٥	٤٣	٨٦	٢٥
١٤	٧	١٤	٢٥	٤٣	٨٦	٢٥
١٦	٦	١٢	٢٥	٤٤	٨٨	٢٥
١٧	٨	١٦	٢٥	٤٢	٨٤	٢٥
١٨	٩	١٨	٢٥	٤١	٨٢	٢٥

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٢٠	٨	١٦	٢٥	٤٢	٨٤	٢٥
Total	٩٠	١٥	٣٠٠	٥١٠	٨٥	٣٠٠

The number of the observed correct responses is (٩٠, ١٥ %) while the number of the expected correct ones is (٣٠٠ out of ٦٠٠) and that of the incorrect responses (including avoided items) (٥١٠, ٨٥ %) while it is expected to be (٣٠٠ out of ٦٠٠). The rate of the observed correct responses is lower than that of the expected ones which indicates that the subjects are unable to recognize the items and the words that are anaphora. The rate of the observed incorrect responses is higher than the expected ones which ensure the learners' ignorance of the anaphora grammatical rules.

٤,١,٢ Subjects' Responses on the Cataphora Items

This question measures the subjects' responses at the recognition level also, where the subjects are required to determine which items are cataphora. The following table represents the number of the observed and expected correct and incorrect responses with their rate of each item:

Table (٤)

Subjects' Responses On the Cataphora Items

No of Items	Observed Correct Responses	%	Expected Correct Responses	Observed Incorrect Responses	%	Expected Incorrect Responses
٢	٥	١٠	٢٥	٤٥	٩٠	٢٥
٤	٦	١٢	٢٥	٤٤	٨٨	٢٥
٥	٨	١٦	٢٥	٤٢	٨٤	٢٥
٦	٦	١٢	٢٥	٤٤	٨٨	٢٥
١٠	٩	١٨	٢٥	٤١	٨٢	٢٥
١٣	٧	١٤	٢٥	٤٣	٨٦	٢٥
١٥	٨	١٦	٢٥	٤٢	٨٤	٢٥
١٩	٨	١٦	٢٥	٤٢	٨٤	٢٥
Total	٥٧	١٤,٢٥	٢٠٠	٣٤٣	٨٥,٧٥	٢٠٠

The number of the observed correct responses is (٥٧, ١٤,٢٥ %) while the number of the expected correct ones is (٢٠٠ out of ٤٠٠) and that of the incorrect responses (including avoided items) (٣٤٣, ٨٥,٧٥ %) while it is expected to be (٢٠٠ out of ٤٠٠). The rate of the observed correct responses is lower than that of the expected ones which indicates that the subjects are unable to recognize the items and the words that are cataphora. The rate of the observed incorrect responses is higher than the expected ones which ensure the learners' ignorance of the grammatical rules of cataphora.

The following table shows the total number of the correct responses (١٤٧, ١٤,٧) and the total number of the incorrect ones (٨٥٣, ٨٥,٣). These results indicate that the learners can't recognize anaphora and cataphora because they don't master their grammatical rules.

Table (٥)

Subjects' Responses of the Whole Question

Type of Reference	Total No of Correct Responses	%	Total No of Incorrect Responses	%
Anaphora	٩٠	١٥	٥١٠	٨٥
Cataphora	٥٧	١٤,٢٥	٣٤٣	٨٥,٧٥
Total	١٤٧	١٤,٧	٨٥٣	٨٥,٣

٤,٢ Error Analysis Error analysis is a technique used for identifying, classifying and systematically interpreting the unacceptable forms produced by learners of a foreign language, using any of the principles and procedures provided by linguists. Errors are assumed to reflect the level of competence achieved by a learner (Crystal, ١٩٩٧: ١٣٩). The results of error analysis studies are important because they provide empirical support for the theoretically derived claims.

٤,٢,١ Sources of Errors

It can be said that identification of the exact source of errors made by foreign learners cannot be completely accurate. Furthermore, an error may be attributed to more than one source. Corder (١٩٧٣: ٢٩٠) argues that “ in accounting for particular errors made by a learner, there is a large area of uncertainty In many cases there appear to be several simultaneous processes going on: transfer, overgeneralization”

According to Brown (١٩٨٧: ١٧١), errors are attributed to four factors: i) **interlingual transfer**; ii) **intralingual transfer**; iii) **context of learning**; and iv) **communication strategies**.

٤,٢,١,١ Interlingual Transfer

Iraqi EFL university learners face difficulty of interference between their native language and the target language. Their native language may have characteristics similar to those of the target language which lead Iraqi EFL university learners to overgeneralize the rules between the two languages (Lightbown and Spada, ١٩٩٩: ١٧٦).

Iraqi EFL university learners fall in this type of error when they face difficulty in producing correct foreign sentences; they try to apply the rules of their native language on the target language, which are actually different from each other causing interlingual transfer. This source of error has not been used by the learners since there is no similar equivalent topic in the Arabic language with the current topic under study.

٤,٢,١,٢ Intralingual Transfer

This type of errors takes place within the structure of the foreign language itself. Intralingual transfer has four factors which works at both levels, the recognition and production ones; they are: i) **overgeneralization**; ii) **subjects' ignorance of rule restrictions**; iii) **incomplete application of rules**; iiiii) **false concepts hypothesis** (Brown, ١٩٨٧: ٨١-٨٣). **Overgeneralization** is one of these factors which refers to the negative transfer that involves the incorrect application of the previously learned foreign language material to a present foreign language context (Ellis, ١٩٨٦: ١٧١). Due to the learners' obvious lack of knowledge with regard to both the syntactic and semantic rules of anaphora and cataphora, EFL Iraqi learners tend to make various generalizations which are unacceptable. This explains the high rate of incorrect responses of the **sixth item** (٨٨%):

Item (٦): If he owns a BMW, Fred drives it like a maniac.

٤٤ subjects out of ٥٠ subjects have identified cataphoric reference as anaphoric one and vice versa since this sentence hold the two concepts; which means that the subjects have overgeneralized the rule of anaphora on cataphora and vice versa.

Another factor of intralingual transfer is the **subjects' ignorance of rule restriction**, that the learners apply a rule on a category which is in incorrect place that leads to error committing. Items (٥, ٨٤%), (٩, ٨٦%), (١٠, ٨٢%) and (١٣, ٨٦%) are examples of this kind of errors:

Item (٥): When she lied to him, Frieda hurt Rupert.

Item (٩): If Mary likes Fred, she will give him a book.

Item (١٠): She had a miserable time with him, Sam treated Nora badly.

Item (١٣): When she lied to her friend, Suzy didn't trust Sara again.

Most of the subjects have succeed in determining the anaphors but failed to identify the antecedents or vice versa. The same incorrect application happened with cataphora; the subjects have failed to distinguish where the cataphoric words or phrases are.

The third factor of intralingual transfer is **incomplete applications of rules** that the learners fail to apply complex complete rules since they are complex and hard in learning and use, the learners tend to use simple constructions to achieve effective communication.

Most of the subjects are ignorant of the fact that anaphoric reference could be of more than personal pronouns only; it could be possessive determiners, definite and demonstrative determiners, and demonstrative pronouns (see *Chapter One/ Definitions*). The same problem with cataphora; subjects do not know that cataphoric reference could be more than personal pronoun, it could be a constituent in a relation clause, a part of the complement of an initial prepositional phrase, and demonstrative determiners (see *Chapter Two/ 2.3 Cataphora (Cataphoric Reference)*). Also, they don't know that where cataphora does occur, anaphora is also possible so that we can equate two synonymous sentences (see *Chapter Two/ 2.5 The Relation between Anaphora and Cataphora*). Thus, we find that most of subjects have failed in identifying the various kinds of anaphora and cataphora and distinguished the personal pronouns only. This type of intralingual transfer is found in items (٨, ٨٦%) and (١١, ٨٨%) in Question (١٤, ٨٦%), as shown below:

Difficulties of Determining and Distinguishing Anaphoric and Cataphoric

Item (Λ): The woman next door dislikes Tom, she will give him a hard time.

Item (١١): Adolescents keep watching violent films. They are not supposed to watch such films continuously.

Item (١٤): After Patti had a good time with her parents, she went back to college.

The last factor of intralingual transfer is **the false concepts hypothesis** that refers to the target language learners' attempts to control the range of hypotheses that they attempt to build at any single stage in his development by restricting hypothesis-formation to those which are relatively easy to form and then facilitate communication. What results from this process is faulty comprehension of any distinction in the target language (Ellis, ١٩٨٦: ١٧١). This concept is illustrated in items (٢, ٩٠٪), (٥, ٨٤٪), (٦, ٨٨٪), (٨, ٨٦٪), and (١٣, ٨٦٪):

Item (٢): When he returned home, Michel found that the storm had destroyed his house.

Item (٥): When she lied to him, Frieda hurt Rupert.

Item (٦): If he owns a BMW, Fred drives it like a maniac.

Item (٨): The woman next door dislikes Tom, she will give him a hard time.

Item (١٣): When she lied to her friend, Suzy didn't trust Sara again.

The high rate of the incorrect responses in those items may be due to faulty comprehension of the syntactic rules of anaphora and cataphora. The subjects have formed a false hypothesis that is: anaphora is exactly the opposite of cataphora and whenever cataphora does occur, anaphora doesn't exist which led them to determine anaphora and cataphora incorrectly.

٤,٢,١,٣ Context of Learning

Errors can be ascribed to context of learning that refers to the text- books materials. The errors committed under this factor can result from two reasons: i) the misleading explanation by the teacher; and ii) the unauthentic textbooks. Some teachers mislead some rules of some grammatical categories; others ignore some instructions of teaching approaches, while these instructions help learners get more useful grammatical information (Brown, ١٩٨٧: ١٧٩). Most grammar textbooks illustrate their observation about language using examples that have been made up by the grammarians themselves and which they assume will be recognized as representative of how language works in general (Emmott, ٢٠٠٤: ١). Thus, these two factors are the major reasons for a negative effect of motivating the learners to form effective wrong hypotheses (Yalden, ١٩٨٧: ٧٨). It is obvious that the syllabus has explained anaphoric and cataphoric references in general ; without discussing their grammatical possibilities and cohesion. Most of grammar books mention one kind or more of discourse analysis; others have focused on cataphora more than anaphora. Thus, the researcher has faced difficulty in finding sources as well as the learners who face difficulty in getting more knowledge about anaphora and cataphora. All these difficulties have led the subjects to commit errors that can be ascribed to this factor. These errors are represented mostly in item (١, ٨٢٪), (٢, ٩٠٪), (٤, ٨٨٪), (١٢, ٨٦٪), (١٧, ٨٤٪), and (١٩, ٨٤٪):

Item (١): Pat is going to Singapore next week. He may meet his old friends.

Item (٢): When he returned home, Michel found that the storm had destroyed his house.

Item (٤): If he's not careful, John will lose his job.

Item (١٢): Whenever Frieda snaps at a boy, he never goes out with her again.

Item (١٧): Shakespeare is a famous character. He wrote well-known plays.

Item (١٩): They can take all your time. Computers are necessary devices recently.

Some of the subjects couldn't recognize the anaphor or cataphora with their antecedents; others have underlined most of the words in every sentence. This may be due to the lack of information because of the misleading explanation by the teacher or the unauthentic textbooks.

٤,٢,١,٤ Communication Strategies

Strategic competence is the ability to organize a message effectively and to compensate for any difficulties. It actually includes processes of *interlingual* and *intralingual transfer* and *the context of learning* as a learner tries to get a message across to a hearer or a reader (Brown, ١٩٨٧: ١٨٠). Second language learners will inevitably experience moments where there is a gap between communicative intent and their ability to express that intent. Some learners may just stop talking; others will try to

express themselves using *communication strategies* (Yule, ١٩٩٦: ١٩٧). Some of these strategies are *avoidance* which is a common communication strategy that can be broken down into several subcategories; the most common strategy of which is syntactic or lexical avoidance within a semantic category, *appeal for repair and confirmation* that the learner asks for a help from other people in order to say what he wants. Among these lie *self-achievements points* such as *paraphrasing* (i.e. using different words similar in meaning to the original ones), *guessing* (i.e. using words, clauses or sentences that are based on the target language or not, from context, world or text structure in order to guess the meaning when there is absence of knowledge of the target language elements), *coinage* (i.e. the learners make up a new word in order to communicate a desired concept), and *approximation* (i.e. using a single target language vocabulary item or structure, which the learner knows is not correct, but which shares enough semantic features in common with the desired item to satisfy the speaker) (Brown, ١٩٨٧: ١٨٣).

Approximation strategy can be illustrated in items (٣), (١٦), and (٢٠):

Item (٣): Wash six apples. Put them in a flat dish.

Item (١٦): Tsunami was huge tidal waves. It killed thousands and left others homeless.

Item (٢٠): Vegetables are healthy food. They are necessary in every meal.

In item (٣) the subjects (٨٤%) have approximated the right answer (*six apples*) with (*a flat dish*) as its antecedent which is wrong. In items (١٦) and (٢٠); the subjects have committed the same error. They have identified the word (*others*) as the antecedent of the word (*tsunami*) in item (١٦) and the word (*they*) as the antecedent of the word (*food*) in item (٢٠); which are both wrong.

Most of the subjects have depended on *guessing strategy* in their answers since they are ignorant of the grammatical rules and the different forms of cataphora and anaphora. It could be seen in items (٧) and (١٥):

Item (٧): Sami owns a tape-recorder, he will give it to Dep.

Item (١٥): Whenever it floods , the Mississippi destroys nearby villages.

٤٢ (٨٤%) of the subjects have guessed that (*he*) in the second sentence stands for (*Dep*); which is wrong. In item (١٥), ٤٢ (٨٤%) of the subjects have chosen (*the Mississippi*) as the antecedent of the pronoun (*it*); which is also wrong.

Finally, *avoidance strategy* hasn't been used by the subjects so there is no column in the tables under the name 'No. of Avoided Items'

٤,٢ Conclusions

Iraqi EFL university learners at the fourth year face difficulties in determining and distinguishing the anaphoric and cataphoric references. The low rate of their correct responses in the hole test in anaphora, (٩٠, ١٥%), is lower than their incorrect ones, (٥١٠, ٨٥%). This validates that Iraqi EFL university learners face difficulties in determining and distinguishing anaphora.

The high rate of the incorrect responses in the hole test in cataphora, (٣٤٣, ٨٥,٧٥%), is higher than their correct ones, (٥٧, ١٤,٢٥) which sustains the fact that those learners find difficulties in determining and distinguishing cataphora.

٤,٣ Recommendations

In the light of the study and its conclusions, the researcher recommends the following:

١. Due to the importance of anaphora and cataphora, as sub-categories of discourse analysis, to language production proficiency and to the programmes of the Department of English, syllabus designers and language teachers must explain and deal with these two kinds of discourse analysis in detail. The results of this study can provide English teachers and syllabus designers with certain clues about the problematic areas in determining and distinguishing anaphora and cataphora that need change or special emphasis, especially the interrelated forms of these two references.
٢. Due to the importance of anaphora and cataphora and their wide use, they must be introduced from the first year of the university study that makes Iraqi EFL university learners of the fourth year more professional in using anaphora and cataphora. Also, there will be more time for testing the learners' mastering of these two references.
٣. Textbooks' designers and teachers must draw and illustrate the distinction between the anaphoric reference and the cataphoric one on one hand and the ambiguous cases and uses of the two concepts

on the other hand.

٤. In addition to the recommendations above, the results of this study can provide textbooks designers and lecturers of English with the necessary effective information for the influential remedial teaching programmes aiming at helping those learners to overcome the difficulties they face in mastering anaphora and cataphora.

Appendix The Test

Definitions:

Anaphora: means word/phrase points backwards in the text, i.e. you find out what an anaphoric word/phrase refers to by looking at the preceding context. Words that are typically anaphoric are personal pronouns, possessive determiners, definite and demonstrative determiners, demonstrative pronouns (Hasselgard et al., ٢٠٠١: ١).

Cataphora: means a forward reference or backwards pronominalization in a text (Doyle, ٢٠٠٦: ١).

Q١/ Classify which of the following words and phrases are **cataphoric reference** and which are **anaphoric reference** in the following sentences?

١. Pat is going to Singapore next week. He may meet his old friends.
٢. When he returned home, Michel found that the storm had destroyed his house.
٣. Wash six apples. Put them in a flat dish.
٤. If he's not careful, John will lose his job.
٥. When she lied to him, Frieda hurt Rupert.
٦. If he owns a BMW, Fred drives it like a maniac.
٧. Sami owns a tape-recorder, he will give it to Dep.
٨. The woman next door dislikes Tom, she will give him a hard time.
٩. If Mary likes Fred, she will give him a book.
١٠. She had a miserable time with him, Sam treated Nora badly.
١١. Adolescents keep watching violent films. They are not supposed to watch such films continuously.
١٢. Whenever Frieda snaps at a boy, he never goes out with her again.
١٣. When she lied to her friend, Suzy didn't trust Sara again.
١٤. After Patti had a good time with her parents, she went back to college.
١٥. Whenever it floods, the Mississippi destroys nearby villages.
١٦. Tsunami was huge tidal waves. It killed thousands and left others homeless.
١٧. Shakespeare is a famous character. He wrote well-known plays.
١٨. If Rupert shouts at a woman, he always buys her some flowers the next day.
١٩. They can take all your time. Computers are necessary devices recently.
٢٠. Vegetables are healthy food. They are necessary in every meal.

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