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DISCOURSE REFERENCE AND PRONOMINALIZATION IN ARABIC

The Ohio State University

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DISCOURSE REFERENCE AND PRONOMINALIZATION IN ARABIC

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

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* * * * *

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To my parents who never entertained
the dream that one of their offspring
would get this far.
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The diglossic situation in Arabic is centuries old. Ever since the pre-Islamic era in the seventh century A.D., when poets met near Mecca in their annual poetry conferences to compete against each other in their grandiloquent style, there has been an awareness that two forms of the same language existed simultaneously, side by side: the elaborate form with its case system and 'unique' poetic diction, which was revered and highly admired by everyone; and the form of the language that was used in everyday activities.

Little is recorded of the second form. However, Arab grammarians in the eighth and ninth centuries, at the time of the codifying of Arabic, were aware of the existence of these two linguistic varieties. The second form was touched on in passing; a mention of it is recorded here and there; and briefly put, their prescriptive rules discouraged its use.

Over the centuries, the first form, labeled by Arab grammarians as al-fuSHa (the good, correct language)\(^1\) remained static and unchanged, its rules sacrosanct and strictly applied by classicists. Any deviations from these rules was (and still is by some) frowned upon, discouraged and resisted.

The second form, on the other hand, underwent many changes. The language of everyday activity comprised many dialects spoken by
different Arab tribes. The migration of those speakers outside Arabia to the newly conquered lands has perpetuated the differences among speakers of various dialects even up to the present time.

The present-day situation in Arabic does not seem to be different from what it was in the seventh century, or before then. In other words, an educated speaker of Arabic maintains two linguistic systems (Ferguson: 1959): The passive form, (the High in Ferguson's terminology), that he learns as the 'correct' model to be emulated, the language of the heritage that 'carries in its very inflections a reminder of the crowning achievements and conscious aspirations of his society' (Cachia:1967); and the second form, the Low (Ferguson:1959), that a speaker uses everyday, 'the one [that] has peculiar associations with the familiar and the immediate and the everyday' (Cachia:1967).

1.1.0

The nineteenth century brought the Arabic-speaking world in contact with the West, both through military conquests and through peaceful contact. In order to become informed about what was happening then in the Western World, groups of students were dispatched to the capitals of the West, mainly Paris, Rome or London, for education; schools were established in Egypt and elsewhere, where translations of scientific works were undertaken, and where foreign languages were introduced. The establishment of the American University of Beirut (AUB) in the 1860's introduced new models of learning as well as disciplines that were new to the Arabic speaking world.
Among the results of this abutment of the West upon the Arab world was the translation of Western literary works into Arabic, which gave rise to new genres of literature, genres that had not developed in Arabic previously, such as drama and fictional prose. These new literary genres brought to the awareness of men of letters the linguistic dilemma in which they were caught: al-fuSHa was not adequate to be used as a mode of expression for those genres. The reasons for this are many, but chief among them is the fact that al-fuSHa is not a language that an Arab would learn natively at home. It is customarily introduced, as a second language, one might say, after the mastery of the dialectal form that is spoken at home as a 'first' language. While it is true that the dialects of Arabic share some of the features of al-fuSHa, nevertheless the differences between these two linguistic varieties are noticeable at all levels of linguistic analysis, including the phonological, the lexical and the syntactic. Thus, the learning of al-fuSHa as a non-native language renders it an artificial tool, and one which may be inadequate to express dialogues in a play or in a story by interlocuters who do not speak this language natively. To make a character in a piece of literary work utter speech in al-fuSHa that he or she does not normally speak evokes sarcastic laughter or derision.

There seems to be another impetus to the adoption of al-fuSHa in writing, despite the unnaturalness of its use as expounded in the previous paragraph. This impetus was the fierce attack on the espousal, by some, of the adoption of the colloquials in writing. Writing in the colloquials was vehemently opposed and resisted; those who called for its use were labeled 'agents of imperialism' and the like.
This situation brought into sharp focus the need for 'greater freedom with the classical language' (Cachia:1967). Butrus al-Bustani, a leading man on letters and translator pleaded in "Khutba fi adab al-Arab, [a speech of Arabic literatures], Beirut, 1859, for the adaptation of 'Classical Arabic to the modern needs by simplification of its grammar and the coining of new words' (Cachia:1967). Such a call was echoed by many others; and the need to do something about the linguistic situation in Arabic was felt to be urgent.

1.1.1

Between these two forms of Arabic al-fuSHa, widely known among Western scholars as Classical Arabic (henceforth CA), and the colloquials - there is a 'variety of intermediary Arabic, often called al-lugha al-wusTa, the middle language' (Al-Toma:1969). Many scholars have come not only to admit the existence of this form of language, but to advocate its use among Arabic speakers as a bridge between Arabic-speaking people from different regions, and as a unifying factor among Arabs. Some scholars called for restricting the use of intermediary Arabic (henceforth IA) to oral communication and academic circles (Al-Rawi:1962); while others saw its development and rise as a result of interlocking cultural, social and political factors in the Arab society (Furayha:1955). People of this opinion maintain that IA is the language of educated Arabs, and of the refined Arab society (Furayha:1955). In other words, IA is the product of schools, mass media, travel and all facets of social and cultural cooperation. While the motivation for the rise of IA is due to educational, cultural and social
factors, as some Arab scholars maintain, it is interesting to see that others (Bishai: 1966) account for the emergence of IA as the fruit of the 'head-on clash between the revolutionary leaders [who wanted] to allow the general public to participate in literary activities, and the traditional classicists'. Because of the leaders' lack of mastery of CA, Bishai argues, they often resorted to the use of the colloquial expression in their speeches. The result of this situation was the rise of a new group, 'neo-classicists', which displaced the classicists. Modern Inter-Arabic has been chosen, Bishai maintains, because this form of language is used as a vehicle for communication in Inter-Arab meetings.

1.2.0

The precise nature of this language is still controversial. In any case, there is a common agreement that it exists. While Al-Toma (1969) maintains that IA is a result of fusion between CA and the colloquials, Al-Rawi (1962) states that this language is close to its 'standard mother'. Al-Toma goes on to say that the IA's main features are predominantly colloquial; yet, it reveals, he maintains, a high degree of classicism especially at the lexical level. Bishai (1966), on the other hand, relies in his assessment of IA on an anthropological field method type of investigation. Not only does he interview a 'select' group of Arabic speakers that he labels as neoclassicists, but he tends to accept their judgments about this form of language, namely, IA. The Arab neo-classicists, Bishai confirms, believe that IA is not a result of a merger of colloquial and classical styles into a composite,
but rather it is 'actually Classical Arabic' minus the case endings. In other words, this language, i.e. IA, is a simplification of CA. The presence of colloquial expressions is due to borrowing from one form into another similar to the situation of code-switching in which bilinguals employ expressions from one of their languages in the other.

The view that IA is a simplification of the CA arrived at by the loss of the case system as a common feature shared by the colloquials seems to be accepted by Al-Rawi (1962). While this on the surface seems to be an appealing explanation, in fact it is far from accurate because the colloquials drastically differ from the CA not only in their not having the case system, but also in their phonological, morphological and syntactic systems.

Furayha (1955), on the other hand, sometimes uses the term 'dialect' in reference to IA, and other times he uses 'language'. He argues in his book that a dialect has the full status of an accomplished language, contrary to the conviction of many Arab grammarians who have always maintained that the colloquials are debased forms of language. While he recognizes that IA is a case-less language, he asserts that it is a 'colloquial dialect' not regionally claimed by any group, and is dependent on al-fuSHa in its vocabulary, structures and 'expressions.' Furayha sees in IA the satisfactory solution to the linguistic problem in Arabic.

1.2.1 THE CHARACTERISTICS OF INTER-ARABIC

The previous section outlines views as to where this language stands in comparison with CA and the colloquials. In spite of
disagreements among the views presented so far, all seem to agree on
the need of a 'flexible' language that can be shared by Arabic speakers.
The form of language that is emerging reveals the following
characteristics:

1.2.2 LOSS OF CASE MARKERS

CA has three cases marked by vowels that show the function of a
particular substantative in relation to other items in a sentence. IA,
on the other hand, has done away with these markers. As a result, word
order is more fixed, the relationship between different items in a
sentence being marked by the position of words with respect to others.
In CA, the sentence word order follows the VSO pattern with stylistic
options of SVO, OSV and OVS indicating focus on the fronted constituent.
To illustrate this, let us consider the following examples:

(1) shakara ?almudiiru ?alwalada
    thanked  the director  the boy

'The director thanked the boy'.

In this example, the subject, the second word, is marked by -u to
signal the nominative case, and the object, the third item in the
sentence, is marked by -a to indicate the accusative.

By transposing ?almudiir 'the director' to an initial position, we
convey special emphasis or focus on 'the director'. Thus:

(1-a) ?almudiiru shakara ?alwalada
    the director thanked  the boy

'The director thanked the boy'.
Or we can focus on 'the boy' in the following way:

(1-b) alwalada shakara almudiiru
the boy thanked the director
'The director thanked the boy'.

Or:

(1-c) alwalada almudiiru shakara
the boy the director thanked
'The director thanked the boy'.

In IA, as well as in the colloquials, the relationship between such items is achieved by fixed word order: the subject followed by the verb and then the object. Thus, the meaning of sentence (1) above can be expressed in the following way:

(1-d) almudiir shakar alwalad
the director thanked the boy
'The director thanked the boy'.

Notice in this case the absence of the case markers that signaled who thanked whom in sentence (1) above. This does not mean, however, that in (1-d) the verb cannot precede the subject. In theory, the verb shakar 'he thanked' can occur in a pre-subject position. However, in IA and the colloquials, the order followed in (1-d) above, is most commonly used and preferred. In other words, the arrangement of the elements of (1-d) in any other way results in either a different meaning of the sentence as (1-e) below shows, or in ungrammatical structures. Thus:
Sentence (1-e) has the same word order as that of (1-b) above minus the case markers. This results in a different meaning altogether. While (1-b) means 'the director thanked the boy', (1-e) means 'the boy thanked the director' - exactly the converse of assigning the semantic relationship of who did what to whom. This is brought about as evidenced from sentences (1-b) and (1-e), respectively, by (1) the loss of case markers in IA and/or colloquials which signal the roles of those involved in an action, and by (2) the fixed word order that IA and/or the colloquials has/have acquired due to the loss of the case system.

Moreover, whereas in (1-c) above, the order of the sentence elements was O SV we notice that the analogical arrangement of elements in IA and/or the colloquials is not permissible in sentence (1-f) below, hence the ungrammaticality of such a sentence in IA. Consider:

\[(1-f) \; ?a\text{walad} \; ?a\text{lmu}\text{dir} \; ?a\text{shkar} \; \text{the boy the director thanked} \; 'The boy thanked the director'.\]

The examples thus far show that while in CA relationships between the components of a sentence are marked by case markers (and position to some degree), IA, like the colloquials, did away with the case endings, thus depending on word order to signal the relationships between the items of a sentence. In other words, because inflectional signals mark the relationships between the sentential elements in CA, CA syntax allows
more room for variety in arranging the elements of a sentence. We have seen that the word order of a sentence could be VSO, SVO, or OSV. On the other hand, one can observe from the examples given above, that IA puts restrictions as to what can appear where (i.e. in what position). Whereas a sentence in CA can have three word orders, namely VSO, SVO and OSV roughly with the same meaning, IA permits only two, namely, SVO and VSO with preference given to the SVO order over VSO. The OSV order in IA is ungrammatical. That is, word order in IA becomes fixed and of more significance as the examples 1-a through 1-f, above, show.

1.2.3 French and English had some influence on IA, partly because of translations from these languages into Arabic (translations in which the style of the source language was imitated), and partly because most leading Arab literati were educated in either French- or English-speaking institutions. New foreign calques and idioms found their way into IA. Here is an example:

(2) ?axadh? C ashaa?ahum baakiran
took they dinner their early
'They had their dinner early'.

in CA the meaning of (2) is expressed by the verb to dine and the subject marker suffix, as we see in (3) below:

(3) taC ashshu baakiran
dined they early
'They had dinner early'.
The introduction of (2) instead of adhering to usages like (3) in IA suggests, though this is far from being conclusive, that the possible sources for the likes of (2) could be the contact that modern writers have had with European languages. The source for (2), one can suggest, could be traced to French as in (4):

(4) ils prennent leur diner.

Another example to illustrate the difference between CA and IA due to the impact of translation from English and French on IA is in word order. As a rule, CA prohibits the joining of two nouns to the same genitive. Thus, sentence (5) below is ungrammatical:

(5) *waziiru wa safiiru miSr saafara
minister and ambassador Egypt left

'The minister and ambassador of Egypt left'.

The rules of CA prescribe that conjoining of two nouns to the same genitive is not permissible. To formalize this, a string like (6) is not acceptable, whereas (7) is the norm:

(6) *(NP_1 conj NP_2) (NP_3)
(7) (NP_1 NP_3) (conj NP_2 possessive_3)

This explains why (5) above is ungrammatical according to the CA rule represented in (6). To express (5) correctly in CA, we must get (5-a) below by applying rule (7):

(5-a) waziiru miSr wa safiiru ha saafara
( NP_1 NP_3) (conj NP_2 Poss_3)

Minister Egypt and ambassador her left
'The minister of Egypt and her ambassador left.'

However, sentence (5) is admissible in IA. The grammaticality of (5) in IA could be viewed as a possible change in the rule through the impact of analogical structures in European languages that Arabic was exposed to due to translation. It would not be of surprise if one claimed that the structure of sentence (8) below, which is similar to (5), came about in IA as a result of the impact of translating the analogical English and French structures (9) and (10), respectively:

(8) ta?mmul wa diraasat mashaahid il-Hayaa\textsuperscript{2}...

'reflection upon and study of life ...'

(9) Reflection on and study of life ... 

(10) des pensees sur et l'etude de la vie ...

To briefly restate what the previous examples attempted to explain, one can see that the rules of CA of $(NP_1 NP_3) (Conj NP_2 Poss_3)$ have been changed into the order of $(NP_1 Conj NP_2) (NP_3)$. This change, as is claimed, resulted from translating, and consequently imitating styles of two European languages, namely English and French, that have had some influence on Arabic at the turn of the 19th century, due to an active translation movement at that time.\textsuperscript{3}

One could claim from the previous discussion that a new variety of language has emerged, or is in the process of emerging in Arabic. The features that characterize this language seem to be shared by all Arabic dialects and are believed (by literati, linguists and whoever is
concerned with the linguistic problems that face Arabic at large) to make the language more flexible and expressive of modern needs.

1.2.4.: Twafiq al-Hakim, like other Arab writers, has confronted the problem of using either CA or the colloquial to write drama. After some experimentation with both, he tried to write in al-lugha al-wasTa, the intermediary language, partly to reach a broader audience in the Arab world by using the form of language that is understood by all, and partly to avoid the 'clumsiness' of his characters' use of CA on the stage, which, as was explained in section (1.1.0) above, is believed to be inappropriate and unnatural. Thus, in a postscript to his play, a-S-Safqa 'The Bargain', al-Hakim (1956) spells out his views on this linguistic dilemma. The language used in the play is experimental: it could be read either in the CA or in the colloquial. This result is achieved mainly by straining the classical syntax to the breaking point, if not beyond, in order to approximate the colloquial (Cachia:1967).

The most common liberties al-Hakim has taken involve the following:
1. The subject of the sentence is usually placed before the verb. This is becoming more and more the norm in IA. It does not, however, mean that there are no examples of the verb preceding the subject. [See section 1.2.2]. One example from a-S-Safqa will suffice to show the preferred SV(0) order:

(11) ?aSSawt cindama ya?ti min fawq yaDrib fi elHaa?iT
the sound whenever come from above hit in the wall
'The sound,' when it comes from above, hits the wall'.
2. In CA nonverbal sentences, traditionally called equational sentences, are commonly negated by the use of the particle *laysa* 'there is not', which is never used in any spoken form. Thus, a sentence like (12) can only be seen in written Arabic:

(12) *laysa hunaaka Hal*

'Not there solution'.

In spoken Arabic, on the other hand, the particle *ma fish* or *ma fii* 'there is/are not' is used to negate non-verbal sentences as we see in (13):

(13) *ma fish hunaak Hal*

'There is not a solution'.

Al-Hakim faced the dilemma where (12) is unnatural in spoken Arabic, and (13) is too colloquial for the purposes of his espousal of IA. In order to find a solution for this dilemma, al-Hakim adopted the use of the first element of the particle *ma fish*, namely *ma* as we see in (14), taken from *aSSafqa*:

(14) *ma hunaak Hal*

'There is not a solution'.

3. CA has singular, dual and plural pronouns; colloquial Arabic did away with the dual category completely. In the same way, colloquial Arabic dropped the form of the verb in the dual. In situations where
reference is made to two things, the plural pronoun is used often in combination with two pronouns designating the people involved, as in (15) and (16):

(15) fa ma baaluna naHnu ?ana wa ?anti and what matters we I and you

'What about us, you and me?'

(16) wa limaadha ?inkasar dimaaghuna ?ana wa ?ant and why broke head our I and you

'Why did we think too hard, you and I?

The repetition of ?ana wa ?ant(i) in both sentences is a feature that is carried over from the colloquials into IA. While IA is making use of this colloquial feature, CA does not permit the use of the forms like ?ana wa ?ant(i), 'I and you' to express the addressee and the first person singular; it rather uses the first person plural pronoun followed by the adjectival form of two, naHnu ?alIthnaaI 'we, the two of us'.

4. al-Hakim also sometimes (a) omits the subjunctive particle ?an 'that' before the subjunctive form of verb, and (b) inserts a preposition before a subjunctive as in examples (17) and (18) below, respectively:

(17) ?amar ?addaktor ?uHallil demi ordered the doctor analyse blood my

'The doctor ordered that I have my blood analyzed'.

(18) Daruuri min ?an yaSilikum ?al-maa? necessary from that reach you the water

'Is it necessary that water reach you?'
Both of these features, i.e. the omission of the subjunctive particle before a subjunctive and the insertion of a preposition before a subjunctive, are carry-overs from colloquial patterns. CA, on the other hand, insists on the use of ?an before a subjunctive verb; according to CA rules sentence (17) above is ungrammatical. Sentence (19) below would be the 'correct' CA correspondent of (17):

ordered the doctor that analyze blood my
'The doctor ordered that I have my blood analyzed'.

5. The use of colloquial expressions is very common in IA. Below is an example to illustrate this tendency:

(20) dimaaghuh ka?annuh Taar minnuh burj
brain his as if flew from·it chamber
'as if he lost his marbles'.

In CA, sentence (20) would be unthinkable. It would be expressed by a different syntactic structure as well as by the choice of different lexical items as in sentence (21) below:

(21) ka?annahu faqad caqlahu
as if he lost brain his
'as if he lost his mind'.

1.2.5.: SUMMARY

I have attempted in the sections above to survey the linguistic situation in Arabic. We find two varieties of the same language: (1) the standard and (2) the colloquial(s). Moreover, we notice four
additional characteristics in the case of Arabic that differentiate it from other linguistic situations: First, there is a variety of the language that had been codified over twelve hundred years ago, and thus became an 'idealized' model, any deviance from which is labeled heresy. This model remained static and preserved its complexities over all those years. Second, different colloquials developed away from this model, to the degree that each of these can be considered an independent linguistic entity. Third, the gap between these colloquials and the 'standard' is much wider than the gap between spoken English and written English, for example. Fourth, there is a need felt among writers, academics and others, urged by a national sense of solidarity, to narrow the gap between these different colloquials on the one hand and the 'standard', on the other, in order that they may converge into a unified linguistic form. Arab writers have accepted that there seems to be an emerging linguistic form that makes it possible for people from different Arabic-speaking regions to communicate. This intermediary form had been given different names by different people; my choice here is Inter-Arabic.

There is always the fear that this form of language may meet the same fate of all the attempts in the past to create artificial languages to be used as lingua francas. Yet, the case of Arabic is different, in the sense that this form of language tends actually to be used by speakers. Its use may be restricted to somewhat limited number (namely, the educated), in restricted environments (i.e., conventions, classroom situations, etc.); yet, with the on-going increase of education and channels of communication, this language may develop as the 'new standard'.
Tawfiq al-Hakim, a staunch proponent of this language, adopts this variety of Arabic in his writings for the theater. My purpose here is to use his works, and other works by other writers, as the source for the data in the following chapters.

The discussion in the rest of the dissertation will be concerned with the process of using pronominal elements to stand for already introduced nouns, and the circumstances under which such usage is not permissible. Sometimes the repetition of the NP is obligatory due to the fact that the use of a pronominal form results in either infelicitous or ambiguous discourses. The phenomenon of pronominalization will be studied in discourse-domain rather than with the traditional sentence-based treatment of the subject. Chapter Two will introduce the subsequent discussion of pronominalization.
NOTES - CHAPTER ONE

1 as defined in Lane's dictionary, Arabic English Lexicon.


3 for a brief but succinct discussion on this matter see Chapters 5 and 6 in Stetkevych (1970).

4 from ?aTTa'aam likul fam 'Food for every mouth', a play by al-Hakim, Cairo.

5 Ibid.
Examine the following discourse, taken from one of al-Hakim's plays, between a farmer and one other villager, speakers one and two below, respectively:

Speaker one:

(1) wa dhdhabiiHa ya muC allim waqafat?
    and the slaughtered oh teacher stopped sheep

'Has the slaughtering of the sheep come to a stop?'

Speaker two:

(2) ?ant ma shaaghil C aqlak ?illa [mas?alat dhdhabiiHa]
    you not occupying mind your except matter (of)
    the slaughtered sheep

'All that is occupying your mind is the matter of the slaughtered sheep.'

The repetition of the NP dhdhabiiHa 'the slaughtered sheep' (doubly underlined) in (2), in a form of a genitive construct [mas?alat dhdhabiiHa] 'the matter of the slaughtered sheep') vis-a-vis the use of the possible pronominal suffix -ha to replace dhdhabiiHa is an intriguing matter, because speaker two certainly has the option of saying sentence (3) or (4) below:
In other words, speaker two could have used the feminine pronominal suffix -ha to replace dhdhabiHaiHa, a feminine NP, in (2). Thus, (3) above is a perfectly acceptable response to the question in (1).

On the other hand, the choice of (4) in reply to (1) would have been peculiar. The pronoun hiya 'she' can replace both singular human and non-human feminine NPs. The peculiarity of (4) is to be attributed, as far as I can judge, to an intuitive interpretation of hiya as primarily human. It is my hypothesis at this stage that if a test were constructed where hiya is used in sentences as reference to entities in discourse, and speakers were asked to determine whether this pronoun referred to human or non-human NPs, most speakers would interpret it as human, provided that other components of the test were constant. As of yet, this suggestion remains hypothetical and in need of verification in future research. If this hypothesis is correct, it might confirm that non-syntactic knowledge is crucial to the interpretation of (4) and similar sentences in languages.

Sentence (4) above, it seems, is acceptable with hiya referring to mas?alat dhdhabiHaiHa rather than dhdhabiHaiHa alone, because of pragmatics and conversational knowledge that the two speakers share. In other words, (4) is acceptable in this particular context to refer to the
targeted entity because the two participants in the discourse (as well as readers of, or listeners to, the play) know the referent in the preceding portion of the discourse. And thus reference to it by use of an independent pronoun makes (4) acceptable.

2.0.1 DISCOURSE ACCEPTABILITY

The use of the term acceptable in this context calls for further comment. For some time, and as shown by Chomsky (1965:148-153) there has been concern over the development of a significant theory of 'degree of grammaticalness'. Chomsky talks of (1) deviant sentences that (a) violate the rules of grammar and break strict subcategorization rules (an example of this would be a sentence like 'John found sad'); and (b) sentences that fail to observe a selection rule, such as the famous example: 'Colorless green ideas sleep furiously'. However, Chomsky argues that sentences that belong to category (b) 'can be interpreted metaphorically, or allusively in one way or another, if an appropriate context is supplied'. Chomsky also talks of (2) well-formed sentences. These are the sentences in the language 'that are generated by the system of the grammar rules'. In the same vein as Chomsky talks of 'degree of grammaticalness', he goes on to talk of degrees of acceptability/unacceptability: of the interpretability of a sentence despite the fact that it may be ungrammatical. Chomsky tries to explicate the 'intuitive sense' that facilitates the interpretability of a sentence. He also suggests that 'interpretability' can not be related to the 'notion of grammaticalness' in any simple way. Moreover, he is aware that there
are other 'various factors' that may determine the way and/or whether 'a sentence can be interpreted'.

Other terminology about the notion of grammaticality has been used in the literature. R. Lakoff (1971) suggests the following restriction: 'to reserve the term ungrammatical . . . for anomalies that arise out of violation of syntactic rules alone, such as 'John and Bill is here'.

My use of the term acceptable in the previous section implies not only grammatical well-formedness, in the sense that an utterance follows the rules of the language syntactically, but also the ability for an utterance to be used in discourse without being strained. In other words, in the context of a discourse, an acceptable utterance could be used in that discourse without causing any infelicities. The literature has employed sundry items, like appropriate/inappropriate; felicitous/infelicitous; anomalous (syntactic and semantic); considerate/inconsiderate (Kantor, 1977), to support one theoretical approach or another. Needless to say extra-linguistic factors do exist (as was suggested by Chomsky (1965)) that determine whether a certain utterance is acceptable or not. To consider these factors in detail is beyond the scope of this dissertation.

2.0.2 PRONOUN HUMAN INTERPRETABILITY: FURTHER EVIDENCE

If we examine (4) in section 2.0.0 above, repeated here for clarity,

(4) ?ant ma shaaghil ćaqlak ʿilla hiya
we notice that the processing of *hiya* would be different if the sentence were said in isolation and out of the context of the discourse that had taken place between the two participants. Assume that in a particular discourse several topics had been talked about, and that one discourse participant says (4) above to express feelings about someone else's preoccupation with 'something': *hiya*, in this case, would be processed, as was suggested earlier, as standing for a human NP. The hearer of (4) will process the utterance to refer to a human, feminine NP.

As further evidence, let us examine (5) below from *aS-Safqa*. In this discourse I have substituted the appropriate pronominal form (doubly underlined) for the NP that is repeated four times in the original text:

(5) ?inna ?SSafqa Daa^C^ at nihaa?iyyan ^C^ala ^C^hal truly the bargain lost completely for people

balad 1?anna^h^a tcxaaaf wa ?anta ^C^adra the village because she is afraid you more knowing

biha ya xamiis ^afandi qulelahum meta dhahar of her oh Khamis afandi tell to them when appeared

min ^taHaqiiq ^anna ijariima HaSalat bisababi from the investigation that the crime occurred because

^wa^diha ^lil^aahali ^anna^h^a tabii ^C^lahum promise her for the people that she sell to them

^l?araaDi xaafat(hiya) min Hashri ^ismiha ^h^ the lands because afraid from squeeze name her in

^taHqiq ^wa mtna^C^cat the investigation and abstained.
Indeed the bargain was completely lost for the people of the village because she is afraid—and you know her well, Mr. Khamis. Tell them that the crime occurred because of her promise to the people to sell the lands to them. She was afraid of having her name dragged into the investigation, and (she) abstained'.

We notice that (5) above, with pronouns used throughout to replace the original NPs, appears to talk about a human NP. If such a discourse were used in the test that I suggested earlier, any reader would certainly interpret as human the entity to which the pronouns refer. This human interpretation of the pronouns hiya 'she' or -ha 'her' could be corroborated by the fact that this discourse contains other linguistic elements that are characteristic of human NPs, such as the verb taxaaf 'fear', wa‘ad 'promise', tabii 'sell' and ?imtana 'abstained'. Let us examine the original text, which is produced below for clarity and for the sake of comparison:


We see four occurrences of the actual NPs, namely ?ashsharika 'the company', and two cases of suffixal pronominal forms. It seems to me that one reason for the repetition of the NP rather than the use of the pronominal form(s) is to obviate the human interpretation which is likely to leap first to the reader's mind.

In this case it appears that for the interpretation of a pronominal form (in a sentence) that stands in isolation and out of the context of
a larger discourse, there exists a hierarchy of interpretation. Human seems to be the most salient interpretation, and thus the pronoun hiya in (4) and (5) evokes, first, a human referent. I propose that this hierarchy of pronoun interpretation consists of human as primary, nonhuman animate in the second order of interpretation and possibly abstract coming next. Schematically, this would have the following representation, in descending order of pronoun interpretation:

```
Pronoun Interpretation

  Human
    ↓
  Nonhuman animate
    ↓
  Abstract
```

Figure 1.

The competition, as it were, between human and nonhuman interpretations seems related to the fact that Arabic, like other member of the Semitic family, has two genders only, namely masculine and feminine. The lack of the neuter category in the language makes the nonhuman interpretation of a noun not readily available.

A pertinent syntactic feature of Arabic is that the third person singular feminine pronoun, namely hiya or its suffixal variant -ha, refers (Cantarino, 1975, Vol. II:426) 'not only to a feminine singular noun but also to a plural noun designating animals or inanimate objects'. Thus a sentence containing the independent form of the third person singular feminine pronoun could in general be interpreted to refer to a
human, feminine NP if that sentence is said in isolation, and out of the context of any other form of speech. Because of this, hiya in (7) below could refer, as a primary interpretation, to some female human NP introduced before, and possibly as a secondary interpretation to some nonhuman singular pronoun, such as sayyaarah 'car', or to a nonhuman plural NP, such as sayyaraat 'cars'. Examine sentence (7) below:

(7) hiya fi Ikaraaj
    she in the garage

\begin{align*}
\{ \text{She} & \text{ is in the garage} \\
\text{It, e.g., a car} & \text{are} \\
\text{They, e.g. cars} & \text{are} \}
\end{align*}

The same human interpretation of a pronominal form could also hold for a verbal sentence whose explicit nominal subject has been deleted. In this case, the subject is marked by a suffix form attached to the verb. A sentence like (8) below could be interpreted to refer to an NP or NP

\begin{align*}
\begin{array}{c}
\text{+hum} \\
\text{+fem} \\
\text{+sing} \\
\text{-hum} \\
\text{+fem} \\
\text{+sing} \\
\end{array}
\end{align*}

(8) waSalat ?ila Ikaraaj ?ams
    arrived she to the garage yesterday

\begin{align*}
\{ \text{She} & \text{arrived at the garage yesterday.} \\
\text{It, e.g. the car} & \text{arrived at the garage yesterday.} \\
\text{They, e.g. cars} & \text{arrived at the garage yesterday.} \}
\end{align*}

A relevant question at this point is whether languages operate in a haphazard manner, and whether the interpretation of their sentences relies on having them in isolation. We accept, as has been implied, the
rudimentary premise that a major function of language is to communicate (a message); to transmit ideas and culture, etc. Therefore, in order that communication take place, we find a speaker/writer, i.e. an encoder on the one hand, and a hearer/reader, i.e. a decoder, on the other. These two persons involved in the communicative process depend on other factors outside the domain of the linguistic utterance for communication to be completed. These factors include, among others, the fact that speakers must be able to identify clearly referents in the discourse topic (Keenan and Schieffelin, 1976). There are factors of pragmatics, from the world outside the domain of the sentence, as in the examples of sentences (4) through (8) above, that signal to both speaker or writer and hearer or reader whether the topic of their discourse is an attractive blond, a car, or cars. If speakers of a language did not have access to information from outside the domain of the sentence to help them in encoding and decoding messages, then these speakers would certainly find it difficult to communicate.

Moreover, it is possible for language at times to constrain and delimit the interpretation of a sentence. As we have seen from sentences (4)-(8), each of them could have more than one reading for its referents, simply because certain grammatical categories in those sentences could refer to both human and nonhuman NPs. In addition to hiya, -ha (which have the human or nonhuman interpretation), there are other components of the utterance, such as fi likaraaj 'in the garage', in (7) or waSalat { she | it | they } arrived' in (8), that could also contribute to the human or nonhuman interpretations of state of affairs and/or action.
If, however, other lexical selection that is characteristic of human NPs is used to replace the predicate in (7), the result would signal a state of affairs for a human entity. Sentence (9) below illustrates this result:

(9) hiya fi ssariir
    she in the bed

'She is in bed'.

Similarly, we get a human reading also if we select a verb that denotes a human activity to replace waSalat in (8), as we see in sentence (10) below:

(10) fakkarat fi Ikaraaj
    she thought in the garage

'She thought in the garage'.

Sentences (9) and (10) above allow only one interpretation for a human NP. This human interpretation is accomplished as we can see from the examples by the use of lexical items that denote a human entity.

2.3.0 HYPOTHESES

The preceding discussion suggests the following three hypotheses.

In the absence of lexical items that contribute to the interpretation of pronouns as referents to human entities:

(11) In isolated sentences, pronouns appear to have more than one interpretation.

(12) The process of interpreting pronouns seems to follow a hierarchical order: human interpretation being the most salient, and nonhuman being secondary.
This hierarchy of interpretation seems to be tied up with the order of significance of entities (to humans) in the world.

Put differently, (12) and (13) suggest that humans see entities in the world in terms of the importance of those entities to them. Thus, it is not surprising that the feature of humanness leaps first to mind when a pronoun form has more than one reading. The nonhuman interpretation seems to be secondary. The following section offers syntactic evidence in support of this hypothesis.

2.4.0 PRONOUN HUMAN INTERPRETABILITY: SYNTACTIC EVIDENCE

Several syntactic tests will be presented below in support of the proposition put forth in the preceding paragraphs, namely that the most salient interpretation of a pronoun in an isolated sentence is that of humanness. This claim seems to hold true for pronominal forms used in reference to entities introduced as a part of a preceding discourse. Participants in discourse could anaphorically identify the referent within the domain of the discourse by the use of pronominal forms. It is noticeable, however, that sentences containing the pronominal forms could be interpreted to refer to human NPs, particularly if those sentences were extracted out of the discourse to stand in isolation. Sentence (4) cited previously was shown to support this claim. Needless to say, judgments on those utterances are entirely from my own intuitions. It is also worthy of mention here that I consulted a few native Arabic-speakers, and their judgments seem to support the claims advanced here. What is of significance in the claim about the human
interpretability of pronominal elements is the tendency towards the interpretation that I am making.

2.4.1 ACTIVE AND PASSIVE SENTENCES

The test that I presented to speakers was in the form of sentences containing active voice verbs, and then these sentences were changed into the passive. Speakers were asked for their judgment about the referents in these sentences, and in both instances, the speakers seem to process hiya and ha in these discourses as referents to human NPs. Examine (14) below:

(14) hiya shaaghila caqlak
she occupying mind your

'She is occupying your mind'.

hiya is interpreted for a human NP when this sentence is said in isolation. One could construct the appropriate context where the pronominal in (14) could refer to a nonhuman. At any rate, in discourses where anaphora gets 'blurred' because several NPs could be talked about, pronouns get generally processed as referents to human NPs.

The form of (14) was changed into the passive as in (15),

(15) caqlak mashghuul biha
mind your busy with her

'Your mind is preoccupied with her'.

and then this latter form was used in discourse (16) by speaker A as a response to the information provided by speaker B:
(16) Speaker A:

a. hal waSilak ?ayyat makaatiib fi lfatra
Q-partic reached-you any letters in the period

l?axiira bixuSuuS ssayyaara. wa hal hunaak
the last concerning the car and Q-partic there

?xbaar jadiida min kanada
news new from Canada

Speaker B:

b. la ma samiC't ?ayyat ?axbaar ?abadan. SSaHiH
no not I heard any news at all truly

fi lfatra l?axiira ma cindi rraghba fi
in the period the last not with me the desire in

ttafkaa bishaay? ?abadan
thinking in anything at all

Speaker A:

c. yabdu ?anna c aqlak mashghuul bi-ha
it seems that mind-your busy with her

(16) a. Did you receive any letters lately concerning the
car? and is there any news from Canada?

b. No. I did not hear any news at all. Truly, lately
I have no desire in thinking about anything at all.

c. It seems that your mind is preoccupied with her.

Despite the fact that speaker A uses five NPs that can be
replaced by -ha in straightforward pronominalization, namely,
makaatiib 'letters,' ssayyaara 'the car,' ?axbaar 'news,' kanada
'Canada' and fatra 'period', the -ha in (16 c) fails to be processed for
any of these candidates. Instead, (16 c) is primarily interpreted as a
referent to a human NP, even though there is no mention of any human NP
in (16 a) or in (16 b).
This situation involves an interplay between a linguistic form and conversational inferencing: The discourse referent, whose nature is linguistic, and the human interpretation of -ha, which is overriding. This human interpretation causes a violation of Grice's Maxim of Relevance which in turn causes a conversational implicature that the referent is not in the discourse, even though acceptable discourse referents are available.

2.4.2 THEMATIZATION

Examine (4), repeated below for the sake of clarity:

(4) ?ant ma shaaghil c\textsuperscript{a}qlak ?illa hiya.
   'Nothing is occupying your mind except she'.

The surface structure of this sentence may tempt us, at first sight, to consider ?ant 'you' as the subject of the sentence. But further and careful examination reveals otherwise. Three arguments will be offered below in support of this. First, if ?ant 'you' in (4) is deleted, the rest of the utterance remains grammatical; ?ant is, I claim, used as a contrastive element.

Second, the fact that ?ant and -ak 'your' in c\textsuperscript{a}qlak 'your mind' are coreferents in (4) suggests (as I will show below) that ?ant was preposed for contrastive purposes, and as a focusing device. This is to claim that the process of thematizing ?ant was derived from (17) below:

(17) ma shaaghil c\textsuperscript{a}qlak \underline{?ant} ?illa hiya.
   not occupying mind your \underline{you} except she
(17) seems to have been derived from a more underlying form as in (18),

(18) ma shaaghil c-qal ?ant ?illa hiya.

which seems to yield (18.a)

(18) a. ma shaaghil c-qalak ?illa hiya.

by an obligatory rule whereby in a sequence of NP + Pronoun [independent] that involves a genitive relationship, the independent pronoun gets cliticized and is suffixed to the NP preceding it. Thus, by this rule we obtain (18.a) from (18). Moreover, there seems to be an optional rule in Arabic that allows the independent pronoun to remain present after cliticization has taken place, as in the following formula:

(19) Cliticization of genitive pronouns

NP + Pro + gen + nom + clitic
[α fem] [β sing] [γ speaker] [δ hearer]

Evidence of this is seen in (17) above.

The third argument in support of the claim that ?ant 'you' is not the subject of (4) relates to the conjunction ?illa 'except'. Recall that ?ant could be deleted in (4), yielding

(18) a. ma shaaghil c-qalak ?illa hiya.

?illa 'except' normally conjoins two structures (as we see in (20))
(20) saafara lwuzaraa? ?illa henri
left the ministers except Henry

'The ministers left except Henry'.

where the part following ?illa would be a negated repetition of the
verb of the first sentence and in which all parts common to both the
first and second sentences have been omitted.³ Put differently, (20)
could be derived from the two underlying sentences as in (20.a) and
(20.b) below:

(20) a. saafara lwuzaraa?
(20) b. ma saafar henri

Schematically:

In light of this argument, one could claim that (18.a) above is
derived from two sentences, as the tree diagram attempts to show:

Shay? shaaghil ^{aqlak}
hiya ma shaaghila ^{aqlak}
The subject of $S_1$ in the preceding diagram is a putative NP like *shay?un 'something' posited to contrast with the subject of $S_2$, i.e. *hiya 'she'. Recall that the word *?illa generally conjoins two structures, the second of which is an elliptical form of the first. This supports the claim made earlier that *?ant is not the subject in (4).

Let me recapitulate the preceding discussion: The surface structure of (4) is the result of thematizing *?ant 'you' -- a nonsubject pronoun in (17), which, as I have suggested, is derived from a deeper level as in (18). What is of concern to us in this discussion, at any rate, is the processing of (4), which is taken, as claimed previously, to refer to a human NP. While it is true that one's mind can be preoccupied by nonhuman as well as human entities, for some reason *hiya in (4) is interpreted to stand for a human NP. This is probably due to the hierarchy of significance of entities as far as humans are concerned.

In colloquial speech, however, it is interesting to note that *hiya 'she' in (16) could be thematized as in (21):

(21) *hiya, ma shaaghil ?illa hiya
     she not occupying mind-your except she

'Nothing is occupying your mind except she'.

thus leaving behind it a duplicate independent form of the pronoun. In a Harvard dissertation (Russell, 1978) argues that only thematized nonsubject NPs leave behind them 'pronominal copy in comment clause'. The evidence from (17) and (18) supports the argument that *hiya is the subject of the second of the two sentences. Recall that *?illa conjoins two structures that are identical in some parts; the identical part of
the second structure undergoes ellipsis thus leaving behind it its subject. Thematization of a subject seems to leave behind it a pronoun copy, contrary to Russell's claims. This problem merits further research in the future.

One interesting fact about thematizing *hiya* 'she' in (17) is that the suprasegmental feature of juncture becomes obligatory in this case. A reading of (21) requires a pause after the thematized *hiya*. This is of some interest, and is a different case from that in (4), in which the thematized *?ant* 'you' does not require this suprasegmental feature. This is probably a clue to a fourth argument that could be supplied against *?ant* being a subject of (4). One could possibly claim that *?ant* is a trace of a truncated relative clause *?amma* *?ant* ... *fa* 'as for you ... then' used generally as a focusing device. In cases where the pronoun following *?amma* is not the subject of the sentence, the pronoun is never deleted. That is why *?ant* is retained in (4).

The relevant question that concerns us the most is the processing of the thematized *hiya* in (21). Upon checking with five native Arabic speakers (three Jordanians, one Palestinian and one Egyptian), four corroborated the claim of human interpretation of pronouns that I put forth in this chapter. The test which I designed to elicit reaction from these speakers was in the form of discourse (16) cited earlier in this chapter, except for the third part, i.e. (16.c). Instead of (16.c) the discourse was devised to incorporate (21) above, which has *hiya* 'she' in a thematized position. Let us examine (22) below:
a. Did you receive any letters lately concerning the car? and is there any new news from Canada?

b. No, I did not hear any new news. Truely, lately I have no desire in thinking about anything at all.

c. Ah! this is an expected thing. She, nothing is occupying your mind except she.

The procedure that I followed in testing the reaction of the native speakers, admittedly a limited number, was to read the above discourse, i.e. (22) once; at times twice; then I asked them about the referent of hiya. One response suggested ssayyaara 'the car' and four mentioned hiya as a referent to a human NP. Some suggested 'a girl
friend', 'a female person', and the like. It was suggested, however, by two that this human NP is 'understood' or 'known' to both speakers involved in the discourse. In other words, there is presumed knowledge of a human NP that is shared by the participants in the discourse. The human interpretation of *hiya* is not triggered only by the linguistic form. Knowledge from outside the discourse seems to be crucial in decoding.
NOTES - CHAPTER TWO

1 From as-safqa. 1956. Cairo, page 29.
2 Ibid, page 47.
4 This was brought to my attention by Doug Fuller.
5 I read it to two in person, and to the other three on the phone.
3.0.0

An NP may be introduced at some point in a discourse, thus establishing that NP as a discourse topic. This discourse topic may then become the central point of discussion for those participating in the discourse. Situations like this are a matter of daily life, and are easily attested. In the real world it is also conceivable that discourse participants may momentarily drop the discourse topic in pursuit of (an) other topic(s) that may arise at some point during the course of conversation. This 'digression' from the original discourse topic may occupy the discourse participants for (very) short or (very) long periods. I would like to suggest a few factors which may help to determine the length of this digression: These are the intrinsic interest of the intervening topic(s) to the participants; the extent to which that interest is maintained; and the degree of relevance of the intervening topic(s) to the original one.

Sacks, Schegloff and Jefferson (1974:699), in an article about the organization of turn-taking in conversation, state that 'conversation can accommodate a wide range of situations,...and it can be capable of dealing with a change of situation within a situation. They go on to enumerate fourteen facts that they have observed in their study. Of concern to us here are facts 7 and 8 in their list, which say that (Ibid:710)
'length of conversation is not specified in advance' and 'what parties say is not specified in advance'. They further note that the length of conversation is 'generated in a manner internal to its developing course'.

Discourse topics get introduced, 'dropped' and reintroduced. This reintroducing may have nothing obvious to do with the immediate discourse. In this case, the discourse-participant tries to find an opportunity to bring back into the discourse the topic being reintroduced. The participants' reasons for reintroducing a topic may be quite varied. They may wish to pursue in depth a topic which had previously been discussed only superficially. Some other possibilities may be that they did not get to express their opinions to their satisfaction. Other reasons could include the degree of emphasis to be put on the subject, the merit of the topic, the immediate relevance to discourse-participants and possibly other reasons.

Based on these observations, I would like to suggest the following hypotheses:

(1) a. A speaker who wishes to reintroduce an NP which had formerly been introduced as a discourse topic has the option of either (a) repeating that NP or (b) pronominalizing it.

b. If the NP is pronominalized, the pronoun may fail to be interpreted as a substitute for the NP that had been introduced as a discourse topic. It may instead be
interpreted as referring to a human NP whenever that interpretation is available.

c. This possibility calls for the imposition of some discourse restrictions on the use of pronominalization.

d. These restrictions would be sensitive to the possible interpretation of pronouns in discourse and would have as their result the repetition of the NP instead of the use of pronominalization.

The analysis of the data gathered from discourses in al-Hakim's plays suggests three possible reasons for the choice of repeating the NP rather than using a pronominal form to stand for that NP. First, the speaker may wish to employ a certain style. Second, he may wish to avoid ambiguity. Third, he may be guided by considerations of grammaticality. Discussion of each of these reasons follows.

1. STYLE

Repetition of a particular word or NP constitutes an accepted rhetorical device for purposes of emphasis; orators make use of this technique to impress a given message on the minds of an audience. This same device is similarly used in daily speech. It is worth noting that the normal grammatical rule of pronominalization may undermine this purpose. Thus while pronominalization may be permissible syntactically the intended rhetorical effect would be lost.
Let us examine two discourses which occur at different stages of aS-Safqa. The first one is spoken by an old country woman who chooses to save her money for her funeral and the post funeral charity rather than lend the money to her grandson to pay the mortgage of the land leased to him by a corporation. Thus, she tries to emphasize that her hereafter and the fact that God will be content with her for giving to charity are more important to her than her grandson's land. For emphasis the word ?aaxirti 'my hereafter' is repeated five times in a relatively short discourse, the text and translation of which are introduced below:

(2) (The old woman speaking)

?aaxirti ?awla min ?arDak. ?aaxirti hereafter-my prior from land-your hereafter my

?ahamm min kul Haaja. ?aaxirti ...qaa da min more from every everthing hereafter-my staying from

zamaan ?ajahhiz li ?aaxirti taquum ?ant long time I prepare for hereafter-my you start you

ya bni tDayyi C calyy ?aaxirti wa xarjiti. oh son my you lose for me hereafter and passing-my

'my hereafter takes priority over your land. My hereafter is more important than anything. My hereafter! For a long time I have been preparing for my hereafter, and here you come, my son, to spoil my hereafter and passing'.

In (3) below the appropriate pronominal form will be used as a substitute for all the occurrences of ?aaxirti 'my hereafter' except the first one in (2) above. This is done in order to clarify the difference between the use of the full NP for rhetorical purposes and using the appropriate pronominal form. Consider (3) below:
The following two observations can be made as a result of pronominalizing ?aaxirti 'my hereafter' in (2). First, ungrammaticality occurs in two instances: (i) the second occurrence of hiya 'she' (marked by one asterisk) cannot stand alone; whereas the use of the NP ?aaxirti 'my hereafter' is not only acceptable but also contributes to the effect intended by the old lady. One probable reason for the unacceptability of hiya in isolation in the above discourse is that hiya- is the subject of a sentence that is parallel to the two preceding sentences, and whose predicate has been deleted. Whereas the NP ?aaxirti 'my hereafter' can stand alone, hiya fails to do so. This is similar to the situation where a pronoun standing by itself cannot be used as a subject of an equational sentence (or nominal, in other terminology), whose predicate is deleted, that results from a response to a (nominal) interrogative.

The English examples below illustrate the point:

(4) What is the capital of Zimbabwe?
(5) *It
(6) Who is the Republican presidential front-runner?
(7) *He.

The cases of (5) and (7) are similar to the situation where the second occurrence of hiya in (3) above is ungrammatical.
(ii). The second instance of ungrammaticality in (3) resulting from the use of pronominalization involves a violation of Ross's Co-ordinate Structure Constraint (CSC). The last utterance in (2) above has in it the two conjoined NPs ?aaxirti 'my hearafter' and xarjiti 'my passing' as in ?aaxirti wa xarjiti. As a result of pronominalization the first NP of this coordinate structure in (3), namely ?aaxirti, the cliticised pronominal element -ha 'her' gets suffixed obligatorily to the verb tDayyic 'you spoil' in this case. This violates Ross's CSC, and renders the last sentence in (3) ungrammatical.

Secondly, due to the use of pronominal elements in (3) the effect achieved by the NP repetition is lost. As was mentioned earlier in this section, the device of repeating NPs is generally used by orators to create an effect on their listeners. I have no explanation as to why this effect diminishes, or ceases to exist, with pronouns. My only guess is that the use of NPs point to more tangible referential entities. We also notice that a regular grammatical rule, especially an obligatory one, cannot have a special effect because its correct application is expected by the listener. A suspension or violation of the rule is unexpected and hence can serve to convey extralinguistic information.

Such situations can be extended. I will present below another example, taken from the same play from which discourse (2) was extracted, that involves two elderly speakers, AwaDayan (A) and SaCddwi (S). They are trying to think of a way to salvage the land that was about to be confiscated by the money lending corporation because these farmers did not pay their dues - the result would be a disaster not only because of the loss of the land, but also because of
the loss of their offspring, some of whom tried to plot to 'liquidate' the money-collector. Let us consider the following discourse.

(8) A: wa 1?arD ya sa'daawi? and the land Oh Sa'daawi

S: 1?arD? the land

A: 1?arD? kunna natruk-ha the land we were leave her

S: (angrily) 1?arD... 1?arD... wa ya'ni hiya 1?arD the land the land and I mean she the land nilnaa-ha? la nilna 1?arD wa la qa'dna we obtained her not the land and not we sat bi?awlaadna.. ?arD ma dhaahir lana ?arD. with children our land not seen for us land wa ?aaxritha naxsar 1?awlaad. and end her we lose the children

A: What about the land?

S: The land?

A: The land! Are we going to leave it?

S: The land, the land. Do you mean that we obtained the land? We neither obtained the land, nor would we have our children... the land.... It does not seem that we have the land. And eventually, we will lose our children.

An attempt to pronominalize 1?arD 'the land' in (8) as we see in (9) below corroborates the two observations made earlier about discourse (3). Examine (9) wherein all the occurrences of 1?arD, except the first one, get pronominalized:
The ungrammaticality and loss of the intended effect are probably justifiable reasons for the NP repetition in (2) and (8) above.

Moreover, these discourses serve to demonstrate that while pronominalization is permissible syntactically, its use results in the loss of the rhetorical effect that speakers intend. As can be seen, both the old woman and SaCdaawi in (2) and (8) respectively were trying to express their intense feelings concerning the discourse topic; and in order to heighten the effect, they intentionally repeated the NP of the discourse topic five times in (2) and six in (8). The choice of pronouns would have resulted in some syntactically acceptable utterances, but the intended effect would not have been the same.

II. AMBIGUITY

If we accept Sack et al's (1974) observations about the organization of turn-taking in conversation, we notice that according to one observation, parties do not specify in advance what they will say. We see that a relatively short turn of discourse may concentrate quite a few NPs in one stretch of speech. A reference, at a later stage, to one of these NPs may result in a listener's/reader's missing of the intended target, and consequently misinterpreting the intended
message. To test this claim, let us examine discourse (10) taken from aS-Safqa, where the discourse topic is Taasa 'a cooking pot' that the village barber uses as a lather container in his shop.

(10) AwaDayn:

?ighsil ?ant l?awwal Taast-ak, loonha yigrif lkalb
you wash you first pot your color her disgusts the dog

The barber:

ma laha Taasti ? wallah ma tilqa ?uxtha c.ind
what to her pot my by God not you find sister her chez

?akbar dukkaan mzayin fi lbandar.
the biggest shop barber in the county seat

A country woman (close by):

ta?rif ya?am AwaDayn ?yyaam l?uTal waliyytuh
you know oh uncle AwaDayn days of holidays wife his

ta?mal TTaasa masqa liikataakiit
make the pot drinking the chickens

(10) AwaDayn:

First wash your container. Its color is revolting to dogs.

The barber:

What is wrong with my pot? By God, you won't find its equal
(lit. its sister) at the best barber shop in the county seat.

A country woman:

Do you know, AwaDayn, that on holidays his wife makes the
container a drinking pot for chickens?

We notice that the country woman chose to reintroduce the NP that
was first mentioned by AwaDayn rather than to use a pronoun to refer to
TTaasa 'the pot', because the use of -ha 'her', in such a case, would
have resulted in an ambiguous utterance, and it would have been hard for the listener to understand this pronoun as referring to TTaasa. Let me repeat the countrywoman's utterance in discourse (10) above, using -ha as a substitute for TTaasa to illustrate the point:

A countrywoman: ta'$rif ya $am $awaDayn $yyaam 1uTal waliyytuh
ta$mal-ha masqa ilkataakiiit

In other words the processing of -ha in reference to TTaasa would have been infelicitous because at least one feminine NP has been introduced, namely dukkaan 'shop' to which -ha could be a referent.

Another example will better illustrate the point. Consider (11) below:

(11) wa hind ya ?uestaadh saafarat
    and Hind oh professor she left
    'And did Hind leave, Professor?'

This question is structurally parallel to (1) in Chapter Two repeated here for illustration:

(1) wa dhdhabiiHa ya muCallim waqafat
    'And did the slaughtering of the sheep come to a stop?'

in the fact that the discourse topic is Hind's departure. Assume that one answers the question in (11) by sentence (12), below, which is parallel to (4) in Chapter Two.

(12) ?ant ma shaaghil $aqlak ?illa hiya
    you not occupying mind your except she
the pronoun hiya 'she' will be interpreted in reference to Hind-a
girl's name. This is a possible answer to the question in (11); and
the hearer/reader will immediately recall Hind upon hearing the answer.
Remember that in response to (11) we can get other ways of answering the
query. One such way is exemplified in (13) below:

(13) ?ant ma shaaghil c'aqlak ?illa mas'alat hind
you not occupying mind your except matter (of) Hind

'All that is occupying your mind is Hind's problem.'

Needless to say, hind in (13) can be replaced by the pronominal
suffix -ha 'her' if the speaker chooses to do this, especially if Hind
has been duly talked about in the course of discourse, and now she is
being reintroduced. Let us consider what happens when pronominaliza-
tion applied to hind in (13):

(14) ?ant ma shaaghil c'aqlak ?illa mas'alat-ha
you not occupying mind your except matter her

'All that is occupying your mind is the problem of hers'.

Suppose that mas'alat-ha 'her problem' in (14) has been the
discourse topic for some length of time, then dropped and at some later
stage in the discourse, the conversants choose to reintroduce the
discourse topic. It is conceivable that a participant in this discourse
may refer to mas'alat-ha 'her problem' by the use of a pronominal form,
thus saying sentence (15) below:

(15) ?ant ma shaaghil c'aqlak ?illa hiya
We notice that (15) is identical to (12) above. This would mean that
hiya 'she' can be arrived at by (a) referring to a human NP as we see
in (12) in response to the question in (11); or by (b) pronominaliz-
ing a non-human NP as in (15). Let me outline the processes involved in
the production of (12) in sequence below for the sake of clarity:

(13) ?ant ma shaaghil C aqlak ?illa mas?alat hind

Step 1:  ↓
   Pronominalize [hind]

(14) ?ant ma shaaghil C aqlak ?illa mas?alat-ha

Step 2:  ↓
   Pronominalize [mas?alat-ha]

(15) ?ant ma shaaghil C aqlak ?illa hiya

As was maintained earlier the pronoun hiya is interpreted to stand for
a human NP, in this case hind, if (15) is said in isolation or in a
context where the human interpretation is available. The processing
of hiya in (15) to refer to mas?alat-ha 'her problem' does not occur
felicitously. The claim made earlier about the tendency towards the
human interpretation for pronominal elements still seems to hold. This
could be explained by the fact that the mention of Hind directs the
hearer's attention to this human NP; and the mention of other non-human
NPs is relegated to a secondary level of interpretation. This
hypothesis requires psychological testing. However, experimental verification of a claim of this nature is beyond the scope of this dissertation.

To further explore the interrelationship between the process of pronominalization and ambiguity, in the following example mas?ala ‘matter’ (a feminine noun) in (13) above will be replaced by the masculine NP safar ‘departure’ to see if the gender of the head NP in a genitive construct has any role in the ambiguous interpretation of pronouns, or their human interpretation. Sentence (16) below serves as a test for this.

(16) ?ant ma shaaghil caqlak ?illa safar hind

(16) you not occupying mine your except travel Hind

‘All that is occupying your mind is Hind's departure’.

Let us now pronominalize safar hind as in (17):

(17) ?ant ma shaaghil caqlak ?illa hu(wa) hind

(17) you not occupying ming your except he

‘All that is occupying your mind is he1.

The pronoun huwa 'he' in (17) has the tendency to be interpreted for a human NP rather than a non-human one if the sentence stands in isolation, or if the discourse topic gets reintroduced. Recall that (17) is the result of pronominalizing safar hind. However, it is likely that hind gets pronominalized as in (18):
Assume that we are conducting the processing test that was suggested above. Also, assume that *safar-hind* was the discourse topic at some point, but was 'digressed' from in order to pursue an interesting intervening discourse topic, and at a later stage *safar-hind* is reintroduced. In this case the introduction of (17) after (18) seems to be more felicitous. In other words, if (17) is said after (18) the pronoun *huwa* could be interpreted as referring to *safar 'departure.'* In this context, at any rate, the reading of *huwa* for *safar* does not leap to mind as readily as its interpretation as a human NP. This seems to support the claim that was put forth concerning the interpretability of pronouns in isolated sentences: that these pronouns are primarily understood as referring to human NPs, and secondarily to non-human entities.

In answer to the question in (11) above, one could possibly use any of the sentences (11)-(16), or (18). Let me illustrate this by repeating the question in (11) and (12)-(16) and (18) as possible answers:

**Question:** (11) wa hind ya ?ustaadh saafarat ?

**Answer:** (12) ?ant ma shaaghil ḍaqlak ṭilla hiya.

(13) ?ant ma shaaghil ḍaqlak ṭilla mas?alat hind.

(14) ?ant ma shaaghil ḍaqlak ṭilla mas?alat-ha

(15) (identical to (12))
(16) Tant ma shaaghil ḍaqalik tilla safar hind.
(18) Tant ma shaaghil ḍaqalik tilla safar-ḥa

However, (17) cannot be acceptable in answer to (11) as their juxtaposition below demonstrates:

(11) wa hind yā ᵇustaadh safarat
(17) *tant ma shaaghil ḍaqalik tilla huwa.

A possible reason for rejecting (17) as an answer to (11) would be the presence of hind, a feminine NP, in the question, and the occurrence of huwa, a masculine pronoun, in the answer. This 'mix-up' of genders results in infelicity in the discourse. Rather, the respondent to the question raised in (11) must either (a) repeat the NP (mentioned in the question) which is the discourse topic; or (b) pronominalize the discourse topic (if it is human). The result of (a) would predict sentences like (13) and (16). And (b) predicts (12), (14) and (18).

If my interpretations are correct, it seems that when an NP has already been introduced as a discourse topic, a pronominal form could be used, at a later stage, as a referent to that NP. As a result of pronominalization, there seems to be a tendency to interpret the pronominal element primarily for a human entity even though the linguistic element could be related to a non-human. Put differently, the most salient interpretation of a pronoun is that of humanness, thus complicating the process of decoding the linguistic form. What this finding seems to indicate is that the syntactic structure alone fails to convey the message intended by the encoder. This problem, however,
is remedied by non-linguistic factors. The pragmatic aspects of the situation enable the hearer to process what is intended on the speaker's part.

III. THE NP-PRONOMINAL PROXEMICS

A possible explanation for ambiguity due to pronominalization is the relatively great distance between the pronominal form and its referent NP. One would suspect that this NP-Pronominal proxemics could be a factor in ambiguity especially when other NPs intervene in the interval between the first introduction of the referent and subsequent references to it. The occurrence of more than one NP in a discourse is likely to make the processing of anaphoric pronouns more difficult for the listener/reader. However, those cases which have been examined in depth suggest that a discourse topical NP could actually be repeated quite a few times (the maximum number of repeating the same NP was ten times before that NP got pronominalized). As was shown in section I above, the repetition of the NP may be motivated by stylistic considerations; for rhetorical effect NPs may get reiterated a number of times, e.g. in oratorical speech, in demonstrative discourses such as those which describe a scientific experiment, in forensic discourse and in contractual documentation. The small corpus which I have gathered and analyzed shows that the frequency of occurrence of a given NP in a particular discourse ranges between 1-10 occurrences. In three out of five cases the NP was repeated frequently (7-10 times) before being pronominalized; in two cases it was repeated only once.
The repetition of the NP (as opposed to its pronominalization) demonstrates a desire on the speaker's part to create a certain effect in the hearer. In the three instances of frequent repetition the speaker wishes either to affirm to the hearer a decision that he or she has made, or to convince the hearer of a certain position on a specific matter.

On the other hand, if we examine the occurrence of a pronominal form that stands for an already-introduced NP, we notice that the occurrence of pronominal forms is also constrained either by stylistic considerations, the need to avoid ambiguity, or by considerations of acceptability. The highest frequency of pronominal forms (before the NP is reintroduced) in the data that I have examined ranges from ten in one discourse to twenty-two in another (See Appendix A). It is possible to imagine a discourse which contains ten pronominal forms. The one discourse that contains twenty-two occurrences of pronominal forms that refer to one NP calls for further examination. It appears that in this particular discourse a certain character in the play, i.e. the referent, is subjected to scrupulous character analysis by three of his village compatriots. This situation occurs at a juncture in the play where the analyzed personality is most needed (by the villagers) yet suspected of surreptitiously having double standards. It is no wonder that for dramatic effect the focus is on this character, and detailed information about his personality is exchanged by these three compatriots. As expected, the result is a lengthy discourse that utilizes twenty-two pronominal forms in reference to this character before an NP, his name in this case, gets repeated.
The data from al-Hakim's plays show that in discourses we commonly find that a pronoun will be repeated four to ten times before its referent NP is reintroduced. It is rare to find more than ten repetitions. I have found ten instances wherein fifteen or twenty pronouns occur in an uninterrupted sequence as referents to a previously introduced NP before this NP is repeated. This unusually high frequency could be attributed to speakers' intentions to perform an in-depth analysis of the discourse topic. On the other hand, the cases where the number of pronominal forms ranges between four to ten could probably be explained by some of Sacks et al.'s (1974) observations about turn-taking in conversation. As mentioned earlier in this Chapter, one such observation is that a wide range of situations can be accommodated in conversation. This may possibly be accomplished through the use of several NPs to encode those situations. If pronominal forms were used to replace these many NPs, hearers or readers would find it hard to process all the pronouns. Instead of using pronominal forms, NPs are more likely to be used. This would result in fewer ambiguous discourses.

IV. GRAMMATICALITY

The analysis of the present data suggests that there are at least three grammatical factors which constrain the use of a pronominal form in reference to an already introduced NP. These grammatical constraints require that the NP be repeated rather than pronominalized. When the constraints are violated an ungrammatical utterance results (see section 2.0.1. Discourse Acceptability for the notions of grammaticality vs.
acceptability)). These constraints operate in the domain of (1) Answers to questions; (2) Sentences containing intrusive pronouns; and (3) genitive construct structures. The constraints in (1) and (2) will be dealt with separately below; the constraint on the genitive construct merits a separate discussion in Chapter Four.

IV. 1. ANSWERS TO QUESTIONS

Delisle (1973) argues that pronominalization is a type of deletion, and in general deletion applies forward. He goes on to reject the explanations of the pronominalization phenomenon offered by Langacker, Ross, Lakoff and others. A review of these works will be given in Chapter Five. Delisle's treatment of pronominalization is based on the premise that the domain of grammatical analysis is discourse rather than the sentence, the opposite of the position taken traditionally by most linguists. My current work leads me to adopt a position similar to the one taken by Delisle, Fillmore (1972), Hymes (1972) and others, in regard to considering discourse as 'the basic units of communication' (Fillmore: 1972) and, therefore the domain of grammatical analysis.

Delisle suggests that the principle of Forward Pronominalization Within Discourse (FPD) operates in the following way: $NP_1$ will pronominalize $NP_2$ if and only if $NP_1$ occurs before $NP_2$. He also argues that backward pronominalization and backward deletion do not exist, a position defended by Ross, Langacker and others. Moreover, examples that involve 'such so-called backward operations are accounted for by a universal principle of deletion (FD hypothesis), unordered rules, and language
specific constraints, all of which apply intra- and extrasententially (Delisle:1973). A critical review of Delisle and others will be presented in Chapter Five of this dissertation. However, it is worth mentioning here that the analysis presented by Delisle does not seem to answer satisfactorily all the questions pertaining to the use of either NPs or pronominal forms in discourses. This criticism will be discussed below. A brief note on question and answer discourse will help elucidate the pertinent points.

Harries (1972) argued that WH- questions and answers in discourse are underlyingly cleft sentences. To illustrate this, let us examine the following question and answer:

(19) a. What did Max read?
   b. Max read the book that he just bought.

The appropriate answer (19.b) Harries argues, shares the presupposition of the question in (19.a). She goes on to say that the underlying sentences such as (19.b) are ones in which the new information occurs last. Underlying the sentence in (19) would be the following cleft sentences (presuppositions are underlined).

(20) a. What is the thing that Max read?
   b. The thing that Max read is the book that Max just bought.

Both sentences of (20) can be reduced as in (19). However, (20.b) can be modified in many ways. The new information, 'the book that Max just
bought', can be front shifted into focus position and this information can itself be modified.

The preceding exposition based on Harries' argument serves as background for the following discussion of the other type of questions, namely, the yes-no questions. Let us consider the following examples:

(21) a. Do you like sweet potatoes?
   b. Sweet potatoes! Sweet potatoes do not appeal to me.

(22) a. Do you feel any jealousy?
   b. Jealousy! Jealousy does not cross my mind.

While (21.a) and (22.a) could receive different answers from those in (21.b) and (22.b), we notice that the respective questions, unlike WH-questions (according to Harries' analysis), do not presuppose any information. This is to say that the questions request novel information that is not known to the questioner. However, one can offer examples that presuppose knowledge on the questioner's part. Consider the following sentences:

(23) a. Did you finish your paper?
   b. I have not even started it!

The question in (23.a) indicates that the questioner knows that the person questioned had to read or write a paper. The information that is lacking on the questioner's side concerns state of completion of the task in question.
We notice, however, a difference between (21.a) and (22.a) on
one hand, and (23.b) on the other. This concerns the operation of
pronominalization in these answers. Whereas (23.b) shows a straight-
forward case of pronominalization (21.b) and (22.b) do not. Both of
the latter start with an exclamatory utterance that duplicates an
item in the questions (21.a) and (22.a). One could interpret these
exclamatory utterances as questions also. They seem to ask for either
a confirmation of what was suggested by the questioner or express
puzzlement at the suggestion. The intonation contour could be a factor
in assigning either of the above interpretations.

The important point here is the fact that the repeated entities
cannot be pronominalized. Thus, the first occurrence of sweet potatoes
and jealousy in (21.b) and (22.b) cannot be replaced by they or it
as we see in the following examples.

(24) a. Do you like sweet potatoes?
    b. *They! They do not appeal to me.

and

(25) a. Do you feel any jealousy?
    b. *It! It does not cross my mind.

However, (24.b) and (25.b) could be perfectly acceptable if the first
occurrence of 'they' and 'it' is removed. Thus, (26.b) and (27.b)
below seem to be perfectly acceptable to English speakers.

(26) a. Do you like sweet potatoes?
    b. They do not appeal to me.
(27) a. Do you feel any jealousy?
    b. It does not cross my mind.

One could also offer counter examples to the ones mentioned in (24) and (25), as in (28):

(28) a. Do you like Harriet?
    b. *Her! You've got to be kidding.
    c. *She! She does not appeal to me'

Examples (21) and (22) above show that Delisle's FPD fails to apply in some cases. This could be explained in terms of the nature of the answer and the type of information being offered by the answerer. A parallel situation seems to occur in Arabic. While the FPD hypothesis could be partially true, it cannot satisfactorily explain the situation that is exemplified by (21) and (22) above or the following examples from Arabic. Consider these two discourses:

(29) a. The director: tuC aariD 1 ?infiraad ya daktor
    You oppose seclusion oh doctor
    'Do you oppose isolation, doctor?'

    b. The doctor: la ?ajid lahu Daruura muTlaqan
    not I find for it necessity at all
    'I do not find it necessary at all.'

We notice that the doctor used -hu 'it', a masculine pronominal suffix, in reference to 1?infiraad 'seclusion or isolation' - a straightforward case of FPD. On the other hand, in discourse (30) below, FPD fails to apply.
(30) a. The second prisoner: ʔala tashCuru bijuuC?
don't you feel with hunger
'Do not you feel hungry?'
b. The first prisoner: juuC! Hatta ljuuC faqada
hunger even hunger lost
?ismuh
name his
'Hunger?! Even hunger lost its name!

The question that may be raised at this point is: If the first
prisoner had chosen to pronominalize juuC 'hunger', would the discourse
have been felicitous? If not, we have a ready explanation for why he
chose to repeat the full NP.

The first question can be appropriately answered in the negative,
since the use of pronominal forms results in ungrammatical/infelicitous
discourse. Thus, if the first prisoner said the following in answer to
the question in (30), above, this response would be starred as in (31):

(31) The first prisoner: *huwa! Hatta huwa faqad ?ismuh
he even he lost name his

He?! Even he lost his name.
It it its

The pertinent question at this stage is: why is this response starred?
The badness of this response can probably be attributed to the human
interpretation suggested earlier, since the independent pronominal forms
of huwa 'he' could be interpreted in isolation to stand for a human NP.
Since the prompting question is about hunger, i.e. a non-human NP, the
use of a pronoun fails to establish a felicitous discourse-hence the
badness of the pronominal form. Put differently, given the fact that
the discourse topic is still fresh in the listener's/reader's mind,
the inappropriate use of a pronoun that is primarily interpreted for a
human NP throws the listener off balance.

Another possible explanation for the badness of the use of the
pronoun can be found by examining discourse (31) once again. The rele-
vant part is repeated here for the sake of clarity:

(31) * huwa! Hatta huwa faqad ?ismuh

\{ He?, even he lost his name
\}

\{ it\} \quad \text{it} \quad \text{its}

The explanation concerns the possible answers to the prompting question.
While a yes/no answer would respond to the question (and the first
prisoner certainly has this option available to him) there are some
significant restrictions on what may appear in the answer if this choice
is not exercised. Three options are most commonly at the answerer's
disposal: (1) the repetition of the same NP that is introduced in the
question; (2) the use of another NP that shares some or all of the
semantic features of the NP in the question; and (3) the use of a pronom-
inal form as a substitute for the already introduced NP. It is clear
that in cases like (31) above, the use of a pronominal form results in
a starred answer to the question in the discourse. One more example
from Arabic is given below as a further evidence of the inapplicability
of FPD in answers to questions in discourse. This is a partial
repetition of discourse (8) that was introduced in Section I, above.
Consider the following example:
(8)-a. A: wa 1?arD ya sa\textsuperscript{c}daawi ?

b. S: 1?arD ?

c. A: 1?arD kunna natrukha ?

d. S: (angrily) 1?arD 1?arD wa ya\textsuperscript{c}ni hiya 1?arD nilnaaha

If we substitute pronominal forms for the NPs that are repeated by S in answer to the question raised by A in (8) above, the results will be infelicitous. Note, however, that within the same discourse of the same speaker, i.e. in intra unilateral discourse, pronominalization is permissible as we see in (8.c) and (8.d). This may help us formulate the following conclusions:

i. Delisle's FPD is too strong a principle to account for the available data from Arabic and English.

ii. Evidence to counter Delisle's claims can be found in questions and their answers.

iii. The answerer's attitude vis-a-vis the requested information may determine whether the speaker chooses (a) to use a pronominal form, (b) to repeat the NP introduced by the questioner; or (c) to use an NP that shares some semantic features with the NP used in the question. The choice of (b) not only conveys the requested information, but it also expresses the answerer's reaction to the situation.
IV. 2. SENTENCES CONTAINING INTRUSIVE PRONOUNS

The type of sentence that is under discussion here is what has traditionally been called the equational sentence. These sentences have definite NPs as their subjects; the predicate could be either definite or indefinite NPs, prepositional phrases, adjectives or relative clauses. When the predicate of such sentences is either a definite NP or a relative clause, ambiguity occurs. In this case the predicative element could be interpreted as an NP in apposition to the subject NP or as an adjectival unit. Examine these two examples:

(32) saami lmudiir(u)
    Sami the director

and,

(33) ?almudiir(u) lladhi saafara.
    the director who left

(32) and (33) could each have two readings. Thus, (32) could be read either as a sentential unit, 'Sami is the director'; or 'Sami, the director', i.e. lmudiir, here, could be in apposition to Sami. (33) can have two readings of either 'the director is the one who left' or 'the director who left...'. In order to disambiguate (32), (33) and their like in favor of the sentential reading, Arabic uses the device of inserting a pronoun that is in agreement with the subject in number and gender. Such a pronoun is called the intrusive pronoun. Other Semitic languages, e.g. Hebrew, behave in the same way. Thus, in order to disambiguate (32) and (33) and to ensure one reading only for these
sentences, one encounters the following two sentences instead:

\[(34) \text{saami huwa l} \text{mudiir(u)} \]
\[\text{Sami he the director} \]

and

\[(35) \text{?l} \text{mudiir(u) huwa lladhi saafara.} \]
\[\text{the director he who left} \]

The insertion of the intrusive pronoun is also used when the subject of the sentence is a relative clause as in the example below:

\[(36) \text{?alladhi yaktub huwa saami} \]
\[\text{who he writes he Sami} \]

'He who writes is Sami'.

Sentences like (36) would be ambiguous without the use of the intrusive pronoun.

IV. 2.a THE LIKE FORM CONSTRAINT

This constraint blocks at the surface level the occurrence of two successive identical forms. For further discussion, read Radford (1977).

Radford (1977:7-45) suggests a modification of what Kuno (1973: 368) recognized as a CONJUNCTION JUXTAPOSITION CONSTRAINT, where 'the juxtaposition of conjunctions, especially these of the same form, adds to the reduction in intelligibility in sentences'. This modification is made in order to establish 'a more general constraint in language.' According to Radford, three different factors seem to be involved in
the LIKE FORM CONSTRAINT: (a) the phonological shape of the linguistic item, (b) its function and (c) its proximity (defined in terms of both precedence and dominance). Thus, the following English examples illustrate the three factors suggested above:

a. shape:

   (37) I showed her (* her)
        (them)

   (Radford:1977:40, Example ix)

b. function:

   (38) * John is more taller than Harry than you are.

   (Radford:ibid, Example xvi)

c. proximity:

The Like Form Constraint seems to be strong where two identical constituents are 'dominated by the same S-node', but this constraint is weaker when these identical constituents 'are dominated by different S-nodes.' Examples to illustrate this are borrowed from Radford:

   (39) ?* The cat wanted the milk, so I gave it it.

   (40) When I did it, it seemed like the right thing to do.

   (Radford's examples xviii and xix)

The previous discussion illustrates that the juxtaposition of two similar linguistic units is constrained at the level of surface structure rather than at the underlying level. Now, we will turn to Arabic to examine the same phenomenon.
IV. 2.b. NP AS SUBJECT OF EQUATIONAL SENTENCES

Arabic corroborates the findings by Radford concerning the LIKE FORM CONSTRAINT. In discourses where an NP has been introduced and later reintroduced as the subject of an equational sentence containing an intrusive pronoun, pronominalization is ungrammatical. The result is an unacceptable discourse. Examine the following example to illustrate the point:

(41) la yahimm faltakun ?annihaaya lmawt....
not matters and let be the end the death

?inna lmawt la yuxiifuna laysa lmawt
indeed the death not scare us not the death

huwa lladhi yuxiif
he that he frightens

'It does not matter. Let the end be death. Truly, death does not frighten us. Death is not that which scares (me)'.

We notice that the last sentence in (41) repeats ?lmawt 'the death' for the third time. This NP is not pronominalized because the sentence has in it the intrusive pronoun huwa 'he'. Thus, if ?lmawt is replaced by the pronoun huwa, the result will be unacceptable as we see below:

(42) * laysa huwa huwa lladhi yuxiif

We can conclude from this example that the LIKE FORM CONSTRAINT prevents pronominalizing the subject of an equational sentence containing an intrusive pronoun.
IV. 2.c. NP IN THE PREDICATE POSITION

The previous section was an illustration of how the LIKE FORM CONSTRAINT operates on preventing pronominalization of NPs in the subject position of equational sentences. It is clear that the same constraint operates in the same manner when NPs in equational sentences are in predicative positions. Examine the following example:

(A3) juuc ? Hatta ljuuc faqada ?ismuh ..lam ya cud φ
[?ismuh] huwa ljuuc
hunger? Even hunger lost its name. [its name] is no longer hunger!

The third occurrence of ljuuc 'hunger' in (A3) above is the predicate of the last sentence, whose subject has been deleted. If Delisle's FPD (see section IV. 1 above) applies, then the result will be unacceptable as (A4) illustrates:

(A4) * lam ya cud [?ismuh] huwa huwa

Thus, it seems that Radford's LIKE FORM CONSTRAINT excludes sentences which Delisle's FPD would generate.

If this analysis is correct, the following conclusions can be drawn from the previous discussion:

i. THE LIKE FORM CONSTRAINT prevents the pronominalization of subject or predicative NPs in sentences containing intrusive pronouns.
ii. As a result of (i), the NP must obligatorily be repeated in the situations where (i) operates.
NOTES - CHAPTER THREE

1 For further discussion of this constraint, refer to Ross's dissertation (1967) on Constraints on Variables in Syntax.

2 Cliticized direct object pronouns get suffixed to the preceding verb by an obligatory rule.

3 Arnold Zwicky also brought to my attention that if the accusative form of pronouns is used instead of the nominative, then answers like (24) b would be acceptable. Thus, while (24) b is starred, (24) c is good.

(24) a. Do you like sweet potatoes?
   b. *They! They do not appear to me.
   c. Them! They do not appeal to me.

This is corroborated by the evidence given in (28) b and (28) c examples suggested to me by Chris Farrar.

4 Both examples come from riHla ila lghad 'A Journey into tomorrow', pages 27 and 60, respectively.

5 From riHla ila lghad, page 64.

6 Ibid., page 60.
CHAPTER FOUR

THE GENITIVE CONSTRUCT CONSTRAINT

4.0.0 INTRODUCTION

In this chapter I (shall) discuss the constraint that the Genitive Construct Structure (GCS) puts on the process of pronominalization. The occurrence of a pronominal form or the repetition of the NP in anaphora has been shown in Chapters Two, and Three to be partially determined on grammatical grounds. The study of the Genitive Construct Constraint (GCC) is a continuation of that discussion.

4.1.0 TERMINOLOGY AND DEFINITIONS

4.1.1 Questions of terminology and some definitions have to be dealt with at the onset of this section. The present choice of terminology is a makeshift tool that may have to be refined at a later stage.

4.1.2 By GCS is meant a sequence of two NPs or more, that exhibits a relationship of possession, the possessed item coming first, and the possessor next (to it). In this linear sequence of these complex relationships the first NP of a GCS shall be called THE HEAD NP; and the final NP in a string of NPs THE TAIL NP. In case we have more than two NPs in a possession relationship the second NP shall be called THE SECOND HEAD NP; the third THE THIRD HEAD NP, and so forth.
4.1.3 SIMPLE AND COMPLEX GCS

A sequence of only two NPs in a GCS relationship shall be called SIMPLE GCS; a three- or more NPs is to be called COMPLEX GCS.

In an attempt to illustrate the above definitions let me give some examples:

(1) kitaabu ?aTTaalibi
    book (of) the standard
    'The student's book'

(2) kitaabu Taalibi ?aljaami\textsuperscript{c}a(ti)
    book (of) student (of) the university
    'The University student's book'.

In (2), a COMPLEX GCS, Taalib 'student' is the SECOND HEAD NP (kitaab, being THE HEAD NP and ?aljaami\textsuperscript{c}a is THE TAIL NP.

4.2.0 DOMAINS OF THE GCC

I shall discuss three domains where the GCC seems to operate:
(1) when an NP is a GCS constituent;\textsuperscript{2} (2) when the GCS constituent is in conjunction with another NP; and (3) when the GCS is an embedded clause in a complex sentential structure. Each of these will be discussed below separately.

4.3.0 AN NP AS A GCS CONSTITUENT

The GCC seems to block the pronominalization of an NP in discourse when that NP is a GCS constituent. The following example\textsuperscript{3} illustrates the point:
(3) a. The first prisoner:

\[\text{taquul } ?\text{innaka } ?\text{irtakabta } jariima}\]

you say that you you committed crime

\[\text{bisababi } ?\text{annisaa?}\]

because of the women

b. The second prisoner:

\[\text{jaraa?im } \ldots [?\text{arba}^c jaraa?im]\]

crimes four (of) crimes

\[\text{c. The first prisoner:}\]

\[\text{qatl } ! [?\text{arba}^c jaraa?im } \text{qat\text{l}}]\]
murder four (of) crimes (of) murder

a. 'Are you saying you committed a crime because of women?'

b. 'Crimes. Four crimes?!

c. 'Murder? Four crimes of murder?'

The repetition of \text{jaraa?im} 'crimes' in (3.b) and also in (3.c), which is in both instances a constituent of a GCS, vis-a-vis the use of pronominalization is due to the fact that a pronominal form would result in an ungrammatical sentences, and hence the discourse would be infelicitous. Because of this limitation, (3.b) and (3.c) would be starred when a pronominal form is used as in (4.b) and (4.c) below:

(4) b. \text{jaraa?im. } *?\text{arba}^c-ha

c. \text{qatl } ? * \text{?arba}^c-ha qat\text{l}.

A second example\textsuperscript{4} will better illustrate the point:
If we replace the third occurrence of ḏarD 'land,' which is a GCS constituent, by a pronominal form, the result would be an unacceptable structure. Thus, the following conclusion could be formulated:

(6) An NP in discourse can not be pronominalized where repetition of this NP occurs, if this NP is a constituent of a GCS.

4.4.0 THE GCS CONSTITUENT CONJOINED

The GCC seems to operate in the domain of an NP that is a part of a GCS which is in conjunction with another NP. A simple conjoining of pronouns and NPs may evoke different reactions on the English examples illustrate:

(7) I saw her and the boy.
(8) I saw you and John's wife.
(9) ?You bought the factory clock and it.
(10) ?? You bought it and the factory clock.
(11) ?? You broke it and David's car.

Whereas (7) and (8) are quite acceptable, my informants' reaction to (9) - (11) ranged from uncertainty about the acceptability of these sentences to a complete rejection. The phenomenon is related, I
believe, to the impossibility of pronominalizing an NP that is a part of a GCS, which is conjoined to another NP.

In light of the preceding discussion, ?aaxirti 'my hereafter' in (12) below can not be replaced by a pronominal form, because ?aaxirti is an NP that is a part of a GCS conjoined to another NP. Examine the following example:

(12) qaa da min zamaan ?ajahhiz li?aaxirti
sitting from time I prepare for hearafter my
taquum ?ant ya ?ibni tuDayyi? Calayy
you start you oh son my you spoil for me
[?aaxirti wa xarjiti]
hereafter my and funeral my

(12) 'For a long time I have been preparing for my hereafter, and here you come, my son, to spoil my hereafter and funeral'.

If the second occurrence of ?aaxirti 'my hereafter' is replaced by -ha, the result would be a starred discourse:

(13) ..... ya ?ibni *tuDayyi-ha? Calayy wa xarjiti

This violation of grammaticality is in accord with Ross's (1967:89) The Coordinate Structure Constraint (CSC) which says that 'in a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct'.

4.5.0. GCS AS EMBEDDED CLAUSE IN COMPLEX SENTENCE.

In Chapters Two and Three I claimed that pronouns in isolated sentences are primarily interpreted for human NPs. I would like to
return to this claim in this section, and set up discourses where an embedded complex GCS is the discourse topic to which someone reacts by raising a question or offering a comment, thus pronominalizing either the whole GCS or some part of it. Speaker A in (14.a) will report to speaker B a news item, or a rumor, and (14.b) will be a possible comment by Speaker B (the Complex GCS will be enclosed in square brackets, and the part that is to undergo pronominalization will be doubly underlined].

Speaker A

(14) a. yaquul saami ?inna [mushkilat safar hind] he says Sami that problem (of departure (of Hind

ma tazaal tubHath
is still being discussed

Speaker B:

(14) b. la ?adri limaadha tas?al Can ha no I know why you ask about her

(14) a. Sami says that the matter of Hind's departure is still being discussed.

(14) b. I do not know why you ask about her.

In (14.b), the pronominal suffix -ha in Canha 'about her' would be processed, according to my judgment, to stand for a human referent if (14.b) stands in isolation, or if the question of Hind's departure had been discussed before and a speaker re-introduced it by saying (14.b). One, however, could argue that the presence of an explicit feminine NP, namely Hind, in (14.a) may force the human interpretation of -ha in (14.b). It seems plausible that human NPs are more prominent in memory. If human NPs are stored along with nonhuman NPs in memory,
it also seems plausible that the recall of the human entities is easier. I know of no study to this effect; but my guess is that the above claim is worth examining. We notice in (14.a) the presence of two feminine NPs, namely hind and mushkila(t) 'problem'. This causes some difficulty in the processing of (14.b) as to whether -ha 'her, it' is a reference to hind or mushkila. As was suggested above, the tendency is to interpret pronouns in isolated sentences primarily for human NPs whenever this is possible.

An appropriate test to determine the primacy of the retrieval of human NPs when these are stored simultaneously with nonhuman NPs can be found in the degree of the acceptability of the response to (15) below:

Speaker A

(15) a. yaqul saami ?inna [mushkilat safar cumar]
he says Sami that problem (of) departure (of) Omar

ma tazaal tubHath
she still being discussed

(15) b. ^ la ?adri limaadha tas?al C an ha
not I know why you ask about her

(15) a. Sami says that the problem of Omar's departure is still being discussed.

(15) b. I do not know why you still ask about her.

The only difference between (14.a) and (15.a) is the gender of their respective TAIL NPs, namely hind and Cumar, the former being feminine and the latter masculine. It was mentioned above that (14.b) is ambiguous with the tendency to interpret the pronoun -ha for a human. (15.b), on the other hand, poses another kind of problem: the utterance is
somewhat infelicitous due, as far as I can determine, to the 'conflict' that \textit{\textsuperscript{c}umar}, a masculine NP, and \textit{-ha}, a feminine anaphor, create. What this seems to suggest is that \textit{\textsuperscript{c}umar} attracts the hearer's or reader's attention, and is the NP that is, not only retained longer in memory, but retrieved primarily. If these claims are correct, it seems that a further constraint is called upon in order to eliminate ambiguity, as in (14.b), and to reduce the kind of infelicity shown in (15.b).

A further example will help illustrate the above claims. In (16.a) the complex GCS includes three masculine NPs, all nonhuman except the TAIL NP, i.e. \textit{\textsuperscript{c}umar}. Upon the pronominalization of the GCS, we notice that \textit{-hu} 'him, it' will be processed to stand for \textit{\textsuperscript{c}umar}, the human NP. Examine (16.a) and (16.b):

Speaker A:

\begin{align*}
(16) \text{a.} & \quad \text{yaquul saami } \textit{\textsuperscript{?}ilghaa?} \text{ safar } \textit{\textsuperscript{c}umar} \text{ ma yazaal yubHath.} \\
& \quad \text{he says Sami that cancellation departure Omar is still being discussed}
\end{align*}

Speaker B:

\begin{align*}
(16) \text{b.} & \quad \text{la } \textit{\textsuperscript{?}adri limaadha tas?al } \textit{\textsuperscript{c}an-hu} \text{ no I know why you ask about him} \\
(16) \text{a.} & \quad \text{Sami says that the cancellation of Omar's departure is still being discussed.} \\
(16) \text{b.} & \quad \text{I do not know why you ask about him!}
\end{align*}

If my interpretation is correct, it seems necessary to impose a constraint on what part of a GCS can be pronominalized and what part cannot. This is done in order to avoid infelicity or ambiguity, resulting, in this case, in the obligatory repetition of certain NPs
in the domain of discourse. This constraint can be formulated in
the following way.

(17) To avoid ambiguity or infelicity in discourse, the
retention of the first NP in a GCS is obligatory.

The pertinent question at this stage is whether (17) is too strong
a claim, and if so how could it be modified to adequately describe the
data. A way to deal with this situation is to take complex GCSs and try
to pronominalize parts of them to see how the claim in (17) stands the
test. Thus far, we have been examining the result of pronominalizing
whole GCSs. The result of this is the human interpretation of the
pronouns as in (14.b) and (16.b). This motivated the claim in (17).

4.5.1

In the following section I shall examine the result of pronomi-
 nalizing a partial constituent of a complex GCS. In examples (18) and
(19), the SECOND HEAD NP (See Section 4.1.2 for definition) will be
pronominalized; and in (20)-(22) the TAIL NP will be substituted by a
pronominal form. Examine the following:

(10) a. yaquul saami ?inna [loon dihaan lbayt] jamiiil
he says Sami that color paint house beautiful
   b. la ?adri limaadha tahtam bi loon-hi
no I know why you care with color his

(18) a. Sami says that the color of the house paint is
beautiful.
   b. I do not know why you care about his/its color.
(19) a. yaquul saami ?inna [sayyaarat Taalibat [jaamiCa] he says Sami that car student university
jamiila
pretty
b. la ?adri limaadha tahtam bisayyaaratiha.
o I know why care with car her

(19) a. Sami says that the University student's car is pretty.
b. I do not know why you care about her car.

(20) a. yaquul saami ?inna [loon dihaan ?issayyaara] he says Sami that color point the car
jamiila.
pretty
b. la ?adri limaadha tahtam biloon dihaani-ha
no I know why you care about color paint her.

(20) a. Sami says that the color of the car paint is pretty.
b. I do not know why you care about the color of her paint.

(21) a. yaquul saami ?inna [sayyaarat Sadiiq [umar] jamiila. he says Sami that car friend Omar pretty
b. la ?adri limaadha tahtam bisayyarit Sadiiqihi.
no I know why you care about car friend his

(21) a. Sami says that Omar's friend's car is pretty.
b. I do not know why you care about his friend's car.

(22) a. yaquul saami ?inna [sayyaarat ma[Cam 1?utay!] he says Sami that car restaurant the hotel
jamiila.
pretty
b. la ?adri limaadha tahtam bisayyaarat ma[Camihi no I know why you care about car restaurant his

(22) a. Sami says that the car of the hotel restaurant is pretty.
b. I do not know why you care about the car of his restaurant.

The pronominalization of the SECOND HEAD NP or the TAIL NP in (18)-(22) seems to contribute to the claim that the reading of a pronominal element in isolation stands for a human NP. However, the semantics of the HEAD NP seems to play a role in the human interpretation: whereas it is generally assumed that, for example, sayyaara 'car' as in (19) belongs to someone, i.e. a human, the word loon 'color' is generally thought of as pertaining to something. Notice the use of the term generally in the preceding sentence. The fact that car can belong to some nonhuman NP, a bank, for example, or color can pertain to a human NP, can be attested everyday.

The situation seems to be similar when we pronominalize the TAIL NP as in (20)-(22). In this case the SECOND HEAD NP seems to behave like the HEAD NP in the sense that its semantics determines largely the human or non-human interpretation of the pronominal element that gets suffixed to it. This should not be surprising since the second HEAD NP is the head NP of a GCS within the larger one. A second reason has something to do with a tendency toward a change in the syntax of the GCS: It is noticeable that the TOPOICALIZATION of the TAIL NP, or, for that matter the SECOND HEAD NP results in a disambiguated utterance. Thus, in order to produce an unambiguous utterance, the speaker of (20.a) is likely to produce (20.c) below, with ?assayyaara 'the car' being topicalized, thus leaving in its place a pronominal element. Examine the following:
(20) c. yaquul saami ?inna [?assayyaara loon dihaani-ha] he says Sami that the car color paint her
jamiil.
pretty

(20) c. Sami says that the car, its paint is pretty.

It is worth mentioning that this tendency is very common in IA, dialectal as well as CA. The motivation for this tendency is obvious. What I do not know is the historical development of this phenomenon. But that is another question raised for future research.

4.5.2.

Where does (17) stand, in light of the tendency to topicalize GCS constituents? It seems to me that there is a tendency to topicalize constituents of a GCS occurring beyond the HEAD NP. This means that the SECOND HEAD NP or the THIRD HEAD NP or the TAIL NP of a GCS are good candidates for topicalization. Note that once the relevant NP gets topicalized, a pronominal form is used as a substitute for it. Sentences (23.b) and (23.c) illustrate this:


b. yaquul saami ?inna [alkitaab [loon ghilaafih] jamiil


(23) a. Sami says that the color of the book cover is pretty.

b. Sami says that the book, the color of its cover is pretty.

c. Sami says that the book cover its color is pretty.
This seems to confirm the conclusion arrived at in (17).

4.5.3. SUMMARY

To briefly summarize the discussion presented in this chapter, there seems to be a restriction on the GCS regarding what NP can undergo pronominalization. It seems that Delisle's Forward Pronominalized within Discourse (FPD) [see Chapter Five, for further discussion] fails to apply. Furthermore, if an NP that is a constituent of a GCS is conjoined to another NP, the former cannot be pronominalized, otherwise this will be a violation of Ross's CSC.

Genitive construct structures embedded in complex sentences exhibit an interesting phenomenon: in order to avoid ambiguity or infelicity as a result of pronominalizing a constituent of these GCSs the language tends to topicalize the relevant constituent, thus leaving in its place a pronominal suffix. This tendency seems to apply to SECOND HEAD NPs as well as TAIL NPs since the HEAD NP has to be maintained obligatorily.
NOTES—CHAPTER FOUR

1 Certain restrictions are put on the NPs that appear in a GC sequence, such as that the HEAD NP cannot have prefixed to it the definite article, etc... Details of these conditions are irrelevant to the discussion of the GCC. Also, Arabic expresses the genitive relationship by putting the possessed entity and the possessor in a linear order.

2 A GC Constituent is any NP that forms a part of a GC.


4 from al-Hakim's ?aSSafqa, page 32.

5 Arnold Zwicky attributes the problem with (9)-(11) to the stress on it, not because of the structure. Yet, I find that even when these sentences are read with an unstressed it, they still reveal some problems. Zwicky also brought to my attention a manuscript on it by Jorge Hankamer given at LSA Summer Meeting, 1974.


7 Doug Fuller brought to my attention the fact that the language uses a demonstrative pronoun to stand for a whole GCS. Thus in answer to (16.a) it is possible to get something like:

(16) c. la ?adri limaadha tas?al c an dhaalik.

(16) c. I do not know why you ask about that.

dhaalik would, in this case, be a substitute for the entire GCS in (16.a).

8 The morphophonemic facts are not of relevance to the discussion here.
5:00

Sentences like (1) and (2) have always been of interest to grammarians, and have generated discussion with regard to the referents of the pronouns she and he in these sentences:

(1) a. Sally said she had a cheese sandwich.
   b. Todd disappeared after he went to the movies.

and

(2) a. She said that Sally had a cheese sandwich.
   b. He disappeared after Todd went to the movies.

In (1) the pronouns can be interpreted in two ways: Sally and she, and Todd and he could be coreferential on one hand; or they could refer to different entities, on the other. In (2) however, she and Sally, and he and Todd are not coreferential. Examples of this kind in languages motivated the treatment of the process of pronominalization in the transformational grammar. In what follows, I will provide a brief sketch of the rise and development of what came to be known as the Pronominalization Hypothesis in the post-Chomskian tradition of linguistic analysis. It is not intended to give the impression that this is a comprehensive summary of the vast literature on the subject, or the main
schools of thoughts and their originators. It is interesting, however, to see the progression of the treatment of pronominalization as it developed in the domain of the sentence, as the tradition was at the time, to the domain of discourse as we see in Bolinger (1977, and 1979) and Delisle (1973).

5.1.0 SENTENCE-DOMAIN PRONOMINALIZATION

The traditional treatment of the sentence as the domain of linguistic investigation persisted in the early tradition of transformational grammar. The concepts of surface and deep structures of a sentence were introduced (Chomsky, 1965:16-18), and widely received. It was maintained according to this tradition that the meaning of a sentence is determined in the underlying structure of a sentence, and that we arrive at its surface structure by means of operations called transformations, i.e. the processes that enable us to get from the deep level of a sentence to its phonological form that is actually used by a speaker. Thus, using these notions, generative grammarians would explain the occurrence of she and he in (1) above as a result of the application of a transformational rule that converts the underlying structures of the sentences in (1), something like those in (3)

(3) a. Sally\textsubscript{i} said Sally\textsubscript{i} had a cheese sandwich.

b. Todd\textsubscript{i} disappeared after Todd\textsubscript{i} went to the movies.

This transformation was called **Pronominalization**. The transformational approach to pronominalization has three consequences: (1) The rule
applies to a structure containing two coreferential, identical non-pronominal NPs; (2) Pronouns that are coreferential with full NPs in the same sentence are the product of Pronominalization; and (3) a non-coreferential pronoun with a full NP in the same sentence must be present in the underlying structure. In light of this analysis the two interpretations of (1.a) are derived from the underlying structures represented in the following trees:

(4)
In (4) Pronominalization applies replacing Sally in S2 (the pronominalized NP is sometimes called the victim) by she because Sally in S2 is coreferential with Sally in S1 (the trigger). This directional application of the Pronominalization rule has come to be known as forward pronominalization. When two coreferential, identical NPs occur in different clauses in a sentence, the first NP triggers the process of pronominalizing the second NP. Thus, the pronouns in (6) are the result of coreferential identical full NPs undergoing forward pronominalization:

(6) a. Suzie sold the car that she bought last year.

b. Jim decided to look for the phone number of the blond girl that he met at a singles' bar last week.

It was shown by Kuroda (1968) and Langacker (1969) that Pronominalization operates not only forwardly as we have seen in (1)
and (6), but it also operates backwardly as the examples in (7) show:

(7)  
   a. That **he** was a tyrant did not bother Napoleon.  
   b. The professor who flunked **her** will see Cathy next week.  
   c. The fact that **she** went to Harvard surprised Thelma's superior.

The pronoun and the underlined NP in each of the sentences in (7) can be coreferential and this is a case of what is referred to as **backward pronominalization**, where pronouns are instances of the pronominalization of full NPs. Cases where backward pronominalization is permissible must not be confused with cases like (8) where it is not.  

(8)  
   a. *He*, said that **David** was sick.  
   b. *She*, sold the painting that Dale gave to **Patti**.  
   c. *He* slept after **Elmer** ate a snack.

Since these pronouns and NPs can not refer to the same person in each of the sentences in (8), it shows that Pronominalization can not apply to derive (8.a) from the structures in (9).
The explanation for the fact that backward pronominalization can not occur in (9) was offered by Lagacker (1969) in terms of the notions of precedence and command (for detailed discussion of these notions see Langacker (1969)). In (8) the victim commands the trigger, and the result is the inapplicability of backward pronominalization to the deep structure in (9). By way of contrast, we notice that the trigger commands the victim in (10), thus allowing forward pronominalization to apply. Whereas backward pronominalization does not apply to (9), pronominalization could apply forward, thus producing:

(10) David, said he, was sick.

where David and he are coreferential. The sentences in (8) are ungrammatical for a coreferential interpretation of the pronoun and the full NP in each sentence because the victim in each sentence commands the trigger. The other side of this is that backward pronominalization is possible whenever the trigger is not commanded by the victim.
This led to more complication in formulating a backward pronominalization rule. In conjoined sentences, where an element in one clause can never command an element in the other, we notice that the notion of command is irrelevant. But a sentence like (11.a) is ungrammatical, whereas (11.b) is acceptable.

(11) a. *He$_i$ is upset and Ferguson$_i$ will have a headache.
    b. Ferguson is upset and he will have a headache.

This seems to indicate that precedence is the only relevant primacy relation that motivates pronominalization. It was also assumed that pronominalization must obligatorily apply to produce sentences like (12) from the underlying structure in (13).

(12) Thelma$_i$ believes she$_i$ is competent

(13)
In (12) Thelma and she are coreferential. But (14) below can not be
derived from (13) and is ungrammatical.

(14) * Thelma\textsubscript{i} believes Thelma\textsubscript{i} is competent.

The only situation where (14) can be grammatical is when the occurrence
of the two Thelmas is noncoreferential as in (15).

(15) Thelma\textsubscript{i} believes Thelma\textsubscript{j} is competent.

Here Thelma and Thelma are indexed noncoreferentially in the deep
structure of the sentence.

The assumption of obligatory pronominalization was challenged
(Morrisroe, 1969). Yet, it was recognized that some structures can
undergo either backward or forward pronominalization, but not
simultaneously. Thus, from (16) both (17) and (18) can be derived by
forward and backward pronominalization, respectively; but (19) or (20)\textsuperscript{4}
can not. Examine the following examples:

(16) \[
\begin{array}{c}
S \downarrow \\
NP \downarrow \\
S2 \downarrow \\
NP \downarrow \text{Heather}\textsubscript{i} \downarrow \text{be pretty} \\
VP \downarrow \text{pleases} \\
VP \downarrow \text{Heather}\textsubscript{i} \\
VP \downarrow \\
S1 \downarrow \\
NP \downarrow \\
\text{Thelma} \\
VP \downarrow \text{believes} \\
V \downarrow \text{Thelma} \\
N \downarrow \\
\end{array}
\]

(17) That Heather\textsubscript{i} is pretty pleases her\textsubscript{i}.

(18) That she\textsubscript{i} is pretty pleases Heather\textsubscript{i}.
5.1.1 INADEQUACIES OF THE PRONOMINALIZATION HYPOTHESIS

The Pronominalization Hypothesis was shown to be an inadequate mechanism to explain some data that were offered to test its claims. Among the chief problems with the Pronominalization Hypothesis were:

First, the interaction of pronominalization and other rules such as (a) Wh-Question movement as was shown by Postal (1971); (b) There-insertion rule (Bresnan, 1970) and (c) the problem of pronominalization being cyclical and obligatory. Second, Lasnik (1976) and others have shown the difficulty of marking coreference in the underlying structure between full NPs and pronouns, and between full NPs and epithets (Jackendoff, 1972; and Lakoff, 1968). Third, it was shown that there is a theory internal problem related to the underlying identity of the coreferents. An illustration of this problem can be seen in the following examples:

(21) Jim \textsubscript{i} drank a beer before Jim \textsubscript{i} played tennis.

(22) The fat man \textsubscript{i} drank a beer before the fat man \textsubscript{i} played tennis.

(23) Jim \textsubscript{i} drank a beer before the fat man \textsubscript{i} played tennis.

Since both occurrences of Jim in (21) and the fat man in (22) are coreferential, these sentences can be the underlying structures. If we apply the pronominalization transformational rule to (21) and (22) we can get:
(24) Jim drank a beer before he played tennis.

and,

(25) The fat man drank a beer before he played tennis.

If, however, we apply the same transformational rule to (23) we get,

(26) Jim drank a beer before he played tennis.

which, if derived from (23), is derived from a structure that does not represent its meaning. Since (23), but not (26), has the information that the man who played tennis is fat, the Pronominalization Hypothesis must not allow pronominalization to derive (26) from (23). This situation calls for an identity condition whereby the victim and trigger must be identical word-for-word. Fourth, The Pronominalization Hypothesis fails to account for a certain class of data. Examine the following:

(27) Each of the professors thinks that he is the most competent instructor.

(27) has a reading in which he is anaphoric with the preceding full NP. Yet, he can not be the result of pronominalizing a full NP identical with the antecedent in (27). Thus, (27) is not derived from (28):

(28) Each of the professors thinks that each of the professors is the most competent instructor.

because (27) and (28) have different meanings. This is to say that (28) can not be the underlying structure of (27).
These problems and others weakened the pronominalization Hypothesis, and linguists started to look for alternative ways to characterize all sorts of data that were suggested as counter arguments for the proposed theory of explaining pronominalization. Several competing theories came into existence but none has been universally adopted (for further discussion of pronominal reference, see Wasow (1972, 1975); Jacobson (1977); Bach (1970)).

5.2.0 PRONOMINALIZATION IN THE DISCOURSE-DOMAIN

Traditionally, linguistic analysis centered on isolated sentences as its domain despite efforts by people like Firth (1935) who suggested that linguists and psychologists should undertake 'the study of conversation' as a key 'to better understanding of what language really is and how it works.' In addition to Firth, in the pre-Chomskian era of language analysis, we also notice that Z. Harris (1952) attempted to analyze texts through a highly formalized method that did not meet with much success.

The Chomskian tradition of linguistic analysis continued the structural convention of adopting the sentence as the domain of study. At the same time that this tradition was setting its roots strongly, some linguists realized the limitations of this technique in accounting for data that did not seem to be explainable in the description of a single sentence. Fillmore (1972:274) notes '...that although what we seek is basically a grammar of sentences, the notion 'sentence' needs to be generalized to include sentence sequences in coherent discourse'. What seems to have motivated Fillmore's call for
modifying the sentence orientation is the inadequacy of the sentence-based grammar in accounting for sentential sequences that involve negation as in (29):

(29) Nor did Alice.

which in the sentence-based grammar would be starred, yet it seems to be a natural response by speaker B to the discourse initiated by speaker A:

Speaker A:

(30) I did not plant my garden yet.

Speaker A:

(29) Nor did Alice.

Many other generative semanticists and sociolinguists have had trouble adhering to the sentence as the natural domain of grammar, and they called for adopting supra-sentential structures instead:

(Karttunen, 1969; Gordon and Lakoff, 1971; Lakoff, R, 1972; Labov, 1970; Hymes, 1972; Sinclair, Forsyth, Coulthard and Ashby, 1972, and many others.)

We saw in the first half of this chapter that the Pronominalization Hypothesis took as its domain the 'independent' sentence. Lately, an attempt to adopt an alternative for the sentence-based analysis has been made, and it is worth noting at this stage that in 1977 a Symposium on Discourse and Syntax was held at UCLA, the result of which was a valuable volume of articles, some of which were on pronominalization.
As far as the rejection of the Pronominalization Hypothesis is concerned due to its inadequacy in accounting for natural language data, I restrict my reviewing of the literature to a work by Delisle (1973).

To the extent that I can determine, Delisle's work (1973) was a pioneering attempt to study the process of pronominalization in supra-sentential structures. He persuasively argued for the adoption of discourse as the domain of grammatical analysis instead of the traditional treatment of using the 'independent' sentence. He goes on to reject the principles of command, backward pronominalization and cyclicity as advocated by Langacker, Kuroda, Lakoff and Ross as the determining factors in triggering pronominalization intrasententially. All evidence, according to Delisle, indicates that pronominalization is a type of deletion, and it operates only forward. Moreover, the motivation for pronominalization is the occurrence of an extrasentential antecedent. Thus, Langacker explains the occurrence of him in (31) as a case of backward pronominalization by means of precedence and command

(31) The woman who is to marry him will visit Ralph tomorrow.

(Delisle's (13.a); Langacker's, 1969, (32))

in the sense that Ralph, the following NP, pronominalizes the preceding NP.

Delisle, however, rejects Langacker's suggestion that the occurrence of him is motivated internally within the sentence. Had this been the case, (31) would have been grammatical regardless of what NPs occur outside the sentence and in positions preceding it. The following example shows that this is not the case:
(32) a. Do you know Max?
    b. * The woman who is to marry him\textsubscript{i} will visit Ralph\textsubscript{j} tomorrow.

(Delisle's, 1973:7, 14)

The him in (32.b) can only be interpreted as coreferential with Max, so that it can not be the result of a sentence-internal NP that triggers the use of a pronoun, but rather an extrasentential antecedent. If the him is to be interpreted as coreferential with Ralph, then a coreferential Ralph would occur as antecedent outside sentence (32.b) as in (33):

(33) a. Who will visit Ralph\textsubscript{j} tomorrow?
    b. The woman who is to marry him\textsubscript{i} will visit Ralph\textsubscript{j} tomorrow.

(Delisle's (17)).

These examples and other arguments in Delisle's important paper (1973) have cogently established a more adequate 'theory' to account for the process of pronominalization than the sentence-based grammarians tried to do. Yet, Delsile's explanations suffer from the following shortcomings.

5.2.1 DELISLE: CRITIQUE

The Forward Pronominalization within Discourse (FPD) Hypothesis, as advocated by Delisle, partially accepts Langacker's explanation of precedence in the sense that NP\textsubscript{1} will pronominalize NP\textsubscript{2} if and only if NP\textsubscript{1} precedes NP\textsubscript{2}. This process of pronominalization could also be
accounted for by the forward deletion (FD) principle, unordered rules and language specific constraints, all of which apply intra- and extrasententially.

While it is partially true that the precedence of NP1 before NP2 can be determining factor in triggering pronominalization, we notice that one can readily provide examples for natural languages that will counter this argument. The question and answer discourse that Delisle uses to argue against Langacker, Ross and others could be a double-edged weapon to be used against Delisle himself. The assumption we get from FPD is that the occurrence of NP1 in the question results (almost automatically!) in the use of a pronominal form in the answer, since NP1 precedes the one provided by the answerer, NP2, that is. This seems to be too strong a claim; and data from Arabic, and English for that matter, can show the falsity of this claim. Consider the English example, used elsewhere in this dissertation, followed by a similar case from Arabic:

(34) a. Do you like sweet potatoes?
   b. Sweet potatoes! Sweet potatoes do not appeal to me.

and

(35) a. ?ala tash'uru bi-juu
   do not you feel with hunger
   'Do not you feel hungry?'
   b. juu ! Hatta ljuu faqada ?ismuh
   hunger even the hunger lost name his
   'Hunger! even hunger lost its name!'

A superficial glance at (34) and (35) would falsify the claims advanced by Delisle regarding the precedence of an NP extrasententially as a triggering mechanism for obligatorily pronominalizing the following
NP(s). An attempt to explain the reason for the NP repetition in (34.b) and (35.b) was made in Chapter Three, Section IV.1 of this dissertation.

Bolinger (1977) points out the possible occurrence in a complex sentence of a pronoun to the left of its coreferent, and seems to misunderstand Delisle's intent about this matter. A sentence like

(36) Hey George! As soon as he gets home, tell Dad to call Mom.

(Bolinger, 1977:43)

is equally acceptable to Delisle. However, it seems that Delisle and Bolinger have different explanations for the likes of this sentence while in fact they may be in agreement.

The occurrence of he in (36) is explained by Bolinger, (1979:293-297) by the presupposition of 'prior identification' that is to say he for Dad in the case of (36). The acceptability of sentences where pronouns precede their antecedents is enhanced if the noun in question is characterized (Bolinger, 1979:293). According to Bolinger, characterization also presupposes 'prior identification', which is an aspect of 'a more general assumption of familiarity'. Despite the fact that Dad may not have been explicitly talked about in the discourse prior to (36), he is someone recently or frequently a discourse topic.

Bolinger adds other dimensions to the motivation of using a pronominal form in a position to the left of its referent. These dimensions include offhandedness, contrast, vague prior reference, connections, etc....

If my reading of Delisle's explanation of sentences like (36) is correct, it seems that the only requirement that he emphasizes is the
occurrence of Dad in a portion in the discourse prior to (36) for this sentence to obtain. He rejects Langacker's notion that he in (36) is the result of backward pronominalization by the occurrence of Dad to the right of he.

The upshot of the preceding paragraphs is that Delisle would insist on the appearance of an explicit prior context in which Dad would occur that becomes a sufficient trigger for the pronominalization of an identical following NP. Bolinger, on the other hand, provides lengthy exemplification to show that the explicit prior context could be eliminated 'to force the initial pronoun to take its identification from the noun to the right even though the initial position of the pronoun depends on informal recognition of someone or something as familiar' (Bolinger, 1973:295).

5.2.2. SUMMARY

This chapter presents a brief survey of the study of the pronominalization process in the transformational tradition, which adopted the single sentence as the domain of linguistic analysis. The Pronominalization Hypothesis was traced from its inception as developed by Lees, Langacker, Ross, Kuroda and others. Forward and backward pronominalization rules, along with the the primary relations of precedence and command as the motivators for the processes of pronominalization, were briefly introduced. Moreover, this chapter gives a critique of the Pronominalization Hypothesis and demonstrates that it is an inadequate mechanism to explain data from natural languages as the examples from English have shown.
I contribute to the stand taken by some linguists concerning the rejection of the sentence as the single domain of linguistic analysis. Instead, I adopt sequences of sentences that form a discourse as the basis of language study. As far as can be determined, the study of pronominalization in discourse is still nascent and needs further exploration. Delisle's pioneering article was discussed in this chapter along with my criticisms of this important work. Finally, I sketched Bolingler interesting views on Delisle's article in particular and on pronominalization in general.
NOTES - CHAPTER FIVE

1 The subscript \( i \) indicates that the two NPs are coreferential.

2 The reason why these sentences are starred is that the underlined pronoun and NP are not coreferential.

3 The sentence in (10) could have noncoreferential reading where David and he are referents to different people.

4 The pronouns in this sentence are coreferential with a full NP in the same sentence. This makes it necessary that both pronouns she and her are present in the deep structures with different indexes to produce (a) and (b) below:

   a. \([\text{that she} \_i \text{ is pretty pleases her} \_i\].

   b. \([\text{That she} \_i \text{ is pretty pleases her} \_j\].

5 Such a sentence has also a nonanaphoric reading where he and each of the professors refer to different entities. In this case, the identity of he is inferred from the context.

6 By no means does this list of works on pronominal anaphora claim to be exhaustive. This is just a biased listing of articles that I consider to be more influential than others. One can add works by Partee (1972); Dougherty (1969); Hankamer, and Sag (1976); Morgan (1970) and several others.


8 For further explanation see Bolinger (1973:8 and 1979:294).
6.1.0 APPLICATIONS

The question of relating theoretical research of this nature to tangible applications is generally ubiquitous in people's minds. It is not surprising that such a question gets raised about the relevance of something like pronouns to our daily life. In actual fact, a moment of deliberation would convince us that the impact of this research can relate to the following aspects:

First, in teaching composition teachers encounter problems exhibited by students' writings, namely the misapplication of pronominal rules. Traditionally, teachers prescribed the use of pronouns to stand for NPs once the latter had been introduced. An examination of the data introduced in this work reveals the falsity of such a claim. This would suggest that a better prepared teacher in the linguistic behavior of pronouns in discourse would do a better job in instructing his students in the use of pronouns in language.

Second, text writing is another area that the result of this research can pertain to. The preparation of texts for teaching and writing purposes can take as a reference the findings of this dissertation. A text that employs the appropriate use of pronominal to refer felicitously to its antecedent is far better than the one that is careless in its use of pronouns. Traditionally, texts, especially for
primary foreign language teaching, have used mostly isolated sentences rather than a cohesive text built around some notion. This method of sentence-based text writing did not face the problem of using pronouns i.
discourse. But a discourse-based text would inevitably use pronominal forms as referents to previously mentioned NPs. Unless text-writers are aware of the behaviour of pronouns the result might be laden with traps.

These two areas are just suggested examples of the possible application of this research.

6.2.0 FURTHER RESEARCH POSSIBILITIES

This study has left unanswered many questions that need to be further explored at a later stage. These research possibilities are of two kinds: (1) experimental and (2) theoretical.

The tests administered in this dissertation for the purposes of eliciting reaction from native Arabic speakers about the interpretation of pronominal forms need to be refined more and put into a more scientific design similar to those administered in social sciences. In addition to the experimental design, the tested population needs to be larger numerically than the limited number of people tested in this dissertation. This type of research could be carried out in an environment where access to Arabic speakers does not form a problem. A fairly uniform environment such as a campus audience would be a good testing ground for the hypotheses advanced in this dissertation.

Two theoretical issues raised as a result of this current research merit further exploration. The first relates to the processing of the third person singular pronoun in Arabic. The present work is essentially
dealing with the interpretation of huwa, -uh, and hiya, -ha, namely the third person singular masculine and feminine pronouns, and their suffix forms, respectively. It is worth mentioning here that the functional load of hiya, -ha encompasses a wider range than huwa, -ha, simply because the former stands for singular feminine animate and inanimate NPs, and all plural nonhuman entities; whereas huwa, -uh represent only the third person singular masculine animate and singular inanimate objects. Because of this disparate range of the representation of huwa, hiya it may be valuable to test each one of these pronouns separately to see if the difference in the functional load of each of them would produce different results. My guess is that the human interpretation of these pronouns would hold. Verification of this can naturally be achieved by conducting some psychological testing.

The other theoretical issue raised as a result of this research but not explored here concerns the process of thematization, especially in Genitive Construct Structures and the effect of this on pronoun interpretability. It was suggested that the language has exhibited some change in the use of this syntactic device. This is an example of a movement rule, and the study of this phenomenon in relation to pronominalization would be an important contribution to the linguistic theory.

Other relevant issues merit further exploration. Examples of this include Radford's LIKE FORM CONSTRAINT that was accepted at face value, but further research in this area is necessary. The situation of interArabic vis-a-vis the Classical Arabic and/or the dialects is a huge territory that has not been thoroughly explored yet. Needless to say, this is just a tentative listing of possible future research
opportunities, issues that could not be dealt with in the present dissertation.

6.3.0 SUMMARY

In this dissertation I have examined the phenomenon of pronominalization in Arabic discourses, primarily taken from plays by al-Hakim the effect on the discourse processing as manifested by the use of pronominal forms. I began with characterizing the data used in this work; this inevitably led to a historical examination of the type of language used by educated Arabs in their inter-communication.

In Chapter Two I advanced the hypothesis that in isolated discourses there exists a hierarchy of pronoun interpretation. The human interpretation seems to be the most salient, followed by nonhuman. This hierarchy could be attributed to the fact that Arabic, as well as other sister semitic languages, categorizes the world into masculine and feminine only. In situations where the human interpretation of a pronoun is primary and where infelicity or ambiguity arises as a result of this interpretation, the pragmatics of the discourse rescues the situation. In order to support the claim of primary human interpretability of pronouns, syntactic evidence was used in testing the intuition of five native speakers about the processing of pronouns in discourses. The first test uses active sentences and their passive counterparts containing pronominal forms that were incorporated in fairly long discourses in which there is no mention of any human NP. The native speakers intuited that the pronominal forms used in these discourses stood for human
referents. The second test involved thematization. The claim of human interpretation of pronouns was also corroborated.

In light of the human interpretation of pronouns as discussed in Chapter Two and the subsequent infelicity and/or ambiguity in discourse, Chapter Three deals with the imposition of constraints on the process of pronominalization. I have suggested three factors that come into play in order to avoid the use of pronouns in discourse. These factors pertain to (1) style; (2) ambiguity and (3) grammaticality. I have examined in quite some detail aspects of grammaticality especially in regard to Question-Answer discourses, and sentences containing intrusive pronouns. Radford's (1977) LIKE FORM CONSTRAINT seems to beget some support, since sentences containing intrusive pronouns, pronominalization is blocked by virtue of Radford's claim. I have also examined in this chapter the proxemics of NP-Pronominal elements and shown that the proxemics of the pronominal element from its referent do not seem to be the determining factor in triggering pronominalization.

In Chapter Four I examined at some length the constraint put on the Genitive Construct Structure (GCS) regarding which NP in the GCS can undergo pronominalization. I have shown that an NP in discourse can not be pronominalized where repetition of this NP occurs, if this NP is a constituent of a GCS. I have also demonstrated that the retention of the first NP in a GCS is obligatory in order to avoid ambiguity or infelicity in discourse. Furthermore, if an NP that is a constituent of a GCS is conjoined to another NP, the former can not be pronominalized. In complex sentences, in order to avoid ambiguity or infelicity as a result of pronominalizing a constituent in a GCS topicalization of the
relevant constituent tends to be favored, leaving behind it a pronominal suffix.

Chapter Five presents a brief survey of the study of the Pronominalization Hypothesis in the Generative-transformational tradition. The bulk of the discussion centers on the treatment of pronominalization in the sentence domain as the tradition dictated at the time. Then I presented a synopsis of an important work by Delisle (1973) in which he dealt with pronominalization in the domain of discourse. I critiqued Delisle's work and gave some of Bolinger's (1977, 1979) insights about pronominalization.

Finally, Chapter Six attempts to provide some ideas about the significance of this study and its implications as well as its limitations.
APPENDIX A

KEY:  
\[ \text{cawaDyan} (A) \]  
\[ \text{Xamiis} (X) \]  
\[ \text{Tihaami} (T) \]  
\[ \text{Sa’daadiri} (S) \]

A: qul lanaa ya xamiis ?afandi. ?alHaaj \(_{\text{abdilmawjuud}}\)

X: maa lu\(\text{h} \)? \(\phi\) saafar SS\(\text{SubH} \) \(\text{Ibadri fi ?awwal qatr}\)

T: \(\phi\) saafar !?

X: Tab\(_{\text{C}}\)an kalmu\(_{\text{C}}\)taad

T: Imu\(_{\text{C}}\)taad !?

X: qaSdi...ya\(_{\text{c}}\)ni.. huwa \(\text{la-hu} \) \(\text{C}a\text{adh} \) \(\phi\) yusaafir lu\(\text{andar fi ?ayyaam mu\(_{\text{C}}\)ayyana}\)

T: \(\phi\) yusaafir yawm \(\text{ImuHzina u ma\(_{\text{C}}\)uh} \text{Ifuluus} \) ?! ghara\(_{\text{Duh}}\) \(\phi\) yahrub!

ghara\(_{\text{Duh}}\) \(\phi\) yafDaHni ?!

X: ghara\(_{\text{Duh}}\) Haaja thaaniya

A: gul lana ghara\(_{\text{Duh}}\) ya xamiis ?afandi wa Hayaat \(_{\text{C}}\)aynayk

X: huwa \(\phi\) yaquul lakum ?intadhiruuh

T: C\(_{\text{indak}}\) ?amal fi HuDuuru\(_{\text{C}}\) ?

X: Daruu\(_{\text{ri}}\) \(\phi\) yaH\(\text{Dur.} \) ?anaa faah\(_{\text{muh}}\)

A: klaamak fii shay? yaa xamiis ?afandi

X: ?abadan... kalaami waa\(_{\text{DiH}}\)

A: Haqiiqi... huwa mu\(_{\text{C}}\)taad \(\phi\) yusaafir fi ?awqaat maxSuu\(_{\text{Sa}}\) ?ana mulaaHidh ha

113
X: wa ?ana maxzani fi sikkat ImaHatta wa mulaaHidh Tab'an.

S: wassabab

---

1 Pronominal reference # 22
   explicit  13
   implicit  9

2 Ten more utterancys intervene with mention of other people before the NP gets repeated.

Source: aS-Safqa, pp. 125-126.
APPENDIX B

Transcription Conventions

The following symbols were used in transcribing the Arabic data in the present work. Opposite each symbol there is a brief articulatory description of the sound it is intended to stand for:

Consonants

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>voiced bilabial stop</td>
</tr>
<tr>
<td>d</td>
<td>voiced dental stop</td>
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ABBREVIATIONS USED IN BIBLIOGRAPHY

CLS  =  Chicago Linguistic Society
IULC = Indiana University Linguistics Club
JAOS = The Journal of the American Oriental Society
LI   = Linguistic Inquiry
Lg   = Language

_____ 1963. AtTaCaam likul fam 'Food for every mouth'. Cairo: Al-adaab Pr;ss.

_____ (196(?)) RiHla ?ila Ighad 'A journey into tomorrow'. Cairo: The Arab Company for Printing and Publishing.


Bach, Emmon. 1970. 'Probleminalization'. LL 1, 121-122.

Bishai, Wilson. 1966. 'Modern inter-Arabic'. JAOS. vol. 86, no. 3. 319-323.


Bolinger, Dwight. 1977. Pronouns and repeated nouns. Indiana University, Bloomington, Inc.: IULC.


Lakoff, G. 1968. Pronouns and Reference., Indiana University, Bloomington, Indiana: IULC.


_____. 1975. Anaphoric pronouns as bound variables. Lg. 51. 368-384.
