

Paragraph Structure in Arabic
and English Expository Discourse

by

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ABSTRACT

The purpose of this study was to compare and contrast Arabic and English paragraph structures in expository discourse. The analysis covered three aspects essential to a full description of paragraph structure, namely, tagmemic or thematic patterns, logical relations holding between propositions on the one hand, and between themes and rhemes on the other, and finally lexical cohesive devices.

A sample of forty expository paragraphs was selected from each language. Thirty of these paragraphs were randomly selected, while ten were, more or less, parallel in content. The analysis was carried out within the framework of tagmemeics as it was developed by Pike and Pike (1977).

The results indicate that themes, in both Arabic and English, tend to be developed deductively rather than inductively. The mono-level thematic pattern, i.e., the given paragraph has one theme) is the most frequent in both languages. However Arabic shows a stronger tendency for marking themes both internally and externally. English shows a stronger tendency for expressing themes in initial propositions. Conjunctions in Arabic seem to have a role or marking themes but it is not the case in English.

As far as logical relations are concerned, the additive was found to be the most frequent interpropositional relation in both languages. However, English showed more preference than Arabic to the explanatory theme-rheme relation, while the mixed pattern is the most frequent in Arabic. In Arabic, unlike English, connectives tend to function as markers of logical relations. Finally there are differences between Arabic and English in making use of lexical cohesive devices to achieve cohesion in texts. English shows a stronger tendency to use the same word to create cohesion in texts. Arabic, on the other hand, shows more preference for the use of collocation.

To my sincere wife and dear children.

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GUIDE TO PHONETIC SYMBOLS

ɠ	voiced pharangeal fricative
ʔ	glottal stop
<u>s</u>	voiceless alveolar velarized fricative
<u>z</u>	voiced alveolar velarized fricative
dh	voiced dental fricative
sh	voiceless palato-alveolar fricative
<u>dh</u>	voiced dental velarized fricative
th	voiceless dental fricative
<u>t</u>	voiceless alveolar velarized stop
<u>h</u>	voiceless pharyngeal fricative
x	voiceless uvular fricative
gh	voiced uvular fricative
j	voiced alveo-palatal affricate
q	voiceless uvular stop

Chapter 1

Introduction

Until recently discourse analysis has been considered peripheral to all the most important theoretical principles of linguistics. This can be attributed to a number of factors, chief among which is the absence of a comprehensive theory that can handle complexities beyond the level of the sentence. Many linguists, for reasons of convenience, did not get involved in linguistic analysis of language samples that exceed the level of the sentence. They even considered discourse analysis impossible or belonging to other fields such as rhetoric. Some others were under the influence of the theoretical limitations fundamental to certain theories of linguistics which kept followers within the boundaries of the sentence. The structuralists, for example, have focused their linguistic research on the analysis of elements, forms, and structures at or below the level of the sentence. This trend of analysis was explicitly stated in Bloomfield's dictum (1933:170) that "each sentence is an independent linguistic form, not included by virtue of any grammatical construction in any larger linguistic form." In this sense, a sentence is interpreted by means of cues from the grammatical structure of the sentence.

Chomsky, in his transformational generative model of grammar, further advanced Bloomfield's view stating that a grammar of a language should aim at accounting for only acceptable sentences in that language. He defined language as "a set of sentences each finite in length and constructed out of a finite set of elements" (1957:83). Chomsky's linguistic analysis, even in his later work, did not go beyond the level of the sentence.

Ostensibly, such a view of language is inimical to the study of how larger chunks of language are constructed or how texts are organized and developed.

Today, the situation has drastically changed. Linguists have become increasingly aware of the inadequacies of sentence grammar. Language to them is no longer a composite of sentences that are interpretable with reference to linguistic forms only. Longacre (1983:xv), for example, criticized linguistics as having been restricted to analyzing sentences out of context. He indicates that many problems related to ambiguity, reference, anaphoric use of pronouns, aspect, and tense might arise as a result of strictly following such an approach.

In their article "Transitivity in grammar and discourse," Hopper and Thompson (1980:251-299) note that properties and functions of transitivity, as a

morphosyntactic device, are discourse determined. They found that high transitivity and low transitivity correlate with the discourse notions of foregrounding and backgrounding respectively. This means that a sentence which provides the main points of the discourse, or foregrounding, is usually characterized by being high on the scale of transitivity, while the sentence which is at a lower level of the scale of transitivity generally denotes backgrounding, the part of the discourse that provides the supporting points.

The claim being made here is that the functions and properties of morphosyntactic devices such as transitivity and aspect are discourse determined. The authors presented an example from Swahili in which the prefix 'li-' on the verb indicates the past tense in narration. But, in a verb sequence in a narrative, only the first verb is prefixed with 'li-'. The other verbs are marked with the prefix 'ka-' which is restricted to narrating single consecutive events. That is to say, it has the function of tracking the story line. For determining the function of these devices, one ought to go beyond the level of the sentence. Grimes (1975:97) specifically supports this notion saying:

Our grasp of grammar has changed sufficiently in the past decade that instead of simply saying that a

language has for example, thirty-two clause types, we can now ask legitimately what the various clauses are for and by tracing their pattern of use within a discourse we can get an answer.

Conducting linguistic analysis at the discourse level has been further advanced by Gerald Sanders (1970:72) who argues that words, morphemes, or phrases cannot constitute a natural domain for any scientific theory about language. Sanders says that all discussion of such subsentential elements are included in grammars of sentences, which in turn cannot constitute a natural domain for any comprehensive language theory as well. Sanders concludes that the natural domain for any language theory must be the discourse and not the sentence. Sanders says that a grammar of English can only be adequate if it explicitly accounts for the ability of the native speaker to recognize the grammaticality of sequences like:

a. Did Mary eat the apple? Yes, she did.

and the ungrammaticality of

b. Did Mary eat the apple? Yes, they did.

Another argument that Sanders raised against sentence grammar is its inadequacy in handling the semantic properties and relations of sentences such as paraphrase ambiguity and entailment. He argues that

synonymy is not only a relation between words, phrases and sentences, but also between sets of sentences such as the following:

a. Cleopatra will go to Karnak. Cleopatra will see Caesar at Karnak.

b. Cleopatra will go to Karnak. She will see Caesar there.

The motivations for discourse grammar stems from the fact that sentences cannot be a natural domain for any adequate language theory, especially after extensive evidencing of the inadequacies associated with sentence grammar. A grammar of any language, as Chompsky views it, must account for and characterize the linguistic competence of the native speakers of that language. A major component of this competence is the ability of the native speaker to distinguish between utterances that are acceptable and those that are not. This ability is not confined to any length or complexity of utterances. A native speaker is supposed to pass grammaticality judgments not only on words, phrases and sentences, but also on discourses of any length. This is what Morgan (1981:196) refers to as 'discourse competence'.

Grimes (1975:5) recommends that linguists work with discourse and suggests that the magnitude of the subject matter should not be a barrier. He says:

Progress in scientific thinking always implies distinguishing between generalizations that can be broadened on the one hand and kinds of complexity that can be left out of consideration on the other ... the answer to complexity is not to give up the whole thing, but to find generalizations and simplifying assumptions that put their finger on the essential factors behind the complexity.

The point that Grimes is trying to convey is that discourse analysis is not much more intractable than that the complexity of phonology or syntax. He indicates that linguists have come up with some generalizations about handling such complexities, and that similar ones can be made at the level of discourse by conducting several studies that examine the different aspects of discourse structure and organization in different languages.

Significance of Study

Research in rhetoric (e.g. Kaplan 1966, 1967, 1972, Gumperz and Gumperz 1981, and Gleason 1968) suggests that it is culture-based in the sense that different languages have different organizational patterns and structures. These differences are usually reflected in the writing of foreign language learners. Kaplan (1972:401) states:

Foreign students who have mastered syntactic features have still demonstrated inability to compose adequate themes, term papers, theses,

and dissertations. Instructors have written, on foreign students papers, comments such as "The material is all here, but it seems somehow out of focus," or "lacks organization, or lacks cohesion." And these comments are essentially true.

Kaplan indicates that the reason for such a weakness in composition is that foreign language learners employ rhetorical and organizational patterns of their native languages that violate the expectations of native teachers. He concluded that contrastive rhetoric must be taught in the same sense in which contrastive grammar is presently taught. Kaplan (1972:400-410) puts it explicitly:

It is necessary to arrive at accurate descriptions of paragraph orders other than those common to English...more detailed descriptions are required before any meaningful contrastive systems can be elaborated.

The present study is an attempt to describe the structure of the paragraph, lexical cohesion and logical relations in both Arabic and English expository texts. It is significant in many respects.

First, I do not know of any published study of the major features of Arabic expository texts. Therefore, there is a pressing need for such a study. Secondly, it provides a basis for indentifying what features of discourse facilitate and interfere with learning writing

in an unrelated foreign language such as English. Once facilitating and interfering aspects are identified, they can be better handled in curriculum planning and better taught through the devising of special exercises.

Thirdly, it has direct implications for teaching writing skills to Arab learners when learning Arabic or English, and to non-Arabic speaking students when learning Arabic as a foreign language. Learning writing in a language involves more than learning the grammatical structures and vocabulary. It involves understanding textual relations through the use of cohesive devices, distinguishing main ideas from supporting ones, developing themes or topics coherently. Morrow (1977:152-157) refers to such kinds of skills as "enabling skills," which are different for each learning task, while Enkvist (1982:130) calls them "text strategies," ways in which information is presented and developed in written texts. These strategies are part of what Hymes (1979:5-20) refers to as "communicative competence," or a knowledge of how sentences are used in performing communicative acts in culturally appropriate situations. Hymes (1979:15) explicitly says that "There are rules of use without which the rules of grammar would be useless." Once these strategies and skills have been identified and better understood, they can be better

taught through particularly designed exercises for paragraph development.

Fourthly, writing can be better assessed if the skills and strategies involved are identified. The results of this study might be essential to testing composition and evaluating the quality of writing, since part of the difficulty in evaluating writing lies in knowing what aspects to evaluate, such as: grammaticality of sentences, cohesion, logical relations, or topic development in a text. Furthermore, identifying different features of texts adds to the validity of writing tests since we will have a better and more explicit idea of what features to test. Keith Morrow (1979:152-157) argues that a communicative test involves the answers to many questions such as:

What are the performance operations we want to test?

What are the enabling skills involved in these operations?

Finally, it is only through the description of language specific discourses that a theory of discourse can be developed.

Scope of Study

This study is an attempt to describe:

- 1) the structure of the paragraph in Arabic and English expository discourse,
- 2) the logical relations or 'sentence roles' that hold between the functional parts of the paragraph, and
- 3) the lexical cohesive devices in both languages.

The study is based on a number of assumptions. Some of these assumptions are pertinent to the tagmemic framework. In the tagmemic view, grammar is hierarchially structured from the morpheme to the discourse with intermediate levels such as word, phrase, clause, sentence, and paragraph. In analyzing the structure of paragraphs and discourses, tagmemics looks for "functional slots," or tagmemes and sets of possible exponents. Furthermore, tagmemics assumes that there are specific types of paragraph and discourse. This assumption can readily be rejected by looking at a variety of paragraphs in which one may find different types of discourse in one paragraph. But tagmemics confirms its standpoint by admitting recursion on the level of the paragraph and discourse. This means that an expository paragraph, for example, may be embedded in a narrative type of paragraph. On the other hand, a discourse of a certain type may be embedded into another

different genre. A discourse consists in a sequence of hierarchically organized elements, the functional parts of which, especially those of a paragraph, are linked together in a storable manner characteristic of each type of paragraph.

Another assumption of this study is that perfecting the techniques of writing a paragraph is essential to and indispensable for learning to write, since a discourse is a composite of coherently linked paragraphs. Knowing the logic of combining sentences, the principles of coherence and cohesion, is expected to improve the quality of writing in any language. In addition, the knowledge of these writing skills enables us to test and evaluate them more efficiently and with more validity at the levels of recognition and production.

Paragraph Structure

The present study recognizes the paragraph as a unit of discourse that is composed of more than one sentence. It usually develops an idea or topic or part of one. There might be one or more paragraphs, not necessarily the same type, embedded in the main paragraph. This characteristic has been referred to by Longacre, among others, as "recursion." In writing, a paragraph is usually marked by indenting the first sentence.

An attempt will be made in this study to describe the structure of the expository paragraph in Arabic and English in terms of the number of the constituent parts, or tagmemes, and the types of tagmemes: peripheral, or nucleus, or recursion. A classification of paragraph types will be attempted in the light of these parameters and the logical relations that hold between the constituents as well.

As far as paragraph type is concerned, Becker (1965) states that there are two major patterns in expository writing. In the first major type, a paragraph consists of three functional slots: T (topic), R (restriction), and I (illustration). These slots can be expounded in different ways. The T-slot, for example, can be filled by a simple proposition or a proposition that implies contrast or comparison. The second major pattern is the PS pattern; P (problem), and S (solution). Similarly, Richard and Karis Mansen (1976:196-216) classified Guajiro paragraphs into two major types: binary and open-ended. They observed that an explanatory paragraph is the binary type. It consists of a Text tagmeme, plus and Expository tagmeme.

Logical Relations

The concept of logical relations, as it is used in this study, is based on the system of logical relations devised by Milic (1969). This term has been referred to as "meaning relationships" by Jones and Faulkner (1966), "semantic relationships" by Becker (1965), and "sentence roles" by Larson (1967), Winterwood (1970), and Cooper (1983).

Milic (1969:21) described eight logical relations that hold between sentences in a text. These relations are:

Initial: the first sentence of a paragraph

Additive: a proposition that has no organic relation with its predecessor

Adversative: a proposition which changes the direction of the argument

Alternative: a proposition which may be substituted for the previous one

Explanatory: a restatement, definition, or expansion of the previous proposition

Illustrative: an instance or illustration

Illative: a conclusion

Causal: the cause for a preceding conclusion.

Sentences are classified into one of these relations, according to their relationships to each

other. For example, a proposition or a sentence is an Alternative if it can be substituted for the previous one.

The type of logic intended in these relations is not the same as formal logic, for as Milic (1969:21) states, "Formal logic may be ineffective rhetorically, and fallacious logic, it has often been seen, may be rhetorically persuasive." What the term 'logic' refers to in this study is the relationship between one sentence or proposition and the next.

It has frequently been noted that each discourse genre has a pertinent type of linkage. Unlike narrative which is chronologically oriented, expository prose is logically oriented. In this respect, the present study is an attempt to investigate the logical relations that hold between sentences or propositions that function as exponents of tagmemes, and between tagmemes themselves in Arabic and English expository paragraphs. In discussing sentence roles, Larson (1967:16) observed that "Each sentence in any paragraph accomplishes or should accomplish an identifiable task, a piece of work in cooperation with the sentences that surround it."

Larson suggested that these roles could be precisely described and he offered a list of seventeen of these roles. Winterwood (1975:229) suggested a list of seven

roles, namely, coordinate, obversative, causative, conclusive, alternative, inclusive and sequential. He argues that these relationships between T-units exist in any coherent stretch of discourse and they can be expressed or implied. Many other theorists seek to explain the relationships between sentences in a text, e.g., Tuen Van Dijk (Text and Context: 1977), Robert de Beaugrand (Text, Discourse, and Process: 1980) and the most complete explanation is that of Halliday and Hassan (Cohesion in English:1976).

Lexical Cohesion

The concept of cohesion has been fully developed by Halliday and Hassan (1976). They identify it as a semantic concept that is a part of the whole system of a language. It refers to a set of relations or linguistic devices that are present within a text and by means of which texture is achieved.

A text is not a composite of randomly sequenced sentences. There are certain relationships holding between successive sentences in a discourse. The exact nature of these relationships is indicated by formal devices. These devices can be grammatical, lexical or in spoken language intonational. In their book, (1976), Halliday and Hassan in a lengthy discussion of textual

cohesion, divide cohesive devices into two major categories: grammatical and lexical. The major interest of this study is in lexical cohesive devices, but since lexical cohesion is a part of the whole system of cohesion, it might be appropriate to give a brief account of the other cohesive devices. Grammatical cohesion involves the following categories:

1) Reference: language can be used to make reference of two types. 'Exophoric' reference refers is concerned with the relationship between the linguistic sign or form and the real-world object that it is used to refer to. When someone says, "my house," or "your car," for example, he refers to entities in the real world. This type of reference does not play a primary role in textual cohesion and organization. 'Endophoric' reference, on the other hand, is concerned with the relationship between a bit of language and another. In the sentence, "John loves his wife because she helps him save his money," both "John" and "wife" normally have exophoric reference while "his, she" and "him" normally have endophoric reference. They refer to other linguistic elements already mentioned in the text.

2) Ellipsis: this is the complete elimination of a segment of a text under certain restrictions. Halliday and Hassan (1976:196) observe that the function of

ellipsis is "...to create cohesion by leaving out, under definite rules, what can be taken over from the preceding discourse."

3) Conjunction: conjunction is another text-forming device that differs from other types of cohesion in the sense that conjunctive elements are not cohesive in themselves, but by virtue of their meanings. They presuppose the presence of other elements in the discourse. They specify the way in which following elements are connected with preceding ones. Halliday and Hassan (1976:242) summarize four major types of conjunctive relations: addition, adversative, causal, and temporal.

4) Substitution: the fourth type of cohesion is substitution which simply means the replacement of one element by another. It is a relationship between linguistic elements such as words or phrases. For example, in the sentence "My car is very old. I'd better buy a newer one," the word "one" is a substitute for "car."

Turning now to lexical cohesion, one can realize the importance of vocabulary in the process of composing. Lexical cohesion has received great attention by composition researchers and theorists. In her book Errors and Expectations, Mina Shughnessy (1977) devoted

a long chapter to discussing different types of vocabulary errors and their sources. On the other hand, other scholars have considered the role that lexical items play in discourse from a different perspective. Halliday and Hassan (1976) examined the role of lexical items as a text-creating device. They used the term lexical cohesion to refer to the semantic relationships that are created by the use of certain lexical items in texts. Lexical cohesion becomes more important in expository discourse that is subject-matter oriented. This means that the appropriate choice of lexical items plays a role in creating texture, probably more important than the role of other cohesive devices.

Another motive for the selection of lexical cohesion for analysis in this study is the lack of studies conducted in this field. This is what Shaughnessy (1977:320) emphasizes. She states:

As part of this explosion of academic discourse, I am recommending, we need above all else to take a closer look at vocabulary, which is of course critical to the development of complex concepts, the maturation of syntax, and the acquisition of an appropriate tone or register. This is probably the least cultivated field in all of the composition research, badly, or barrenly, treated in texts and not infrequently abandoned between the desks of reading teachers and writing teachers.

It is obvious that Shughnessy calls for more research in the lexicon of academic writing.

In this respect, Halliday and Hassan (1976:274-292) propose two major types of lexical cohesion: reiteration and collocation. In both categories the interpretations of a lexical item is facilitated by the presence of another one preceding it. According to Halliday and Hassan, reiteration is a phenomenon in which one lexical item refers back to another one to which it is related by having a common referent. The clearest instance of lexical cohesion is where the same lexical item is repeated in adjacent sentences. This type of reiteration is usually referred to as repetition. For example, in "She was at the party last night, the party that she was looking forward to for a long time," the repetition of the noun phrase "the party" in the second sentence connects it with the preceding one having the same lexical item. Lexical cohesion can also be achieved by repeating the same lexical item not necessarily in the immediately following sentence. The two sentences containing the two lexical items can be interrupted by one or more sentences. The distance depends on the ability of the reader to associate a lexical item with another preceding occurrence of the same item. This statement of lexical cohesion achieved by repetition has

to be qualified. Not every repeated lexical item need be cohesive. The cohesive force of a lexical item is influenced by its relative frequency in the whole linguistic system. An item that has a high degree of frequency and which can fit into many collocational sets has a very slight degree of cohesion in any of these sets. But the item that has very restricted collocation usually contributes more to the cohesion of the text in which it occurs.

The occurrence of a particular lexical element in a sentence and its synonym or near-synonym in another following sentence is another type of cohesive repetition. In this case, both synonyms have the same referent, and this is what makes them cohesive. A third type of reiteration is the occurrence of a lexical item in a sentence and its hyponym or superordinate in a following sentence. For example, in "John's sister is a spinster. She is an unfortunate woman," the word "woman" is a hyponym of spinster, and it is this relation of hyponymy that makes the text cohesive.

The last type of reiteration as a lexical cohesive device is the use of general nouns such as man, people, creation, etc. In brief, reiteration has four subtypes, (a) the same word (repetition), (b) a synonym or near-synonym, (c) a hyponym, or (d) a general noun.

The phenomenon of reiteration or repetition has recently been emphasized by Philip Alan Quick (1985), Wruter and Hoey (1983), Grimes (1972), and Longacre (1976). Quick (1985) classified repetition into two major categories or functions: prominence and cohesion. In her article "The Semantics of Redundancy," Hohulin (1984:1-15) expresses the possibility of using repetition universally. She says:

Each language has strategies for linking information to make a text coherent. Redundancy may be one of those linking strategies.

In this study, the cohesive lexical strategies in expository Arabic and English prose will be identified. There are types of lexical cohesion that are not achieved by the repetition of the same item, synonym, superordinates or using a general noun. They are due to the use of lexical items that can be associated with a larger lexical set. Gutwinski (1976:81) refers to these sets as "co-occurrence groups". Halliday (1967:220) states:

The lexical set is identified by privilege of occurrence in collocation, just as the grammatical class is identified by privilege of occurrence in structure; the set is a grouping of items with similar tendencies of collocation.

The members of each set stand in different relations with each other for the purpose of providing cohesion to the text in which they occur. For example, the words 'love, hate, like,' and 'dislike' may be classified into one collocation set.

Despite the amount of research that has been conducted to investigate the characteristics of written composition produced by foreign language learners, relatively few studies have been conducted to examine the organizational structures and the use of cohesive devices characteristic of writing in the students native languages based on their performance in the target language specifically in Arabic.

Purpose of the Study

The purpose of this study is three-fold:

1. Describing the tagmemic structure of both Arabic and English expository paragraphs. In this description, the functional parts or tagmemes will be identified, and their markers and exponents will be specified as well. Similarities and differences between Arabic and English will be identified with respect to these aspects.

2. Describing how Arabic and English employ lexical cohesion, an important text-creating device in maintaining continuity in discourse. In this respect,

all types of lexical cohesion described by Halliday and Hassan (1976) will be studied. They include reiteration with four subtypes and collocation.

3. Describing the logical relations holding between sentences in paragraphs according to the system developed by Milic (1969). Milic (1969:21) examined the manner in which sentences or propositions are combined with each other by means of a set of eight categories of logical relations: INITIAL, ADDITIVE, ADVERSATIVE, ALTERNATIVE, EXPLANATORY, ILLUSTRATIVE, ILLATIVE, and CAUSAL. This is what Longacre (1976:200) refers to as "logical linkage," the basic organizational pattern of expository prose that is concerned with the ordering of elements by importance of effect. According to Becker (1965:169), the functional parts, continuity between them, and semantic relations are the basic parameters for describing the structure of paragraphs and them discourses in the tagmemic approach.

Chapter 2

Theoretical Models of Discourse Behavior

Introduction

Different approaches to discourse analysis emerged as a result of the attempt to expand linguistic analysis beyond the sentence. Although these approaches have something in common, they still differ in two major dimensions. The first is the size of the unit posited for analysis. In the structural approach, for example, the sentence has been considered the maximum unit with morphemes, phrases, and clauses as its major components. Harris (1964:356) notes that

...almost all the results (of conventional linguistic analysis) lie within a relatively short stretch, which we may call a sentence. That is, when we can state a restriction on the occurrence of element A in respect to occurrence of element B, it will almost be the case that A and B are regarded as occurring within the same sentence.

Other approaches consider a given text as the maximum unit with sentences and paragraphs as subunits. In what follows, I will briefly describe five common approaches to discourse analysis.

The Structural Approach

Harris was the pioneer in modern American linguistics who attempted to extend linguistic analysis beyond the level of the sentence. In his article (1952) entitled "Discourse Analysis," he presents a distributional method for analyzing connected speech or writing. This formal method depends on the occurrence of morphemes as distinguishable elements and examines the interrelationships between them in a text. Different texts may exhibit different patterns of morpheme distribution. Morphemes occurring in almost identical environments are classified under the same distributional class called an "equivalence class" (1952:7). For example, if an element A occurs before M and another element B occurs before M, we can classify A and B in the same equivalence class ($A=B$). The essential requirements for this analysis is a knowledge of morpheme boundaries. It makes no use of the meaning of morphemes, nor does it make use of non-linguistic factors that might affect the structure of discourse such as the intention of the speaker, the audience, or the context of the situation. Furthermore, Harris's distributional method does not account for intersentential relationships, nor does it attempt to account for certain textual features such as reference, ellipsis and semantic relationships between

sentences. It also neglects meaning and as Prince (1978:192) comments, it is adequate only for simple texts, because equivalence relations may be dissimilar in complex texts. According to Harris (1963:7) discourse analysis is "a method of seeking in any connected discrete linear material...some global structure characterizing the whole discourse or large sections of it." Structure, in this view, refers to patterns of occurrences of segments of the discourse in relation to each other. The approach considers discourse as a linearly organized structure without admitting the presence of hierarchy between discourse constituents. However, this method was expanded more efficiently by transformational grammarians, chief among whom is Chomsky.

The Generative Approach

The transformational generative approach to the study of language structure, led by Chomsky (1957, 1965), motivated some linguists who were dissatisfied with considering the sentence as the largest analyzable unit, to explore the structure of larger entities than the sentence such as the paragraph and discourse.

Working within the theoretical framework of transformational generative grammar, Derstler (1970),

Ruhl (1973), Grimes (1975), and Van Dijk (1972, 1985) postulate the existence of deep and surface semantic structures for discourse. The reason for postulating such structures is the fact that cohesive devices and logical relations that maintain continuity in texts are not necessarily present or overt, yet these texts are still coherent to native speakers. This means that relationships and linkage devices need not be overtly expressed in the surface structure. Van Dijk (1972:34-43) argues that intersentential relations that determine linear continuity or coherence in texts must be described in terms of abstract relations between deep semantic representations holding among underlying sequences of sentences. He justifies the postulation of semantic deep structures by noting that text grammar is supposed to be a formal model for the competence of native speakers that goes beyond their ability to produce, interpret, process, and paraphrase utterances at the level of the sentence. Van Dijk (1972:132) refers to this type of competence as textual competence.

Similarly, Grimes (1975:186-206) presented the underlying relationships between predicates and their arguments by reducing sentences to propositions at the deep structure to which a number of transformations are applied to derive the surface structure.

The generative approach has been employed by Grimes and Glock (1970:400-423) in their analysis of Saramacean travel narrative. They posited a semantic deep structure that shows the relations between events, event settings, and participants in the event. The relationship between semantic deep and surface structures of texts, however, is vague; more research has to be done to determine this relationship. Much less is known about the transformations required to derive surface structures from deep ones in texts. Hendricks (1972:88) and Reiser (1978:12) express their dissatisfaction with what has been done to relate the microstructures (surface) with the macrostructures (deep). They also observe that the interaction of the transformations remains unclear.

The Systematic Approach

Systematic linguistics was established by Halliday in a series of articles (1961, 1964, 1967a, 1967b) and it was fully developed in the jointly-authored book with Rughayia Hassan (1976) entitled Cohesion in English. This school of linguistics developed from 'scale and category' linguistics originated by J.R. Firth's earlier work which was mainly concerned with the sociology of language. It derives its name from the category of system in the description of language which is composed

of a series of systems. Berry (1975b:141) defines the system as "a list of choices which are available in the grammar of a language." For example, in English, there is a system of tense with the choices between past, present and future; there is a system of mood with the choices between declarative (making a statement), interrogative (asking a question), and imperative (giving a command).

In this approach, texts are analyzed in relation to two basic concepts: the internal structure and the external structure. The internal structure of texts can be achieved by three text-building resources. The intersentential cohesion is defined by Halliday and Hassan (1976:18) as "the set of possibilities that exist in the language of making a text hang together: the potential that the speaker or writer has at his disposal."

These cohesive possibilities include: reference, substitution, conjunction, ellipsis, and lexical cohesion. The internal structure is not only influenced by intersentential cohesion, but also by intrasentential cohesion that is mainly concerned with the relationship of words within the sentence. Finally, there is the discourse structure manifested in the structure of larger units such as paragraphs, section, narrative, and poems.

According to Halliday and Hassan (1976:326-327) the discourse structure is the larger structure that is a property of the forms of discourse themselves, the structures that is inherent in such concepts as narrative, prayer, folk-ballad, formal correspondence, sonnets, operating instructions, television drama and the like.

From an external perspective a text cannot be a text unless it is appropriate to a particular context of situation in which it functions. Factors such as the intentions of the speaker or writer and the nature of the audience restrict the linguistic choices open to the writer or speaker.

Most of the work done in the framework of this approach was based on literary texts and dialogues. Tierney and Mosenthal (1981) conducted a study to explore the relationship between Halliday and Hassan's concept of cohesion and textual coherence. They concluded that the cohesion of texts cannot be considered an index of textual coherence.

Although this approach seems promising and insightful, it does not escape criticism. Butler (1985:150-151) states that Halliday's account of discourse structure as described in Halliday's (1984a) paper entitled "Language as Code and Language as

Behavior," is too programmatic to be really useful. In an attempt to revive and expand Halliday's account of discourse structure, Martin (1981a) expanded the semantic speech functions network and rejected Halliday's social contextual level.

The Procedural Approach

In the procedural approach advocated by Beaugrande and Dressler (1981:3-12), a text is a "communicative occurrence" which meets seven standards of textuality, otherwise it is a non-text. These standards can be categorized into two groups: text-centered notions and user-centered notions.

Text-centered notions include: (a) cohesion: the ways in which components of a text are mutually connected within a sequence. It depends on grammatical dependencies such as reference and conjunctions. (b) Coherence: the ways in which the components of the textual world, i.e., the configuration of concepts and relations which underlie the surface text, are mutually accessible and relevant.

A text has to meet user-centered standards as well. These include the following notions:

a. Intentionality: the intention of a text producer to produce a cohesive and coherent text.

b. Acceptability: the ability of the receiver of a text to accept the intended text so that it can be used in communicative interaction.

c. Informativity: the extent to which a text or part of it is known or unknown, expected or unexpected by the receiver.

d. Situationality: the factors which make a text relevant to a particular situation.

e. Intertextuality: factors that make the participant's utilization of a particular text depend upon his knowledge of other existing related texts.

This approach deals with texts in terms of utilization, that is, how people produce and use or receive texts in different situations. In other words, the procedural approach is concerned with how texts function in human interaction, and with the factors that affect discourse units and types.

The Tagmemic Approach

The tagmemic theory was founded by Kenneth L. Pike in a series of his first publications on this approach (1954, 1955, 1960, 1967a). It was later developed in the jointly-authored book with his wife Evelyn Pike, entitled "Grammatical Analysis" (1977), and in the works of Pike's

followers such as Longacre (1968, 1972, 1978), and Alton Becker (1965, 1977, 1979).

This theory derives its name from the concept of the 'tagmeme' which Pike (1977:33) defines as "a constituent in a construction seen from the point of view of its four general features (Pike 1982:75, 1983b:9).

This theory is based on certain assumptions and principles, chief among which is the assumption that language is an integral part of man's total behavior. Language occurs in context. It consists of units within units. Smaller units are contained in larger ones in hierarchical levels. This hierarchy is manifested at the phonological, grammatical, and referential levels. The assumption of the hierarchical structure of language is what makes the tagmemic theory especially applicable to discourse analysis.

Tagmemics has been extensively used in discourse analysis studies in many languages. Longacre (1968) studied the structure of discourse, paragraph and sentence in some selected Philippine languages. Mary R. Wise (1971) conducted a study to identify the participants in discourse in Nomatsiguenga, a representative of the Campa languages of the pre-Andine group of Arawakan languages. She examined the types of

units beyond the sentence that provide some cues for the identification of participants in discourse.

Linda Jones and Ned Coleman (1979) conducted a discourse-based study of tense and mode in Kickapoo, an Algonquian language. They found that the functions of tense and mode are discourse determined.

Since this study will be conducted within the framework of tagmemics, its basic assumptions and concepts will be treated more fully in the chapter on theoretical background.

Analysis of Discourse Types

In the last three decades, individual scholars and small groups of researchers have attempted to address linguistic problems at levels of higher than that of the sentence. Grimes (1975:28) states that discourse analysis studies have been done for more than seventy languages. This line of research was led by linguists such as Kenneth Pike, Longacre, Grimes, Halliday, Dressler and Van Dijk.

Pike and his group focused on the discourse structure of some Peruvian and Brazilian languages. Longacre and his group, on the other hand, analyzed the discourse of many languages of the Philippines, Mexico, New Guinea, and the indiginous languages of Panama,

Columbia, and Ecuador. Gleason, Tabor, and Cromack worked on some African languages such as Sango, Fulani and Kate of New Guinea. Grimes guided many studies on Paressi of Brazil, Chuave of New Guinea, Kalinga, Ivatan, and Mamanwa of the Philippines. Grimes edited "Papers on Discourse" (1978), a collection of field studies dealing with different aspects of discourse phenomena in different languages. The purpose of these studies was to establish the discourse patterns in different languages for the sake of reshaping the theory of language. Another result of these studies was the establishment of a typology of discourse types. Longacre (1968), for example, was able to differentiate several types of discourse in the Philippine languages, chief among which are: narrative, procedural, expository, dramatic and oratory. He confirmed that each type or genre has its own distinguishing features.

The narrative genre received more attention in those studies than other types of discourse probably because this genre exists in almost all languages. It is unlikely to be influenced by outside factors from other cultures; and above all, the narrative is the clearest and most readily analyzable genre. This emphasis on the narrative is reflected in the works of Longacre (1968), Grimes (1978), and Jones (1979). More than half of

Grimes's "Papers on Discourse," dealt with different aspects of narrative discourse; almost all the articles in Jones's (1979) "Discourse Studies in MesoAmerican Languages" were based on particular features of narrative prose.

Fruitful insights into the study of other types of discourse have been gained from the analysis of the narrative genre. It might be helpful to review briefly the analysis of the two major types of discourse, namely, narrative and expository. In the following sections, I will summarize the distinguishing features of each genre and the point of contrast between them.

Narrative Discourse

Linguists analyze narrative discourse to achieve different goals. Firstly, the narrative is a good domain for studying and describing linguistic phenomena such as anaphora, topicalization, tense and aspect. The functions and properties of these devices are usually discourse determined, that is, they can be better analyzed and understood at the discourse level than at lower levels. In this respect, McArthur (1979:116) examined the role of aspect in distinguishing Aguacatec discourse types. He notes that each Aguacatec aspect is a combination of two semantic features, and has

particular grammatical restrictions. The affix 'ja', for example, indicates a completed state or condition and it is used in independent clauses, which the suffix '-l' indicates incomplete definite events and it is used in dependent clauses. Furthermore, he observed that aspect plays an essential role in distinguishing between primary and secondary events in narrative discourse.

Similarly, in describing time reference in Godie, Lynell Marchese (1979:72) observes that the incompletive aspect is the predominant one in folktales and narratives. It is used when the speaker provides background information about customs and settings as well as events.

The second major goal of analyzing narrative is to arrive at the general outline or structure of this genre that differentiates it from other types. This involves identifying and describing the units of discourse, determining the organizational patterns, recognizing the peak or the climax, establishing the roles of participants, noticing how tense changes and how a discourse begins and ends. Along these lines, Bishop, Reid, Button, and Longacre (1968) described the structure of the Totonac narrative. Longacre's works (1968, 1972, 1976) were the most complete investigations conducted within the tagmemic framework. In his analysis of some

Philippine languages, Longacre (1968:3-15) specified the identifying features of the narrative genre as follows:

1. Chronological Orientation

The essence of narrative discourse is chronological sequence or tense orientation. Narration means to narrate past events, or to tell a story which can be real-life or folktale. This pattern of writing is dominant in history and biography. In describing tense orientation in Bontoc narrative discourse, Lawrence Reid (1970:111-112) states that:

Narrative discourse is oriented towards past time. Even though this is the tense orientation, a large proportion of the verb forms in the sentence nuclei are not past, but are interpreted as past, because it is a narrative discourse.

2. Person Orientation

Narrative discourse is chiefly oriented towards the first person especially when the narrator is recounting his own activities, or towards the third person when the narrator is telling a story or describing activities of a third person. This feature of person orientation affects the choice of pronouns in a narrative. Reid (1970:111) observes that in Bontoc narrative only third person pronouns occur throughout a text, apart from the exponents of direct quotations.

3. Longacre (1968:5-7, 56) postulated a tagmemic formula for the structure of narrative at the discourse level and at the level of the paragraph as shown in (a) and (b) respectively:

(a) +Apperature, +Episode, +Denonement, +Anti-Denonement, +Closure, +Finis (+ indicates an obligatory tagmeme; + indicates option).

(b) +Setting (+Build up_i...+Build up_n) +Terminus
With these variations in the formulae, Longacre (1968:5) claims that they indicate the tagmemes in any type of narrative discourse or paragraph.

At the discourse level, the tagmeme that initiates a narrative is termed "apperature" or stage. Its purpose is to open the discourse, to introduce the participants, and to mark time and location, that is to say it provides the general setting for the narrative. The apperature tagmeme is followed by a series of optional episodes that may culminate in the climax or denouement of the narrative. These episodes are followed by either a closure tagmeme that provides a final commentary on the participants or concludes the event in the narrative.

The component tagmemes of a narrative fall into two major categories: nuclear and peripheral. Nuclear tagmemes, such as episode, denonement, and anti-denonement are obligatory in that one or more of these

tagmemes must be present to form the backbone of the narrative. Peripheral tagmemes, on the other hand, such as apperture, closure, and finis, are optional.

The presence or absence of the nuclear tagmemes determine three types of narrative discourse:

(a) Episodic which consists of a series of episodes that do not culminate in a recognizable climax. The nuclear tagmeme of this subtype of narrative is the episode.

(b) Mono-climatic discourse consists of a number of episodes that build up into a single climax.

(c) Di-climatic narrative consists of a climax and an anti-climax or second climax (Longacre 1968:7; Reid et.al. 1968:109-123).

Using very different labels for describing the constituents of narrative, Labov and Woletzky (1967:12-44) outlined the overall structure of narration as follows:

1. Orientation which is almost always equal to Longacre's apperture tagmeme.

2. Complication: series of events.

3. Evaluation: the part of the narrative which reveals the attitude of the narrator by emphasizing the relative importance of some narrative units as compared to others.

4. Resolution: the portion of the narrative that follows the evaluation.

5. Coda: a functional device that relates the temporal perspective to the present, or device that gives a narrative a present relevance.

A tagmemic formula was also posited by Longacre (1968) for the structure of the paragraph. The nuclear tagmeme of the narrative paragraph consists of a number of build-up tagmemes. The setting and terminus tagmemes are peripheral.

To complete the analysis of discourse structure, Longacre (1968) and Reid (1968:112-113) recognized several types of cohesion or linkage.

1. Chaining linkage: a type of textual linkage that maintains the chronological sequence in discourse. According to Longacre (1968:56), this cohesive device consists of repeating, paraphrasing, or referring to, at the onset of a subsequent sentence, a part or the whole of the preceding sentence. This repeated material forms what Longacre calls the 'ground' for the novel material which he refers to as the 'figure'.

2. Grammatical linkage involves the use of grammatical markers that imply a sequential activity such as: then, later, before, having done that, etc.

3. Anaphora and deletion: the use of pronouns to replace nouns or noun phrases.

4. Lexical association: Longacre does not say much about textual linkage. Instead, he quoted what Shirley Abbot comments for Ata Manoba:

This linkage comes via the Dramatics Personae by (1) continuity of a specific Dramatis Persona... (2) continuity through the conversation of the Dramatis Personae (Longacre 1968:13-14).

Expository Discourse

Exposition is one of the major forms of communication which is more important than other types to most people. It simply means exposing information or ideas; its basic function is to explain or expound a topic. In the introduction to his book Patterns of Expositions, Decker (1966) indicates that expository writing may utilize other types of prose such as narrative, description, classification, analysis, comparison, and contrast.

Longacre (1968:26-32) identified certain features of expository discourse. Unlike the narrative, in which the events are chronologically sequenced, expository discourse is not chronologically oriented. The time dimension does not strikingly influence the discourse

structure. Person orientation is not an identifying feature, either. Instead, expository discourse is oriented towards the subject matter. It is essentially impersonal. No formal tagmemic formula was posited by Longacre for this type of discourse. However, Longacre (1968:26-29) specified the overall structure of this genre as consisting of three tagmemes: the introduction tagmeme that introduces the main topic of the discourse; the nuclear tagmeme, which forms the body of the discourse and which is usually expounded by explanatory paragraphs; and the conclusion tagmeme, which is expounded by a sentence or an explanatory paragraph.

At the paragraph level, Longacre (1968:109) postulates a general formula for what he refers to as 'explanatory paragraphs'. The formula is:

+Prelim (+Text, +Expo, +Reason, +Warning) +Terminal,
(nuclear tagmemes are bracketed).

The optional preliminary and terminal tagmemes are like the introduction and the conclusion tagmemes at the discourse level. The only obligatory tagmeme is the paragraph in the text which is usually the topic sentence of the paragraph. This tagmeme is followed by a series of exposition tagmemes that expound it in more detail. The linearity of the paragraph structure formula is significant since the Text tagmeme usually precedes its

supporting details; the Reason tagmeme may follow the Text tagmeme directly. It can be expounded by sentences that are paraphrases of cause margin in the previous sentence which is regularly indicated by the word 'because' (Longacre 1968:118). The Result tagmeme is expounded by a sentence whose cause margin paraphrases the text. The following examples, adapted from Longacre (1968:121), makes clear the relationship between the Text, Reason and Result tagmemes.

FIGURE	GROUND
1. Wow, what a beautiful place that is at Nasulit	TEXT
2. No wonder they chose to live there.	RESULT
	Because it is really a beautiful place there at Nasuli.

In this example, sentence (1) is the text, and sentence (2) is the result, and sentence (3) is the cause margin of the result (2), and in the meantime, (3) explains (1).

The Warning tagmeme is usually rare in expository paragraphs and is usually understood from the context.

The frequency of the constituent tagmemes of the expository paragraphs and the relationship among them

lead to different types of expository paragraphs. In his analysis of the Philippine languages, Longacre (1968:133-141) identified two types of explanatory paragraphs: the coordinate, and the antithetical. The former consists of more than one Text tagmeme that are not antithetical. Linkage between these tagmemes is usually achieved by conjunction or juxtaposition. The latter type involves two tagmemes that stand in opposition to each other. Linkage between two tagmemes is usually accomplished by an adversative such as 'but'.

In analyzing Paez discourse, paragraph, and sentence structure, Gerdel (1976:332) posits the following tagmemic formula for antithetical paragraphs:

(+Thesis, +Antithesis), +Terminus.

He also identified several other types of paragraph such as the descriptive, parallel, contrast and reason.

Composition researchers and theorists have been interested in the analysis of different aspects of expository discourse for the purpose of facilitating the teaching of composition and for establishing the identifying features of each discourse genre. For example, Christensen (1963, 1965), Becker (1965), Jones (1977), Knneavy (1969, 1971), and Sandra Stotsky (1983) have concerned themselves with the linguistic and rhetorical aspects of expository discourse. Becker

(1965:237-242) proposes a tagmemic approach to the analysis of expository paragraphs. He identifies two major patterns of paragraphing in expository discourse. A paragraph of the first type consists of three slots: Topic (T), Restriction (R), and Illustrative (I). The topic is usually stated in the T-slot, defined or restricted in the R-slot, and described or illustrated at the lower level of generality in the I-slot.

The slots in the TRI pattern can be filled in several ways. The T-slot, for instance, can be filled with a simple proposition, or a sentence that implies comparison or contrast, while the R-slot usually provides a more detailed definition of the T-slot. The I-slot, on the other hand, is often expounded by illustrative examples. Each slot with its potential fillers constitutes a tagmeme at the paragraph level.

The second type of expository pattern consists of two slots: the Problem (P) and the Solution (S). The P-slot is commonly filled by a question or a statement of a problem that is solved in the S-slot. The S-slot may be extended to form a TRI pattern.

These two expository patterns are the major types which Becker (1965:240) refers to as 'kernel' patterns. All other types or variations result from four kinds of

operations: deletion, reordering, addition, and combination of slots.

Not only did Becker specify the major types of paragraphs, but he also described the formal markers of tagmemes in paragraphs. These markers can be:

(a) graphic: indention and other punctuation marks,

(b) lexical signals of two types: equivalence classes whose domain might extend over a slot or more, and lexical transitions that include words like 'but' and 'and', for example, that introduces the I-slot, 'in other words,' that usually introduces the R-slot,

(c) grammatical signals including verb sequences and shift in tense,

(d) phonological markers involving things like shifts in pitch, tempo, and volume.

In his article "A Generative Rhetoric of the Paragraph," Christensen (1965) observes a great similarity between the structure of a sentence and that of a paragraph. The topic sentence of a paragraph is parallel to the basic clause of a sentence and the supporting sentences of a paragraph and parallel to single work modifiers and subordinate and relative clauses. According to Christensen (1965:145), a paragraph is "a sequence of structurally related

sentences that are related to each other by coordination and subordination."

Each sentence in a paragraph should be subordinate or coordinate to a preceding one, otherwise, it breaks the sequence. Another study that shows more interest in expository writing was conducted by Sandra Stotsky (1983) on the types of lexical cohesion proposed by Halliday and Hassan (1976) and proposed some more types. The purpose of the study was the development of teaching vocabulary in academic discourse.

Narrative vs. Expository Discourse

In this section, I will summarize the identifying features of narrative and expository genres. These types of discourse differ in factors such as time orientation, person orientation, distinctive tagmemes, and means of linkage. The following chart shows the basic differences between narrative and expository prose.

NARRATIVE

1. 1/3 person
2. Actor or Agent-oriented
3. A completed time encodes as past or present
4. Chronological linkage

EXPOSITORY

- No necessary person reference (usually 3rd person)
- Subject-matter oriented
- Time is not focal
- Logical linkage

Adapted from Longacre (1974:358, 1976:200).

The chart shows a clear contrast between the two genres. Narrative discourse is usually oriented towards first or third person, while person orientation in exposition is not necessary, it usually is in third person. Narrative prose is agent or participant oriented, but exposition is subject-matter or theme oriented. Narrative discourse moves in accomplished time that is usually represented by the past tense form or the historical present, while time in expository prose is not focal. Unlike expository prose which is characterized by logical linkage, narrative discourse is identified by its chronological succession of events. Expository prose gives priority to logical linkage probably because it is concerned with explanation and paraphrases that provide the basis for logical linkage which requires logical movement from theme to theme. Finally, narrative

discourse has a plot, while in expository writing, the explanatory tagmemes are basic.

In this study, an attempt will be made to investigate the structure of Arabic and English expository paragraph with respect to three basic aspects of paragraph structure:

- a. the constituent tagmemes will be identified,
- b. the relationships between them will be specified, and
- c. the lexical cohesive devices that contribute to the cohesion of texts will be analyzed to see how they are used in each language, what types are preferred or more dominant, and what types exist in one language rather than in the other.

Contrastive Discourse Analysis

It is generally recognized that foreign language learners encounter many difficulties in writing in the target language. Many contrastive studies were conducted to analyze the syntactic and lexical errors produced by foreign language learners. However, such difficulties can be overcome more readily than the difficulty foreign language learners encounter in the organization of whole written work or discourse. Kaplan (1966:401) states that many learners of English as a foreign language who have

mastered English grammatical structures are still unable to develop themes in compositions or larger written samples. Their writing still shows organizational defects in cohesion, coherence, and still violates the expectations of native speakers of English.

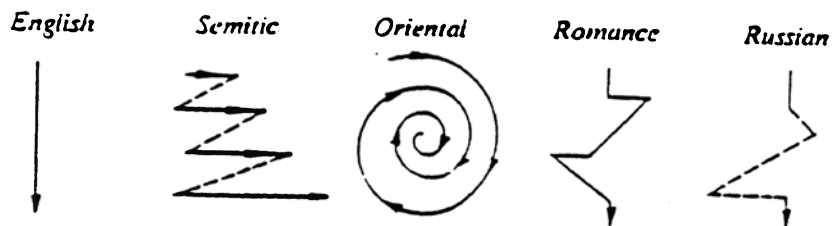
The foreign language learners' competence in discourse organization may be influenced by several factors, chief among which is the interference or negative transfer from their mother tongue. Before any judgment is passed to which the influential factor is, a contrastive analysis of discourse organization ought to be carried out between the learners' native language and the target language they are learning.

In a widely quoted work on foreign language learners' academic writing, Kaplan (1966:399-418) claims that the difficulties in composition encountered by foreign students of English are due to cross-cultural differences. He states that deviations from the expected patterns of organization in foreign language learners' writing stems from negative transfer from the rhetorical pattern and organization of their native tongues.

To support his claims, Kaplan (1966) conducted a large-scale study in which he analyzed more than six hundred expository compositions written by ESL learners from different linguistic backgrounds such as Arabic,

Korean, French, and Russian. Based on the analysis of compositions written by Arabs, Kaplan concluded that the Arabic paragraph is characterized by different types of parallelism. On the other hand, oriental writing has the feature 'indirection'. This means that the main point in a paragraph is never hit directly. Digression also characterizes the French, Spanish, and Russian paragraphs.

All these types of paragraph patterns stand in contrast to the pattern in English which is dominantly linear and direct. An English expository paragraph usually begins with a statement of topic followed by a series of supporting statements that develop the central theme and relate it to the subsequent ideas. In discussing the relationship between sentences, Kaplan (1966:404) notes that in English, subordination rather than coordination, is a sign of maturity of style. This is what makes the Arabic paragraph seem odd to native English speakers. Kaplan (1966:410, 1972:64) graphically represented the different patterns of paragraph organization as follows:



These generalizations concerning paragraph structure and development in other languages remain hypothetical unless they are supported by analytical studies of discourse written by native speakers in their own languages. The compositions that Kaplan used in his research do not necessarily reveal anything about the organization and rhetorical patterns of discourse characteristic of the subjects' native languages.

In subsequent research based on Kaplan's approach, Hinds (1983:184-195) notes that Kaplan correctly identifies an alien schema for orientals and shows that there is a major rhetorical pattern in Japanese that does not exist in English. This style is called 'ki-shoo-ten-ketsu' (Hinds 1983:183). In this pattern, 'ki' introduces the topic, 'shoo' develops the topic, 'ten' forms an abrupt transition, and 'ketsu' forms the conclusion. Hinds demonstrates that the use of this pattern is negatively evaluated by native speakers of English.

In comparing English and German expository writing, Michael Clyne (1983:38-49) observes that English expository prose is linear and lacks redundancy, whereas German prose is more digressive because of the grammatical structure of the language that allows

multiple embedding where verbs accumulate at the end of a sentence.

In the same volume, Kachru (1983:50-77) compares Hindi and English narrative and expository paragraph structure. He states that unlike English, Hindi shows a greater degree of tolerance for digressions that have a linking function between episodes in paragraphs. Unlike Clyne, he attributes this digression in expository prose to sociocultural factors. Kachru concludes that Indian English texts present difficulties to native speakers of English partly because of the different paragraph structure that Hindi has, and the different cohesive strategies such as the use of tense, reference, and ellipsis. Furthermore, he observes that deletion or ellipsis is the favored anaphoric device in Hindi.

Marathi, like Hindi, according to Pandharipandi (1983:128), is characterized by what may native speakers of English consider as 'a circular paragraph' pattern with many digressions. A Marathi paragraph usually begins with a hypothesis followed by arguments to either prove or disprove that hypothesis. The last part of the paragraph confirms or opposes the validity of that hypothesis.

Tsao (1983:99-177) compared and contrasted Mandarin Chinese and English textual cohesion, textual coherence

and stylistic preferences in both languages. Using Halliday and Hassan's system of cohesion, Tsao found striking differences between English and Chinese in the use of cohesive devices, reference, ellipsis, and substitution. Co-referentiality in English is usually indicated by pronominalization while Chinese prefers deletion. A Chinese learner of English is expected to use zero-pronouns in many contexts where deletion is not acceptable in English. The pronoun 'it' in Mandarin is chiefly used to refer to animals only. If a Chinese speaker needs to refer to inanimate objects, he uses two other strategies: lexical repetition of the reference which is in the subject position, and a zero pronoun if it occurs in other positions. Tsao (1983:110) agrees with Mo's (1982) view of the Chinese paragraph development which involves four steps: 'chi' indicates the beginning or the introduction of the topic, 'cheng' elucidates the topic, 'juan' indicates a turn to another point, and 'he' which provides the closing or the conclusion. It is 'juan' that makes the Chinese paragraph indirect to native speakers of English, because it involves a change of mood, tone, topic, time, or grammatical subject.

Although all the above mentioned studies support Kaplan's hypothesis of the relativity of rhetoric, other

researchers do not accept it as an absolute. Mohan and Lo (1985:515-535) do not agree that all difficulties in writing a foreign language can be predicted by comparing and contrasting the rhetoric and discourse organization of the learner's native language with those of the target language. They also note that the Chinese classical style of writing is now old-fashioned and has been replaced by the spoken language style, which is similar to that of English. What is more important than transfer, in the author's view, is the developmental factors and appropriate instruction in teaching composition.

In her unpublished thesis, Sistrunk (1987) concludes that the errors produced by Arabic speaking learners of English subordination are mainly developmental. However, neither Mohan's nor Sistrunk's studies denies the role that negative transfer plays in the process of foreign language learning.

This review shows that differences among languages are present not only at the sentential level but also beyond it, that is, at the discourse level. These differences have been identified between English and many other languages for pedagogical and theoretical purposes as well. I have not found a single contrastive study between Arabic and English at the discourse level. Accordingly, this study is in order and will contribute

to the relatively new developing field of contrastive discourse analysis as it is an attempt to describe the rhetorical patterns and organization of Arabic discourse written by professional Arabs, not English compositions written by Arabic speaking students.

Chapter 3

Theoretical Framework

This study is based on the tagmemic theory as developed by Pike (1967, 1977, 1982). The theory derives its name from the concept of 'tagmeme', which was originally used by Bloomfield (1933) in a rather different sense. Tagmemics is based on a number of theoretical assumptions. Language, in this view, is not abstracted from life; it is not an abstract mathematical system, but a component or system within the whole system of human behavior. Pike (1967) emphasizes the need for having an integrative theory that deals with verbal and non-verbal aspects of human behavior as a unified human activity. He states: "Language is a phase of human activity which must not be treated in essence as structurally divorced from the structure of non-verbal human activity (p.26)."

Another assumption of this model is that language is trimodally structured. Every unit of human behavior, verbal or non-verbal, can be described in terms of three modes: the feature mode, the manifestation mode, and the distribution mode. Each unit of behavior has certain characteristics or properties that can be used in identifying and contrasting it with other units. These identificational and contrastive features or properties

are what make a unit of behavior distinct from others (the feature mode). For example, the English phoneme /k/ can be identified by the features of being voiceless, velar, aspirated stop. It contrasts with /g/ in the features of voicing and aspiration. Since these two units are conceived by native speakers as different units, they are said to be emically (phonemically) different.

A unit can also be described in terms of its distribution or occurrence as a unit belonging to a particular class or system, and in terms of its relationships with other units in that system (the distribution mode). In the above example, the phoneme /k/ has the distribution as a member of a class of sounds called 'stops' that can occur initially, medially and finally, and it can cluster with only a restricted number of consonants.

Finally, within the same emic unit, there might be variations or different manifestations that are referred to by Pike and Pike (1981:2) as "etic" differences. These different realizations of a unit can help provide a fuller description of that unit (the manifestation mode). For example, the phoneme /k/, in English, can be manifested as aspirated, unaspirated, fronted or retracted.

These three modes are reflected in language in its hierarchical structure at various levels. For example, the English phoneme /t/ has the identifying features (the feature mode) of being voiceless, alveolar and stop. It can be realized as aspirated, non-aspirated, glottalized, dental or as a flap (the manifestation mode). It has the distribution as a member of a class of sounds called 'stops' that can occur initially, medially, and finally.

Tagmemics also postulates that language itself is hierarchically structured. There are three simultaneous and parallel hierarchies: the phonological, grammatical, and referential. These hierarchies are simultaneous in the sense that each hierarchy stems from the same shared substance. In other words, these hierarchies are not in a one-directional sequence with phonology at the bottom and syntax at the top. The tagmemic hierarchies are parallel in the sense that they are equally important and each one is distinct from the other. The concept of hierarchy means that constituents at each level are contained in larger ones. In this respect, tagmemics recognizes units beyond the level of the sentence. For example, a text can be viewed as a hierarchical structure. At the lowest level, word or morphemes are joined together to form larger structures such as

sentences, which, in turn, are put together to form paragraphs, sections and whole texts.

In the following section, I will explain the fundamental concepts around which tagmemics revolves.

Tagmeme

The tagmemic theory derives its name from the concept of the tagmeme. This term is derived from the Greek word 'tagma' which means 'arrangement'. It was first used by Bloomfield (1933:166-167) to refer to the smallest meaningful unit of grammatical form. For example, the utterance 'Come!' consists of two grammatical forms: the infinitive form of the verb and the exclamatory final pitch. Each unit with the meanings associated with it is called a tagmeme. However, the tagmeme has been used in a rather different sense in tagmemics. Pike and Pike (1982:459) define the tagmeme as "a constituent of a construction described in terms of four general features: slot, class, role, and cohesion."

The slot, i.e., the place of occurrence and prominence of a constituent or tagmeme within the whole structure, can be nucleus or margin. The margin can be further subdivided into pre-margin and post-margin. This division is based on the occurrence of the margin constituent relative to the nucleus tagmeme. A pre-

margin precedes the nucleus, while a post-margin follows it. The post-margin tagmeme may consist of a subordinate theme that occupies the nucleus slot, preceded or followed by margin tagmemes. These degrees of nuclearity and marginality are referred to by Pike and Pike (1982b:18) as "degrees of prominence."

The second feature is that of the class. The form or the type of construction which fills the slot is indicated in this cell, that is, it specifies what or who is in the slot. Knowing the class of items that can occur in a certain place helps characterize the whole structure since there are characteristic types of structures in each place or slot. In the story of The Rich Young Man that is analyzed later in this section, the pre-margin and post-margin tagmemes are both expounded by sentences that can be categorized under the class of independent declarative sentences. The types of constructions in a class can be further subcategorized into categories based on transitivity, mood, and voice. These fillers differ from level to level. Pike and Pike (1982:404-409) mention different types of fillers at different levels. At the sentence level, for example, the types of constructions that may fill a class cell include subtypes of sentences such as independent declarative sentences that initiate speech or

conversation, interrogative sentences, imperative, or a dependent clause that provides a minimum response to an initiating sentence. At the higher level of the paragraph, the fillers of a class can be sentences of any kind or sentence clusters. A still higher level such as that of monolog, which is the development of a theme by one speaker, the types of constructions used as fillers of a class are different. They include types like narrative, lecture, sermon, poem, or epic as a nucleus; and an initiating speech or a paragraph type as pre-margin.

The third cell of a tagmeme is that of role. This feature specifies the function of the unit in relation to other parts of the whole structure. In other words, this cell answers the question "Why is this unit used?" Unlike the slot-cell which has three categories, i.e., pre-margin, nucleus, and post-margin, the role slot can have different categories depending on the function that each constituent may serve in relation to the nucleus tagmeme. For example, the nucleus tagmeme of a paragraph may have the role of introducing the primary theme, and the post-margin tagmeme may have the role of developing the primary through illustrative or explanatory sentences. Roles may differ from one level to another. At the paragraph level, for example, the nucleus tagmeme

may provide the primary theme or present a problem while the marginal slot may have the role of developing the primary theme through illustration, expansion, causal relation, or solution. Pike and Pike (1982:397-409) extensively showed the relations between the four cells of a tagmeme at different levels starting from the word level up to the monolog level. At the monolog level, on the other hand, the nucleus may be said to have the role of story-telling, or presenting the climax.

The fourth feature of the tagmeme is cohesion in which each constituent governs or is governed by others. In this cell, the cohesive devices that link constituents together are entered.

The cohesion cell of the tagmeme with all the features entered into it shows the appropriateness of the textual unit to other units in the whole structure. Since the tagmeme is a 'unit-in-context' the cohesive cell cannot be isolated from other cells such as slot and role. The interaction between slot and role is cohesive. For example, the slot-cell shows the position of a tagmeme or constituent in relation to other units in the whole structure. The location of the nucleus tagmeme determines the location of the other tagmemes. There would be no pre-margin if there were no nucleus.

The post-margin is so labelled because it occurs after a nucleus. Similarly, in the role-cell, there would be no development or illustration tagmeme if there were no primary theme or topic to be developed or illustrated. In this sense, a linguistic unit or constituent acquires its meaning when it is described in relation to other units.

Another type of cohesion that is relevant to this study is the cohesion based on the roles of sentences and the relation between these roles. The semantic roles of propositions proposed by Milic (1969:21) show how cohesion can be maintained by the inferred roles that propositions or sentences have in a certain text. A sentence can be an alternative, illustrative, additive, explanatory, illative or be in causal relationship to the preceding one. These semantic relations provide cohesion and coherence to a text. Cohesion can be overtly marked by a conjunction or an anaphoric expression as well.

The four cells of the tagmeme are shown in the following chart.

SLOT	CLASS
Where is the item in the including whole?	What items can be appropriately substitutable in a slot?
ROLE	COHESION
What is the relationship of the set of items to other sets in the including whole?	How is a tagmeme or part of it tied to other units?

Adapted from Pike and Pike (1982:75, 1983b:8).

The tagmeme was later defined by Pike and Pike (1983b:8) as "a unit-in-context" with its four mutually dependent features. A member of a class fills a slot which has a specific role in a particular context, spoken or written. The four-celled tagmeme was originally used to describe grammatical units or constituents, and it was later employed by Pike and Pike (1982), and Longacre (1982) to describe larger units of discourse. The constituents of discourse such as sentences, sentence cluster, paragraph or strings of paragraphs can be described in terms of discourse level slots. A discourse, for example, is a string of paragraphs, and a paragraph slot is filled by a sequence of related sentences.

Since this study employs the tagmemic principles in the analysis of paragraph structure in Arabic and English expository discourse, a sample tagmemic analysis for the

structure of a story and an expository paragraph will be provided as an illustration. The short story of The Rich Young Man is quoted from Pike and Pike (1983:10-11).

1. Once a man came to Jesus. 2. "Teacher," he asked, "What good must I do to receive eternal life?" 3. "Why do you ask me concerning what is good?" answered Jesus. 4. There is only One who is good. 5. Keep the commandments if you want to enter life." 6. "What commandments?" he asked. 7. Jesus answered: "Do not murder; do not commit adultery; do not steal; do not lie; honor your father and mother; and love your neighbor as yourself." 8. "I have obeyed all these commandments," the young man replied. 9. "What else do I need to do?" 10. Jesus said to him, "If you want to be perfect, go and sell all you have and give the money to the poor, and you will have riches in heaven; then come and follow me." 11. When the young man heard this he went away sad, because he was very rich.

This short story can be divided into three major tagmemes at its highest level. The introductory tagmeme that has the function of establishing the setting (time, place, and participants) is manifested in the first sentence. The nucleus tagmeme which forms the main body of the story is expounded in sentences 9-10. The closure tagmeme which provides the conclusion for the story is manifested in the last sentence. Following Longacre's (1968) formulation of tagmemic structure, this story, at the highest level of discourse structure, can be formally

represented as follows: [+Preliminary +Nucleus +Closure]. Pike and Pike (1982) analyze the story into two formulas which may be further subdivided into lower level constituents as follows:

1. Story = + Pre Mar Ind. Dec./Sent.1

Setting 1. SAHN >
 2. StTM >
 3. StSpc >
 4. StPrc Pnt >

1. Once a man came to Jesus.

+ Nucleus Conver. 2-10

Interaction 2. > StTM
 3. > StSpc
 4. > StPrc Pnt

2-10. Teacher...follow me.

+ Post Margin Ind.Dec./Sent.11

Outcome 2. > StTm
 3. > StSpc
 4. > StPrc Pnt

11. When the young man heard
 this, he went away sad, because he
 was very rich.

2. Conversation =

+ Nucleus Intial Resolved
 Exchange (2)-(5)
 Problem 5. Top > (Topic)
 6. Del. Redun. >
 (Deletion
 Redundances)

2-5. Teacher...enter life.

	Sequential (6)-(8)
	Resolved
	Exchange
<u>+ Margin</u>	(9)-(10)
Development	5. > Top
	6. > Del. Redun.

6-8. What...replied.

9-10. What else...follow me.

SAHN:	Speaker-Addressee- Here-Now Axis
StTM:	Story Time
StSpc:	Story Space
StPrc Pnt:	Story Participant
Top:	Topic
Del-Redun:	Deletion Redundancies

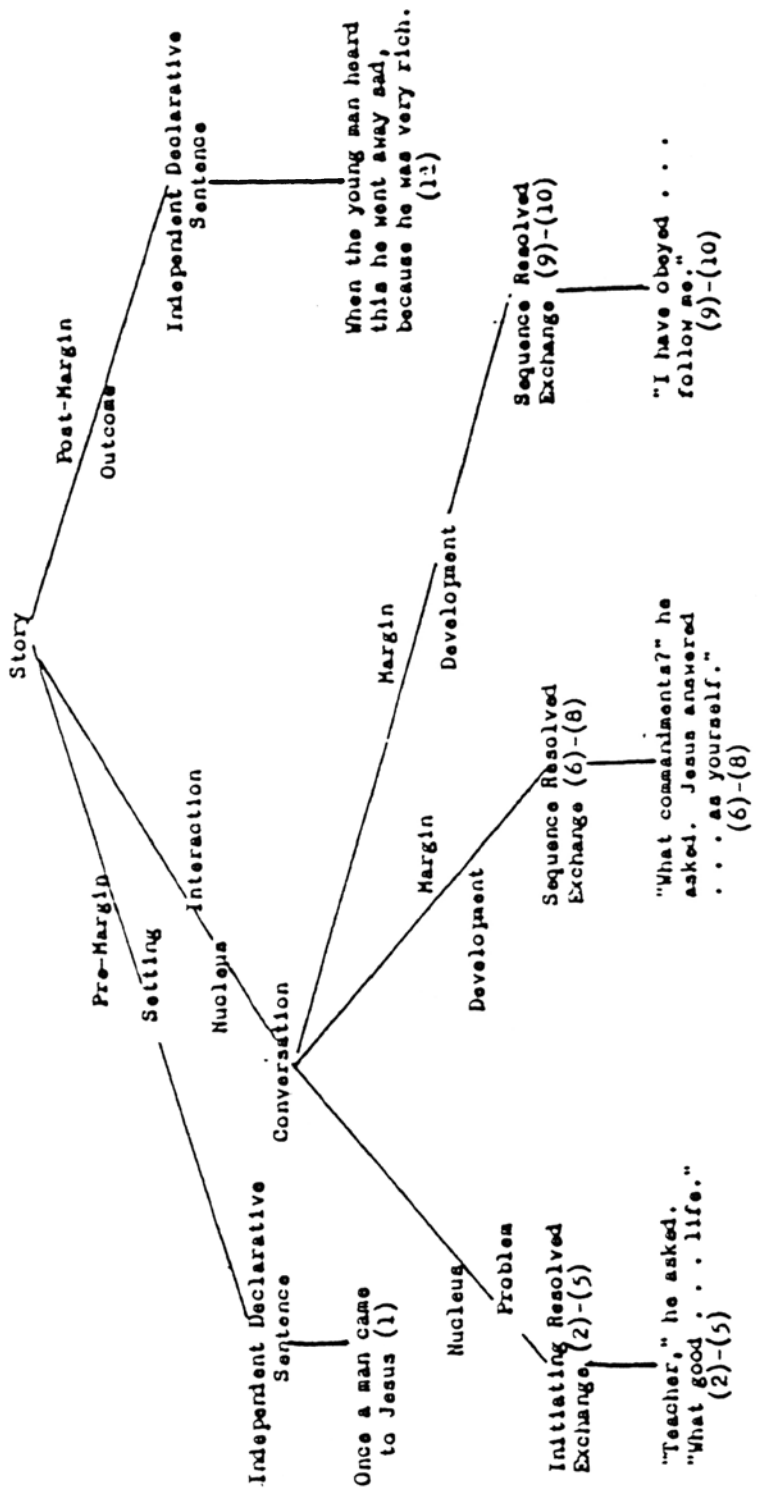
Two of the highest level formulas of The Story of the Rich Young Man, Pike and Pike 1982:376.

The chart shows the two major formulas with their constituent tagmemes. The story formula consists of three major constituents: the pre-margin tagmeme, manifested in the first sentence, serves to provide the setting of the story; the nucleus tagmeme, expounded in sentences 2-10, presents the problem and resolution of the story; the post-margin tagmeme, shown in sentence 11, represents the conclusion or the closure of the story. The conversation formula includes the nucleus tagmeme that presents the problem, and the post-margin tagmeme that develops and concludes the story.

The chart also displays each tagmeme with its four component cells: slot, class, role, and cohesion. The nucleus tagmeme of the story occurs after the pre-margin tagmeme (slot). It is manifested in sentences 2-10, which are either interrogative, imperative or declarative (members of the class cell). The slot with its fillers serves to provide the main topic of the paragraph represented in the interaction between the young man and Jesus (role). The fourth cell shows how the constituents of this tagmeme hang together or to other tagmemes (cohesion). The symbol > preceding the second sentence indicates that it is governed by the base line of time margin indicated in the preceding sentence. The third sentence is governed by the story space that provides a period of reference or the location of participants, therefore it is entered in the cohesion cell preceded by the symbol >. When this symbol is placed on the right of a constituent, it indicates that this constituent governs the occurrence of a tagmeme or part of it. The term "govern" is used here to indicate that the governed constituent is motivated by the governing constituent. That is to say, it maintains the theme line of the paragraph in which it occurs. The cohesion system proposed by Pike and Pike (1982:392-393) consists of twenty-nine features. This renders the system too

complicated for an analysis to be pedagogically useful. A simple system of cohesion based on sentence relations or roles will be adopted and explained in more detail in a later section of this chapter.

The tagmemic structure of this story can also be shown in a hierarchical upside-down tree diagram with branches showing the parts, and nodes representing the unifying structures. Each node is labelled with the class of structure occurring in that node. In the following tree diagram, the label above the branching line represents the slot of the unit in the containing grammatical construction, while the one below it represents the role or the function of that unit. The terminal nodes are filled with the appropriate actual parts from the story.



Tree diagram of the story of the Rich Young Man
 (Adapted from Pike and Pike 1982:12)

The tree can be read as follows: the story consists of three tagmemes: the pre-margin, the nucleus and the post-margin. The pre-margin has the role of establishing the setting and it is manifested by an independent declarative sentence. The nucleus tagmeme that follows the pre-margin functions as interaction and is filled by interrogative or declarative statements. The nucleus tagmeme is followed by two margin tagmemes developing the theme of the conversation. The third major tagmeme is the post-margin which provides the outcome and is expounded by an independent declarative statement.

Expository paragraphs can be analyzed in a similar way. The following analysis is based on a paragraph written by Roger Revelle (1970) and quoted by Kane and Peters (1986:173).

1. In many ways, the quality of our environment has deteriorated with each new advance of the gross national product.
2. Increases in electric power production mean the burning of more coal and fuel oil, and hence the discharge of more sulphur dioxide into the air.
3. The growth of the paper industry has brought a vast increase in trash.
4. The production of new automobiles and the discard of old ones has resulted in unsightly piles of hulks.
5. The growth of urban automobile transportation is choking both the mobility of the city and the lungs of city dwellers.

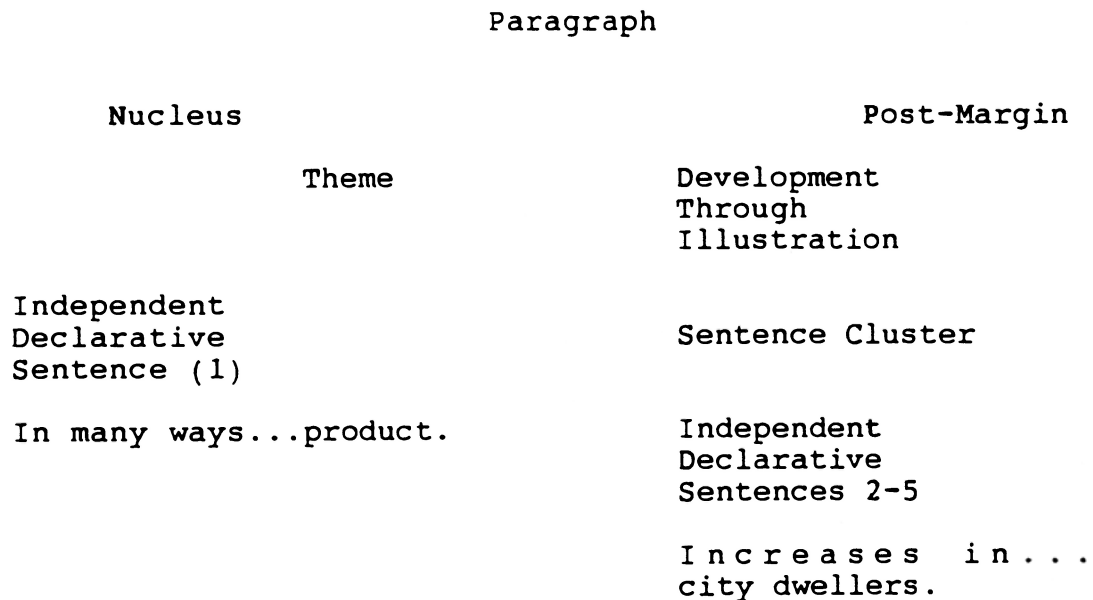
This short expository paragraph consists of one major theme represented in the first sentence. The topic is then developed by illustrative examples. In tagmemic terms, this paragraph consists of two major constituent tagmemes: the nucleus and the post-margin. The nucleus tagmeme is manifested in the first sentence which is an independent declarative statement. This sentence represents the main theme of the paragraph. The post-margin tagmeme is expounded by the independent declarative statements 2-5. Each constituent of the post-margin tagmeme contributes to the development of the major theme expressed in the nucleus tagmeme. The pattern of development that this paragraph represents is one of the most common and effective ways of generating an expository paragraph. A tagmemic formula for the structure of this paragraph would be as follows:

SLOT	CLASS
+ Nucleus	Independent Declarative Sentence (1)
ROLE	COHESION
Primary Theme	In many ways... product >

1. In many ways...national product.

SLOT	CLASS
+ Post-Margin	Independent Declarative Statement (2-5)
ROLE	COHESION
Development through illustration.	1. > 2-5 2. Lexical Collocation [environment, trash, air, dwellers.] 3. Hyponymy: national products... paper industry...

The tagmemic structure of this paragraph can also be represented in a tree diagram as follows:



The analysis of the preceding expository paragraph shows that it consists of one major theme around which the whole paragraph is developed. The theme of the

paragraph is developed through illustration since each constituent of the post-margin tagmeme provides an illustrative example of the many ways in which the environment deteriorates. The two major tagmemes of this paragraph are shown with their four cells: slot, class, role and cohesion.

In the above-analyzed expository paragraph, the nucleus tagmeme governs the constituents of the post-margin tagmeme. The post-margin tagmeme maintains cohesion to the nucleus tagmeme through two basic devices. Each constituent of the post-margin tagmeme is logically related to the primary theme, e.g., there is a particular type of logical relation, illustration between the second sentence and the first. The same relation holds between the rest of the sentences and the first one. All the constituents of the post-margin tagmeme are related to the theme expressed in the nucleus tagmeme. The second cohesive device that links the post-margin to the nucleus is lexical collocation. The words and phrases "sulphur dioxide into the air, paper industry-trash, piles of hulks", and "dwellers" collocate with the word "environment" in the nucleus tagmeme. This shows that logical relations and lexical collocation are the major cohesive devices that tie together the constituents of this expository paragraph. Cohesive devices are not

always overt. Unity of theme can maintain cohesion between constituents that may otherwise look incohesive, and it may be expressed through logical relations between propositions as well.

Hierarchy

Pike and Pike (1982:3) define the concept of hierarchy as the relationship in which "small units are found within larger ones, and these in turn in still larger units". These part-whole relations are characteristic of the three tagmemic hierarchies: the phonological, referential and grammatical.

Grammatical Hierarchy: this is concerned with the distribution of lower-level grammatical units into higher level units. For example, morphemes in English link together to form the higher level of words which are in turn strung together to form phrases, clauses, sentences, paragraphs and texts. Pike and Pike (1982:4) characterize grammatical hierarchy as follows:

When types of specific, dictionary (lexical) items or sequences of items serve as parts of larger units made up of such items, the relation of the included parts to types of including patterns (and, through the including whole, to each other) makes up a grammatical hierarchy...

This part-whole relationship means that higher-level units, and higher-level units can be analyzed into their lower-level immediate constituents. According to Pike and Pike (1982:20), the list of levels that make up a grammatical hierarchy are from larger to smaller: conversation, exchange, or minimum dialog, monolog, paragraph or sentence cluster, sentence, clause, phrase, word, morpheme cluster, morpheme.

The linguistic units or the levels that build up the grammatical hierarchy starting from the smallest (morpheme) to the largest (conversation) can be grouped into pairs, each of which can provide the same meaning. For example, an exchange indicates a type of social interaction, and so does the conversation. Since both the exchange and the conversation mean the same thing, 'social interaction', they can be grouped together. Pike and Pike (1982:23) show the paired grammatical levels with their meanings in the following chart:

MEANING UNIT	MINIMUM UNIT	EXPANDED
Social Interaction	Exchange	Conversation
Theme-Development	Paragraph/Sentence Cluster	Monolog
Proposition	Clause	Sentence
Term	Word	Phrase
Lexical Package	Morpheme	Morpheme Cluster

Chart of Paired Grammatical Levels.

The second type of part-whole hierarchy is the referential hierarchy. This type is the largest and the most complex of the three hierarchies. It is concerned with what speech can refer to, and it is what Pike and Pike (1983b:35) call "communication referents". In discussing the referential hierarchy, Pike and Pike (1982:321) define it as follows:

The etics of such a referential hierarchy is whatever any person in the world does or can talk about ... the linguistic referential hierarchy of human beings deals only with items which are or have been talked about by humans, in some part of their present or past culture.

Like the grammatical tagmeme, the referential tagmeme consists of four features: slot, class, role and

cohesion. Referential class answers the question of what is happening, and who or or what is involved in those events. In other words, referential class consists in the different ways of talking about one concept; or the different referring expressions used for the same referent. Referential slot specifies the place or the creation of these events in terms of time and space and shows their prominence relative to other constituents or events in the whole structure. The role feature of the referential tagmeme explains why those events or actions took place. Finally, the cohesion feature shows how the tagmeme can be understood as an integrative part of the whole. Cohesion can be achieved by having a particular universe of discourse in mind. A proposition can be considered true or false according to our assumptions about the universe of discourse; it is true or false insofar as it is compatible or incompatible with a particular universe of discourse (Pike and Pike 1982:321-335, 1982:100-103, 1983b:35-37). The four-celled referential tagmeme can be displayed as follows:

<p>SLOT</p> <p>Where is the item on the including wave?</p>	<p>CLASS</p> <p>Who or What, specifically, is the form of the action: or the specific individual or thing performing it?</p>
<p>ROLE</p> <p>Why is the action performed--to do what, with what purpose? Or what is the role identity of the actor or item?</p>	<p>COHESION</p> <p>How does this item relate ro others within the system how does it govern them or how is it governed by them?</p>

Pike and Pike (1982:325).

Despite the fact that both the referential and grammatical hierarchies have some features in common, they are still different. In a narrative paragraph, for example, the grammatical constituents are arranged in a linear structure; that is, a main clause may precede or follow its subordinate clause. But the referential structure of the same paragraph indicates the chronological order of events regardless of their grammatical display. When one says "Mary came home, then she watched a movie", the order in which the events are told and their happening order are the same, but when the order of the clauses is reversed, the grammatical structure is reversed but the referential structure remains the same. Another difference between reference and grammar lies in the semantic relations between

constituent in grammatical and referential structures. The relation between grammatical units are "general relations" such as actor, patient,...whereas reference is concerned with the "encyclopedic or specific character of the event" (Pike and Pike 1981:27). Finally, in the referential hierarchy, unlike the grammatical one, there is room for handling truth and falsity. To clarify this point, Pike and Pike (1981:27) gave an example of a simple mathematical equation 'nine plus four equal one'. This equation is grammatically acceptable but unacceptable in terms of reference since it violates the ordinary rules of mathematics. It becomes acceptable only when one is referring to a clock.

Another type of hierarchy which is not part of the part-whole type is that of taxonomy. In this type, units are grouped according to shared features into manageable classes in terms of specific-generic relations. Higher level (generic) constituents are more general than the lower (specific) constituents. In a tagmeme, for example, the highest level margin which has the function of developing the nucleus, may have more specific functions at lower levels such as illustration, comparison or contrast. Themes in a tagmeme may also be of two types: primary (general) and secondary (more specific). These specific-generic relations may be

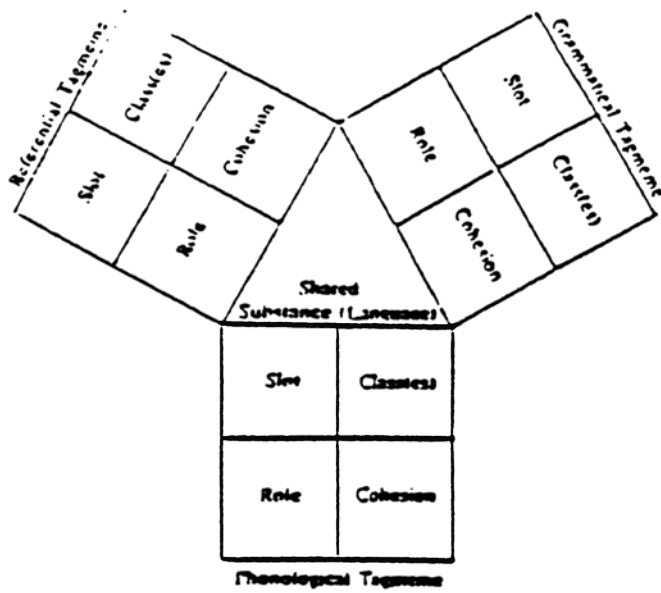
utilized as covert devices for maintaining the cohesion of constituents.

Taxonomic hierarchy is also important in describing expository discourse because unlike narrative discourse which is chronologically oriented, expository discourse is subject-matter oriented and there might be more than one nucleus slot in a tagmeme where the former introduces the primary theme, while the latter provides the secondary theme. In such a case, the higher level and lower level tagmemes could be in generic-specific relationship to each other. This agrees with what Christensen (1965:145) observes about the levels of generality of sentences in a paragraph: "when sentences are added to develop a topic or subtopic, they are usually at a lower level of generality".

The third type of part-whole hierarchy is the phonological hierarchy which is defined by Pike and Pike (1982:3) as "the relation of sounds to their containing (including) syllables, stress groups, pause groups and rhetorical periods". Since the study is not concerned with phonology, I will not go into the details of the phonological hierarchy.

The concept of the hierarchical structure of language is not a unique contribution of Pike. Structural linguistics, for example, posits a one-

directional sequence of linguistic levels with phonology at the bottom and syntax at the top of the hierarchy. However, the hierarchies posited by Pike are distinct and equally important. Each hierarchy begins with the minimal structural unit that is included into larger units. In this sense, units are related to each other not only in terms of sequence but also in terms of layerings. The three hierarchies share one common aspect of language which is the lexical substance. The following display shows how the three hierarchies intersect:



Pike and Pike (1982:323, 1983b:109).

Context

The third major concept of tagmemics is context. Pike and Pike (1983b:8) define the tagmeme as a 'unit-in-context'. This reflects their emphasis on the importance of context in the analysis of language. According to Pike and Pike (1982:440) context is defined as "the setting of a unit in its phonological, grammatical, or referential surroundings".

A linguistic unit has form and meaning. Form is the linguistic manifestation of a unit and sequential arrangement or occurrence of a unit in relation to other units in the language. Meaning, on the other hand, is the impact of that form on the hearer's behavior or perception. This relationship between form and meaning is called "form-meaning composite" (Pike and Pike 1982:2). Context is clearly noticed in the four-celled tagmeme. The slot describes the occurrence of the form in relation to other forms, i.e., textual context; the class cell shows what type of constructions can fill that context whereas the meaning of the form or construction is shown in the role slot. The slot and the class cells provide the formal properties of the construction while the role and cohesion cells provide its meaning and specify the manner in which it is related to other parts in the whole structure.

The notion of the universe of discourse is relevant in discussing the concept of context since language does not take place in a cultural vacuum but is related to a certain time, place and situation. Pike and Pike (1982:461) define the concept of universe of discourse as:

The temporary frame of reference, topic, style, genre, discipline, or general situation in which a linguistic unit occurs, and which leads to cohesion in relating events or propositions in various ways which leave parts of the whole compatible with each other.

The type of genre, expository or narrative, may affect the choices of constructions or words in a certain context. Discourse genres differ from each other in terms of person, orientation and linkage.

The last concept of tagmemics is that of perspective. Pike and Pike (1982:5) characterize three types of perspective. The normal or "static" perspective reflects the view of an observer of the world or of a whole as made up of discrete elements or particles, while in the dynamic or wave perspective, the observer considers these discrete elements or events as a whole composed of those particles. Finally, in the relational perspective, the observer may focus on the relationships between units.

It has become clear that tagmemics has certain characteristics that make it more applicable to discourse analysis than other modes of linguistic analysis. It recognizes linguistic units beyond the level of the sentence such as sentence cluster, paragraph, section, and whole texts. These units are hierarchically structured in the sense that small (lower-level) constituents are contained in larger (higher-level) structures. Discourse units, in this model, are discourse level slots which can be filled by a sentence or a sequence of sentences at the paragraph level, a paragraph at a higher level, or by a text of a particular type, i.e., expository, narrative, at the discourse or genre level. These discourse units are related to each other not merely in terms of sequence, but in terms of layerings. That is to say, the larger units can be determined partly in terms of their smaller or lower-level constituents.

Language in tagmemics is not an abstract mathematical system and it must not be detached from the culture and context in which it is used.

This study assumes that expository discourse has an identifiable structure of its own, but it differs cross-linguistically because expository discourse, like any other aspect of language, does not occur in a cultural vacuum.

Chapter 4

Methodology and Procedure

Introduction

Contrastive analysis is fundamental to the development of a general theory of language and to the full characterization of specific languages. Studies in contrastive linguistics have been conducted chiefly at the lexical, phonological and syntactic levels within the boundaries of the sentence. However, linguists in the last three decades have realized the importance and necessity of extending the scope of contrastive analysis to a level higher than that of the sentence. Most of the studies that compare and contrast language structure at the discourse level have been conducted on expository essays or compositions written by high school or university level students. Kaplan (1966) based his generalizations on English compositions written by native speakers of other languages. Nathaniel Norment (1984) based his analysis of organizational structures and cohesive devices on compositions written by native and ESL Chinese, English, and Spanish students. Idris (1982), on the other hand, investigated thematic structures and logical relations in English and Malay expository texts.

There are, however, obvious advantages of any discourse analysis study based on compositions. The researcher can obtain data on any topic he prefers. He can also guarantee that the texts or the samples of his research are parallel in content, a matter that simplifies the analysis, meets the objectives of the study, and provides a stronger basis for drawing more valid generalizations.

The shortcomings of depending chiefly on students' compositions ought not to be overlooked. Contrastive analysis involves identifying the similarities and differences at the phonological, syntactic, and lexical levels. The composition of a foreign language learner does not necessarily reflect the rhetorical and organizational patterns existing in his or her native language. Therefore, any conclusion or generalization about the student's native language may not be valid. The organizational patterns exhibited in a student's composition may not be the result of interference. They might reflect the temporary competence of the foreign language learner in the process of learning the target language. This is what has been called "idiosyncratic dialect" (Corder 1971), "approximative system" (Nemser 1971), and "interlanguage" (Selinker 1972). By and large, these terms refer to the unique characteristics of

the language of the foreign language learner at a certain stage which conforms to neither the systems or norms of the learner's mother tongue nor to those of the target language. Thus, the deviations that occur in students' compositions might be erroneously accounted for in terms of mother tongue negative transfer.

Since this study will investigate professionally written texts in Arabic and English, it is expected to circumvent the disadvantages of the approach based on students' compositions. Professionally written texts have, most probably, undergone revision by their own authors and editing by others. Therefore, they are closer to the accepted organizational and rhetorical norms and patterns of the language they represent.

Selection of Texts

Forty paragraphs from the expository discourse of each language are chosen for analysis in this study. They are selected from pre-university and university textbooks. The texts from which the sample is chosen are assumed to reflect the organizational and rhetorical patterns in each language. The texts were chosen according to four conditions. They have to be written by professional native speakers of each language. This condition will partially avoid the influence of other

cultures that might be reflected in the organization of texts. In conjunction with this condition, another precaution was taken into consideration, namely, these texts must not be translated from other languages. Furthermore, these texts must not have undergone any process of simplification. Simplified texts were rejected because they might have lost or gained some sentence connectives, they might have undergone a process of lexical change, that is, deleting a vocabulary item, or substituting one for another. Finally, portions of these simplified texts might have been deleted. Therefore, simplified texts do not necessarily reflect the organizational and rhetorical structure of the original ones.

Analysis of Texts

This study investigates three major features of paragraph structure, namely, partitioning a paragraph into functional slots or tagmemes, specifying semantic roles or logical relations holding between sentences and tagmemes in a paragraph, and determining the lexical cohesive devices that maintain cohesion and continuity between the constituents of a paragraph. Each of these three features is indispensable for providing a complete description of paragraph structure. The exclusion of any

of these features will render an incomplete or distorted description of paragraph structure.

The following procedures will be followed in the analysis of texts:

1. Basis of analysis:

The analysis of paragraphs in this study is based on the notion that expository paragraphs can be divided into functional slots or tagmemes that can stand in several orders or relationships with each other. These functional parts may consist of more than one sentence. The constituents of a paragraph stand in a particular relationship to each other. Any structure that does not stand in a certain relationship with a preceding or following one will be considered a violation of the conventions of paragraph patterning. Cohesion between the constituents of the paragraph is maintained through several devices, chief among which is lexical cohesion.

2. Basis of identifying paragraphs:

In this study, paragraphs are identified on the basis of graphic indicators. Paragraphs can be easily identified because they are typographically indented. A paragraph is an arbitrary discourse unit that consists of a sequence of related sentences. Kaplan (1972:91) notes that:

The paragraph is admittedly an arbitrary unit and since paragraphing, like punctuation, is a feature only of the written language, then it seems reasonable that, like punctuation, the amount of variation possible must be finite, and the patterns of variation must be detectable and subject to description.

Another distinction has to be made at the level of the paragraph. It is the identification of nucleus tagmemes that serves to provide the primary theme of the paragraph and the marginal tagmemes that may introduce the nucleus tagmeme, or develop the major theme (post-margin). Christensen (1965:145) defines the paragraph as "a sequence of structurally related sentences". According to Christensen, this means that a paragraph consists of a set of sentences related to one another by coordination or subordination. One of the sentences, usually the first, expresses the topic of the sentence and the rest of the sentences are in coordinate or subordinate relationship to the thematic sentence. Pike and Pike (1982:452) define the paragraph as "the minimum unit in which a theme is developed". It might be appropriate, at this point, to define theme.

A good deal of work on theme within linguistics has been done by a number of European linguists who are

indebted to the Prague School of linguistics. Linguists like Firbas, Dahl, and Halliday study theme within the sentence. They do not go beyond the sentence to larger units of discourse such as paragraphs and whole texts. Jan Firbas (1974:24) defines theme as "an element or elements carrying the lowest degree(s) of communicative dynamism". By the term 'degree of communicative dynamism', Firbas means the extent to which the linguistic element contributes towards the development of communication. In the light of this definition, theme is the element or elements that carry the highest degree of communicative dynamism.

Halliday (1967:211-212) defines theme and rheme on the basis of the clause. He states that theme is "what comes first in the clause". Theme is what is being talked about or the point of departure for a message in a clause. Rheme is, then, the part of the clause that highlights the theme. Jones (1977:2) defines theme, in general terms, as "minimum generalizations" of a text that can be overtly stated in a sentence or more, or it can be obscured and has to be restated in one's own statement. This process of extracting the theme from a text is referred to as synthesizing theme. This general definition of theme was later refined by Jones (1977:7) to mean "referential prominence". This tagmemic concept

refers to the main idea which is usually expressed in the nuclear constituent of a text. It has become obvious that tagmemics, unlike other models of linguistics, studies themes at levels higher than that of the sentence. This feature of tagmemics makes it more appropriate for the purpose of this study that investigates the structure of linguistic units larger than the sentence.

The division of information in a paragraph into theme and rheme agrees with the tagmemic approach of investigating discourse structure. Tagmemic analysis of paragraphs posits two basic constituents of a paragraph: the nucleus tagmeme that serves to provide the primary theme, and the post-margin tagmeme that develops or highlights the primary theme via different means such as illustration, explanation, or comparison and contrast. Furthermore, the assumption that paragraphs have themes is in accord with the hierarchical structure of language, another basic assumption underlying this study. In this study, I will base the tagmemic analysis of paragraphs on the assumption that themes exist at levels beyond that of the sentence such as the levels of paragraphing sections, and whole texts.

Analysis of Logical Relations

Each sentence plays a role in developing the general theme of the text in which it occurs. Sentences in a paragraph perform identifiable tasks or roles that can be determined by analyzing the relationships between these sentences. A complete description of paragraph structure and pattern cannot be achieved without specifying the role that each sentence has in relation to the other surrounding sentences.

Investigating logical relations between sentences becomes more important when analyzing expository prose, the major concern of this study. Unlike sentences in narrative discourse which are chronologically arranged, sentences in expository prose are logically sequenced. Kane and Peters (1976:3-4) observe that the subject of an exposition is organized by logic and not in time or space. They say that although an expository writer may

...appeal to our emotions, he is more likely to appeal to our reason by using evidence and logic...He will do well to remember that his primary purpose ... is to explain by logic and to show relations (1976:3-4).

The logical relations between sentences in a paragraph, together with other cohesive devices, provide cohesion to the whole text.

The model of analyzing logical relations in Arabic and English expository prose is based on that of Milic (1969). Milic investigated the manner in which sentences are combined with each other by means of eight categories of logical relations, and a system of logical diagrams. The concept of logic as used by Milic is not concerned with logic in the formal sense, but with the semantic role of holding between one proposition or sentence and another surrounding one. This sense of logic is a reflection of logical relations in natural language. Halliday and Hassan (1976:320) emphasize this notion saying that:

There are certain elementary logical relations inherent in ordinary language;... These logical relations are embodied in linguistic structure, in the form of coordination, opposition, modification, etc.

Milic (1969:21) defined the eight logical categories with the symbol for each category as follows:

- () Initial, the first sentence of a paragraph.
- (+) Additive, a proposition which has no organic relation with its predecessor (and).
- (-) Adversative, a proposition which changes the direction of the argument (but).
- (0) Alternative, a proposition which may be substituted for the previous one (or).

- (=) Explanatory, a restatement, definition or expansion of the previous proposition (that is).
- (X) Illustrative, an instance or illustration (for example).
- (:) Illative, a conclusion (therefore).
- (!) Causal, the cause for a preceding conclusion (for).

In the analysis of text sentences the following steps will be followed:

1. Reduction of each text sentence to one or more propositions, that is, reducing it to its basic minimum form that represents the content of the sentence. This process is referred to by Milic (1969:18) as 'propositional reduction'.

2. Dropping all sentence connectives so that the interpretation of propositions might not be influenced by these connectives. Milic (1969:21) argues

Writers often use logical connectives rhetorically, to suggest connections which may not really implicit in the argument itself. Others may use them decoratively or habitually.

3. The semantic role of each sentence in both languages will be determined by native speakers of each

language. This procedure makes generalizations more valid and less arbitrary.

The following paragraph is analyzed as an illustrative example to show how the method works:

1. If anyone wants to exemplify the meaning of the word "fish," he cannot choose a better animal than a herring. 2. The body, tapering to each end, is covered with thin, flexible scales, which are easily rubbed off. 3. The taper head, with its underhung jaw, is smooth and scaleless on the top; the large eye is partly covered by two folds of transparent skin, like eyelids--only immovable and with the slit between them vertical instead of horizontal; the cleft behind the gill-cover is very wide and when the cover is raised, the large red gills which lie underneath it are freely exposed. 4. The rounded back bears the single moderately long dorsal fin about its middle.

--Thomas Henry Huxley: "The Herring" in Brook & Warren (1972:63).

This expository paragraph can be reduced to the following propositions:

1. The best example for the word fish is a herring.
2. The body of the herring is covered with easily rubbed off scales.
3. The head is smooth and scaleless on the top; the eye is covered by transparent skin; the cleft is

very wide; the large gills are freely exposed when the cover is raised.

4. The back bears the dorsal fin about its middle.

The role that each proposition plays in developing the topic of the paragraph can be clearly shown in the following logical diagram:

	A	B	C	D
1.		()		
2.			(X)	
3.			(X)	
4.			(X)	

In this diagram sentence (2) is in illustrative relation to (1), and similarly sentences (3) and (4) are also in illustrative relation to sentence (1). It is obvious that the dominant pattern of development in the above paragraph is illustration.

Milic's model of analysis examines the relationship between one sentence and another which precedes it. This study will examine the tagmemic structure of paragraphs, and tagmemes may consist of more than one sentence or proposition. Therefore, a few modifications to Milic's model are essential for the purpose of this study. It is assumed in this study that paragraphs have a tagmemic structure, and the constituent tagmemes of a paragraph

may be expounded by one or more sentences. In such a case, the logical relation between the constituent tagmemes, rather than between the sentences, has to be identified. A tagmeme may have the role of providing the main theme or topic of a paragraph, another tagmeme may develop, compare, introduce or add to that basic tagmeme. To show the relations between the constituent tagmemes of a paragraph, a logical diagram showing the relationship between tagmemes, rather than between sentences, has to be devised with numbers indicating the tagmeme, and letters showing the logical relationship between tagmemes. For example, Huxley's paragraph, mentioned above, can be divided into two tagmemes. The nucleus tagmeme, expounded in the first sentence, has the role of providing the primary theme of the paragraph. The post-margin tagmeme, manifested in sentences (2), (3), and (4) illustrates the nucleus tagmeme. The structure of this paragraph can be shown in the following chart:

Tagmeme Number	Role	Logical Relation			
		A	B	C	D
1	Primary Theme	->			
2	Development			X	

A = Theme-Statement (->)
 B = Explanatory Relation
 C = Illustration
 D = Illative

P = Primary Theme
 I = Introduction
 S = Secondary Theme
 T = Transitional

The role 'Initial' assigned by Milic to initial sentences is replaced in this study by the role theme-statement. A second modification to Milic's model concerns the role 'Initial' that he assigns for the first sentence in the paragraph. This role has to be replaced by the functional role of the first sentence in the whole paragraph. The initial sentence might be a transitional one, an introduction or orientation to the main topic, or it can be the topic sentence that fills the slot of the nucleus tagmeme. The role 'Initial' in Milic's model does not seem to play a role in developing the paragraph or maintaining its cohesion. In this study, the first sentence might affect the cohesion of the whole paragraph especially if it represents the major theme of the paragraph in which it occurs. In such a case, the initial sentence has slot, class, role and cohesion features. It will be entered in the cohesion cell followed by the sign '>', which means that it governs the following sentences that can be a response or an expansion to that sentence.

The logical relations between sentences and tagmemes will be determined according to the procedures described above. This analysis will also show whether these relations are explicitly marked, and if so how they are marked.

Analysis of Lexical Cohesion

Lexical cohesion is a non-grammatical text-creating device. In written discourse, lexical cohesion is more frequent than other types of cohesive devices. Many studies (Crowhurst 1981, King and Rentel 1981, in Cooper 1983:295) confirm that older students use more lexical ties per T-unit than other grammatical cohesive devices. Cooper (1983:245) emphasizes the role of lexical ties in discourse. He says 'lexical ties appear to be particularly telling, and it may be that future studies could focus here'. Lexical cohesive devices were discussed in more detail in chapter one.

The analysis of lexical cohesion, in this study, will be carried out according to the following procedure:

1. Each paragraph will be carefully examined for any occurrence of lexical cohesion.
2. These occurrences will, then, be analyzed and classified into general types according to the relationship between any pair of lexical ties. For example, two lexical items might be synonyms, simple repetition of each other, they might share the same morpheme, (derived from the same root), or they can be members of the same collocational set. The analysis might reveal other types of lexical

cohesion that are present in a language rather than the other.

3. Similarities and differences between Arabic and English lexical cohesive types will be identified quantitatively, that is, frequency tables will be made to compare and contrast each type of lexical cohesion in both Arabic and English.

In this chapter, I have summarized the procedures that will be followed in the analysis of paragraphs, logical relations, and lexical cohesion. More relevant details will be presented in the chapters on analysis and discussion of findings.

CHAPTER 5

Analysis

Before starting the analysis, I feel it is appropriate to restate the objectives of this study. It is an attempt to identify and describe the tagmemic structure of paragraphs in Arabic and English expository prose. The constituent tagmemes of each paragraph will be identified, their markers and exponents will be specified, the types of logical relations holding between them will be determined, and their roles and the manner in which they maintain cohesion with each other will be investigated as well. The ultimate goal of this analysis is two-fold: to arrive at patterns of paragraph developments by means of which expository discourse may be described for both Arabic and English, and to specify the differences and similarities between both languages with regard to paragraph patterns and rhetorical organizations.

Another important aim of this study is to examine how both languages make use of lexical cohesion. The different types of lexical cohesion and the frequency of each type will be determined in both Arabic and English expository prose. Finally, to provide an overall picture of paragraph structure and organization, I will analyze the logical relations (the semantic roles) of the

constituent sentences of each paragraph. Logical relations holding between sentences are essential for maintaining cohesion in any spoken or written passage.

The following section provides a tagmemic analysis of sample paragraphs in Arabic and English.

Tagmemic Analysis

The analysis of paragraphs into tagmemes is based on the assumption that paragraphs are identifiable discourse units that can be analyzed into smaller constituents. In the tagmemic analysis, a paragraph can be analyzed into two major parts: the nucleus tagmeme that provides the primary theme of the paragraph, and the post-margin tagmeme that serves to develop or highlight the primary theme through several means such as explanation, illustration, comparison or contrast. The post-margin tagmeme may include a theme of a lower level usually referred to as the secondary theme. This thematic structure which recognizes the fact that a secondary theme may be embedded into a larger theme is in accordance with the tagmemic structure concept of hierarchical structuring of language.

However, there are other patterns of thematic organization in paragraphs as was explained by Jones

(1977). These thematic patterns include the following possibilities:

- a. $P + R_1 + R_2 \dots R_n = \text{monolevel}$
- b. $S + R_1 + R_n \dots + S + R_1 + \dots R_n = \text{Equal-level}$
- c. $P + S + R_1 \dots R_n = \text{multilevel}$
- d. $P + S + R_1 \dots + R_n + S + R_1 + \dots R_n = \text{both (b)-(c)}$.

P = primary theme

R = rheme

R_1 = one rheme

R_n = any number of rhemes

S = secondary theme

Pattern (a) represents a paragraph that consists of a primary theme developed by a series of rhemes. That is to say, this pattern involves a nucleus tagmeme that is supported by a post-margin tagmeme consisting of a sequence of sentences; the function of each is to expand the primary theme in a certain manner such as explanation, causation or illustration. This type of paragraph pattern is referred to as the monolevel because it consists of one thematic unit. Pattern (b) involves two equally-important thematic units. Each secondary theme is expounded by a series of rhemes. In tagmemic terms, this pattern consists of a nucleus tagmeme that

provides a theme of a certain type of generality, and it is supported by one or more rhemes. The post-margin tagmeme, in this pattern, involves an equally-general or important theme that is developed by a number of rhemes as well. Type (c) represents a paragraph consisting of themes at different levels: a primary theme that is expressed in the nucleus tagmeme, and a secondary theme, more specific than the primary theme, is contained in the post-margin tagmeme. Type (d) is a combination of types (b) and (c).

These thematic patterns show that there can be no paragraph without a theme. If a paragraph consists of two secondary themes then the primary theme has to be synthesized from the secondary themes in that paragraph.

Determining the nucleus tagmeme that provides the primary theme of a paragraph is a subjective process. However, there are some principles that help in identifying a primary theme from a secondary one or from its supporting details. Besides the researcher's intuition and experience in identifying the major theme from its supporting details, there is the general-to-specific principle. A proposition with a more general content usually expresses a higher level of thematicity. In analyzing a paragraph, the researcher should be aware of the propositions that provide examples, explanations,

illustration, causation or illation. These propositions are usually of a lower degree of thematicity. Christensen (1965:145) notes "when sentences are added to develop a topic or subtopic they are usually at a lower level of generality." This indicates that specifying the semantic role of each sentence facilitates the process of identifying major themes from supporting details.

Another essential principle in identifying thematic units is the consideration of grammatical devices used for highlighting themes. Jones (1977:169) discussed three basic types of theme-highlighting devices in English: word order, special constructions, and repetition.

Word order is important in indicating theme. The more prominent item is usually fronted in the sentence. Ordering can take place at the level of the sentence and at higher levels as well.

Theme can also be highlighted by using special constructions such as questions, clefting, psuedo-clefting and topicalization (Jones 1977:177). Finally, repetition of words, phrases, or the use of synonyms may indicate thematicity. The recurrence of a concept through repeating the same word, its synonym or paraphrase, indicates that this concept forms a primary theme.

In addition to the above principles, I will seek the opinion of native speakers of Arabic and English in identifying the major theme of each paragraph in respective languages. Furthermore, I will employ another technique for discovering themes. Jones (1977:227-236) developed a diagramming method that proved useful in determining themes. This method is called the blocking chart. It is based on the general-to-specific and on repetition principles. It also makes use of the grammatical devices that may have a function in highlighting the theme or introducing it. Constructing a blocking chart requires the following steps:

1. Dividing the chart into three columns: the first includes the propositions, the second contains the grammatical devices, and the third is specified for the key concept derived from the propositions.

2. Dividing the text into propositions: This procedure involves reducing the text to its component propositions or clause--like chunks. Jones divides the texts into clause-like chunks.

3. Noting the grammatical devices occurring in the text. Each grammatical device will be placed across the proposition in which it occurs. These devices include things like conjunctions and other connectives.

4. Choosing the key concepts in each proposition and placing them in the column of the key concepts. Two or more concepts will be selected from each proposition, one from the first part of the proposition and another from the last part. These concepts are the key words or the basic ideas in each proposition; they are usually indicated by using nouns. In this study, I will use verbs in addition to nouns whenever I feel that the verb in a certain proposition has an important linking function between the two parts of the proposition. The purpose of recording the key concepts in each proposition is to note the repeated items and concepts that help in highlighting themes and their supporting details.

5. Finally, noting paraphrase equivalences occurring in the key concepts. This means that a paraphrase equivalence is a case when a particular term in the key concepts is referred to by another term that may or may not have any relationship with it outside the context of the text, such as referring to 'a strong man' as a 'monster,' in a certain situation.

To illustrate the steps of this technique, I will analyze a few paragraphs from Arabic and English texts. The following paragraph was written by Qasim Amin, who is known for his writing on the role of women in society. I will try to transliterate the Arabic passage and provide

a glossed translation of each word, followed by appropriate English translation.

A.1.

l.sabaqa aššar9u-l'sala:mi: kulla
preceded law-Islamic every

šari:9atin siwaha fi: taqri:r
law other in establishing

musa:wa:t almarati lil-rajul, 2.fa
equality the-woman to-the-man by

'9lana hurriyyataha wa
declared freedom-her and

'stiqla:liha: yawama ka:nat
independence-her when was-she

fi hazi:z 9l'nhita:t 9inda
in bottom humiliation in

jami:9 'l'umam, 3.wa xawwalqha:
all nations and entitled-her

kulla huqu:q 'l'insa:n, 4.wa
all rights man and

'9tabara laha: kafa:'tan
considered for-her competence

šar9iyyah la tanqusu 9an
legal no less than

kafa:'ati-rrajuli fi: jami:9
competence-of-man in all

'l'ahwa:l 'lmadaniyyati min
aspects civil from

bay9in wa šira'in wa hibatin
selling and purchase and gift

wa wašiyatin min ghayri 'an
and legacy with out that

yatawaqqafa tasr̄rufuha 9ala:
depend behavior-her on

'dhni 'abi:ha 9aw zawjiha:
permission father-her or husband-her

5.wa ha:dhihi-lmazaya: 'llati: lam
and these-the-merits which not

tas̄il 'ila: 'iktisa:biha: hatta
reach to gaining-it until

l'a:n ba9zu-nnisa:'i-lgharbiyyat-
now some-women-western

kullaha: tashad gala: 'anna min
all-it witness on that from

9usu:l-ss 'ari:gati-ssamha:'
basics law-forgiving

'ihtira:mu-lmar'ati wa ttaswiyyati
respect-the-woman and equality-her

baynaha wa bayna-rrajul.
between-her and between-the-man.

6.bal 'inna sari:9tina: balaghat
Moreover that law-our exaggerated

fi-rrifqi bi-lmar'ati
in-kindness with-the-woman

7.fawaza9at gahna: ahma:l-lma9i:shah,
exempting off-her burdens-life,

8.wa lam tulzimha: bil'istira:ki
and not oblige-her in-participating

fi nafaqati-lmanzil wa tarbiyyati-
in expenses-the house and bringing up

l'awal:d 9.xilafan liba9zi-ssara'i9i
children unlike to-other-laws-

lgharbiyyah 'allati: sawwat bayna-
western which equated between

r^rajuli walmar'ati fi:lwajibati
the-man and-the-woman in duties

faqat 10.wa mayyazati-r^rajuli fi-
only and favored-man in

lhuqu:q.
rights.

1.The Islamic law preceded all other religions in establishing equality between women and men, 2.by declaring her freedom and independence when she was greatly humiliated in all nations. 3.It granted her all the rights of man, 4.and legally considered her equal to man in all civil aspects such as selling, purchasing, gifts and legacy without the need for her father's or husband's permission. 5.These merits that have been obtained by only a few Western women so far, prove that respecting the woman and equating her with the man is one of the basics of this religion. 6.Furthermore, our law exaggerated in being kind to women. 7.It exempted her from the burdens of life, 8.and it did not commit her to share the expenses of the house and the upbringing of the children, 9.unlike some other western legislative systems which equated women with men in duties only, 10.and favored men in the rights.

The blocking chart for this paragraph will be as follows:

Propositions	Grammatical Devices	Key Concepts
1. Islamic law established equality between men and women		Islamic law... equality.

Propositions	Grammatical Devices	Key Concepts
2. It declared her independence	fa	It (Islam)... independence.
3. and entitled her with all the rights of man.	wa = and	It (Islam)... rights of man.
4. and legally considered her as competent as man in all civil aspects of life.	wa	It...competence.
5. These merits prove that this forgiving law respects women and equates them with men.	wa These merits	These merits... respect of equality. [merits = declaring freedom, entitling women... being competent.] [forgiving law = Islamic law.]
6. Our law exaggerated in being kind to women	bal=furthermore	Our law...kindness to women.
7. It exempted her from the burdens of life	fa	It (Islam)... burdens.
8. and it did not demand that she share the expenses of the house and children,	wa	It (Islam)... non-sharing expenses.
9. unlike some Western laws that equate women with men in duties only	xilafan = unlike	Western laws non-equality of rights.
10. and favored man in rights.	wa = and	Man...rights.

The construction of this blocking chart was done according to the steps explained earlier. In brief, these steps are:

a. Dividing the text into propositions and recording them in their respective column.

b. Identifying the grammatical devices in each proposition and recording them in the column of grammatical devices.

c. Determining the basic concepts in each proposition and writing them in the third column.

d. Noting any paraphrase equivalences and putting them in square brackets.

For example, the first sentence, typographically indented and with a period at the end, has been divided into four conjoined sentences or propositions 1-4. The second proposition is connected with the first by the conjunction 'fa', which is recorded in the column of grammatical devices. The basic concepts of the first proposition are: 1. The Islamic law and the equation of men to women. Two paraphrase equivalences were noted in this paragraph. The first is equating All these merits with the merits mentioned in each of the preceding propositions, namely, declaring independence and freedom, entitling women with all the rights of man, being as competent as man. The second paraphrase equivalence is

manifested in the use of the term forgiving law for Islamic law.

The previous procedures make the text ready for the second major step, which is thematic analysis. The first step in identifying themes is examining the key concepts column for patterns of repetition. For example, the concept Islamic law is repeated in the form of pronominal reference in the first five propositions. Besides these repetitions, there are two paraphrase equivalences mentioned above in the same set of propositions. At this point, one can hypothesize that propositions 1-5 make one thematic unit. Further support of this hypothesis comes from examining the set of propositions in terms of the general-to-specific principle. As far as this principle is concerned, we can observe that proposition (1) is more general than the following four since it is further developed in each of the following propositions that explain how women were made equal to men, the content of proposition (1). For example, proposition (2) states that the Islamic law declared the freedom and independence of women. Proposition (4) states that women are considered legally as competent as men. Another clue supporting the thematic unity of propositions (1)-(5) is represented in proposition (5), which is introduced by the summative phrase "and all these merits" referring to

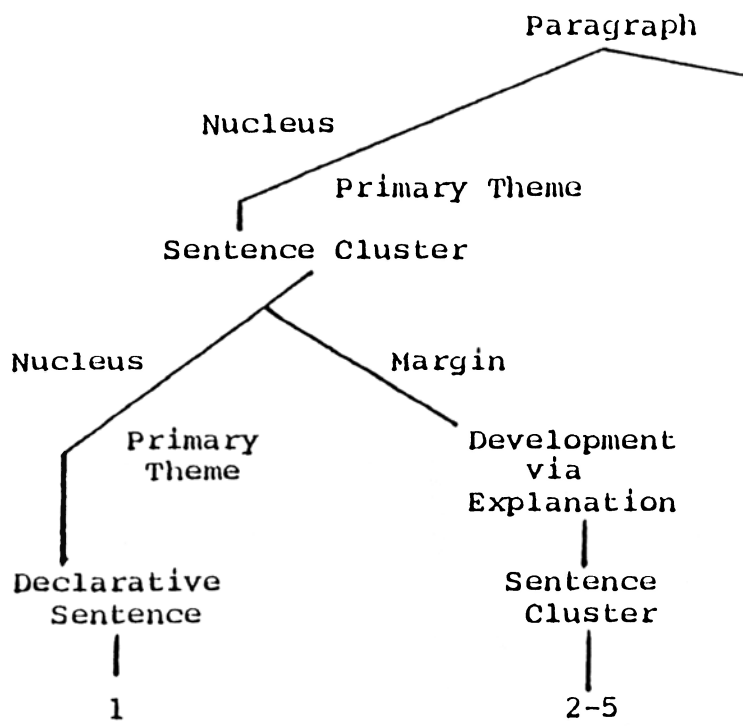
the three preceding propositions. Furthermore, proposition (5) restates the principle of equality between men and women, which is expressed in the first proposition. All these indications prove the hypothesis that propositions (1)-(5) form one thematic unit.

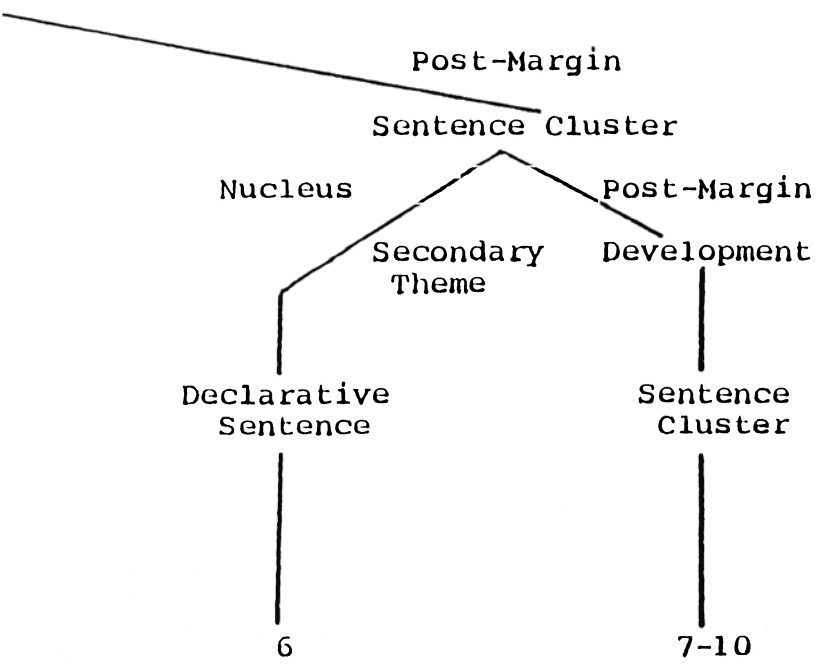
The second thematic unit in this paragraph is represented by the propositions (6)-(10). If we examine the key concepts column, we will find that the term our law is repeated in the first three propositions indicating that they belong to one thematic unit. Proposition (6) establishes the primary theme of being kind to women. Propositions (7) and (8) explain in more detail how kindness to women was realized. Therefore, propositions (7)-(10) are a step lower in generality than proposition (6). This movement from general-to-specific establishes proposition (6) as the primary theme of this thematic unit and propositions (7)-(10) as supporting details. It can also be noted that this theme is reinforced by contrast represented in the propositions (9) and (10) starting with unlike.

If we examine the relationship between proposition (1) and (6), we will notice that proposition (1) is more general than proposition (6) since proposition (1) involves a general theme in which proposition (6) can be contained. The analysis leads us to divide this

paragraph into one primary theme and a secondary one. Each of these two themes is developed through a number of explanatory statements.

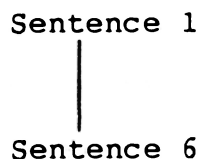
In tagmemic terms, this paragraph can be represented in a tree diagram as follows:



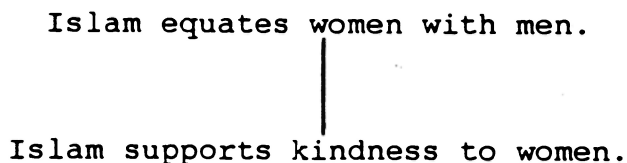


The above analysis of this expository paragraph shows that it consists of two major tagmemes containing the primary and secondary themes, the two major constituents around which the whole paragraph is developed. Briefly, the nucleus tagmeme provides the primary theme that is developed via the explanatory propositions in the margin tagmeme of the first thematic unit. The post-margin tagmeme consists of a nucleus tagmeme that presents the secondary theme and a post-margin tagmeme that develops the secondary theme through two explanatory statements (7) and (8), and two other contrastive statements, the second part of proposition (8) and proposition (9).

The thematic structure of this paragraph can be displayed in another method developed by Jones (1977:250-259), which she refers to as 'dominance display'. In this display, the sentence that represents the highest-level theme is located above the sentence that represents the theme of the lower degree. A dominance display of themes in the preceding paragraph would be as follows:



This diagram can also be drawn by replacing the sentence numbers with a brief statement of its content as follows:



Before starting the analysis of another paragraph, some observations are in order.

1. This paragraph consists of ten propositions connected to each other by conjunctions. Each sentence, except the first, is introduced by a conjunction such as wa (and), fa (and, by), and bal (but, moreover). The functions of these conjunctions and the semantic roles of the conjoined sentences will be discussed later in the analysis of logical relations.

2. The paragraph consists of a primary theme that is developed by four rhemes, and a secondary theme that is developed by three rhemes. Therefore, the development of rhemes in this paragraph is of the pattern:

$$P = R_1 \dots R_n + S + R_1 \dots R_n$$

3. The repetition of certain terms in a portion of a text may indicate the thematic unity of that portion. Repetition may be in the form of repeating the same words, by using pronominals or by the use of parallel

equivalence. For example, the term Islamic law is repeated pronominally in propositions (2), (3), and (4) and there is a parallel equivalence in proposition (5).

4. The use of summative expressions or phrases may help highlight thematic units especially when a summative expression comes at the end of this unit. In the paragraph analyzed above, the phrase and all these merits in proposition (5) is an indicator that the preceding propositions form one thematic unit.

5. A primary or secondary theme may be highlighted or reinforced by contrasting it with other notions. This can be clearly seen in the highlighting of the secondary theme of the above analyzed paragraph by contrasting our law, the secondary theme, with other Western laws. This shows that contrast is a possible theme-highlighting device.

6. More theme-highlighting devices can be pointed out particularly with regard to the function of conjunctions and their role in determining the semantic relations between sentences. However, these matters will be thoroughly discussed later in the analysis of logical relations.

7. A primary theme can be externally signalled. That is to say, there are clues or theme-highlighting devices that exist in other propositions rather than in the

proposition that expresses the primary theme. These external devices include signals such as the use of summative expressions as is the case in proposition (5).

The same procedures of identifying theme will now be applied to the following English paragraph (E.1).

E.1

1. In many ways, the quality of our environment has deteriorated with each new advance of the gross national product. 2. Increases in electric power production mean the burning of more coal and fuel oil, 3. and hence the discharge of more sulphur dioxide into the air. 4. The growth of the paper industry has brought a vast increase in trash. 5. The production of new automobiles and the discard of old ones has resulted in unsightly piles of hulks. 6. The growth of urban automobile transportation is choking both the mobility of the city and the lungs of city dwellers.

A blocking chart for this paragraph can be constructed as follows:

Propositions	Grammatical Devices	Key Concepts
1. The quality of our environment deteriorated with new advances of national products.		Deterioration of the environment...new national products.
2. Increases in electric means burning more coal and oil.		Electric power production... burning of coal and oil.
3. Burning of coal and oil leads to discharge of sulphur dioxide into the air.	and hence	Burning of coal and oil... discharge of sulphur dioxide.

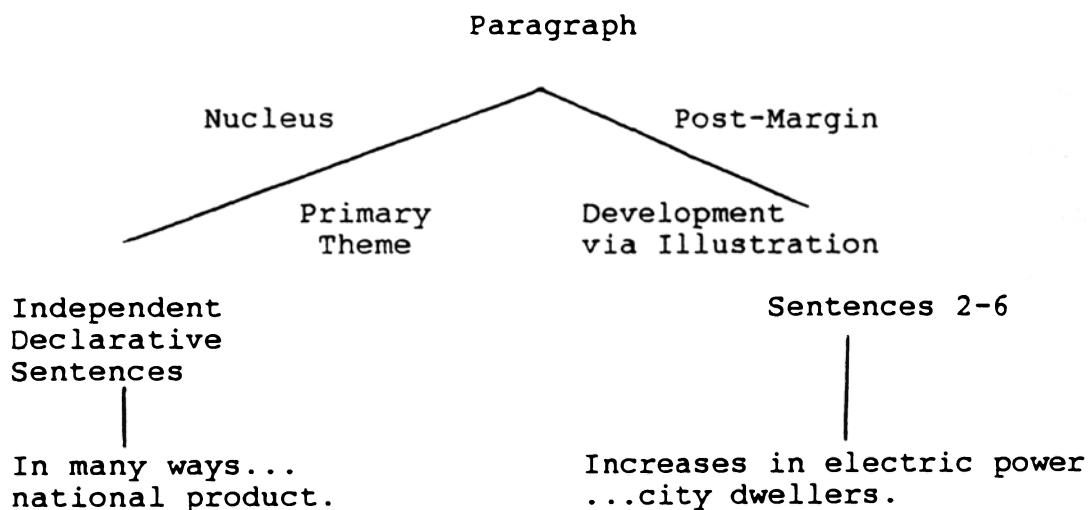
Propositions	Grammatical Devices	Key Concepts
4. The growth of paper industry increased the trash.		Paper industry... trash.
5. Producing new automobiles and discarding old ones resulted in unsightly piles of hulks.		Producing and discarding automobiles...piles of unsightly hulks. [Deterioration of environment = more sulphur dioxide in air, more trash, piles of hulks.]
6. Growth of automobile transportation resulted in choking the city and its dwellers.		Increase of automobile transportation chokes the city and the dwellers. [Gross national product = electric power, paper industry...]

Examining the key concepts in the blocking chart, we can realize that the paragraph starts with a generalization or an abstraction that is manifested in the first sentence, namely the relationship between the environment's deterioration and advances in gross national products. This abstraction is translated into concrete and visible illustrative examples in sentences

2-6. Each proposition provides a real example of how growth of gross national products affect the environment. For example, propositions (2)-(3) shows how the increase in electric power production (a national product) negatively affects our environment by discharging sulphur dioxide into the air (deterioration). The author further illustrates the two basic concepts of the first sentence in propositions (4)-(6). The use of paraphrase equivalences is the major means of linking the sentences of this paragraph together. It is evident from the text that the term increases in electric power, in proposition (2), is to be understood as a paraphrase of the term new advances of national products in proposition (1). On the other hand, the expression discharge of sulphur dioxide into the air is a paraphrase equivalence of deterioration of the environment. I have recorded these paraphrase equivalences between square brackets in the key concepts column of the blocking chart. These paraphrases support the hypothesis that this paragraph forms one thematic unit with the primary theme expressed in the first sentence. A further support of the hypothesis of thematic unity of this paragraph comes from examining the levels of generality in the paragraph according to the general-to-specific principle. It is obvious that proposition (1) is a generalization that develops into

more specific illustrative examples manifested in propositions (2)-(6).

The analysis of the above paragraph shows that it consists of two basic tagmemes, the nucleus tagmemes, expounded in sentence 1, provides the major theme--and the post-margin tagmeme, manifested in sentences 2-6, develops the primary theme via illustration. The tagmemic structure of this paragraph can be shown in the following tree diagram:



This analysis leads to the following observation:

1. This paragraph is a good example of developing a theme through specific illustrative examples.
2. Unlike the previous Arabic paragraph in which each sentence was linked with the preceding one by a

conjunction, this paragraph has no conjunctions at sentence boundaries and cohesion is mainly lexical.

3. Sentences that provide the nucleus tagmeme are usually more general and abstract than the supporting statements.

4. The supporting illustrative examples are specific and pertinent instances of the assertion made in the primary theme. This is a technique which handles a generalization with specific illustrations and exemplify an abstraction by a concrete example.

5. Sentences in a paragraph can hang together without using any overt grammatical devices existing in the text. Cohesion in such a case is maintained through other means such as lexical devices and maintaining the theme line.

6. The organizational pattern of this paragraph is

$$P + R_1 + \dots R_n$$

Therefore, it is of the monolevel type in which a theme is developed through a number of rhemes. Themes, however, might have different patterns of development and might be signalled by various clues as can be seen in the following English paragraph, (E.31).

E.31

1. A parallel view states that language at first consisted of emotional ejaculations of pain, fear, surprise, pleasure, anger, and so on.
2. This theory--that the earliest manifestations of language were

"cries of nature" that man shared with animals--was the view proposed by Jean Jacques Rousseau in the middle of the eighteenth century. 3. Rousseau, a founder of the Romantic movement, became concerned with the nature and the origin of language 4. while seeking to understand the nature of the "noble savage." 5. Two of his treatises deal with the origin of language. 6. According to him, both emotive cries and gestures were used by man, 7. but gestures proved to be too inefficient for communicating, 8. and so man invented language. 9. It was out of the natural cries that man "constructed" words.

The following blocking chart facilitates identifying the thematic units of this paragraph.

Propositions	Grammatical Devices	Key Concepts
1. Language consisted of emotional ejaculations of pain, fear, surprise...	a parallel view	Language... emotional ejaculations.
2. This theory viewing language as cries of nature was proposed by Rosseau.	this	This theory... Rosseau. [This theory = the view that language consisted of emotional ejaculations.
3. Rousseau was concerned with the nature of language.		Rosseau... nature of language.

Propositions	Grammatical Devices	Key Concepts
4. He sought to understand the nature of the noble savage.	while	Understand... the nature of the noble savage.
5. Two of his treatises deal with the origin of language.		His treatises... origin of language.
6. Emotive cries and gestures were used by man.		Emotive cries... man.
7. Gestures proved inefficient for communication.	but	Gestures... communication.
8. Man invented language.	and so	Man...language.
9. Man constructed words out of natural cries.	clefting	Words...natural cries.

Checking the key concepts in the propositions, one can see the repetition of terms in propositions (1), (6), (9). The term emotional ejaculations is repeated in proposition (2) as cries of nature, emotive cries in (6), and as natural cries in (9). These repetition patterns form the basis for the first hypothesis that propositions (1), (2), (6), (7), (8) and (9) make one thematic unit or block. For further confirmation of this hypothesis, the grammatical devices column can be examined. The occurrence of the expression A parallel view at the beginning of proposition (1) indicates the introduction

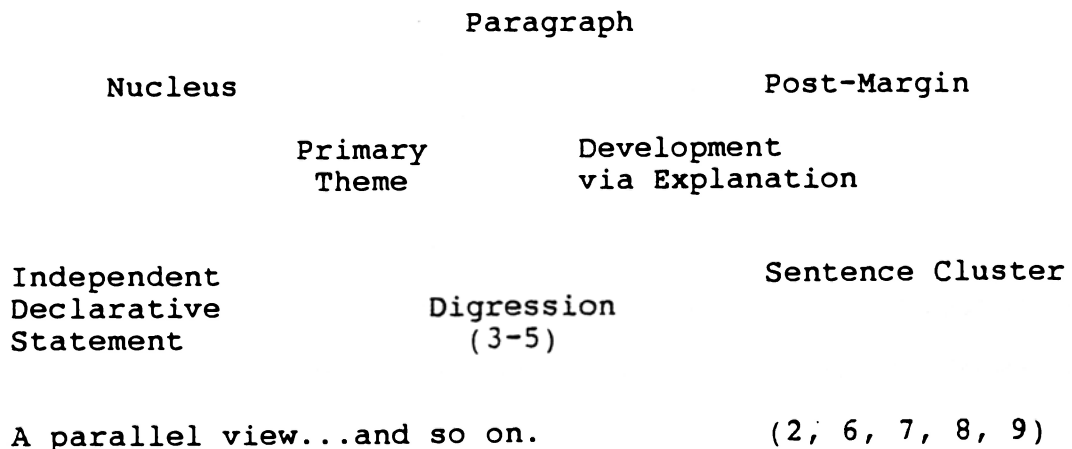
of a new theme parallel to a previous one discussed in the preceding paragraph. Moreover, proposition (2) restates the view in proposition (1) by providing more information. And this indicates that proposition (2) is a step down in thematicity. Another grammatical device that highlights the general theme is the cleft construction in proposition (9), which picks out an element and brings it into special focus. The highlighted element in this construction is the natural cries which is a paraphrase equivalence of emotional ejaculations in proposition one. At this point in the analysis, it can be safely determined that this paragraph is developed around one theme that is expressed in proposition (1). The theme of this paragraph is restated in proposition (2) and further developed through explanation in propositions (6), (7), (8). It is reconfirmed in the cleft construction in proposition (9) as well.

At this point of the analysis, one may ask about the status of propositions (3), (4) and (5). It is obvious that these three propositions provide information about Rousseau. This information can be provided in a footnote or placed in parentheses since it is not directly related to the theme of the paragraph. Therefore, they can be

deleted without causing any distortion of the content of the paragraph.

However, one can argue that since these three propositions show a break in the repetition patterns, they can be considered as a thematic unit of secondary status. It is true that secondary themes introduce new terms, but their content can still be subordinated to that of the primary theme. That is to say, a secondary theme provides an idea that is at a lower level of generality than that of the primary theme. In light of this argument, I considered propositions (3), (4) and (5) digression from the theme line of the paragraph.

In tagmemic terms, this paragraph consists of a nucleus tagmeme that provides the primary theme and a post-margin tagmeme that develops the nucleus tagmeme through explanation. The structure of this paragraph can be shown in the following tree diagram:



The following observations can be drawn from the above analysis.

1. Thematicity can be highlighted by one or more of the following theme-highlighting devices:

a. Internal devices: expressions which are used in the same proposition that provides the primary theme. For example, the expression A parallel view in sentence (1) indicates that a new theme parallel to a preceding one is being introduced.

b. External highlighting devices: expressions or special constructions which are used in other propositions within the paragraph rather than the proposition in which the primary theme is manifested. The cleft construction in proposition (9) picks out a particular element and brings it into a focal position. The clefted element "the natural cries", which can be considered as a paraphrase equivalent to "emotional ejaculations" in proposition (1), is intended to be taken as a reminder of the thematic proposition (1).

2. Restating an idea or the content of a proposition indicates its importance and puts it at a higher level of

thematicity. This is clear in proposition (2) that restates proposition (1) making it more prominent.

3. A thematic unit may be interrupted by one or more digressive or paranthetical sentences as it is the case with propositions (3), (4) and (5).

Themes may not be overtly expressed in a paragraph. In such a case, they have to be synthesized from the content of the whole paragraph as can be seen in the analysis of the following Arabic paragraph A.31.

1. wa 9indama 'ihtamma 9ulama:'u-l
and when became-interested scientists

anthropolojya, bidirasat 'asl 'allugha
anthropology in-studying origin language

2. dhahaba-lba9zu 'ila: 'anna-l'insa:na-lqadi:m
went-some to that-man past

9indama ha:wal 'an yuqallida ma yasma9ahu min
when tried that imitate what hear-he from

'aswati-lhayawanat wal-bi:'ah min hawlihi,
sounds-animals and-the-environment from around-him

min huna: bada'ati-llughat.
from here started-language.

3. wa 'i9taqada lba9zu-l'a:xar 'anna 'ssu:rati-
and believed some-other that picture-

l'u:la lillughati ka:nat gibarah gan 'aswat la
first for-language was something of sounds non

'uradiyyah sadarat 9anil-'insan bisu:ratin 9afwiyya
voluntary produced from-the-man in-a-way involuntary

4. thumma 'axadhat tatatawwar tilka-'ssaraxa:at
and-then started developing that-cries

9alla 'ira;diyya hatta 'asbahat lughatan laha
non voluntary until became a-language for-it

qawa9iduha wa 9aswa:tuha:-lxa:ssah
rules-it and sounds-special

5. wala:kinna ha:dhihi-lum9taqada:t hawla 'aslu-
but these-beliefs about origin-

llaghati gad thabata xata;uha: fi: zaw'i ma
of-language had proven wrong-it in light what

kaşafat 9anhu-ddira:sa:ti-tahli:liyyati lillughati-
uncovered from-it-studies-analytic of-language-

lmu9a:sirah
contemporary

6. wallati: 'akkadat 'anna lughata mujtama9in ma
and-which assured that language society any

tatakawwan min 'aswa:tin wa kalima:tin wa jumal,
consists of sounds and words and sentences

7. wa kullaha: 9ibarah 9an rumu:zin ta9assufiyyatin la
and all-it is symbols arbitrary no

9ilaqata bayna-lkalimati wa-şşay' 9aw-lfikrah
relationship between-words and-thing or-idea

'allati: tadulla 9alayha:
which indicate to-it

8. fa-l9ila:qatu bayana kalimat hişa:n wa-
and-then-relationship between word horse and-

lhayawanu 'allatii: tadullu 9alayhi 9ila:qah
the-animal which indicate to-it relation

ramziyyah ta9assufiyyah,
symbolic arbitrary

9. wa yanş'a'u-lfardu fi-lumjtag wa
and lives-he-the individual in society and

yata9allaum 9an 'usratihi majmu9atan min 'arrumu:z
learn-he from family-his number of symbols

'allati yutliquha:-lmajtama9 liddala:lati 9ala-
which use-it-society indicate to-

l'asya:' 'almuhi:tah, wa 9ala:-l9ila:qa:t
things surrounding and to relation

9alijtima9iyyati, wa-l'afka:r,
social and-the ideas

10. wa la: yastati:9-lfardu 'an yughayyiraha: 'aw
and not able-the-individual that change-it or

yahi:da 9anha:,
deviate from-it

11. li'annahu biha:dha: qad yas9ubu 9attafa:hum
because-he by-this may become-hard communication

ma9 zumala'ihi fi-lmjutama9,
with friends-his in-the-society

12. wa lidha:lika fa'inna-llughata tu9addu rumu:zan
and because then-that-language considered symbols

tagassufiy yatan muttafaqun 9alayha min qibali
arbitrary agreed on-it from by

mujtam9in ma:
society any

13. wa tanhasiru wadhi:fatu-llughati fi-9tiba:riha
and limited functions-of-language in-considering-it

wasi:latan lil'ittisa:l wa-tta9a:wun bayna
means for-communication and-cooperation among

'afradi mujtama9in ma,
individuals society any

14. fa 9an tari:qiha yastati:9u-lfard naqla
by of means-it can-individual transfer

xibratih wa maharatih lil'a:kari:n
experience and skill-his for-others

15. wa 'an yunassiqa bayna xibra:tih
and that coordinate between experiences-his

wa xibra:t wa 'a9ma:l ghayrih.
 and experiences and activities others.

1. And when anthropologists became interested in studying the origin of language, 2. some of them claimed that language started when man tried to imitate the sounds of animals and the cries of nature around him, 3. others believed that the earliest manifestations of language were involuntary voices 4. that later developed until it became a language with its grammar and sounds, 5. but these beliefs about the origin of language had been proven wrong in the light of the results of analytical studies of modern languages, 6. which emphasized that language is an entity composed of sounds, words and sentences, 7. and all of these components are arbitrary. For example, the relationship between the word horse and the animal it refers to is arbitrary, 8. the individual lives in a society and learns from his family a number of conventional signs used by people to refer to the surroundings, to the social relations, and to the ideas, 9. and he cannot change it or deviate from it, 10. because it will be difficult for him to communicate with his friends, 11. therefore, language is considered as a conventional arbitrary system of symbols used by a particular society, 12. and the only function of language is to be used as a means of communication among people, 13. by means of language an individual can transmit his experience and skills to others, 14. and he can coordinate between his experiences and those of others.

A blocking chart for this paragraph will be as follows:

Propositions	Grammatical Devices	Key Concepts
1. Anthropologists became interested in the origin of language.	interest	anthropologists ...the origin of language.
2. Some claimed that language started as an imitation of the cries of nature.		the origin of language... imitation of the cries of nature.

Propositions	Grammatical Devices	Key Concepts
3. Others believed that language started as involuntary cries. 4. These cries developed until it became a language.	and-then	the origin of language...involuntary cries. these cries... language.
5. These views have been proven wrong in the light of modern analytical studies.	but	these views wrong...by modern studies.
6. Modern analytical studies emphasized that language is composed of arbitrary sounds, words and sentences.	and	modern studies.. language...arbitrary sounds, words, sentences.
7. And these components are arbitrary.	and	these components...arbitrary.
8. For example, the relationship between the word horse and the animal it refers to is arbitrary.	for example	relationship... arbitrary.
9. An individual learns a number of symbols used by his society to refer to certain things	and 'wa'	an individual learning... social symbols.
10. He cannot change nor can he deviate from them (symbols).	and 'wa'	He [an individual]...impossibility of changing [social symbols] ...impossibility of deviating from [social symbols].

Propositions	Grammatical Devices	Key Concepts
11. He might find it difficult to communicate.	because al]	He [an individual]...difficulty communicating.
12. Therefore, language is a conventional arbitrary system.	therefore walidha:lika fa	language... conventionally arbitrary.
13. Language is only used as a means of communication and cooperation among the members of a particular society.	'wa'	language...means of communication ...means of cooperation.
14. By means of language an individual can transmit his skill and experience to others.		language...transmission of skill ...transmissions of experience.
15. By means of language he can coordinate his experiences and those of others.	'wa'	language...coordination of one's experiences... coordination of experiences of others.

Examining the key concept column of this blocking chart, one can hypothesize that propositions (1)-(4) form one thematic unit. Proposition (1) introduces the general theme which is the interest of anthropologists in language origin. Propositions (2) and (3) provide specific illustrations of that general theme. Proposition (4) summarizes propositions (2) and (3). The

hypothesis that propositions (1)-(4) make up one thematic unit is further supported by the following three considerations. The first is the repetition patterns in propositions (2), (3), and (4): cries of nature, involuntary cries, and these cries. The second indication is the summative expression in proposition (5), these views about language origin, which indicates that the preceding propositions make up one unit; that is why the judgment of being wrong is passed on them. The above hypothesis can now be safely accepted. Moving on to proposition (5), one can observe a shift in the repetition patterns. New items are introduced indicating a shift to another theme. In an examination of the key concepts of propositions (5)-(14), one can see that there is something common among propositions (5)-(12). The relationship between the linguistic sign and its reference is the prominent idea. The notion of arbitrariness is repeated in propositions (6) and (7), and paraphrased in (8). Propositions (9)-(11) emphasize the social and conventional nature of language. Finally, proposition (12) summarizes propositions (5)-(11). This gives rise to the hypothesis that propositions (5)-(12) block into another thematic unit. In addition to the preceding theme--highlighting devices, repetition, and the use of new terms, additional confirmation of the

thematicity of propositions (5)-(12) comes from the illative proposition (12) which concludes what has been said in statements (5)-(11).

For further testing of this hypothesis, the grammatical devices column is examined. The occurrence of the conjunction 'wala:kin', "but" at the beginning of proposition (5) puts the theme expressed in the preceding proposition in contrast with the theme being introduced.

All these evidences prove that propositions (5)-(12) block into one thematic unit.

Checking the rest of the items in the key concepts column, one notices the introduction of a new set of terms such as means of communication in proposition (13), transmission of skills in (14), and coordination of experiences in (15). Furthermore, the term language is repeated in each of the propositions (13), (14), and (15). These two considerations might indicate that the last three statements block into a third thematic unit. They explain the basic functions of language.

I have, so far, divided the paragraph into three thematic units. The first is manifested in propositions (1)-(4). It is stated in the first statement, namely, the interest of anthropologists in the origin of language. The second theme is manifested in proposition (6) with proposition (5) functioning as an introduction

to (6), and developed by propositions (7)-(12). The theme is the conventional arbitrariness of language. The third unit is shown in the last three propositions that deal with the basic social function of language.

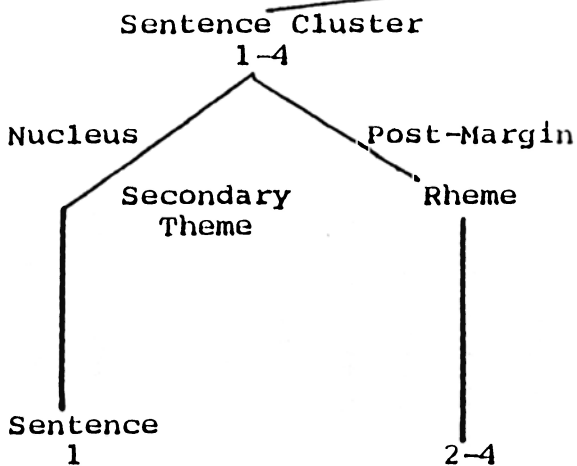
The relationship between the first and the second themes does not seem to be a matter of being primary or secondary. Each thematic unit presents a different view of language. They are connected to each other by the conjunction 'wala:kin', which seems to indicate that these two themes are parallel, and neither of them has primary precedence over the other. In such a case, when the general theme of the paragraph is not overtly stated in any one statement, it has to be synthesized from the meaning of the whole text. The synthesized theme can be "views on the nature of language". This means that the first two themes are secondary to the synthesized primary theme. This hypothesis is confirmed by an examination of the paragraph according to the general-to-specific criterion. Neither of the first two themes can be said to be more general than the other. Each one seems to be at an equal level of generality.

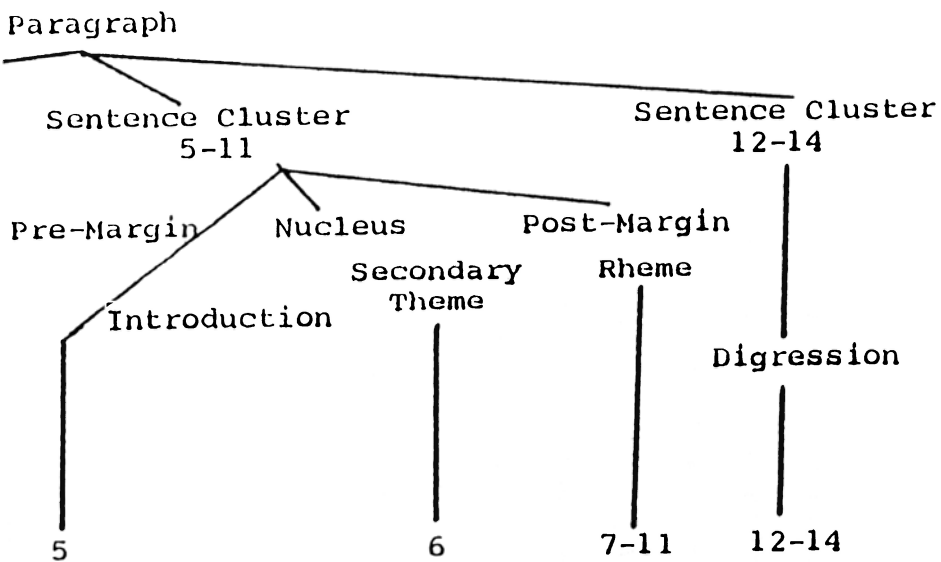
At this point, we are left with the third hypothesized thematic unit that is manifested in propositions (13)-(15). One might consider it as another secondary theme, but the relationship between this theme

and the synthesized theme is weak. Furthermore, the last three statements of this thematic unit do not play any role in developing the primary theme. The third theme, however, can be related to the second theme of conventional arbitrariness, i.e. the social conventional nature of language. If this is the case this kind of theme is a specific development of the second theme-- i.e., the second theme has its own secondary theme. The author could have ended his paragraph with proposition (12). Therefore, the last three statements are both digression from the main theme of the paragraph and a transition to the following paragraph. For further confirmation of this conclusion, I checked the paragraph that follows this one in its original text. I found that the following paragraph is about another function of language. This led me to believe that this thematic unit has a transitional function.

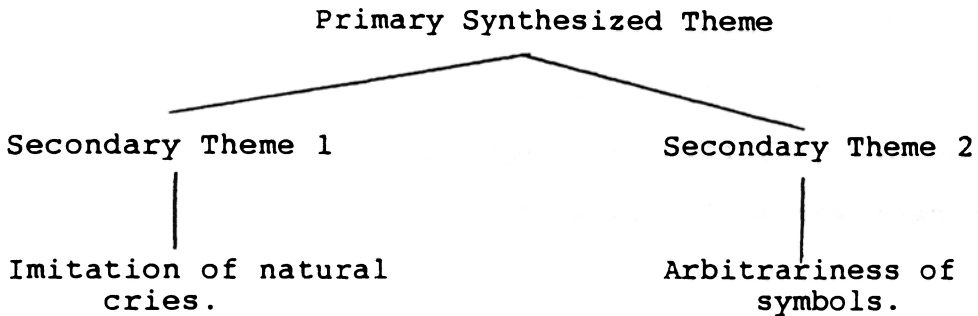
The above analysis of this paragraph shows that it consists of two tagmemes. The nucleus tagmeme, which is expounded in propositions (1)-(4), provides a secondary theme. The post-margin tagmeme, manifested in propositions (5)-(15), consists of two functional units (5-12) and (13-15). The first, shown in propositions (5)-(12), functions as a second secondary theme, while the second (13-15) is a digression and weak transition to the

following paragraph. The following tree diagram shows the tagmemic structure of this paragraph.





The tree diagram shows the structure of the paragraph based on its constituents and the relations among them, but it does not show the hierarchical structure of themes in this paragraph. Both themes are secondary and at the same level of generality. The following dominance display of themes in this paragraph will show their hierarchical structure:



This diagram shows that there is a primary synthesized theme at the top of the hierarchy that dominates two equal-level secondary themes. Therefore, themes in this paragraph are hierarchically structured.

In light of the analysis of this paragraph, the following observations can be noted:

1. Thematic organization of this paragraph is of the equal-level type. That is to say, there are two secondary themes at the same level of generality.
2. Some conjunctions have thematic significance. The conjunction 'wala:kin', or "but" introducing proposition (5) contrasts propositions (1)-(4) with proposition (6).

The preceding analysis has shown that both of the themes connected by 'wala:kin' are secondary and at equal-levels of generality. Therefore, we can conclude that the discourse function of the conjunction 'wala:kin' is to contrast equal-level themes. The relationship between these two secondary themes is coordinate rather than subordinate.

3. The primary theme of a paragraph does not necessarily have to be explicitly stated in any proposition of a paragraph. In such a situation, the primary theme has to be synthesized from the meaning of the whole text.

4. If a paragraph does not have an explicitly stated primary theme, then the secondary themes are most likely at the same level of generality, that is, at equal-level.

5. A paragraph may end in a thematic unit that cannot be subsumed as a low-level theme under the primary theme. This thematic unit is a digression and it may also be a transition. Christensen (1965:145) states:

A sentence that is not coordinate with any sentence above it or subordinate to the next above it breaks the sequence. The paragraph has begun to drift from its moorings, or the writer has unwittingly begun a new paragraph.

6. Subordinate clauses may play a role in determining the main theme of a unit as is the case in proposition (6) that provides the theme of the second thematic unit.

This observation disagrees with what Milic (1969:18) suggested in that subordinate clauses should be omitted in the process of propositional reduction since they contain subordinate ideas. This observation also rejects what Silva (1981:351) claimed in that the information contained in relative clauses is never "the main thrust of communication." Gass and Ard (1981:353) state that what Silva claims is not always true. The main thrust of communication might be contained in subordinate clauses. Furthermore, they note that the hearer plays an important role in determining "the main thrust of communication."

The preceding analysis of the sample paragraphs shows how themes can be identified; they also show the theme-rheme relationship between constituents in a paragraph. They do not, however, show the specific logical or semantic relations holding between the propositions in a paragraph. In the following section, I will analyze the relations between themes and rhemes on the one hand, and the relations between propositions on the other.

Analysis of Logical Relations/Semantic Roles

The preceding section was devoted to the analysis of thematic and tagmemic structure of paragraphs. Identifying thematic units in a paragraph is not the only factor in achieving a complete discription of paragraph organization. In order to complement thematic analysis and to provide a more complete description of paragraph structure, an attempt will be made in this section to analyze the logical relations that exist between sentences and themes (or tagmemes) in a paragraph. This analysis of semantic roles is based on the assumption that the relations between sentences can be described or identified by means of a limited set of categories. The set of logical relations proposed by Milic (1969) will be utilized in identifying the relationships holding between sentences and between themes. Milic's logical relations have been introduced and briefly defined earlier in Chapter 4. An attempt will now be made to present these relations in more detail and with illustrative examples from the sample paragraphs in both Arabic and English.

Milic's system of logical relations consists of eight categories which are: Initial (), Additive (+), Adversative (-), Alternative (0), Explanation (=), Illustrative (X), Illative (:), and Causal (!).

The Initial Relation (): this relation marks the first sentence of the paragraph. According to Milic, this relation does not seem to have any significance in the development of the paragraph other than indicating the first proposition. However, it is assumed in this study that initial sentences have roles. They might introduce the primary theme of a paragraph, or they might function as a pre-margin to a nucleus tagmeme. In the analysis of whole texts, initial sentences might have a transitional function as well. The following are examples of initial sentences in both Arabic and English.

A.1

sabaqa-\$\$ar9u-l'isla:mi: kulla \$ari:9atin
 preceded-law the-Islamic every law

siwah fi: taqrir:r musa:wa:t 'almar'ati
 other in establishing equality the-woman

lilrajul
 to-man

The Islamic law preceded all other religions in establishing equality between man and woman,--

A.31

wa 9indama 'ihtamma 9ulama'u-l
 and when became interested scientists

anthropolojya bidirasat 'sl 'allugha
 anthropoloy in studying origin the-language

And when anthropologists became interested in studying the origin of language...

E.31

In many ways, the quality of our environment has deteriorated with each new advance of the gross national product.

E.2

A parallel view states that language at first consisted of emotional ejaculations of pain, fear, surprise, pleasure, anger, and so on.

All these examples of initial sentences have the function of introducing the primary theme of their paragraphs, and more importantly, play a role in maintaining cohesion in paragraphs. In Pike's terms, a sentence might govern a following in the sense that the first sentence initiates a speech or a conversation and the following sentence might be a response to its antecedent.

Initial sentences might have roles other than being topic sentences. In the following portion of paragraph (A.3), the initial sentence occupies the position of pre-margin and functions as an introduction to the primary theme manifested in the second sentence.

A.3

'annabiyyu muhammad huwa 'awwalan nabiyya-
the-prophet Moḥammad he first prophet

l'isla:m, 9alayhi unzila hadha:-ddi:nu-lkari:m
Islam him revealed this-religion-generous

wa biwa:sit_uatihi 'intaṣara fi maṣariqi-'arzi wa
and by-means-of-whom spread in easts-earth and

magharibiha. wa qad balagha 'atharu ha:dha:-
wests-its and had reached effect this

ddi:n kulla na:hiyatin min nawa:hi:
religion every aspect of aspects

thaqa:fatina-l9arabiyyah
culture-our-the-Arabic

Prophet Mohammad is, in the first place, the prophet of Islam, to whom this religion was revealed, and by means of whom it propogated in the east and the west. This Religion had affected all aspects of Arabic culture.

The Additive Relation (+): this relation has been described by Milic (1969:21) as a proposition that has no "organic relation" with the sentence preceding it. But, he did not explain what he meant by the term "organic relation". However, one can infer from the definition of the additive relation that it refers to the situation where two propositions are not directly related in content, but they can be subsumed under one major theme. The sentence that has the role of additive relation is usually connected with the previous by a conjunction such

as 'and, moreover, furthermore', and 'in addition to'. An additive proposition adds further information to that given in its predecessor.

Unlike the explanatory relation, the additive does not define, restate, or expand its predecessor. That is to say, it does not add information by subordinating itself to the preceding one. It implies a coordinate relation rather than a subordinate one. An example of the additive relation can be seen in (A1), analyzed above, proposition (6), is in additive relation to proposition (1). The conjunction 'bal', "moreover", at the beginning of proposition (6) indicates its addition to the preceding theme. Another example of the additive relation can be seen in the Arabic paragraph (A.3) in which proposition (6) is in additive relation to proposition (4). Proposition (6) is preceded by the conjunction 'wa' "and". More examples of additive relations will be pointed out in the analysis of more paragraphs later in this chapter.

The Adversative Relation (-): this relation expresses a change in the direction of the argument. That is to say, a proposition is in adversative relation to a preceding one if it introduces a new argument that deviates from the line of argument proposed in a preceding proposition. The typical connective that

indicates this relation is but. However, there are other connectives used as markers of this relation, e.g., nevertheless, although, despite the fact that, etc. An example of the adversative relation can be seen in the following English paragraph (E.3).

E.3

1. Education has always presupposed authority--the rightful authority, in respect of teaching, of those who know over those who don't know. 2. It has lost its authority because its practitioners have lent themselves to the production and perpetuation of deadly error. 3. Authority stripped of its rightfulness is authoritarianism. 4. The young are right in repudiating authoritarianism. 5. But they are mortally wrong if they think that they will improve their situation by replacing their elders' authoritarianism with their own.

In this paragraph, proposition (5) is in adversative relation to (4), since it deviates from the line of argument presented in proposition (4). The connective that provides a clue for this relation is 'but'. The relationship between these two propositions is that of coordination rather than subordination.

The Alternative Relation (0): this relation describes a proposition which can be substituted for the previous one. The proto-type connective is or. An instance of this relation can be seen in the English

paragraph (E4), in which proposition (4) reads: or it can compress its body and stretched its legs obliquely to gain stability, like the giraffe is an alternative to proposition (2) which reads: It may make its legs short and thick, like the rhinoceros (see Appendix B, E.4).

The Explanatory Relation (=): this relation describes a relation between two propositions where the second restates, explains, expands or defines part or all of a preceding proposition. The explanatory proposition is usually introduced by a connective such as: that is, this means, in other words, that is to say, etc. The following are examples of this relation. In order to better understand the explanatory function of a proposition, its preceding one is included here.

E.5

Preceding Proposition:

For the first part, he has to bring the body into the proper relations to the particular sport involved.

3

Explanatory Proposition:
[expansion]

This means that he has to analyze the various factors of a peak performance for each boy on the team...

3

A.5

Preceding Proposition:

xalaqa-llahn-lhawa'a fi-lkawan
created-God-the-air in-universe

da9amati muhimmatah min da9a'im
pillar important from pillars

'alhayhat
life.

God made air in the universe one of
the basics of life.

Explanatory Proposition:

fa law lam yaxliq 'allah
and then if not created God

'alhawa' lama ka:nat huna:ka
the-air no was there

'arya:hun wa la 'amtar wa la
winds and no rains and no

zaba:b
fog

Had God not created air, there would
have been no winds, no rain and no
fog...

The Illustrative Relation (X): this relation specifies the role of a proposition that gives a specific example or an illustration of a preceding one. This relation is usually marked by connectives such as 'for example', 'for instance', 'an illustration of,' etc. The following are examples of the illustrative relation:

E.10

Preceding Proposition:

The first and most obvious result of the technological revolution has been to increase the amount of wealth in the form of material things which can be produced in a given time by a given population.

Illustrative Proposition:

For example, in 1913, there was produced in Great Britian, several billion yards of cotton cloth for export alone.

The following is another example from Arabic.

A.15

Preceding Proposition:

wa mag hadha fa 'inna 'al'isla:m
and with this that Islam

la yaharrim 'al'intiga:9 bittajarubi-
not prohibit benefiting with-experiences

lbašariyyah fi: kulli ma yamass
human in all what offend

'aslan min 'usu:l 'aššari:9ah.
basic from basics law

Nevertheless, Islam does not prohibit making use of the experiences of humanity as long as they do not oppose the fundamentals of religion.

Illustrative Proposition:

fala haraj fi: 'al'intifa:9 bitagjarub
then harm in benefiting with-experiences

'albasar fi: 'alha:ja:t 'al'ijtima:9iyyah
human in the-needs social

almutajaididah wa zabtiha: biwasa:'il
renewal and control by-means

'albaht almutajaddidah
research the renewal

For example, there is no harm in using people's experiences in specifying the renewed social needs and controlling them by the renewed needs of research.

In the above examples the illustrative relation is introduced by a connective. It is for example in the English example, and fa which has the same meaning in Arabic even though it is a conjunction. The relationship between the illustrative proposition and the preceding one is that of subordination despite the fact that it is syntactically coordination in the Arabic example. Syntactic and semantic coordination and subordination will be elaborated on later in this chapter.

The illustrative relation, however, can be found between propositions without being connected to each other by any type of connective as is the case in the English paragraph (E.1) in which propositions (2)-(5) illustrate the theme and provide specific instances without being introduced by any marker of this relation.

E.1.

Preceding Proposition:

In many ways, the quality of our environment has deteriorated with each new advance of the gross national product.

Illustrative Proposition:

Increases in electric power production mean the burning of more coal and fuel oil.

The Illative Relation (:): this relation is posited when a proposition provides a conclusion for a preceding argument. The illative proposition usually comes in the form of a summary, a concluding remark, or an opinion of the writer. The proto-typic connective that introduces this relation is therefore. Other connectives are also used such as 'as a result', 'consequently', 'in conclusion', and 'thus'. A conclusion can also be made without being introduced by any connective--the following are examples of the illative relation.

A.25

Preceding Theme: (synthesized)

mawqifi-l'isla:m min 'arriq

The attitude of Islam towards slavery

Illative Proposition:

wa lidha:lika kullihi yumkinu-
and because-of-that all-it able

lqawl bitmi'na:n 'anna-lmujtama9
say with-confidence that-the-society

'al'islami: lam ya9rif 9ahda 9arriq
Islamic not know era slavery

wa la 9ahdal-'iqta:9...
and no feudalism...

Because of all of that, it can be confidently said that the Islamic society did not recognize the era of slavery and feudalism, and it did not recognize their traditional features in any part of its history.

The following English paragraph provides another example of the illative relation.

E.20

1. To know a person's language is to understand his culture, for language grows out of and reflects culture. 2. The Tzeltal tribe in Mexico, for instance, has twenty-five different words for expressing the idea to carry. 3. Tzeltal speakers can indicate by one word each of these concepts: carrying on the shoulder, carrying on the head, carrying in a bundle, carrying in the palm of the hand, or carrying in a container. 4. To carry rolled up is expressed by bal; to carry coiled up is ch'et; to carry with tongs is lut. 5. We know from his language that the Tzeltal does a lot of carrying.

In this paragraph, proposition (5) sums up the argument expressed in propositions (2)-(4), and thus, it functions as a conclusion.

Finally, the Causal Relation (!) is posited when a proposition provides the cause for the preceding one. The proposition that provides the cause is usually introduced by a connective such as 'for', 'because', 'the reason is,' and 'since'. Sometimes no connective is used. In the following paragraph, proposition (8) is in causal relation to proposition (7). Similarly, proposition (9) is in causal relation to (8). Although propositions (8) and (9) are not introduced with a connective indicating causal relation, their propositional meanings offer reasons for choosing to be a cop.

E.17

1. People insist that it is unfair to generalize about the police. 2. The good cop is held up for public inspection and he is supposed to be the example of law-enforcement officers everywhere. 3. Just as the one rabbi, priest or minister who goes to Alabama to demonstrate is supposed to represent the whole church. 4. The one beautiful cop in a neighborhood will stand out. 5. He has pride in his job. 6. He is sensitive to human problems and knows how to talk to the person on the street corner. 7. He has not chosen his job because he couldn't get hired any place else. 8. He is a cop

because he wants to be; 9. perhaps his father and grandfather before him had devoted their lives to law enforcement.

Another example of causal relation can be seen in the following Arabic paragraph.

A.26

1.wa 'amma 'ansa:ru-ljadi:d fttri:qu
and that supporters-new the-road

'amamahum mu9wajjatun multawiyah,
in-front-of-them winding not-straight

2.taqu:um fi:ha: 9iqabun la taka:du
there-is in-it obstacles no about

tuhsa: 3.wa hum la yakadu:na yamzu:n
counted and they not about go

'illa: fi 'ana:tin wa rayth huma:
in slowness and slowness they (dual)

'ila:l-but'i 'aqrabu minhuma 'ila 'ssur9ah
to-slowness closer than-they to speed

4.dha:lika 'annahum la ya'xudhu:n 'anfusahum
because they(dual) no move-on themselves

bi'i:man wa la 'itmi'na:n...
with-faith and no confidence

1. And while the proponents of the new, the road ahead of them is winding, 2. full of innumerable obstacles. 3. And they can hardly move on except with great care and deliberation which are closer to slowness than to speed. 4. For they do not move on with faith and confidence, 5. or they have not been granted this faith and confidence.

In this paragraph, proposition (4) is in causal relation to proposition (3), (2) and (1) as well. Proposition (4) gives the reason or the cause for the slow and careful movements of the supporters of the new. It also accounts for their winding way which is full of obstacles. More examples of these relations will be given later in this chapter.

However, we can, at this stage, categorize the above illustrated logical relations into two groups in terms of the constituents they relate. The first group of relations include the additive, alternative, and adversative relations that hold between equal-level constituents or propositions. That is to say, they are at the same level of generality and no one can be subsumed under the other. These equal-level elements are described by Christensen (1965) as coordinate relations. The second group, on the other hand, includes the illustrative, explanatory, illative and causal relations. These roles usually hold between elements that can be described as being in superordinate-subordinate relations. This means that one proposition is at a higher level of generality than another. For example, an illustrative sentence can be said to be in subordinate relation to the superordinate proposition it illustrates.

These relations will be described in more detail in the following section.

In what follows, I will analyze the logical relations that are obtained between themes or tagmemes in the paragraphs analyzed earlier and in six more paragraphs. It might be appropriate, at the outset, to briefly describe the procedures for analyzing logical relations. The first step is to reduce the text into propositions. Then, the role of each proposition is determined by asking the proper question. For example, a proposition has an additive role if the answer to the question posited for eliciting the additive relation is positive, and so is the case with all of the other relations. The following are the seven relations with questions posited for eliciting each relation:

1. Additive (+):

Does the proposition provide further argument or information that cannot be subordinated to the previous theme?

2. Alternative (0):

Can a proposition be used as a substitute for a preceding one?

3. Adversative (-):

Does a proposition change the direction of a preceding one by providing information that is in

contrast with it or does it deviate from the line of argument proposed in a previous one?

4. Explanatory (=):

Does a proposition restate, define or expand all or part of a preceding proposition or theme?

5. Illustrative (X):

Does a proposition provide a specific example to illustrate a previous theme?

6. Illative (:):

Does a proposition provide a generalization, conclusion or result of a theme?

7. Causal (!):

Does it provide a reason or cause for a theme?

These questions will be used in eliciting the role of each statement. Connectives will be used as clues to form initial assumptions about the relations that will be confirmed or possibly rejected by obtaining answers to those questions.

The last step in the analysis of logical relations is constructing a logical diagram which helps in identifying the pattern of development used in each paragraph.

I will now analyze the logical relations that hold between sentences in the first English paragraph (E.1)

analyzed at the beginning of this chapter. This paragraph consists of the following propositions:

1. The quality of the environment has deteriorated with each new advance of the gross national product.
2. Increases in electric power means burning more coal and oil.
3. Burning of coal and oil leads to discharge of sulphur dioxide into the air.
4. The growth of the paper industry increased the trash.
5. The producing of new automobiles and discarding old ones resulted in unsightly piles of hulks.
6. Growth of automobile transportation resulted in choking the city and its city dwellers.

It has been determined earlier that the first proposition or the nucleus tagmeme provides the primary theme of the paragraph. Proposition (2) answers the question posited for the illustrative relation since it provides a specific example to illustrate the theme. Therefore, it is in illustrative relation to proposition (1). Each of the other propositions, (3)-(5), answer the same question and thus, they are in illustrative relation to the primary theme manifested in the first statement. Milic's logical diagram can show the relation between a

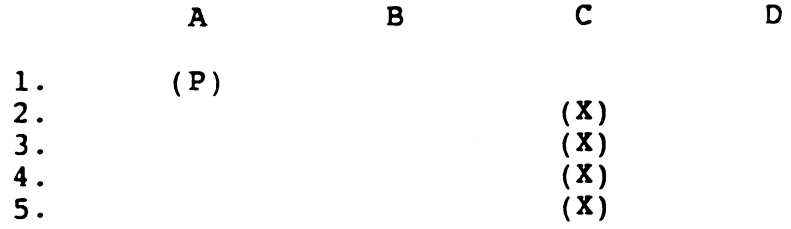
proposition and a preceding one. That is to say, it displays the logical relation between individual sentences in a paragraph. It does not consider the relationship between groups of sentences that may have a unified function such as representing a theme (nucleus tagmeme) or a rheme (post-margin). This incompatibility between Milic's logical analysis and tagmemic or thematic analysis calls for some modification or adaptation to this system. In order to display the logical relation between tagmemic units in a paragraph, the following thematic relations chart is proposed:

Thematic Unit	P	R
Proposition Number	1	2 - 4
Relation	(=)	

This chart consists of three rows. Thematic units such as primary theme (P), rheme (R) or secondary theme will be included in the first row. The second row will display the number of propositions through which the thematic unit is manifested in the paragraph. Finally, the logical relation existing between thematic units will be shown in the third row. I will illustrate how the thematic relations chart works in paragraph E.1.

Thematic Unit	P	R
Proposition Number	1	2 - 5
Relation	(X)	

The chart indicates that the paragraph consists of two thematic units: a primary theme, manifested in proposition (1), and a rheme, represented in propositions (2)-(5). It also shows that the logical relations between the rheme and the theme is illustrative. Therefore, the illustrative relation symbol (X) is placed in the relation row between the theme and the rheme. Not only can logical relations be identified between thematic units, but also between propositions. For this purpose, Milic's logical diagram would be appropriate. The following is a logical diagram of the same paragraph (E.1).



The numbers in this diagram are the numbers of the propositions. The symbols placed horizontally along the four columns (A, B, C, D) stand for the logical value of each proposition. Initial propositions are placed in

column A, with their appropriate roles specified, explanations in B, illustratives in C, and illative in D. When a proposition is one of the other four relations (additive, causal, alternative, adversative), its logical value is entered in the column containing the value of the presupposed proposition. For example, if proposition (3) in the above diagram were in additive relation to proposition (1), the additive symbol (+) would have been placed under column A, opposite number (3).

The above diagram mainly shows the semantic role of each proposition with regard to its relation to the primary theme manifested in proposition (1). But, if we examine the relationship between propositions (2)-(5), we will be able to assign a different role to each proposition. These propositions can be said to be in additive relation to each other since each one singles out a particular advance of national products and shows its effect on the environment. They can all be subsumed under some general topic. This shows that a proposition may have two simultaneous roles. These roles have to be displayed in two different diagrams. The fact that a proposition may have a dual role was confirmed by Larson (1967:17). He states:

...a sentence can fill two or more roles simultaneously, especially if it contains more than one important

predication. Even sentences containing only one predication can sometimes play two roles, one referring directly to the previous sentence, the other acting as a step forward, introducing ideas in later sentences.

Another observation about the logical analysis of paragraph E.1 is that the dominant relation between the theme and its rheme is the illustrative, while the relation between the exponents of the rheme (post-margin tagmeme) is additive. This relation, as mentioned earlier, implies coordinate rather than subordinate relation between constituents. A final observation is that neither the illustrative nor the additive relation is signalled by a connective or a conjunction. The non-existence of conjunctions or connectives to signal a relation emphasizes the role of asking the appropriate question to elicit the role of a proposition. It also indicates that conjunctions are not the only logical device factors in determining the semantic relation of the sentences.

The previous procedure for analyzing logical relations will now be applied to the Arabic paragraph (A.1), thematically analyzed and translated earlier in this chapter.

The semantic roles of the sentences in paragraph A.1 can be shown in the following logical diagram:

	A	B	C	D
1.	(P)			
2.		(=)		
3.		(=)		
4.		(=)		
5.			(:)	
6.	(S)			
7.		(=)		
8.		(=)		

(P): primary theme, (S): secondary theme.

The diagram shows that this paragraph is basically developed via explanation. Propositions (2), (3), and (4) are in explanatory relation to the primary theme since each one of them further explains the primary theme. The secondary theme is also developed via explanation. The semantic roles of each statement were determined on the basis of its function or relation with respect to the primary. The relations between a sentence and its predecessor might not be the same as it is between this proposition and the thematic statement. For example, proposition (3) is in explanatory relation to proposition (1), but it is in additive relation to (2). The semantic roles between each sentence and the preceding one can be seen in the following diagram.

	A	B	C	D
1.	(P)			
2.		(=)		
3.		(+)		
4.		(+)		
5.	(:)			
6.	(S)			
7.		(=)		
8.		(+)		

The above analysis shows the inadequacy of Milic's logical diagram to incorporate the dual function of sentences.

Since this study is concerned with the tagmemic structure of paragraphs and the relationship between the constituent tagmemes, the above diagrams are not adequate for displaying the logical relations between thematic units or tagmemes. Therefore, the thematic relations chart was devised to display the logical relations between themes as follows:

Thematic Units	P	R	S	R
Proposition Number	1	2-5	6	7-8
Relation	(=)	(=)	(=)	

The chart indicates that paragraph A.1 consists of two thematic units; a primary theme, manifested in the first proposition, and a secondary theme manifested in proposition (6). Each of these two themes is developed

by a post-margin tagmeme which functions as a rheme. The chart further shows the logical relations between these thematic constituents. The relation between the primary theme and its rheme is marked explanatory since propositions (2)-(5) expand the primary theme by providing more explanatory information; that is why I placed the explanatory relation symbol (=) between the primary theme (P) and the rheme (R). The relation between the secondary theme (S) and its rheme (R) is also marked explanatory for the same reason. Therefore, the symbol (=) appears between (S) and (R) in the chart.

Determining the relationship between the secondary theme and the primary one was not that easy. The most plausible hypothesis concerning the relation between these two thematic units can be formulated as follows:

1. The relation between the primary theme and the secondary themes is additive. This hypothesis is based on the presence of a syntactic signal. The sixth proposition that represents the secondary theme is introduced by the connective bal which might be translated into English as "furthermore" or "moreover". Syntactically speaking, the proposition introduced by bal is in additive relation to the previous one. This means that the two propositions are in coordinate relationship and thus cannot be subsumed within each other. But

examining the content of the secondary theme, one can see a direct relationship between this thematic unit and the preceding one. The first theme explains how Islam equated women with men, and ends in the conclusion that equality of women to men and respecting women are one of the basics of Islam. Meanwhile, the second theme, starting with proposition (6), expands part of the propositional content of the preceding theme, namely respecting women. Any proposition that expands or restates part or all of the content of a previous one stands in explanatory relation to that unit. This leads to the rejection of this hypothesis, and to the acceptance of the following one:

2. The secondary theme is in explanatory relation to the primary theme. For the above considerations, I placed the explanatory relation symbol (=) between the primary theme (P) and the secondary theme (S) in the thematic relations chart. The theme marker was the use of the connective bal at the beginning of proposition (6). Since bal is not the only connective in this paragraph, a brief discussion of the functions of the other connectives used in this paragraph might be in order.

A noticeable feature of this paragraph is that each proposition, except for the first one, starts with a conjunction. The second proposition starts with fa:

fa 'a9lana hurriyataha...

and declared-it freedom+her

In Arabic, fa is a coordinator that joins two syntactically equal elements, whether they are single words, phrases or sentences. In paragraph A.1, fa links the verb 'a9lana, "declared", with sabaqa, "preceded". Both of these verbs are in the perfect tense. But, the function of fa in this paragraph is not merely a simple structural linkage. The proposition it introduces is in explanatory relation to the preceding one by virtue of its propositional content. In this proposition, fa functions as the marker of this explanatory relation. It expresses the meaning of the connective "that is to say" or "by". It cannot be translated as "and" although it is the commonly used equivalent of the Arabic conjunctions fa and wa.

It has been stated above that the proposition introduced by fa is in explanatory relation to the preceding one, and explanatory propositions are in subordinate rather than coordinate relation to the proposition they explain. In such a case, fa functions as a subordinator and not a coordinator. This duality of

function leads us to both syntactic and semantic considerations. Syntactically, fa is a conjunction that conjoins two elements of equal syntactic status. However, semantically it may have other functions depending on the meaning of the proposition in which it is used. It may function as a marker of an explanatory relation as is the case in paragraph A.1. It may function as a marker of an illative relation, as can be seen in the following example from paragraph A.25:

wa	kullu	9:la:qat	- ul'isla:m	bihi
and	all	relationship-Islam		with-it
9an	ja'a	<u>fa</u>	wajadahu	qa:'iman
that	came	it and	found-it	existing
<u>fa</u>	9axadha	fi:	tajfi:f	mawaridih
therefore	started	in	drying	sources-its

All that Islam has to do with slavery, is that when it came, slavery was already established, therefore it started eliminating its sources.

There are two occurrences of fa in this example. The first fa conjoins two perfect tense verbs. Besides simple linkage, fa has the meaning of sequencing a logical arrangement. That is to say, one action follows another in a certain sequence that cannot be changed if the meaning of the sentence is to be maintained. The second instance of fa has the function of marking an

illative relation. Thus it can be translated into English as "therefore" or "and thus". Fa may signal other logical relations as well. In the following example taken from paragraph A.20, fa is used to indicate an adversative relation:

A.20

wa hi:n yuzi:lu - l'isla:m
and when eliminate Islam

tilka-lhawa:jiz 'aljughra:fiyyah
that barriers the-geographical

aw 'al 9unsuriyyati 'allati:
or the racial which

taqu:mu 9alayha: fikrata lwatan
establish on-it idea the-nation

'alqawmiy, fa 'innahu la: yulghi:
the national, but it is not cancel

fikrata-lwatan 9ala-l'itla:q
idea the nation on at all

When Islam removes the geographical or racial barriers on which the notion of the national nation is based, it does not at all deny the concepts of nation.

In this example, fa introduces a proposition that changes the direction of the preceding one. Therefore, it marks an adversative relation.

The above examples show that the particle fa has more than one function despite the fact that it is classified as a conjunction in Arabic grammar. The

discourse functions of fa are more varied/complex than its syntactic function, where it is used to indicate simple structural linkage.

The second conjunction used in this paragraph is wa. There are five intrasentential occurrences of wa in this paragraph. However, in this study, we are interested in the intersentential use of this conjunction. The first instance of wa is at the beginning of proposition (3). This proposition stands in an explanatory relation to proposition (1) which expresses the theme. The same proposition (3) is in additive relation to the preceding one (2). Considering the propositional content of propositions (2) and (3) that are connected by wa, one notices that they are of equal importance since both of them stand in the same relation to the thematic sentence. In other words, propositions (2) and (3) are functionally equal. The same can be said about the relationship between propositions (4) and (1) on the one hand, and (4) and (3) on the other. Proposition (4) stands in an explanatory function to (1) and in additive relation to (3). This shows that proposition (4) is also equally as important as (2) and (3). This analysis makes it clear that one of the discourse functions of wa is to connect equally important propositions. This function of wa is obvious also in propositions (8) and (9) in their

relation to the secondary theme expressed in proposition (6).

Another discourse function of wa is manifested in proposition (5) which sums up the preceding arguments and restates the theme. In this use, it can be deleted without distorting the structure or the coherence of the text. This usage of wa might be due to the fact that it is commonly and frequently used at the beginning of sentences, paragraphs and chapters to indicate continuity of the theme being developed.

The third conjunction that has a discourse function is bal, which introduces proposition (6). This connective introduces a secondary theme that is in explanatory relation to the primary theme. It is very often translated as "but", however, in this paragraph, it is better translated into English as "moreover" or "furthermore".

Before examining the other functions of wa and bal in other paragraphs, the following observation needs to be stated. This paragraph consists of two thematic units: the primary theme in proposition (1) and the secondary theme in (6). Each theme is developed by a sequence of explanatory additive statements, the first of which, in each case, is introduced by the conjunction fa followed by one or more statements introduced by wa, each

of which is in additive relation to the preceding proposition, but in explanatory relation to the thematic proposition. The pattern can be formulated as follows:

P + fa₁ [explanatory proposition] + waⁿ [additive proposition].

I will now examine wa and bal in other paragraphs. The first striking impression is the use of wa at the beginning of many paragraphs. The function of wa in this position is to indicate that the general theme is being continued and no break is intended, i.e., wa is used in these positions as an attention-drawing device to the continuity of the general theme. Examples of this function of wa can be seen at the beginning of paragraphs A.31, 4, 15, 26, 22, and 17.

Analyzing the logical relations between propositions (8) and (7) in paragraph A.14, one can detect a new function of wa that introduces proposition (8). Proposition (8) is in adversative relation to proposition (7) since it changes its direction as can be noticed from the propositional content of each.

Proposition 7

fa lastu 'uri:du 'an 'aqu:la albaḥthu
do not-I want that say investigation

I do not want to say "investigation"

Proposition 8

wa 'inna ma 'uri:du 'an 'aql 'aššak
but want-I that say suspicion

but I want to say suspicion

The conjunction that signals the adversative relation between these two propositions is wa. In this context, the best English equivalent of wa is "but". This function of wa is very common in Arabic, especially when used before the adversative particle la:kin.

Wa can also introduce other relations. In paragraph A.3, it introduces proposition (12) that functions as a generalization or conclusion of the preceding propositions. Therefore, wa in this context has the discourse function of marking an illative relation as can be seen in the following portion of paragraph A.3.

Preceding Propositions

fa-tura:thu l'arabiyy juz'un minna:
and heritage Arabic part of-us

š'i'na: 'am 'abayna wa huwa fawqa
liked-we or not-like and it-is furthermore

dha:lika mayyizātuna: 'allati: natafarradu
that feature-our which distinguished

biha: bayna-l'umam
by-it among nations

Arabic language is part of us whether we like it or not. Furthermore, it makes us unique among nations...

Illative Proposition (12)

wa liha:dha wajaba 9ala kulli 9arabiyy
and for-this it-is-a-must on each Arab

'an yahtamma bithaqafatihi-lmaziyah wa
that take-care with-culture-his-great and

biba9thiha-ljadi:d

reviving-it new

therefore, it is a must on each Arab
to take care of his past culture and
its revival.

It has become obvious that the additive "and" is not the only equivalent of Arabic wa, which has various functions. In the above example, wa is equivalent to "therefore".

Another basic function of wa can be recognized in proposition (2) of A.4, where it introduces a circumstantial sentence modifying the pronoun hum, "they" (plural, masculine) at the time of the occurrence of the action as can be shown in the following.

in any order without affecting the meaning of the sentence. This function of wa makes it distinct from the other common conjunction fa. Wa indicates a simultaneity of actions without any implication of logical arrangement or sequencing of events, while fa, in one of its discourse functions, implies logical arrangement and simple linkage as well. The following examples may clarify the difference.

a. daxala ahmad wa ha:ni:

entered-he Ahmad and Hani

Ahmad and Hani entered, or
Hani and Ahmad entered.

b. daxala ahmad fa ha:ni
entered-he Ahmad then Hani

Ahmed entered and then Hani.

These are some of the discourse functions of wa, which is not the only conjunction in the paragraph. Another conjunction that was used in paragraph A.1 is bal, which introduces the secondary theme in proposition (6). Bal is usually considered an adversative particle and thus it is translated into English as "but". In paragraph A.1, bal introduces a secondary theme that is in explanatory relation to the primary theme. It also amplifies part of the content of the preceding proposition, and in this context, bal is the equivalent

of English "furthermore" or "moreover". The meaning of bal is manifested in proposition (7) of paragraph A.3 and proposition (4) of paragraph A.9 as can be seen below.

A.9

Preceding Proposition (3)

wa 9alayhi yajuzu lilfardi an
and therefore allowed to-the-individual that

yamtalika 'adawa:t baytihi wa malabisihi
own tools house-his and clothes-his

wa 'amwalihi ta:lama: la: yastaghilluha:
and money-his as-long-as not use-it

biwa:sitati 9umma:l
by-means-of workers

And therefore, the individual is allowed to own his own house utensils, clothes, and money as long as he does not make use of it by employees.

Proposition (4)

bal rubbama: sumiha lahu bimitila:ki
moreover probably was-allowed to-him to-own

maskanihi 'ydan
house-his as-well

Moreover, he might be allowed to own his own house as well.

Another function of bal that is related to the preceding one can be detected in paragraphs A.21 and A.10. Bal introduces proposition (6) in paragraph A.10 as

can be seen below.

A.10

Proposition 5

fannahzatu sina:9iyyati 9axadat
and the-renaissance industrial started

taxtariqu-19a:lam al9arabiyy min 'adnah:h
spread the-world Arab from nearest-its

'ila: 'aqsa:h musa:9idatan 'iyya:hu la:
to farthest-its helping it not

'iala: tanmiyati mawa:ridihi fahasb
on developing resources-its only

The industrial renaissance spread in all parts of the Arab world, helping it not only in developing its resources...

Proposition 6

bal 'iala: tasni:9 ha:dhihi-ththarawati
but on manufacturing these-resources

'aydan
also

but also in manufacturing them.

In this example, bal is equivalent to English "also" although it does not introduce an adversative relation. It serves as an indicator of an additive relation of the preceding proposition. It also gives more emphasis to the proposition it introduces.

A more common function of bal is manifested in paragraphs A.19, 29, and 30. Proposition (7) of paragraph A.30 is introduced by bal. The analysis of logical relations holding between the propositions in this paragraph indicates that proposition (7) is in adversative relation to proposition (5). Proposition (5) states that the teacher must not teach his student any controversial issue which he believes to be true, while proposition (7) makes it an obligation for the teacher to teach his students critical thinking by means of which they can make their own judgments. In such contexts, bal is best translated into English "but" or "on the contrary".

So far, I have discussed some logical relations between propositions and their markers associated with these relations. These relations will be displayed in the next chapter with tables and charts showing the possible indicators and the frequency of each relation.

In the following section, an attempt will be made to analyze the logical relations holding between themes and between propositions in English paragraphs.

The following English paragraph will be analyzed for the purpose of identifying its thematic units and the semantic roles holding among themes and constituent propositions.

1. The first and most obvious result of the technological revolution has been to increase the amount of wealth in the form of material things which can be produced in a given time by a given population. 2. For example, in 1913 there was produced in Great Britian several billion yards of cotton cloth for export alone. 3. In 1750 the total population of Great Britian, working with the mechanical appliances then available, could have produced only a small fraction of that amount. 4. A second result of the technological revolution is that, as machines are perfected and become more automatic, man power plays a relatively less important part in the production of a given amount of wealth in a given time. 5. Fifty years ago, when all type was set by hand, the labor of several men was required to print, fold, and arrange in piles the signatures of a book. 6. Today machines can do it all, and far more rapidly, 7. little man power is required, except that a mechanic, who may pass the time sitting in a chair, must be present in case anything goes wrong with the machine. 8. And finally, a third result of the technological revolution is that, under the system of private property in the means of production and price system as a method of distributing wealth, the greater part of wealth produced, since it is produced by machines, goes to those who own or control the machines, 9. while those who work the machines receive that part only which can be exacted by selling their services in a market where wages are impersonally adjusted to the necessities of the machine process.

Constructing a blocking chart for this paragraph would reveal that it consists of three thematic units. The first is manifested in propositions (1)-(3) with the theme expressed in the first sentence. The second thematic unit starts with proposition (4) and ends with (7). Finally, the third unit is shown in propositions (8) and (9). Examining the relationship between these three themes, one can observe that they are of equal-level of generality. Each one explains a result of the technological revolution.

Since these thematic units are related to one general topic, they have to be considered as secondary themes to a primary one that is not overtly manifested in any proposition. Therefore, it has to be synthesized from the general meaning of the whole text. It can be synthesized as 'The adverse consequences of the technological revolution'. The three secondary themes are internally marked by expression "the first..., A second..., And finally, a third...". They are externally signalled as well. Examining each thematic unit with respect to the general-to-specific principle, we can see that the first statement in each thematic unit is more general than the propositions developing it. For example, proposition (1) of the first thematic unit provides an abstract statement which is "the increase of

wealth in the form of material things produced at a certain time by a given population", while propositions (2) and (3) provide concrete and specific illustrative instances of this abstract statement. The case is the same in the other thematic units.

The secondary themes are in an explanatory relation to the synthesized primary theme. This means that they are in subordinate relation to it. This relation can be shown in the following dominance display.

The results of the technological revolution

Increase of wealth in the form of material things.	Machines reduced the need for man-power.	The greater part of the wealth produced goes to the owners of the machines.
--	--	---

The logical relations between themes and rhemes can be shown in the following thematic relations chart:

Thematic Unit	P	S ₁	R ₁	S ₂	R ₂	S ₃	R ₃
Proposition No.	Syn-thesized	1	2-3	4	5-7	8	9
Relation between:							
-themes & rhemes		(X)		(=)		(=)	
-secondary themes			(+)		(+)		
-P & S		(=)	(=)		(=)		

This chart shows that paragraph E.10 consists of a synthesized primary theme and three secondary themes: S_1 , S_2 , and S_3 . Each secondary theme is developed through a sequence of propositions functioning as rhemes: R_1 , R_2 , and R_3 . The number of propositions manifesting each theme or rheme is shown in the second row below each theme or rheme. The third row shows the relation that stands between themes and rhemes. For example, the relation between the first secondary theme (S_1) and its rheme (R_1) is illustrative, that is, R_1 develops S_1 by illustration, thus the illustrative relation symbol (X) is placed between S_1 and R_1 . The fourth row shows the logical relation between secondary themes. In this paragraph, the secondary themes are in additive relation to each other. The additive relation symbol (+) appears between S_1 and S_2 , and S_2 and S_3 . The last row of the thematic relations chart indicates the role of each secondary theme in developing the synthesized primary theme. Since each secondary theme explains an aspect of the primary theme, namely, the effects of the technological revolution, they stand in explanatory relation to the primary theme. Therefore, the explanatory relation symbol (=) appears between the primary theme (P) and each of the secondary themes.

The constituent propositions of the whole paragraph may have different roles in relation to each other. The following logical diagram shows the relation between the constituent propositions of this paragraph:

	A	B	C	D
1.	(S ₁)			
2.			(X)	
3.	(+)		(X)	
4.	(S ₂)			
5.		(=)		
6.		(-)		
7.		(=)		
8.	(S ₃)			
9.	(-)			

This diagram shows the role of each proposition in the paragraph. Some of these propositions may have a dual role. For example, proposition (3) has an explanatory function with respect to the secondary theme expressed in (1), and an additive function in relation to proposition (2).

Some of these relations are signalled by particular markers. The three thematic units, for example, are signalled by the use of ordinal numerals, i.e., "the first, the second" and "the third". The illustrative relation is indicated by the connective "for example" in proposition (2), but it has no overt marker in other propositions. The adversative relation holding between proposition (6) and (5) is lexically marked by the use of

adverbial expressions such as "fifty years ago" and "today". The same relation holding between proposition (9) and (8) is marked by the conjunction "while".

The frequency of these logical relations and their markers in the other paragraphs will be presented in tables in the next chapter.

To complete the description of paragraph structure, an attempt will be made in the rest of this chapter to examine the patterns of lexical cohesion in both Arabic and English paragraphs.

Lexical Cohesion

Lexical cohesion means the utilization of lexical resources in creating textual cohesion. Halliday and Hassan (1976:274) define lexical cohesion as "the cohesive effect achieved by the selection of vocabulary." They divide lexical cohesive devices into two main categories: reiteration and collocation. Reiteration involves the repetition of the same word, the use of a synonym or near-synonym, the use of a superordinate, and the use of a general word. Collocation, on the other hand means the use of lexical items that tend to co-occur in a particular context. This type of lexical cohesion includes lexical items that are drawn from the same ordered series such as the days of the week, or members

of unordered series such as ceiling, roof, basement, or they can be opposites of a certain type.

Halliday and Hassan's framework for the analysis of lexical cohesion will be employed in analyzing the sample paragraph in the study. Examining paragraph A.1, translated earlier in this chapter, we can find that the texture of this paragraph is not only created through grammatical devices but also through the use of lexical items in certain patterns and relations. In the first sentence, for example, we find the lexical item /?'s\$arq-ul islami/ repeated through synonymy in proposition (5) and (6). It is also contrasted with one of its opposites in proposition (8) which is /?'s\$ara:?'iq ?alqharbiyyah/, or "western jurisprudence". The lexical cohesive devices in paragraph A.1 can be displayed in the following chart:

Proposition Number	Cohesive Item	Type of Lexical Cohesion	Presupposed Item
4	'arrajul	same word	'arrajul (1)
5	ha:dhihi- 'lmazaya:	superor- dinate	hurriyyah (2) 'istiqla:l (2) huqu:q (3)
5	's\$ari:9ah	synonym	kafa'ah (4) 'a'ssar9 (1)
5	'ilmar'at' 'rrajul 'ttaswiyat	same word same word synonym	'ilmar'at (1) 'arrajul (1) musa:wa:t (1)

Proposition Number	Cohesive Item	Type of Lexical Cohesion	Presupposed Item
6	šari:qatina:	synonym	'aššarq (1)
6	'ilmarah	same word	'ilmarah (1)
8	nafaqah	subordinate	'ahma:l (7)
8	tarbiyah	subordinate	'ahma:l (7)
9	'arrajul	same word	'arrajul (1)
	'ilamra'ah	same word	'ilmar'ah (1)
10	'arrajul	same word	'arrajul (1)

This chart is divided into four columns. The first column lists the proposition number. The second contains the lexical cohesive item in each proposition. The third specifies the type of lexical cohesion. That is to say, is lexical cohesion achieved by repeating the same word, or by using its synonym, or by using a subordinate word to a superordinate item? Finally, the fourth column shows the item which the cohesive item presupposes or with which it achieves cohesion.

The chart shows that there are thirteen lexical cohesive items in this paragraph which consists of ten propositions. The frequency of lexical cohesive devices indicates the role that lexical cohesion plays in

creating texture in texts. Each two related cohesive elements constitute a tie or a relation between two elements in a text. Halliday and Hassan (1976:3) define a tie as "an instance of cohesion" or "an occurrence of a pair of cohesively related items". A pair of related items can be contiguous, i.e. following each other without any intervening element. This type of tie has been called "immediate" by Halliday and Hassan (1976:332). The second type of tie is what they call an "intermediated" tie, where two related items are repeated in two sentences that are mediated by one or more sentences containing an element such as a pronoun that forms a link to the presupposed item. The third basic type of tie described by Halliday and Hassan is the "remote" tie where the presupposed element is separated from the presupposed one by a number of non-mediated sentences that do not contain any link between the two items.

An example of immediate ties can be seen in the chain of relations between /\$ari:9atuna:/ in proposition (6) and /'a\$\$ar9/ in proposition (1). Each of the mediating sentences contains either the same cohesive item as is the case in proposition (5) or a pronoun replacing this item as is the case in propositions (2, 3 and 4). The cohesive item in these propositions are

understood rather than expressed. This is a property of the morphology of Arabic verbs that can be inflected for person. For example, in proposition (2), the perfect verb /'a9lana/ means "he (it) announced". The subject of this verb is understood as referring to the subject of the first proposition.

Examining the types of lexical cohesion displayed in the chart, we notice that the dominant pattern through which lexical cohesion is achieved is reiteration through the use of the same word, synonyms, and the superordinate.

At this point of the analysis, there appears to be two flaws in Halliday and Hassan's framework of analyzing lexical cohesion. The first one is related to Halliday and Hassan's classification of lexical cohesion created by a subordinate item when it follows a superordinate word or vice versa. They classify a cohesive tie that is created when a superordinate word precedes a subordinate item as a case of reiteration (1976:278), while this relation is classified under collocation when the superordinate word follows the subordinate item (p.280). Halliday and Hassan fail to offer any justification for this classification. Both cases occur in paragraph A.1 as can be seen in the chart in proposition (5) in relation to (2, 3, 4) and the superordinate-subordinate

relation is manifested in proposition (7) with respect to (8).

The second flaw lies in their treatment of morphologically related lexical items. Halliday and Hassan (1976:291) stated "a lexical item is not bound to a particular grammatical category, or to a particular morphological form..." According to this view, all the forms derived from the same root represent a single lexical item, and thus can be classified under the lexical cohesive device called reiteration or repetition of the same word. In paragraph A.1, the word /musa:wa:t/, "equality" in proposition (1) and the item /taswiyat/, "equating" in proposition (5) are derived from the same root but they do not have identical meanings. Therefore, they cannot be considered as the same word. Derived forms might be better considered as separate texture-forming lexical devices.

Despite these flaws in Halliday and Hassan's scheme of dealing with lexical cohesion, it remains more adequate than the tagmemic treatment of the same concept. Cohesion in tagmemics is a grammatical concept. It is the feature of the tagmeme that specifies how a constituent governs or is governed by another constituent in a text. Pike and Pike (1977:41) state that "constituents are cohesive when they control or are

controlled grammatically by one another." This concept of cohesion excludes lexical cohesion that is created by the selection of lexical items.

I will now examine how lexical cohesion creates texture in the English paragraph E.1. The following chart shows the lexical cohesive items, their type and the lexical items they presuppose.

Proposition Number	Cohesive Item	Type of Lexical Cohesion	Presupposed Item
2	Increases in electric power production	paraphrase	new advance of the gross national product (1)
	The discharge of sulphur dioxide into the air	paraphrase	deterioration in the environment (1)
	air	collocation	environment
3	The growth of paper industry	paraphrase	new advance ... (1)
	Increase in trash	paraphrase	deterioration... (1)
4	The production of	paraphrase	new advance ... (1)
	piles of hulks	paraphrase	deterioration... (1)

Proposition Number	Cohesive Item	Type of Lexical Cohesion	Presupposed Item
5	The growth of urban	paraphrase	new advance ... (1)
	choking the mobility... and the lungs of the city dwellers	paraphrase	deterioration... (1)

The chart shows that each of the propositions (2-5) of paragraph E.1 contains two instances of paraphrase equivalences. For example, in proposition (2), the phrase "increases in electric power production" is to be understood in the context of the paragraph as a paraphrase of the phrase "new advance of the gross national product" in proposition (1). The second instance of paraphrase is in the phrase "the discharge of sulphur dioxide into the air" which is to be understood as a paraphrase equivalence of deterioration in the environment in proposition (1). This analysis shows another flaw in the classification of lexical cohesion proposed by Halliday and Hassan who consider repetition at the word level only. Synonymy and hyponymy are word properties. This paragraph shows that synonymy can be at a higher level than that of the word. It can be at the level of a sentence or phrase. In this case, this relation is called paraphrase rather than synonymy. This

modification agrees with what Linda Jones (1977:232) called "paraphrase equivalence" rather than synonymy where an expression is to be understood as a paraphrase of another preceding expression in a certain context.

The different patterns of lexical cohesion in both Arabic and English will be presented and discussed in the following chapter.

Chapter 6

Results and Discussion

In this chapter, I will present the findings of the study followed by a discussion based on them. The first part includes the results of the tagmemic or thematic analysis of the sample paragraphs. The second includes the results of the analysis of the logical relations holding between propositions on the one hand and between themes and rhemes on the other. Finally, the results of the analysis of lexical cohesion will be presented in the third part.

The similarities and differences between Arabic and English paragraph structures, logical relations and lexical cohesion will be presented in the sections dealing with each aspect respectively. Before presenting the findings, however, it might be appropriate to present a quantitative description of the sample paragraphs.

Quantitative Analysis

Forty paragraphs were chosen from each language. Thirty of these paragraphs (1-30) were randomly chosen, and ten (31-40) were more or less parallel in content. The following table provides some quantitative information about the sample paragraphs with regard to

the number of propositions and the mean value of propositions per paragraph.

	Arabic			English		
	Random	Parallel	Total	Random	Parallel	Total
No. of paragraphs	30	10	40	30	10	40
Total no. of propositions	288	78	366	244	69	313
Mean of propositions per paragraph	9.6	7.8	9.15	8.1	6.9	7.8

Table 1. Quantitative Aspects of Sample Paragraphs in Arabic and English

This table indicates that Arabic paragraphs tend to be longer and have a slightly larger number of propositions than the English ones.

Distribution of Themes in the Arabic and English Sample Paragraphs

As far as themes are concerned, the analysis of the Arabic random sample paragraphs (1-30) reveals that themes in these paragraphs can be categorized into three distinct types. Paragraphs of the first type consist of an explicitly stated primary theme which is developed

through one or more rhematic propositions. This pattern is more dominant than the other two. It is represented in twenty-five paragraphs, excluding paragraphs A.1, 7, 14, 18, and 23 (Appendix A). That is to say, the percentage of this pattern in the random sample is 83%.

The second pattern is manifested in the paragraphs that have two or more secondary themes that are of equal level of generality. Each of these themes may be developed through a number of rhemes, although not all secondary themes may have rhematic propositions. An example of this pattern can be seen in paragraph A.23 where the first secondary theme (Proposition 1) has no rheme. In this pattern, it is left to the analyst or the reader to synthesize the primary theme from the paragraph. This pattern of thematic development can also be seen in paragraphs A.7, 14, and 18. It forms 13% of the whole sample.

The third pattern is the one in which paragraphs have an explicitly stated primary theme with one or more rhematic propositions, and one or more secondary themes that can be subsumed under the primary theme. That is to say, the secondary theme is at a lower level of generality than the primary theme. This pattern can be seen in paragraph A.1.

In the parallel paragraphs (31-40), only one paragraph (A.31) has a synthesized primary theme with two secondary themes explicitly stated in the paragraph, i.e., the second pattern. The other paragraphs (32-40) have explicitly stated primary themes that are developed through a number of rhemes (i.e., the first pattern). Thus, the three basic patterns in the Arabic paragraphs (1-40) can be summarized as follows:

1. $P + R_1 + R_2 \dots R_n = \text{Monolevel}$

This pattern is manifested in all the paragraphs (1-40) except paragraphs A.1, 7, 14, 18, 23, and 31. This pattern is the most dominant and forms 85% of all patterns.

2. $S_1 + R^1 + R_n + S_2 + R_1 \dots R_n = \text{Equal level}$

In this pattern, each paragraph has two or more explicitly stated secondary themes that are developed by any number of rhemes ranging from zero to any number. This pattern is less common than the first one. It forms 12.5% of the entire sample and is manifested in paragraphs A.7, 14, 18, 23, and 31.

3. $P + R_1 \dots R_n + S_1 + R_1 + \dots R_n = \text{Multilevel}$

Paragraphs of this pattern have explicitly stated primary and secondary themes. Among the forty Arabic paragraphs, only one (A.1) is developed using this pattern. It is

the least common pattern in the sample and constitutes only 2.5% of the sample.

The frequency and percentage of these thematic patterns can be displayed in the following table.

Thematic Pattern	Frequency	Percentage
Monolevel	34	85.0
Equal-level	5	12.5
Multilevel	1	2.5
TOTAL	40	100.0

Table 2. Frequency and Percentage of Thematic Patterns in the Arabic Sample Paragraphs

The distribution of primary and secondary themes in the sample Arabic paragraphs can be shown in the following table.

Prop. No.	Random			Parallel			GRAND TOTAL
	P.Theme	S.Theme	Total	P.Theme	S.Theme	Total	
(1)	22	4	26	8	1	9	35
(2)	3	1	4	1	-	1	5
(3)	-	1	1	-	-	-	1
(4)	1	-	1	-	-	-	1
(5)	-	-	-	-	-	-	-
(6)	-	2	2	-	1	1	3
(7)	-	-	-	-	-	-	-
(8)	-	1	1	-	-	-	1
TOTAL	26	9	35	9	2	11	46

Table 3. Distribution of Primary and Secondary Themes in the Sample Arabic Paragraphs

The first column in this table, marked as proposition number, indicates the number of the thematic propositions in each paragraph. The second column labelled Primary Theme (P.Theme) provides the number of explicitly stated primary themes in initial or non-initial propositions within paragraphs. Thus, reading across the table, twenty-two primary themes and four secondary ones are explicitly stated in the initial proposition. In the parallel paragraphs, eight explicitly stated primary themes are found in initial positions. Note that in the actual samples, when the primary theme is not in initial position, it is preceded by an introductory statement, that is to say, a pre-margin, the function of such a statement can be either transitional or introductory to the primary theme.

This tabulation can be looked at in terms of the location of the thematic propositions in each paragraph, namely initial and non-initial. Taking these two parameters into consideration, we find that thirty-five out of forty paragraphs (87.5%) have overtly stated themes in initial propositions.

The following table shows the frequency (F) and the percentages (%) of paragraph initial and non-initial themes in the Arabic sample paragraphs.

	Random P/S Themes		Parallel P/S Themes		Parallel & Random	
	F	%	F	%	F	%
Initial	26	56.5	9	19.6	35	76.1
Non- Initial	9	19.6	2	4.3	11	23.9

Table 4. Frequency and Percentage of Initial and Non-Initial Themes in the Arabic Sample Paragraphs

This table clearly shows that there is a strong tendency among the authors of the sample paragraphs to develop their paragraphs through stating the primary theme in initial position. Only 23.9% of all these themes are expressed in non-initial position. In this case, the preceding propositions can be either introductory or transitional in function.

The results of the analysis indicate that Arabic expository paragraphs are generally deductively developed. This means that there is a preference among writers of the sample paragraphs to state a generalization at the beginning of their paragraphs to introduce their themes regardless of whether they are primary or secondary. Then, these generalizations or themes are developed through supporting propositions.

Turning now to the English sample paragraphs, the analysis reveals that themes in these paragraphs can be classified into the following patterns:

Paragraphs of the first pattern consist of explicitly stated primary themes that are developed through one or more rhematic propositions. Thirty-four out of forty paragraphs (85%) consist of this monolevel pattern, where a primary theme is overtly expressed and developed through one or more rhemes without having any secondary theme. Like the monolevel pattern in Arabic, this pattern is the most common one. It forms 85% of all patterns in the sample. This percentage is exactly the same as that of the monolevel pattern in Arabic. This pattern is manifested in all the English sample paragraphs except E.2, 10, 13, 16, 19, and 40.

In the parallel paragraphs, E.31-40 (Appendix B), this pattern is represented in nine paragraphs out of ten, that is to say, 90% of all patterns in the parallel sample. This percentage is identical to that of the same pattern in the Arabic parallel paragraphs.

The second pattern involves paragraphs in which there are one or more secondary themes, that are of equal level of generality. Each of these secondary themes may be developed through one or more rhematic propositions. In such a case the primary theme must be synthesized from

the content of the paragraph. This pattern is manifested in paragraphs E.10, and 16 of the random sample.

Unlike the Arabic random sample in which this pattern is represented by 12.5% of all paragraphs, this pattern is manifested in 6.7% of the all the English random paragraphs and 5% of the entire sample.

In the English parallel paragraphs, this pattern is not manifested in any paragraph, while in one Arabic paragraph (A.31) we found two secondary themes.

The third pattern involves paragraphs with explicitly stated primary themes that are developed through one or more rhemes and one or more secondary themes of a lower degree of generality. This pattern is manifested in two random paragraphs, E.2, and 19, and one parallel paragraph, E.40.

The fourth pattern, which is the least common, is represented in paragraph E.13 in which we find a development of a theme that is not explicitly stated. Thus, the primary theme has to be synthesized. This pattern did not occur in the sample Arabic paragraphs.

The thematic patterns of the English sample paragraphs can be summarized as follows:

1. $P + R_1 + \dots R_n = \text{Monolevel}$
2. $S_1 + R_1 \dots R_n + S_2 + R_1 \dots R_n = \text{Equal-level}$
3. $P + R_1 + R_n + S_1 + R_1 \dots R_n = \text{Multi-level}$

4. $R_1 + R_n \dots = \text{Monolevel}$

The following chart shows the frequency (F) and percentage (%) of these patterns in both the Arabic and English sample paragraphs.

Thematic Pattern	Arabic		English	
	F	%	F	%
Monolevel	34	85.0	34	85.0
Equal-level	5	12.5	2	5.0
Multi-level	1	2.5	3	7.5
Monolevel with Synthesized Theme	0	0	1	2.5
TOTAL	40	100	40	100.0

Table 5. Frequency and Percentages of Thematic Patterns in Arabic and English

Thematic propositions may have different distributions with respect to the number of the propositions manifesting a primary or a secondary theme. The following table shows the distribution and frequency of themes in the English sample paragraphs.

Prop. No.	Random			Parallel			GRAND TOTAL
	P.Theme	S.Theme	Total	P.Theme	S.Theme	Total	
(1)	26	1	27	9	-	9	36
(2)	1	1	2	1	-	1	3
(3)	-	1	1	-	-	-	1
(4)	-	1	1	-	-	-	1
(5)	-	1	1	-	1	1	2
(6)	-	1	1	-	-	-	1
(7)	-	-	-	-	-	-	-
(8)	-	-	-	-	-	-	1
TOTAL	27	6	33	10	1	11	44

Table 6. Distribution of Primary and Secondary Themes
in the Sample English Paragraphs

Table 6 indicates that thirty-six of the explicitly stated themes are manifested in the first proposition, while only three primary themes are stated in the second proposition.

Keeping the initial and non-initial parameters in mind, the following table shows the differences and similarities between Arabic and English initial and non-initial thematic units.

	Arabic			English		
	Random %	Parallel %	Total %	Random %	Parallel %	Total %
Initial	54.3	21.7	76.1	63.6	20.5	93.1
Non- Initial	23.9		23.9	4.5	2.3	6.2

Table 7. Percentages of Initial/Non-Initial Themes in Arabic and English Samples

The distribution of themes as shown in Table 7 indicates a great deal of similarity in the ways expository paragraphs in both Arabic and English are developed. In both languages, there is a strong tendency for the first proposition of the paragraph to be thematic in function. However, English random paragraphs show a higher percentage of initial themes. In this respect, Arabic has a stronger tendency for themes to be preceded by an introductory proposition or a transitional statement.

It is also clear from Table 7 that the parallel paragraphs in both languages have a great deal of similarity in the way they are organized. However, there are more variations between the random paragraphs in both Arabic and English. This observation lends some support to the assumption that the difference in content between

paragraphs might be an important variable in determining the structure and organization of paragraphs.

The findings also reveal that the prominent pattern of thematic development in both languages is deductive rather than inductive reasoning. This means that a paragraph starts with a proposition of a higher degree of generality than the following ones which function as rhemes that develop the thematic proposition stated at the beginning of the paragraph.

The tendency of the deductive organization of paragraphs is also true when a paragraph is of the equal-level type, that is, when a paragraph has a secondary theme at the beginning and another one somewhere else. The first secondary theme is normally deductively developed until a break in the repetition pattern occurs where another secondary theme is introduced. For example, in the English sample paragraphs, all seven instances of secondary themes are deductively developed (Appendix B: E.2, 10, 16, 19 and 40). Similarly ten out of the eleven secondary themes in the Arabic sample paragraphs are developed deductively while one is not developed, that is to say, it has no rhemes (Appendix A: A.1, 7, 14, 18 and 31).

This conclusion confirms what Kaplan (1972) has hypothesized about English expository paragraphs in that

they are deductively developed. This appears to be true for Arabic expository paragraphs as well. The deductive pattern of reasoning seems to be the major preference for the authors of the sample paragraphs in both Arabic and English. It might be the pattern of thought characteristic of expository discourse across languages. But, this observation is still premature; it needs to be tested in larger expository data written by different authors in different languages.

Another observation needs to be mentioned here. The analysis of the structure of paragraphs in the Arabic sample shows that digression from the main theme occurs in one paragraph only (A.31). Propositions (13-15) of that paragraph can be considered to be unrelated to the main theme. The author started a new semantic paragraph but not the orthographic paragraph. This observation indicates the inadequacy of defining the paragraph in terms of orthographic indicators. For this reason, researchers such as Pitkin (1969), and Pike and Pike (1977) have attempted to redefine the paragraph in terms of discourse blocks. A paragraph, in this sense, is a semantic unit. Such a concept of the paragraph may or may not correlate to the orthographic paragraph.

A final observation based on the initial/non-initial distribution of themes in Arabic and English ought to be

mentioned as well. A closer examination of the results shown in Table 7 revealed some interesting differences between Arabic and English paragraph structures. Five out of forty-six thematic propositions in the Arabic sample are preceded by one or more introductory propositions. That is to say, 10.9% of the themes in Arabic paragraphs have introductory propositions while only 6.8% of the themes in the English sample paragraphs are introduced by one proposition. This result indicates a stronger tendency among Arabic expository discourse writers to use introductions for themes in paragraphs. This observation might be considered as an indicator of how culture affects the thought patterns of people. In Arabic culture, people tend not to be direct in requesting or presenting a particular thing. The major point of request is usually preceded by an introduction. While in English culture, people are more direct in hitting the topic which they want to discuss.

Theme-Marking Devices

Themes at the level of the paragraph can be identified by one or more criteria. The principle of general-to-specific is very useful in identifying themes of different levels especially when these themes are not marked grammatically. A proposition is said to be at a

higher level of generality if it contains a superordinate expression that may have subordinates or hyponyms in some of the following propositions. Very often a higher level proposition includes a general or abstract term, that has a specific or concrete example in one or more of the following propositions. For example, in paragraph A.7., proposition (1) which was established as a secondary theme contains the general term "a source of annoyance" which is illustrated by specific and concrete examples in propositions (2-7). In proposition (2), for example, "the bacteria and germs" are given as examples of sources of annoyance. This relationship of specific-to-general is the major criterion in establishing proposition (1) of A.2 as the theme of that unit.

As discussed earlier in chapter five, themes can be grammatically signalled. Grammatical devices include things like conjunctions or connectives in general such as: but, despite, for example, firstly, in general, etc. These grammatical theme-marking devices can be classified into two categories, internal and external markers. Internal markers are grammatical constructions that exist in the thematic proposition itself such as: firstly, secondly, the most important factor, but, etc. External markers, on the other hand, are constructions that mark a theme while they may be in other propositions such as the

use of a subordinate connective that, while marking the proposition in which it occurs as rheme, also marks a preceding proposition as theme. These external markers include expressions such as: for example, this means, that is to say, therefore.

Another theme signalling device is parallelism in the use of enumeration such as firstly, secondly, etc. An example of enumeration can be seen in the English paragraph E.10. Some other theme-marking devices will be mentioned in the discussion of theme markers in Arabic and English.

The following two tables indicate external and internal theme-marking devices in both Arabic and English sample paragraphs.

Arabic: Paragraph No.	Thematic Proposition No.	Internal Markers	External Markers
1	1		fa "by"
	6	bal "moreover"	_____
3	4	(enumeration) 9wwalan "firstly"	_____
4	1	(enumeration) min harhiyatin thaniyah "secondly"	_____
5	1	_____	fa "that is to say"

Paragraph No.	Thematic Proposition No.	Internal Markers	External Markers
6	1	(topicalization)	_____
7	1	9alarraghmi "despite"	_____
	8	la:kin "but" (topicalization)	_____
8	2	'amma: "while"	Rhetorical Question (4-6)
10	1	min madha:hir	-----
11	2	'innama "but"	wa ha:thihi- ssima:t "and these" features"
12	2	-----	wa minha: "and among them"
13	1	wa 'awwalu	-----
14	1	'imma (1) "either"	-----
	6	wa 'imma "or" (6)	-----
15	1	-----	fa "this means"
18	1	wa huna: malhu:dhha "and there is an ob- servation"	wa ha:dha ya9ni: "this means" (2)

Paragraph No.	Thematic Proposition No.	Internal Markers	External Markers
	3	'amma "while" "as far as... is concerned" (3)	-----
21		'a:xaru:n "other"	-----
23	1	wa min... "and among"	-----
	2	'amma	-----
24	1	-----	fa "for example"
25	1	kadha:likal- 'amr "similarly"	explanatory 'fa'
26	1	wa 'amma "but"	-----
28	1	-----	haythu (2) explanatory
30	1	-----	dha:lika 'anna "that is"
31	6	wa la:kin "but"	-----
32	1	-----	explanatory 'fa'
33	1	-----	mitha:lu dha:lik "an example of..."
34	1	'amma "but"	-----
35	2	wa la:kin	-----
38		-----	explanatory 'fa' (2)
39	1	'akthar	-----

Paragraph No.	Thematic Proposition No.	Internal Markers	External Markers
		"the most"	
40	1	-----	explanatory 'fa' (2)

Table 8. Internal and External Theme-Marking Devices
in Arabic

English:

Paragraph No.	Thematic Proposition	Internal Markers	External Markers
2	1	enumeration: thirdly	this does mean (2) It means (3)
	5	There is no contradiction in my going to say...	-----
4	1	To turn to	-----
5	1	For the first part	This means (2)
10	1	the first	-----
	4	the second	-----
	8	the third	-----
20	1	-----	for instance (4)
21	1	An important aspect of	-----
22	1	An obvious	-----
23	1	-----	in other words (10)
24	1	-----	cleft (5)
25	1	-----	the most important (8)
26	1	then, (topic- alization)	-----
29	1	so far as we can tell	that is (2)

Paragraph No.	Thematic Proposition No.	Internal Markers	External Markers
31	1	A parallel view	cleft (8)
32	1	-----	cleft (5)
33	1	-----	but (2)
34	1	one indicator	-----
35	1	the most obvious difference	-----
37		-----	parallelism of rhemes (2, 3, 4)
39	1	also	

Table 9. Internal and External Theme-Marking Devices in English

In tables 8 & 9 paragraphs with unmarked themes are not included in the tables for the sake of space. However, the frequency (F) and percentage (%) of marked and unmarked themes in both Arabic and English will be presented in the following table:

	Arabic		English	
	F.	%	F.	%
No. of thematic propositions	46	100	44	100
Unmarked	12	26.1	22	50
Marked:				
Internally	19	41.3	11	25.0
Externally	11	23.9	7	15.9
Both	4	8.7	4	9.1
Total	34	73.9	22	50.0

Table 10. Frequency and Percentage of Marked and Unmarked Themes in Arabic and English

The Arabic sample paragraphs include forty-six thematic propositions of both the primary and the secondary levels, while the English sample contains forty-four thematic propositions. Twelve of the Arabic themes are unmarked. That is to say, 26.1% of the total number of themes in Arabic are unmarked. English shows a stronger tendency for themes to be unmarked.

On the other hand, 41.3% of the Arabic thematic propositions are internally marked while only 25% are internally signalled in English. Similarly, 23.9% of the Arabic themes are externally marked when compared with 15.9% in the English sample. This means that externally marked themes tend to be more frequent in Arabic than they are in English. Table 10 also shows that the frequency of externally and internally marked themes is higher in Arabic than it is in English.

That is, the marked themes in Arabic tend to be more frequent. The Arabic themes tend to be marked more (73.9%) when compared with 50% in English (Table 10).

To turn now to the theme markers themselves, one can notice that Arabic internal theme markers can be classified into five general categories:

1. Connectives:

The term connective includes conjunctions and other expressions that may have a linking function. This group of internal markers include expressions such as bal 'but', 'moreover', 9alarraghmi min 'despite', la:kin 'but', 'amma- 'whereas', imma 'either', wa'amma 'or'

In English, unlike Arabic, the results of the analysis show that there is no theme which is internally marked by a conjunction. This shows that conjunctions in Arabic have a thematic function.

2. Enumeration:

It is a form of parallelism in structure that is achieved through the use of numerals such as: awwalan 'firstly', etc. These markers are common in English as well.

3. Attention-drawing expressions:

These are expressions used by the author to draw the attention of the reader to an important topic that he is going to introduce. They can be expressions that

indicate importance or specify something out of many things. Examples of these expressions are: wa huna: mula:hadhatun 'and here', 'there is an observation', 'akthar 'ahammiyah 'more significant', wa min bayni had:dhihil 9awa:mil 'and among these factors'.

Similar expressions are also used in English, such as: 'to turn to...', 'an important aspect', 'an obvious factor', 'so far as we can tell', 'one indicator', 'the most obvious difference'.

4. Comparative expressions:

They are expressions that compare what follows with what preceded such as: Kadha:likal-'amr 'similarly', wa min na:hiyatin'uxra: 'on the other hand, or in the second place'.

These markers are common in English as well, such as: 'similarly and a parallel view'.

5. Topicalization:

In Arabic nominal sentences, the subject usually precedes the predicate, when a sentence is negated by using a negative particle such as laysa, it is usually placed before the subject. Sometimes, however, the subject is preposed for the sake of emphasis or making it more prominent. Topicalization is a means by which an author indicates that the proposition containing the topicalized element is intended to be taken as a theme.

Examples of topicalization can be seen in the first proposition of paragraph A.6 and proposition (8) of paragraph A.7.

Although topicalization is common in English, there was only one case, E.26, in which a theme was internally marked by this device.

To turn now to the external markers, we can notice that, in Arabic, they are basically connectives. The most common is the explanatory conjunction fa that, very often, introduces an explanatory relation to a preceding proposition. Other examples are general connectives that usually indicate the logical relation of the proposition they introduce to the preceding one such as wa ha:dha:ya9ni: 'this means', mitha:l dha:lik 'for example', dha:lika'anna 'that is to say', etc. This type of expression is common in English as well. They include expressions such as: 'for example', 'that is', 'in other words', 'this means', etc.

In English, however, the use of conjunctions as theme markers is much less frequent than it is in Arabic. There is only one instance of a conjunction used as a theme-marker (proposition (2) of paragraph E.33). But English uses cleft constructions more than Arabic. There are three instances where a theme is externally marked by clefting (E.24, 31, 32), but there is no single case of

clefting as an external theme marker in the Arabic sample paragraphs.

To sum up the discussion of theme markers, the following observations are in order.

Some of the theme marking devices have a dual function. Clefting, for example, is used to emphasize a certain element in a sentence while simultaneously telling the reader that the emphasized element is to be considered as the theme of the paragraph. An example of this function is shown in proposition (8) in paragraph E.31 and in proposition (5) in paragraph E.32.

If a theme is unmarked by internal or external devices, this does not mean that it is difficult to be identified. The general-to-specific principle plays an important role in this analysis. The use of summative expressions that indicate the thematic unity of the preceding propositions is another factor. An example of these summative expressions is "all these merits" in A.1.

Another factor that helps identify a theme is the repetition of one or more of the key concepts given in a preceding proposition.

Logical Relations

In this section, the frequency and percentage of logical relations holding between propositions in both

the English and Arabic sample paragraphs will be discussed. The devices marking each relation will be identified as well. The logical relations holding between thematic propositions, and between themes and their rhemes, will also be presented at the end of this section.

The following table (Table 11) shows the frequency (F) and percentage (%) of logical relations manifested between propositions in both the Arabic and English samples.

The total number of logical relations holding among proposition is 294 in Arabic and 231 in English. In both Arabic and English, the additive relation is the most predominant accounting for (40.1%) in Arabic and (51.9%) in English. The percentages of the other relations in both languages are below 24%. The second most frequent relation in both languages is the explanatory relation accounting for 23.5% in Arabic and 20.3% in English. The causal and illative relations in Arabic tend to be more frequent than their counterparts in English. The least frequent relations in both samples is the alternative accounting for 1.6% in Arabic and 0.4% in English.

The reason why the additive relation has the highest frequency is that in many Arabic and English paragraphs, a theme may be developed through a series of coordinate

illustrative or explanatory propositions that are in additive relation to each other while they are in illustrative or explanatory relation to the thematic proposition of the paragraph. That is to say, each of these propositions has a dual function. The following English paragraph illustrates this point.

	Parallel		Arabic				Parallel		English			
	F	%	F	%	Total F	%	F	%	F	%	Total F	%
Additive (+)	29	9,9	89	30,3	118	40,1	19	8,2	101	43,7	120	51,9
Adversative (-)	2	0,68	20	6,8	22	7,5	8	3,5	15	6,5	23	10,0
Alternative (0)	2	0,68	2	0,68	4	1,4	0	0	1	0,4	1	0,4
Explanatory (=)	16	5,4	53	18,0	69	23,5	8	3,5	39	16,9	47	20,3
Illustrative (X)	3	1,0	11	3,7	14	4,8	2	0,9	13	5,6	15	6,5
Illative (i)	3	1,0	26	8,8	29	9,9	5	2,2	8	3,5	13	5,6
Causal (I)	6	2,0	22	7,5	28	9,5	1	0,4	11	4,8	12	5,2
Total					294	100					231	160

Table 11. Frequency and Percentages of propositional relations in the Arabic and English samples

E.12

1. If anyone wants to exemplify the meaning of the word "fish", he cannot choose a better animal than a herring. 2. The body, tapering to each end, is covered with thin, flexible scales, which are very easily rubbed off. 3. The taper head, with its underhung jaw, is smooth and scaleless on the top; 4. the large eye is partly covered by two folds of transparent skin, like eyelids--only immovable and with the slit between them vertical instead of horizontal: 5. the cleft behind the gill-cover is very wide, 6. and, when the cover is raised, the large red gills which lie underneath it are freely exposed: 7. The rounded back bears the single moderately long dorsal fin about its middle.

In this paragraph propositions (2-7) are in additive relation to each other. But each one is an illustration of proposition (1). Based on the inter-propositional relations, one can say that the theme of this paragraph is developed through addition. But if we consider the logical relations between the theme and its rhemes, we can identify them as illustration rather than addition.

Similarly, a theme of an Arabic paragraph might be developed via a series of explanatory rhemes conjoined with each other by a conjunction such as wa 'and' thumma 'and then', etc. The first explanatory proposition is usually introduced by the conjunction fa followed by one or more propositions introduced with wa.

Thus an analysis based on the inter-propositional relations would render all propositions in the series being in additive relation to the preceding proposition,

whereas an analysis based on the relation between themes and rhemes would result in all the propositions being in explanatory or illustrative relation to the theme. The same applies to the case where a theme is developed through a series of illatives or causal relations. The Arabic paragraphs A.1 and 7, among others, illustrate this point.

A better approach to the analysis of logical relations is the one that considers the relations between themes and rhemes. This approach is more reliable than the analysis of the inter-propositional relations in identifying patterns of theme development in paragraphs. The following table shows the frequency and percentages of the relations between themes and rhemes in Arabic and English paragraphs.

Table 12 shows that there are forty-five relations holding between themes and their rhemes in Arabic and forty-six relations in English. The most frequent theme-rheme relation in Arabic is the mixed type accounting for 46.7% of the total number of relations, while in English, the explanatory relation has the highest percentage accounting for 41.3% of the total number of relations. The second most frequent relation in English is the mixed type accounting for 37% of the total of relations. The third most frequent relation in Arabic is the

cause/effect relation accounting for 17.8% of the total number of relations. Unlike Arabic, English cause/effect relation accounts for 8.7%; it is the least frequent relation. Finally the illustrative relation shows more frequency and higher percentage in English (13%) than its counterpart in Arabic accounting for only 6.7%.

The fact that the explanatory and illustrative relations are the predominant relations in English can be attributed to the hypothesis that English shows preference to subordinate sequences rather than coordinate ones. Propositions in subordinate sequences are dependent upon each other and they are mainly illustrative, explanatory and illative or causal in their functions.

	Arabic						English					
	Random		Parallel		Total		Random		Parallel		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Explanatory	8	17.8	5	11.1	13	28.9	13	28.3	6	13	19	41.3
Illustrative	3	6.7	0	0	3	6.7	5	10.9	1	2.2	6	13.0
Cause/Effect	7	15.6	1	2.2	8	17.8	4	8.7	0	0	4	8.7
Mixed	16	35.6	5	11.1	21	46.7	13	23.8	4	8.7	17	37.0
Total	34	75.6	11	24.4	45	100	35	76.1	11	23.9	46	100.0

Table 12. Frequency and Percentages
of theme-rheme relations in Arabic
and English sample paragraphs

On the other hand Arabic tends to show preference to the mixed type of sequences over the subordinate ones. The mixed type of relations includes different types of relations such as explanatory, additive, or adversative. This means that there is no one predominant relation over the others.

As far as the parallel paragraphs in Arabic and English are concerned, there does not seem to be much difference in the frequency and percentage of relations. However, no paragraphs in Arabic have the illustrative pattern of development, while there is one in English. The opposite is true in the cause/effect relation.

Before turning to the markers of logical relations, one observation needs to be stated. The classification of theme-rheme relations is based on the most predominant relation holding between the thematic proposition and its rhemes. There are very few cases of purely an explanatory development pattern. Thus the types of relations mentioned in table 12 should be read as basically explanatory, basically illustrative, etc.

Markers of logical relations

The basic criterion for identifying the logical relation that a proposition holds to a preceding one depends on its propositional content. A proposition

might explain, illustrate, add to a preceding one, or it may be a result or a cause for a preceding one. Conjunctions and connectives in general may help in identifying logical relations between propositions. There are two major types of relations that may hold between propositions in a paragraph: subordinate and coordinate.

Subordinate relations include explanatory, illustrative, illative and causal relations, while coordinate relations, in which propositions are independent of each other, include the additive, alternative and adversative relations.

In what follows I will give some of the Arabic common markers for each relation.

1. Additive:

The additive relation may be marked by connectives such as: wa 'and', bal 'moreover', kama: 'and', 'azif 'ila: dha:lik 'in addition to', etc. When there are more than one marker in one paragraph; the writer uses different markers rather than a particular one.

2. Adversative:

It is marked by one or more of the following devices: bal 'but', la:kin 'but', 'innama 'but', wa 'but'. The common meaning of wa is 'and' but it can also

be used to mean 'but' and thus it introduces an adversative relation.

3. Alternative:

This relation has the least frequency in both Arabic and English. Its typical marker is 'aw 'or'.

4. Explanatory:

This relation is usually indicated by the connective fa which introduces the first proposition that explains a theme. If there is more than one explanatory proposition, the second will be introduced by wa 'and' and so are the other explanatory propositions following the second one. This pattern can be seen in paragraphs such as A.1, 2, 3, 4, or 5. Sometimes this relation is indicated by the emphatic bal, 'moreover' ha:dha' ya9ni: 'this means', and 'ayy 'that is to say'.

5. Illustrative:

This relation is usually marked by connectives such as: mathalan 'for example', mitha:lu dha:lik 'an example of that...'. .

6. Causal:

It is signalled by connectives such as: likay 'because', li'anna 'because of', fa 'because', and 'wa sababu dha:lik 'the reason is'.

7. Illative:

Its common markers are: bina:'an 9ala: dha:lik 'based on that', wa nati:jatu dha:lik 'the result of that', and wa liha:dha: 'for this reason'. However, these relations are not always overtly marked by a connective. The lack of a connective between two propositions seems to play a role in creating texture and cohesion in Arabic texts. For example, in paragraph A.11, there is no connective between propositions (2) and (3). Despite the non-existence of a connective, there is a strong relation between the two propositions. Actually, proposition (3) restates the content of (2); it expresses the same idea of (2). In such a case a connective cannot be used to conjoin (3) with (2) because we conjoin the same thing to itself.

Another instance of this point can be seen in the relation between propositions (5) and (6) in paragraph A.25, in which (5) expresses the same notion of (4) as can be seen below:

prop. 4 Islam started to eliminate the sources of
slavery

prop. 5 It restricted the means of slavery to...

From these observations, we can conclude that the non-existence of a conjunction or the "zero" connective

has a cohesive power as an indicator of a very close explanatory relation between two propositions.

Another observation, related to the frequency of inter-propositional connectives ought to be mentioned here. In the Arabic sample paragraphs, 272 out of the total of 348 propositions are introduced by connectives. This accounts for 78.2% of the total number of propositions as compared with 24.3% in English.

This high frequency of connectives in Arabic texts indicates the roles these connectives play in signalling the intricate semantic relations of propositions. Their absence or misuse will inevitably affect the textuality and the acceptability of texts.

To turn now to the markers of relations in English paragraphs, we find the following:

1. The additive relation is marked by such connectives as: 'also', 'and', 'as well', 'moreover', and 'furthermore'.
2. The alternative relation is signalled by its typical marker 'or'.
3. The adversative relation is generally signalled by 'but', 'however', 'in contrast with', etc.
4. The explanatory relation is marked by connective such as: 'this means', 'that is to say', etc.

5. The illustrative relation is usually marked by: 'for example', 'for instance', 'one indicator', etc.

6. The illative relation is generally signalled by such connectives as: 'so that', 'consequently', 'as a result', and 'therefore'.

7. Finally, the causal relation is marked by 'because', 'since', and 'for'.

These results show that logical relations in English are not basically determined by the existence of a connective or a conjunction. They are more frequently determined by the content of each proposition and the role each proposition plays in developing the theme of a paragraph. In English, out of the total number of 305 propositions, only seventy-four are introduced by connectives, accounting for 24.3% of the total number, while in Arabic the percentage of the propositions introduced by connectives is 78.2%. This conclusion reveals the importance of connectives as a means of creating texture and cohesion in Arabic texts. However, cohesion can be achieved by other means such as lexical devices. In the following section, an attempt will be made to identify the types and frequency of lexical cohesive devices in both Arabic and English.

Lexical Cohesion

The results of the analysis of lexical cohesive devices indicate that Arabic and English make use of one or more of a number of lexical cohesive devices with different frequencies and percentages. The following table shows the frequency (F) and percentage (%) of each type of lexical cohesive devices in the random and parallel paragraphs in both Arabic and English.

Table 13 shows six devices through which lexical cohesion can be achieved in Arabic and English. The first is the repetition of the same word in different propositions in a paragraph. This device is the most frequent one in both Arabic and English accounting for 64.8% of the total number of cohesive devices in Arabic and 73% in English. The parallel paragraphs show slight difference in the percentage of this device.

In Arabic, the second most frequent lexical cohesive device is the use of collocational sets. It accounts for 11.2%, while in English it accounts for 5.2% which puts it in the fifth most frequent device in English. From the percentages of the collocation device in both languages, we can conclude that Arabic shows a stronger tendency than English toward using this device.

The third most frequent device in Arabic is the use of synonyms or repetition through synonymy. It accounts

	Arabic						English					
	Random		Parallel		Total		Random		Parallel		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Same word	190	46,1	77	18,7	267	64,8	196	56,8	56	16,2	252	73,0
Synonyms	33	8	7	10,7	40	9,7	20	5,8	3	0,9	23	6,7
Hyponymy	6	1,6	1	0,2	7	1,7	7	2,0	0	0	7	2,0
Collocation	41	10	5	1,2	46	11,2	11	3,2	7	2	18	5,2
Paraphrase	22	5,3	11	2,7	33	8,1	19	5,5	7	2	26	7,5
Antonyms	18	4,4	1	0,2	19	4,6	17	4,9	2	0,6	19	5,5
Total					412	100					345	100

Table 13. Frequency and Percentages of lexical cohesive devices in Arabic and English

for 9.7% of the total number, while in English, it accounts for 6.7% and this ranks it also in the third place. The fourth device is the use of paraphrase equivalences as a lexicave device. The difference between synonymy and paraphrase is that synonymy is a relation between predicates (words) while paraphrase is a relation of a higher level, that is, the level of phrases. This device accounts for 8.1% of the total number of cohesive devices in Arabic and for 7.5% in English. Both Arabic and English show almost the same tendency toward the use of paraphrase equivalences. Examples of this device can be seen in paragraph A.4 where proposition (6) is a paraphrase of proposition (2), and in paragraph E.32 where the word "rise" in proposition (1) is paraphrased as "to take form" in proposition (3).

The fifth most frequent lexical device is the use of opposites accounting for 4.6% in Arabic and 5.5% in English. Both languages seem to show a similar tendency for using opposites. This device is subsumed under Collocation in Halliday and Hassan's lexical cohesion types. However, antonyms have systematic semantic relationships and there is no theoretical justification for classifying them as types of collocation as Halliday and Hassan (1976:285) suggest. I propose that they be

considered as a separate lexical cohesive device or subsumed under the cohesive devices that have systematic semantic relations, such as hyponymy, synonymy and antonymy.

The least frequent lexical cohesive device in both languages is the use of hyponyms. It accounts for 1.7% of the total number of lexical cohesive occurrences in Arabic and for 2% in English.

Chapter 7

Conclusions and Implications

In this chapter, I will briefly summarize the results of the study especially those pertinent to the differences and similarities between Arabic and English in the three areas covered in this study: thematic patterns, logical relations, and lexical cohesion: these three aspects are essential for a complete description of paragraph structure and organization. Although they have been discussed separately in the preceding chapters, what is crucial is the fact that there is a close relationship between them. They complement each other in defining the structure and organization of paragraphs. Furthermore, identifying the logical relations holding between propositions is basic to theme identification at different levels. If a proposition, for example, is in illustrative relation to a preceding one, then it is at a lower level of generality than its antecedent. That is to say, the preceding proposition might be identified as the theme of the paragraph because of the logical relations holding between this proposition and the following one.

Another principle in the identification of themes is the use of parallel equivalences or patterns of repetition of key concepts in a paragraph. If a lexical

item in a certain proposition is repeated through synonymy, hyponymy or the same word, this leads us to hypothesize that the first proposition containing the repeated item is a theme of a certain level.

The relationship between thematic patterns, logical relations and lexical cohesion can be observed in the definition of 'tagmeme' as a unit in context that can be described in terms of four features: slot, class, role and cohesion. A proposition may occupy the nucleus position in a paragraph (slot), thus expressing the theme of the paragraph (role), and it relates to the other propositions by one or more cohesive devices (cohesion). For example, one or more of its key concepts may be repeated to create lexical cohesion. In Pike's terms, this proposition is said to govern the following ones. From this brief discussion, one can observe the relationship and interaction between thematic patterns, logical relations, and lexical cohesion in building a coherent paragraph.

These three aspects interact in different manners cross-linguistically. This study examined how they complement each other in establishing similar or different organizational patterns in Arabic and English expository discourse. In brief, the similarities and

differences between Arabic and English can be stated as follows:

1. Arabic paragraphs are significantly longer and have a larger number of propositions.

2. Both Arabic and English tend to show the same preference for the monolevel thematic pattern which accounts for 85% of the thematic patterns in both languages.

3. Arabic shows more preference for the equal-level thematic pattern, while English tends to have more frequent multi-level thematic patterns.

4. English has a stonger tendency for themes to be manifested in intial positions.

5. Parallel paragraphs tend to have similar preference for theme location both in Arabic and in English.

6. The prominent pattern of thematic development in both languages is deductive rather than inductive.

7. There is a significant difference between Arabic and English themes in terms of marking. Arabic shows a stronger tendency for themes to be marked both internally and externally.

8. Arabic is significantly different from English in the use of interpropositional connectives which are

used as theme-marking devices in Arabic, but it is not the case in English.

9. Both Arabic and English utilize enumeration, attention-drawing devices and comparative expressions in almost the same way.

10. In English, the additive interpropositional relation is significantly more frequent.

11. There is also a significant difference between the frequencies of the illative and causal relations in both languages. These two relations are more frequent in Arabic.

12. There is no significant difference between the frequencies of the alternative, explanatory, and illustrative interpropositional relation in Arabic and English.

13. There is a significant difference between the frequencies of the explanatory theme-rheme relation in Arabic and English. In English, this relation is much more frequent.

14. English shows more preference for the use of the illustrative relation, while Arabic has a stronger tendency for using the cause/effect and mixed patterns of theme-rheme relation. Despite this seemingly large difference, they are not statistically significant.

15. In Arabic, connectives play a more important role in signalling the intricate logical interpositional relations. Thus connectives in Arabic seem to be an essential standard of textuality.

16. Logical relations, in English, are more frequently determined by the content of propositions rather than by connectives.

17. As far as lexical cohesion is concerned, there is a significant difference between the frequencies of the same word and collocation in Arabic and English. The lexical cohesive device of repeating the same word is more frequent in English, while collocation in Arabic is more frequent than it is in English.

These results cannot be taken as absolute because of the limitations and difficulties within which this study was conducted.

The analysis of logical relations and themes was not completely objective; very often it was subjective and impressionistic. Some procedure ought to be developed to validate one's own analysis. Another related problem was the choice of evaluators. Because no uniform validation procedure was employed, their judgements were intuitive and impressionistic as well. If more objectivity is to be obtained, experienced evaluators ought to be employed or else others ought to be trained.

Furthermore, some difficulties were encountered in the analysis; one of which was the reduction of orthographic sentences into propositions. In many cases, the orthographic sentence contained more than one proposition especially when it was complex. Finally, despite the fact that the sample paragraphs were sufficient in number, more valid and generalizable results can be drawn from larger data written by various authors. Some of the thematic development patterns can be considered as hypotheses that need to be tested in larger and more representative samples.

Despite these limitations and difficulties, the findings of this study are useful in formulating hypotheses about paragraph structures, especially that of Arabic, and are also pedagogically useful and they can be utilized in various ways.

Pedagogical Implications

The findings of this study appear to support the conclusion that each language has its own organizational structure, logical system and patterns of lexical cohesion. This confirms the findings of Kaplan (1967, 1972) and Seda (1974) that language background affects the organizational structure of written texts produced by people from different linguistic backgrounds.

The findings of the present investigation might be utilized in different aspects of language pedagogy. For example, knowing the similarities and differences between the structure of discourse in each language helps the teacher identify rapidly and more accurately the sources of difficulty his students might encounter at the discourse level, and then, appropriate remedial exercises and activities might be designed accordingly. Knowing the rhetorical structures of written texts in both the mother tongue of learners and the target language they are learning will inevitably benefit and facilitate teaching reading and writing in that language. For example, when learning English as a foreign language, Arabic-speaking students should be taught that propositions are not usually conjoined together by a conjunction, but through the semantic role each proposition holds in relation to a preceding one. Interpropositional conjunctions are much less in English than they are in Arabic. Thus it would be inappropriate to start each English proposition with a conjunction such as 'and'. Arabic learners of English should also realize the differences between Arabic and English in terms of punctuation. In Arabic, an orthographic sentence may consist of three or more propositions that are connected with conjunctions, while these propositions could be

realized in separate sentences in English. In this sense, conjunctions in Arabic serve two functions; they signal punctuation marks, and mark the logical relation between propositions.

Contrastive discourse studies may provide useful insights for course design and material preparation as well. These studies reveal the discourse functions of connectives. They reveal how logical relations are signalled and how themes in paragraphs are marked and developed. In Arabic, for example, the connective fa is usually used to signal an explanatory relation to a preceding proposition. Furthermore, themes in Arabic tend to be marked internally, externally or both. All these features ought to be included in teaching a foreign language if it is to be comprehensive and practical.

Textbooks can be revised to include patterns of paragraph development in the target language and to show how they differ from or are similar to those in the student's mother tongue. Consequently, theme markers and logical relations markers can be included in exercises for the use of students.

Furthermore, the findings of a study such as this one are necessary for testing the knowledge of second language learners. The good language test should be a true measure of the students' knowledge and command of

the language they have been taught. The knowledge of a language not only consists of knowing the syntactic structure and the lexicon, but also of knowing the functions of features of the discourse, of how logical relations are marked, and of the different sources of achieving cohesion in a language.

Therefore a language testing instrument cannot be complete unless it tests the students' mastery of those features. Oller (1979:416) states that if a test is to be valid, it has to test:

a discourse processing task that faithfully mirrors things that people normally do when using language in natural contexts ... adherence to normal uses of language is an initial basis for asserting test validity.

Finally the results of this contrastive discourse study are useful in translating Arabic into English, and in teaching translation from Arabic into English, or vice versa. A major difficulty of translating from Arabic into English lies in the proper understanding of the discourse functions of Arabic conjunctions in creating texture. It is the misconception of the functions of Arabic conjunctions as text-forming devices that made Kaplan (1966, 1967) suggest that the predominant pattern of paragraph development in Arabic is characterized by parallelism. Kaplan's claim seems to rely on the fact

the Arabic provides its speakers with a fairly large number of coordinating devices. The present study has revealed that the seemingly coordinating devices are in fact not semantically coordinating. Very often, fa and wa introduce a semantically subordinate proposition to a preceding one.

Consequently, for an English translation of an Arabic text to be equivalent, all the above mentioned discourse features ought to be taken into consideration. This means that teaching translation must go beyond the level of single sentences to the level of discourse to involve the discourse features that cannot be captured in a sentence-based translation.

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Appendix A

1 سبب الشرح الإسلامي كل شريعة سواء في تقرير مساواة المرأة للرجل فاعلم حريتها واستقلالها يوم كانت في حضيض الانحطاط عند جميع الأمم . وحيثما كل حقوق الإنسان . واعتبرها كفاءة شرعية لا تنقص عن كفاءة الرجل في جميع الأحوال المدنية من بيع وشراء ودية ووصية من غير أن يتوقف تصرفها على إذن أبيها أو زوجها . وهذه المزايا التي لم نصل إلى اكتسابها حتى الآن بعض النساء الثمريات - كلها تشهد على أن من أصول الشريعة السحاه احترام المرأة والتسوية بينها وبين الرجل . بل إن شريعتنا بالمت في الرمز والمرأة موضعت على أحوال نعيسة . ولم ترمعها بالإشراك في نفقة المنزل وتربية الأولاد خلافا لبعض الشرائع العربية التي سوت بين الرجل والمرأة في الواجبات فقط . وسيرت الرجل في الخفوق .

2 وتمازس الحكومات العربية رقابة مشددة على وسائل الإعلام وخصوصاً الصحافة . وتتخذ الرقابة أشكالاً متزعة فقد تكون قاصرة في بعض الأحيان على موضوعات معينة مثل الأمور الدينية أو المسائل الحساسة في العلاقات الدولية والشخصيات الأهمية البارزة . ولكنها كثيراً ما تشمل للموضوعات التي تمس أمن وسلامة هذه الحكومات . وغالباً ما تستند الرقابة على الصحف العربية إلى قوانين مدونة ولكنها في كثير من الأحيان تستند إلى السلطة التقديرية للحكومات . وتوافر لدى الدول العربية قوانين للرقابة تطبق أثناء فترات الطوارئ . ومن أبرز أنواع الرقابة التي تلجأ إليها الحكومات العربية الرقابة المسبقة حيث تقدم للجنة الإعلامية للمراقب للموافقة عليها قبل النشر ، والرقابة بعد التوزيع حيث يتم مصادرة النسخ الملعنة للتوزيع من هذه الصحف . ولكن أنظر أشكال الرقابة الشائعة في الصحافة العربية اليوم هي الرقابة الذاتية التي يمارسها رؤساء التحرير والمخضرون من تلقاء أنفسهم دون الحاجة إلى وجود رقيب رسمي .

3 السلي محمد هـ . أولاً . من الإسلام . عبه أولاً هذا الدين انكربه ويواسطه
انتشر في مشارق الأرض ومغاربها . وقد مع أثر هذا الدين كل ناحية من نواحي ثقافتنا
العربية . فلما استطع تبينه أن نمهد نراثنا العربي القديم . صرنا أن الفسفة أو العلم أو
الفن . إلا بعد درس عيبن نعروض الدين الإسلامي وأحكامه . ونمهد صحيح نروجه
ومضامه . وهذا التراث العربي قسم من ثقافتنا الحاضرة . بل هو أساسها الذي نعده عبه .
وماطن ما ينادي به البعض من (١١) أن يرمى هذا التراث القديم حاثماً وقبيل على الثقافة
العربية الحديثة . فالتراث العربي حزه منا - شتاً أم أينا (١٢) - وهو فوق ذلك سيرتنا التي
بها نتفرد بين الأمم . وقد أرق من الحصب والقوة والجهل ما يدعنا إلى الحرض عبه
ومناصرة الناس كبه به . وهذا وجب على كل عربي . من أية طائفة أو فئة . بهم ثقافة
المناصب ويمنها الحديده - وهذا الإتهام هرون طليعة التواضعات التي نعرضها عبه قويمه -
أن يقده على درس الإسلام ونمهد حقيقته ويقدم ذكرى السلي العظيم الذي أول
الإسلام عبه .

4 والسلي محمد هـ . من ناحية ثانية . موحد العرب وجامع شملهم . تمت إليه وهو
أشد ما يكبرون نفرة وحلافاً بنحاسون . ويشاحرون . وبخارون معصبه بعضاً .
لا رابطة قوية ضمهم . ولا ضمير يوحد ويوحد بين قلوبهم . فتح عبه روحه الحية .
فأداه هذه الفئات المتناوذة قد تألفت وإذا عبه الصبح الشاهدة قد تقاربت . وإذا الحبح
كفة واحدة قد صهرت في بيعة الإيمان . صامت على أعناق تمت في القوة والنشاط .
وتشر عبه الحفاصة والعصران .

5 حتى الله الصراء في النكارة دعامة مبهمة من ذواته الحياة . فدر . بحيث
الله الصراء . ما كانت هناك أريد . ولا أميرة . ولا صاب . وصلت للقاء صرده
في الصراء لأن زرقته ناتحة عن النكارة أشعة الشمس عند اختراقه طبقة
الصراء محببة بالنكارة الأرضية . وبلا وحود الصراء . يمكن حياة الأوقات
لأن الصراء . بقى مرححات الصرته . وبكأن حوا حوا صراحة حارقة في الصراء .
قدرة في الصراء . لصراحة لا تحبب طبيعة الإنسان . ذلك لأن الصراء . بمرن
صعب ذارف ويبرز الحرارة . والصراء مظنة نشي سطح الأرض من نساقت
النسب والبيارات . إذ أن الحنك كعب الصراء بقى من صرعب أو درجة كبيرة
بحيث نفس سطح الأرض بسرعة بضنة تجعله لا تكاد تؤثر إلا في مظنة
شروطه .

6 أما عزيمة آرائنا الدينية فيست إلا نكوتها مخالفة فلأراء العامة بين الناس و أصل
 الإنسان وحقيقتة في هذا الوجود . وقد كان الاعتقاد في القديم أن أصل الإنسان غير
 ما قرره العلم اليوم . فكانت الآراء الدينية حثه متناسة مع ذلك الاعتقاد . وأما اليوم وقد
 قرر العلم أن الإنسان كسائر الأحياء في الطبيعة ليس فيه شيء غريب عنها لا في مواده ولا في
 قواه . فصارت الأفكار الدينية القديمة غير صالحة لأن تكون نتيجة لأزمة هذا العلم . وصار
 التوفيق⁽²²⁾ بينها وبينه غير ميسور لها بالعلم العقلي الفلسفي وغيرها من علوم الكلاء كما
 كان في القديم ومنها بذل من اخهد اليوم في ذلك فالعلم الطبيعي نبع⁽²³⁾ .

7 عن نزع من عدد من ذرات كثيرة لبيرو في وجوده بشكل منضج
 رشح الناس في كثير من الأحيان . وهو قد يحسن كثيرا في نظريات
 وحرارة في نسب معين و بعض و بعض ذلك من حسن .
 كما أن بعض نواتج كيميائية . وبما أنه في أثناء حركته في المعدن
 ويحسن ما ينشأ عن هذه حركات من غير مادة كالكربون
 ودفن في معدن . بعض نواتج كيميائية معدن . كما ينشأ من معدن
 في حركات كيميائية من ذرات و غير و غير ذلك مادة أخرى . كل شيء من
 انشأت الطبيعة هذه ليست نبتة إذ ما قيت من به الإنسان من ذات
 لغيره . إذ انشأت من صنع من كيميائية وغيرها منياتها الغازية و لغيره
 اسبقا بعض مواد الغنية والسائلة في الهواء فتدونه في وتسمه أحادي . كما
 تسهم السيارات بنسبة وافر في توليد أجواء تنبت من ثاني كسيد الكربون
 والذرات المحروقة وغير المحروقة ومركبات ارضي صامدة في بحرين . وتسرده
 السيارات عادة . أضف إلى ذلك الغازات والمواد سريعة التطاير التي تتكون من
 النفايات وحرارة تقريبا . كل هذه عوامل تساهم بصورة خطيرة في توليد أجواء ويزيد
 من خطورتها أن درجة توليد الإنسان جو مديته أو قريته تزداد كلما ازداد
 هو نظرا لأن نحو القناعة مظهر من مظاهر التحضر

8 بين بنينا مسألة الشعر الخاهل تزيد أن ندرسها ونسهر فيها إلى الحق . فأما أيضاً القديم فانظر في أمامه واضحة صفة . والأمر عيب صلب يسير . أليس قد أجمع تقدماء من عهد الأعمار^(١٣٧) في العراق والشام وفارس ومصر والأندلس على أن طائفة كبيرة من الشعراء قد عاشت قبل الإجماع وقالت كثيراً من الشعر ؟ أليس قد أجمع هؤلاء العلماء أنفسهم على أن هؤلاء الشعراء أمياء معروقة مخوفة مضيضة بتألفها الناس ولا يكادون يتفكرون فيها^(١٣٨) ؟ أليس قد أجمع هؤلاء العلماء على أن هؤلاء الشعراء مقداراً من الفصائد والمفردات حفظت عن روثه^(١٣٩) وتناقلت عن الناس . حتى جاء عصر التنوير صود في الكتب ومنه ما شاء الله أن يبين إلى أبحاثنا^(١٤٠) وإذا كان هؤلاء قد أحسوا على هذا كنه مرورنا أمياء الشعراء وصغيرها ومقدارنا آثار الشعراء ومسروها . فم يبين إلا أن نأخذ عيب ما قلنا راصين به مضيق إليه .

9 الغناء الاشتراكي يقتضي إلغاء الملكية الفردية . معنى أنه لا يجوز للفرد أن يمتلك أرضاً أو موقفاً أو مسجداً أو أي ثروة إنتاجية واستعمالها إلى غيره أو غيره . وعليه يجوز للفرد أن يمتلك أدوات بيته وملابسه وأمواله طالما كان لا يملكها بواسطة غيره . من ربح ما يبيع له ممتلكات مسكته بعد لأن هذا يملك لا يبيع الآخرين ويحرم الاشتراكية مجرد إيجاد الحرية الاقتصادية حتى تتسوى الفرص بين الناس في الإنتاج^(١٤١) . معنى هذا الإنتاج . لأن وجوده يمانع هذه الحرية الاقتصادية التي تعني أن يملك الناس مساويين لا يتنازع أحدهم عن الآخر غير مميزات الطبيعة

10 من عظام التكيف مع البيئة الاجتماعية ما يمكن أن نسميه باسم التكيف المهني ، أو الامتياز . وعن طريق الامتياز يكتمل اندماج الفرد في مجتمعه . ونظراً للتطورات السريعة التي تم المجتمع العربي ، بتأثير العوامل القومية والسياسية والاجتماعية والاقتصادية تزداد الحاجة إلى التعليم المهني لمواجهة هذه التطورات . فالنهضة الصناعية أخذت تخرق العالم العربي من أدناه إلى أعلاه مساعدة إياه لا على تنسيب موارده واستغلال ثرواته بالطرق العنصرية الحديثة فحسب ، بل على تصنيع هذه الثروات أيضاً . فلا بد للثروة إذن من أن تنبئ فناء هذه النهضة ، فترفع من شأن التعليم المهني ، وتمتدز التعليم الزراعي والصناعي والتجاري من أجل أعداد المهنيين الحاذقين القادرين على المساهمة في المشاريع العمرانية المختلفة ، وإدارة الآلات والوسائل الحديثة اللازمة .

عدد اشخاصه للجانحة المحلة للموتة - كما هـ لثان
في التشريعات الأخرى - إنما كانت منها إليها

الشريعة هي التي صنعت المجتمع الإسلامي هي التي خلقت له
سائته ومفوماته وهي التي وجهته وطورته : **ولم يكن الشريعة**
حاسم في تحديد طبيعة المجتمع ، وسرمي ، وعييزه عن
تفاهات نشروا ذاتاً ، انشأت انشاء في التغييرات
التي تتأصلها وما صد .

البشرية كلها وصياغتها صياغة معينة ودفعها إلى أنواع

المجتمعات التي
المحدودة

12 وقد تبييت النور انشائية ان حضوره هذا النوع . ووضعت برامج
ضخمة جدا للدراسة وسائل انحد من تلوين اجر . ومنب وسائل يتم بموجب
ازالة الشرائب قدر الامكان . ومنب وسائل يتم بموجب مع حدوث التوث
أفلا . حتى أن بعض النور ست بعض التشريعات التي يمنع بموجب
استخدام المواد التي يتبع عن استعمال تلوين خطير لتجر . ففي الولايات
اتحدة الاميركية مثلا . عدلت المصافي مؤخرا عن افصافه مركبات الرصاص
الى البترين وقد تطب ذلك اجراء تعديلات في آلة السيارة . كما أن بعض
النور تمنع سير السيارات التي تستعمل وقود الديزل داخل المدن . لأنه
يؤثر بدرجة أكبر بكثير من البترين .

13 وأول شيء اضيقك به في هذا الحديث هو أن شككت في قيمة الشر الحامل وألححت في الشك . أو قل ألح على الشك . فأخذت أنت وأمكر وأقرأ وأندبر . حتى انتهى في هذا كله إلى شيء الأيكن يقينا فهو قريب من اليقين⁽¹¹⁾ . ذلك أن الكثرة المطلقة مما نسبته شرًا جاهليًا ليست من الجاهلية في شيء . وإنما هي متحلة مختلفة بمد ظهور الإسلام . فهي إسلامية تمثل حياة المسلمين وميوضهم وأمراتهم أكثر مما تمثل حياة الجاهلين . وأكد لا أشك في أن مايق من الشر الحامل لتصبح قليل حدًا لا يمثل شيئًا ولا يدل على شيء . ولا ينبغي الاعتماد عليه في استخراج الصورة الأدبية الصحيحة لهذا العصر الجاهل . وأنا أقدر النتائج الحفزة هذه النظرية . ولكني مع ذلك لا أتردد في إثباتها وإداعتها . ولا أصعب عن أن أعلن إليك وإلى غيرك من القراء أن ما تقرؤه على أنه شر امرئ القيس أو طرفة وابن كثوم أو عنزة ليس من هؤلاء الناس في شيء . وإنما هو انتحال الرواة أو اختلاق الأعراب أو صنعة النحاة أو تكلف القصاص أو اختراع المفسرين والهدلين والتكلمين .

14 عن ابن القيم : إما أن يقال في الأدب وتاريخه ما قال القدماء . لا تناول ذلك من النقد إلا هذا المقدار اليسير الذي لا يخولك كل بحث⁽¹²⁾ . والذي ينبغي لنا أن نقول : أحضراً الأصمى⁽¹³⁾ أو أنصاب . ووفز أبو عبيدة⁽¹⁴⁾ أو في يومز . وهندي انكسار⁽¹⁵⁾ أو وصل الفريز . وإنما أن يصح عمر المتضمنين كنه موضع البحث . فقد أسبت . هلست أريد أن أقول البحث وإنما أريد أن أقول الشك . أريد ألا يقال شيئاً مما قال القدماء في الأدب وتاريخه إلا بعد بحث وتثبت إن لم ينسب إلى اليقين فقد ببيان إن الرحمان⁽¹⁶⁾ .

15 ومع هذا فإن الإسلام لا يحرم الانتفاع بالتجارب البشرية في كل ما لا يتصل أصلاً من أصول الشريعة ، فلا حرج في الانتفاع بتجارب البشر في تحديد الحاجات الاجتماعية المتجددة وضبطها بوسائل البحث المتجددة ، ولا حرج في الانتفاع بتلك التجارب في وسائل تنفيذ المبادئ الإسلامية ، إن مبادئ الإسلام ثابتة لا تتغير ، أما تحقيق هذه المبادئ فمتجددة . ومن ثم تملك الانتفاع بتجارب البشر في هذا المجال وذلك ، على ألا نعطى سواه في تحديد الحاجات الاجتماعية وضبطها أو في وسائل تحقيقها وتحقيقها ببدأ ثابت في الإسلام . ولا باتجاه أساسي من اتجاهاته الخالدة .

19 يتوقف موقف معظم التربية الوطنية من هذه القضية على طبيعة هذه التعاليم (٣٨) . فإذا كانت تتعلق بجوهر الشؤون الوطنية والمبادئ الديمقراطية والقيم الانسانية الصحيحة المنسجمة مع السياسة الوطنية فإنه يحق للمعلم ، بل يجب عليه ان يلقن تلاميذه هذه التعاليم لأنها تؤدي الى جميع شمل الأمة والقضاء على روح التفرقة . أما إذا كانت التعاليم متملة بالعرض دون الجوهر وبالفرع دون الأصل ، أو كانت تدور حول شؤون حزبية أو طائفية تتضارب حولها الآراء فإن من واجب المعلم أن لا يلقن التلاميذ هذه التعاليم التي يمتد بصحتها لأنه بذلك يسيء اليهم ولا انهم . فهو يسيء اليهم على اعتبار أن التلاميذ سيمسحون بالتأثير بالمدرسة وانعزاله . عززل لا يملكون الحجة أو سعة الاطلاع لتمييز الآراء الشخصية من الحقائق الراهنة . بل يجب عليه ان يزودهم بسلاح التفكير المناسب والحكم السليم لكي لا يصدقوا كل ما يقرأون أو يسمعون ، وأن يقرروا في حقائق التصليح . أما الامانة الى الأمة فيبر مرتبط بالتوجيه الحزبي والطائفي الذي يؤدي الى زيادة التفرقة والاقسام في صفوف الأمة

20 وحين يزِيل الإسلام تلك الحواجز الجغرافية أو العنصرية التي تقسم عليه فكرة للوطن القومي . فإنه لا ينبغي فكرة الوطن على الإطلاق . إنه ينبغي على المعنى لعيب وحده هذه الفكرة . معنى التجمع والتآخي والتعاون والنظام . ومعنى الهدف المشترك الذي تنتهي عليه الجماعة من الناس . فيجعل الوطن فكرة في الشعور لا رقعة من الأرض . هذه الفكرة ينتمى في ظلها الناس من كل جنس ولون وأرض . فإذا هم أبناء وطن واحد . وإذا هم إخوة في الله . وإذا هم متعاونون على ما فيه خيرهم وخير البشرية جميعاً . . . تلك الفكرة هي الإسلام .

21 ويضرب فيه آخرون أن الأمة التفت في أقطار واسعة من الأرض مع تفرق أهواها
 واخلادها إلى مادون ربها^(٢٢٢) مدرجات لأعصر ورضاها مانع من العيش^(٢٢٣) والخاس
 الشرف بالانها، من ليس من حسنها ولا من مشربها^(٢٢٤) بل من كان حاصصاً لسادتها ورضاها
 لأحكامها مع هذا كما يتم شفاؤها من هذه الأمراض الثقافية بإنشاء المدارس العمومية دفعة
 واحدة^(٢٢٥) في كل بقعة من بقاعها وتكون على النظر الخديم المعروف بأوروبا حتى تم
 المعارف جميع الأفراد في زمن قريب ومنى تحت المعارف كملت الأخلاق وأعدت النكمة
 وانحسرت القوة . وما أهد ما يظنون فإن هذا العمل العظم إنما يقود به سلطان قوي قادر
 على الأمة على ما تكبره أزمانا حتى تسوق لندته ونهى ثمرته ثم يكون بينها العبادق من بعد
 ثالثا عن سعت في تعيد ما أنزل من حيرها ويبره نه ثروة ووفرة في سفقات تلك المدارس
 وهي كثيرة وموضوع كلامنا في العصف ودوائه فيل مع العصف سعة تفهر وثروة ندى ولو
 كان للأمة هذان لما عدت من السانفيع^(٢٢٦) .

22 والمعروف ان العربية الفصحى تنتشر وتعم بانتشار العلم والثقافة وهذا
 ما لاحظناه في حبلنا السابق، إلا أن الملاحظ في الجيل الناشيء انه ضعيف
 في العربية الفصحى رغم كثرة المدارس وانتشار التعليم، كما يلاحظ زحف
 انعابية اندارجة في السنوات الأخيرة على وسائل الاعلام كالاداعة والتلفزيون
 وغيرها وهذه ظاهرة خطيرة لا يجوز انسكوت عليها لان انسكوت عليها
 حرمة بالمعنى الديني والقومي أيضا . ومن ثم فليس هناك مبرر واحد يسمح
 بهذه الظاهرة بالاستمرار، وعلى المهاماء والمفكرين وأصحاب التنفيذ ان يشا
 كل جهدهم لايقاف هذا الزحف العامي على لغة العلم والدين والا تعرضت
 بلادنا لكارثة كبيرة لا يمكن تلافيها بسهولة.

23 ومن أسرار الأرض ، التي لم يتوصل أحد إلى صرفتها - على رغم الجهود
 والاجتهادات الكثيرة - شفق الحرارة في باطن الأرض ، وإزدياد شفتها كلما
 ازداد المسق . أما عسر الأرض فتدور حوله الارميجيف(٢) ، فسد عهد آخر
 بعيد كان الناس يظنون أن عسرها لا يزيد على ستة آلاف هام ، ثم قال بعض
 الجيولوجيين إن عسر الأرض لا يقل عن مليون من السنين ، ثم ينتشر في هذه
 الأيام الرأي القائل بأن الأرض تبلغ من العمر بضعة بلايين من السنين .
 وما صدق هؤلاء ولا أولئك ، وصدق الله سبحانه وتعالى إذ يقول : « ولقد خلقنا
 السموات والأرض وما بينهما في ستة أيام ، وما سننا من لغوبه(٣) » . فصر
 السموات مرتبط بعسر الأرض ، ولا يطعها إلا الله .

24 والبراهين على ذلك كثيرة في المقامى . فإن تاريخ الأمم بحره ماثامشات واخذل واخذل^(٣٥) واخروب التي قامت في سبيل استعلاء فكر هل فكر ومذهب هل مذهب . وكانت الغلبة نارة للهنز وأخرى للناطل وكانت الأمم الإسلامية على هذه الحال في القرون الأولى والبصطى . وه يرى الأمر على ذلك أو يريد في الملاد العربية التي بصرح أن بقال فيها إن حياتها جهاد مستمر بين الخنز والناطل وانظماً والفسواب : جهاد داخل بين أفراد الأمة في جميع فروع المعارف . والفنون والصنائع . وجهاد خارجي بين الأمم بعضها مع بعض . حصصاً في هذا القرن الذي أنمت فيه الأبحاث الحديثة المسافات والأبعاد . وهدت الحدود الفاصلة والأبواب المانعة . حتى أن الانتعاش الذي ساحت في جميع أنحاء الأرض يعدون بالآلاف . وإذا ألف رجل من مشاهير كتابا ترجمه و تهاء ضعه وظهر و حسن أو ست لغات في آن واحد !

25 كذلك الأمر حين ننظر إلى موقف الإسلام من عهد الرق : فمنذ سيطرة الإسلام لم يعد للرق خصائصه التي عرف بها في المجتمع العربي . وكان علاقة الإسلام به أنه جاء فوجده قائماً : فأخذ في تخفيف مرارده : يقصر أسباب الاسترقاق على الحرب الشرعية وحدها - وكان في هذا يعالج الواقع كما أمكننا - كما أخذ في تثبيت مقرماته الاقتصادية بتقرير مبدأ التكافل الاجتماعي (الذي سنفصل القول فيه فيما بعد) ومقرماته القانونية بالتسوية بين جميع الناس في الحقوق ، ومقرماته الاجتماعية بإزالة الحواجز بين لسانة والعميد . بل بتسوية الموالى وتوليتهم لقيادة .

لذلك كله يمكن القول باصطنان : إن المجتمع الإسلامي لم يعرف عهد الرق ولا عهد الإقطاع ، ولم يعرف بخصائصهما

26 وأما أنصار الخبيد . فالنصيرين أمامهم معرفة مشترية . فقوم فيها عقاب لا تكاد تخصي^(٣٦) . وهم لا يكادون يمحزون إلا في أناة وريث^(٣٧) هما إلى النبط . أقرب منها إلى السرعة . ذلك أنهم لا يأخذون أنفسهم^(٣٨) بإيمان ولا اصطنان أو هم لم يردقوا هذا الإيمان والاصطنان . فقد خسر الله لهم حفولا تجد من الشك لدة وى التفتق والاصطراب وصا . وهم لا يريدون أن يخطروا في تاريخ الأدب حضرة حتى يبيروا موضعها . وسواء عجبهم واقفروا انقدها . وأنصار التقديم أم كان بينهم وبينهم أشد الخلاف .

27 وتقد عرفت المجتمعات الأوروبية - بعد نظام الإقطاع - نظاماً جديداً هو النظام الرأسمالي . عرفت في عهد تاريخية متأخرة ، إذ بدأت بنوره مع الحروب الصليبية في القرن الحادي عشر الميلادي : أي بعدما اطلعت أوروبا على نظم الاجتماعية الإسلامية وتأثرت بها ، فكرت نظام الإقطاع الذي كان سائداً فيها ، وهذا البب يفنله أصحاب النظريات المادية لأنهم لا يريدون أن يخلطوا العنصر الإنساني في خط سير التطور التاريخي ويكتفون بإبراز الأسباب الاقتصادية التي صاحبت الحروب الصليبية ، ونشأة المدن التجارية في جنوبي أوروبا .

28 لقد أعطى الإسلام للعربية صفة البقاء والخلود حينما جعلها لغة القرآن الخالد والدين الخالد حيث قد تكفل الله بحفظ الذكر، والذكر : لفظ ومعنى ، إلا يمكن فيه إلا لغة العرب . واذن فلاند من بقاء لغة العرب حتى يمكن فيه القرآن انكريم، ومن ثم نحمد عالماً هندياً كالامام عبد الحميد القراهي بصر عني ان تكون مؤلفاته بالعربية مع حاجة قومه الهند إلى كتابات لغتهم ولما مثل عن ذلك قال : أردت نكتي الخلود.

29 قرى أن لا تصمد في ما حني في الأديان تعرض و النفس ولم انصها كلام أفتيه حزناً وبراى نفس حاص أو مقس (٣٣) كما يتوه أكثر النسي بسعون بي ولم يقرأوا حتى شبا . ولم أفتق فيها كما يعمل كثيرون اليوم من لا يسمون بالمتبعة الهندية كما هي لتلا تسقط وعانيهم (٣٤) . ولا يقفون و اعتقادهم عند حد الأديان المعروفة . بل يدعون بها مذهب خاصة كل منب على هواه لتلا يقال أنهم شقيرون . ومثل هؤلاء مثل من أسلم القصر ومات لعصر فبسي أنكره محمد ل يعرفه (٣٥) وإنما الترت فيها حاب العلم . وأريد بالعلم العلم الطبيعي القليل الإبتشار اليوم لا علم الحدك النظرى (٣٦) الذي يستطيع أن يعرفه كل مفكر بل أنا أنكره حدًا كل تحت مني على النظر المعرد .

30 هناك علاقة وثيقة ودائمة بين التخطيط الترسوي في المدارس، والاكاديمي في الجامعات من جهة، والتخطيط الوظيفي في الادارة العامة من جهة أخرى. ذلك أن المدارس والجامعات تزود الإداريين العامة والخاصة بالطاقة الضرورية للدراسة. لذا فمن الضروري ان يكون هناك أشد الارتباطات الممكنة بين هئيات واسباب التخطيط في أمة دولة، مع الهئيات المعنية في مؤسسات التربية والتعليم. وللواقع ان هذا المطلب يبدو سهلا لو وحنناه على الورق، لكن تقدير الاحتياحات البشرية للمستقبل والعمل على مواكبتها وتحقيق التنسيق اللازم بين مؤسسات الادارة في الدولة وبين المسؤولين في المدارس والمعاهد والجامعات، وانشاء الكليات الفنية المتخصصة استجابة للحضط التنموية وتزويدها بالانفراد الأكفيا، والتأثير في اتجاهات المواظين لتوجيه انشغالهم لدراسة الموضوعات والقضايا التي تحتاج انبها حطط وبرامج التنمية الاقتصادية والاجتماعية وغير ذلك، لست بالامور السهلة، بل تبدو مستحيلة لاول وهلة عندما يتأمل المحططون في السنوي القومي العام الموحد في مجتمعهم والامكانات المادية والبشرية المتاحة على مستوى الدولة والمجتمع⁽¹⁾.

31 وعندما اهتم عليه الاثروبولوجيا بدراسة أصل اللغة، ذهب البعض الى أن الانسان القديم عندما حاول ان يقلد ما يسمعه من أصوات الحيوانات والبيئة من حوله، من هنا بدأت اللغة واعتقد البعض الآخر ان الصورة الأولى للغة كانت عبارة عن أصوات لا إرادية صدرت عن الانسان بصورة عفوية ثم أخذت تتطور تلك التصرخات اللاإرادية حتى أصبحت لغة لها قواعدها وأصواتها الخاصة وتكون هذه المعتقدات حول أصل اللغة قد ثبت خطؤها في ضوء ما كشفت عنه الدراسات التحليلية للغة المعاصرة والتي أكدت ان لغة مجتمع ما تتكون من أصوات وكلمات وجمل، وكلها عبارة عن رموز تعسفية لا علاقة بين الكلمة والشئ او الفكرة التي تدل عليها. فالعلاقة بين كلمة «حصان» والحيوان الذي تدل عليه علاقة رمزية تعسفية، ونشأ الفرد في المجتمع وتعلم عن أسرته مجموعة من الرموز يطلقها المجتمع للدلالة على الأشياء المحيطة، وعلى العلاقات الاجتماعية، والأفكار، ولا يستطيع الفرد ان يغيرها او ينجدها عنها، لأنه بهذا قد يعصب عليه التفاهم مع زملائه في المجتمع، ولذلك فإن اللغة تعد رموزاً تعسفية متفق عليها من قبل اعضاء مجتمع ما. وتتحصر وظيفة اللغة في اختيارها وسيلة للاتصال والتعاون بين أفراد مجتمع ما، فمن طريقتها يستطيع الفرد نقل خبرته ومهارته للآخرين وان ينسج بين خبراته وخبرات وأعمال غيره.

32 ولدت حركة القومية العربية في ظل ضرورة تاريخية حيوية بتعزيز الرابطة القومية العربية عن الرابطة الدينية العشائرية . فقد مارست القومية العربية التريكة التسلط على القومية العربية بحجة الاسلام واخرص على دوة الخلافة . لتلك كان على حركة القومية العربية أن تكون ، منذ انبئه ، دقيقة في فهم الخصائص المميزة للرابطة القومية والرابطة الدينية معاً . والتفعل ، كانت كذلك . وتعمل هذه الضرورة التاريخية منحها ولادة سليمة لتنهياً لبعض القوميات الأخرى ، إذ هي أخرجتها في وقت مبكر من ميعة الرابطة السببية اللابوية ، ووضعتها على درب تحررها القومي تفتال بالسلاح دوة إسلامية أخرى .

33 تهدف النظريات المكونة لآي علم من العلوم الى محاولة تسيير سبب حدوث ظاهرة من الظواهر بالمعرفة التي تتم بها . ومثال ذلك محاولة تسيير تطورات الداخل القومي على مر السنين ، أو سلوك الأفراد تجاه حدث معين ، أو شروط الأضرار في فصول معينة من السنة . فإذا تمكنت النظرية من تسيير هذه الظواهر وضحها أمكننا إستخدامها في التنبؤ بما ستكون عليه هذه الظواهر في المستقبل بمرض الاستفادة من هذه المعلومات في مراجعة احتمالات المستقبل أو التحكم في أوجه النشاط المنتجة التي ستأثر بهذه الظاهرة للمنة .

34 لما الدور الذي تقيم به الإعلانات في تهديد حرية الصحافة في افريقيا ، فهو يأتي أصلاً من التمويل . إذ إن الاعتماد على الاعلانات كمصدر لتمويل الصحف يضع في أيدي المعلنين سلطة كبيرة تجعلهم يتحكمون في مضمون ما تنشره الصحف ، إلا إذا كانت هذه الصحف خاضعة لإشراف الحكومة . وهنا يمكن تحديد موقف المعلنين رغم أن هذا لا يلغى احتمال اللواجهة بين بعض المعلنين الأثرياء والحكومة ، حيثما يحاول هؤلاء فرض ضغوطهم غير اللبائرة على الصحف ، والتي تهدف في النهاية إلى تخريب خطط التنمية للقومية داخل الدول الإفريقية . هذا ويزداد الصراع بين المعلنين والحكومة عندما يكون هؤلاء المعلنون ممثلين للشركات الأجنبية . (٣٣)

35 ولكنهم ينهون إلى أبعد من هذا إذ يرون أن الازدواجية في العربية تمتد في الزمان إلى العصر الجاهلي⁽¹⁾، وأنه كان للعربي في الجاهلية مستويان لغويان بينهما فرق ظاهر، فرق الازدواجية. أولهما يشتمل في اللغة المشتركة التي بصطنها الشاعر أو بصطنها العربي إذا امتد خارج نيك في الحج أو التجارة، ويشتمل الثاني في لهجة الخاصة التي يتكلم بها في نطق بيت القبيلة وشؤونه المباشرة العربية في أهله.

36 لقد لعبت الصحافة الوطنية دوراً هاماً في حركة التحرر الوطني في كل من آسيا وأفريقيا. وترتبط نشأة الصحافة في العالم الثالث سمر النخبة الوطنية أو الطلائع التي تصدرت لقيادة الحركات الوطنية والتي تبلور نشاطها في شكل تحركات أو تنظيمات حزبية. ولم يكن صدور الصحف الوطنية في قارتي آسيا وأفريقيا مجرد رد فعل لمواجهة السيطرة الاستعمارية فحسب، بل كان أيضاً بمثابة تحيد لاكتفال الحركات الوطنية من الناحية التنظيمية وقدرتها على مواجهة السلطات الاستعمارية بلجبرتها السلبية والإعلامية. ولاشك أن الفوانين والقيود التي فرضتها السلطات الاستعمارية على الصحافة مضافاً إليها سيطرة الأوربيين على الصحف التي صدرت في معظم دول العالم الثالث قبل الاستقلال أقنعت الزعامات الوطنية بضرورة نشوء صحافة وطنية تعبر عن طموحات وآلام ومشاكل الشعوب في هذه الدول، خصوصاً وأن الصحافة الاستعمارية استخدمت كوسيلة لتكريس الاغتراب النفسي والفكري لدى النخبة الوطنية، إذ كانت تذكرهم طوال كالوقت بدورهم المهني في بلادهم وترسخ في أذهانهم استحالة تحقيق الاستقلال.

37 وتسهل اللغة في تسهيل العمل الجماعي وتنظيمه، لأن اللغة تتطلب عدة عناصر مجتمعة، وهي عناصر لا توجد إلا عند الانسان، منها العقل والفكر الذي يصنف الأشياء والأفكار والعلاقات الى مجموعات متشابهة ثم يقوم بعملية اضافة الرموز السموية على كل مجموعة. وثانياً جهاز الكلام ويتكون من الجهاز التنفسي واللسان والحنك والمخ بشرط ان تكون تلك الاجهزة بصورتها الموحدة عند الانسان، ويضاف الى تلك العناصر المعيشة في مجتمع إنساني لأن الانسان لا بد ان يتعلم اللغة من أسرته ومجتمعه، وإذا عاش وحيداً منعزلاً فلا يخرج إلا أصوات وصرخات متفرقة. ولا توجد هذه العناصر مجتمعة إلا عند الانسان. بل ان المعصرين الأول والثاني، مثل العقل وجهاز الكلام لا يوجدان إلا عند الانسان، ومن هنا اعتبر الانسان حيواناً ناطقاً، واعتبر النطق صفة جوهرية تميزه عن باقي الحيوانات. ولذلك كان وجود مجتمع بدون لغة غير قادر على تنظيم أبسط عمل جماعي، وكذلك يعجز عن نقل خبراته وأنكاره البسيطة الى الآخرين. وبناء على ذلك يمكن القول ان اللغة تلعب دوراً كبيراً في تكوين الثقافة، مع انها جزء واحد فيها. ولكنها أهم هذه الأجزاء جميعاً، لأنه عن طريقها تنقل الثقافة من جيل الى آخر، وكذلك تسير الثقافة

38 تسمية حالة الاحتكار البحت في السوق بوجود بائع واحد فقط يبيع سلعة لا يوجد لها بديل قريب. فيجب أن تكون السلعة التي يبيعها المخترع مختلفة اختلافاً واضحاً عن السلع الأخرى بحيث لا تؤثر تغييرات أسعاره أو كيات هذه السلع على السلعة المخترع اتاجها. كما أن تغيير المخترع لاسماره أو كيات اتاجه لا تؤثر على السياسات التي يتبناها المتحورون الآخرون. ويندر وجرود الاحتكار البحت في الحياة العملية. ويكاد يقتصر وجوده على منشآت المنافع العامة مثل الكهرباء والليام والتلفون.

39 وتمتد الإذاعة أكثر وسائل الاتصال الجماهيري انتشاراً في العالم . وقد استخلمت الدول النلية هذه الوسيلة استخداماً هائلاً في العقدين الأخيرين . وتعتبر الإذاعة في الدول النلية الوسيلة الوحيدة التي يمكن أن بطلق عليها صفة الجماهيرية . ولا توجد حالياً وسيلة اتصال أخرى لها إمكانية الوصول إلى فئات سكانية في مناطق مترامية بهذه الدرجة من الكفاءة لتحقيق أهداف تعليمية وإعلامية وثقافية وسياسية ويمكنها التفاهم باللغات واللهجات المحلية (غير المكتوبة في معظم الأحيان) في الدول النلية .

40 والناقد هو الرجل الذي لديه المقدرة على التمييز بين الجيد والقيح من الكلام، معتمداً في ذلك على صوته النقية، وحسبه الدقيق، وخبرته الطويلة في دراسة النصوص، والآثار الأدبية. فير الرجل الذي يعتمد على ركنين أساسيين: لغوية والنداسة. فاللغوية فطرية خاتما الله في الإنسان، وتصلق بالممارسة، وطول الإطلاع هل آثار الكتاب والشعرله، فإذا أراد القارئ ممارسة عملية النقد: عليه أن يتنوق القطعة الأدبية ثم يعقبها بالتفسير والتحليل للمناصر التي أثارته فيه حلة التنوق في العمل الفني، فتنوق النص الأدبي، والانفعال به، والتضاهل معه أولاً. ثم التعرف عليه، والغرض إلى أعماقه، وبيان أسراره ثانياً.

Appendix A

Translation:

A.1

1. The Islamic law preceded all other religions in establishing equality between women and men, 2. by declaring her freedom and independence when she was greatly humiliated in all nations. 3. It granted her all the rights of man, 4. and legally considered her equal to man in all civil aspects such as selling, purchasing, gifts and legacy without the need for her father's or husband's permission. 5. These merits that have been obtained by only a few Western women so far, prove that respecting the woman and equating her with the man is one of the basics of this religion. 6. Furthermore, our law exaggerated in being kind to women. 7. It exempted her from the burdens of life, 8. and it did not commit her to share the expenses of the house and the upbringing of the children, 9. unlike some other western legislative systems which equated women with men in duties only, 10. and favored men in the rights. "Major Themes in Modern Arabic Thought," p.85.

A.2

1. The Arab governments strictly censors the mass media especially the press. 2. Censorship takes different forms. 3. It might be sometimes restricted to religious topics or to other highly sensitive foreign affairs. 4. But it very often includes the topics related to the security of those governments. 5. Generally, censorships on Arabic newspapers is based on written laws, 6. but it very often depends on the government's estimation. 7. In the Arab countries, there are laws to be applied in emergencies. 8. One prominent type of censorship is the pre-censorship, 9. when the material to be published is presented to the viewer before it is published, 10. another form of censorship is the post-publication type which confiscates the copies to be distributed, 11. but the most dangerous form of censorship that is common in the Arabic press is the one practised by chief editors and journalists. "qaza:ya: 'attaba9iyyah," p.132.

A.3

1. Prophet Mohammad is, in the first place, the prophet of Islam, 2. to whom this religion was revealed, 3. and by means of whom it propagated in the east and the west. 4. This religion had affected all aspects of Arabic culture. 5. to the extent that we cannot understand all old heritage without understanding this religion. 6. and this Arabic heritage is part of our present culture, 7. it is even the foundation on which it is based. 8. It is wrong to abandon this culture and adopt the modern western culture, 9. Therefore, Arabic heritage is part of us whether we like it or not. 10. Moreover, it is the feature that makes us unique among nations, 11. it has been plentiful and beautiful enough for us to be proud of it. 12. Therefore, it is a must for each Arab who is concerned for his old culture to study Islam and respect the memory of our prophet. "Major Themes," p.133.

A.4

1. Prophet Mohammad, in the second place, unified the Arabs and brought them together. 2. He was sent to them while they were disintegrated, 3. they felt jealous of each other, 4. they quarrelled, 5. they fought each other, 6. there was no strong tie to bring them together, 7. there was nothing common to make them united. 8. Therefore, he enlivened them, 9. and so they became integrated 10. closer to each other 11. and one united body. 12. This spirit permeated through the whole world motivating and activating it, 13. and spreading to it its civilization. "Major Themes," p.133.

A.5

1. God created air as a basic foundation of life. 2. Had he not created the air, there would have been no wind, no rain, and no fog, 3. and the sky would have been black in the day, 4. because its blueness is caused by the defraction of the sun rays when they penetrate the air. 5. Had it not been for the existence of air, we would not have been able to hear sounds 6. because the air transfers the sound waves, 7. the weather could have been very hot during the day and very cold at night, 8. because it isolates the surface of the earth. 9. Air is a shelter for the earth from comets and meteorites, 10. since its friction with the air reduces its speed. "Chemistry," p.76.

A.6

1. But the oddness of my religion's views is due to its being in disagreement with the common views about the origin of man. 2. The old belief was different from what modern science established. 3. Therefore the religious views were compatible with that belief. 4. But, today, science has confirmed that man is like other living creatures. 5. And so, the old religious views became incompatible with the modern scientific view. 6. The compromise between these views and science became difficult 6. and whatever efforts are exerted to achieve this compromise, will be rejected by natural sciences. "Major Themes," p.75.

A.7

1. Despite the above mentioned advantages of air, its existence can be a nuisance to man. 2. For example, air carries the bacteria and germs that infect parts of the body. 3. It also spreads bad odors. 4. It helps spreading fire in forests, 5. and it also spreads the gasses and carbon oxides resulting from those fires. 6. It spreads dust and sand storms. 7. It spreads the smoke and other gasses produced by volcanos. 8. But these natural factors of pollution are very minor compared with the pollution caused by man. 9. Chimneys of factories blow out lots of smoke into the air. 10. Cars also contribute to the pollution of the air through the smoke they produce. 11. In addition, the gasses produced by burning the trash. 12. All these factors contribute to the pollution of the air. 13. Their danger increases with the advancement of technology 15. because advanced industry is a feature of civilization. "Chemistry," p.82.

A.8

1. We have to study the issue of the pre-Islamic poetry. 2. The way in front of the proponents of the old is clear and easy. 3. The problem is easy. 4. Did not the scholars of Iraq and the leventine agree that there were many pre-islamic poets? 5. Did they not agree that those poets are known to people by name? 6. Did they not agree that those poets produced poetry which was transmitted by people until it was recorded? 7. If those scholars unanimously agreed on that, we have had to accept it. "Major Themes," p.107.

A.9

1. Communism requires the abolition of individual ownership. 2. This means that the individual is not allowed to own anything that can be developed by workers, 3. and thus, the individual may own his clothes and house utensils. 4. Furthermore, he might be allowed to own his house as long as this does not harm other people. 5. The purpose of communism is to provide economical freedom among people. 6. Therefore, inheritance is abolished 7. because its existence is incompatible with the economical freedom. "Major Themes," p.113.

A.10

1. Vocational adjustment is a feature of social adaptation. 2. By means of vocational adaptation, an individual fully adapts himself to his society. 3. The need for vocational education increases because of the fast developments in the Arabic society. 4. The industrial renaissance permeated the whole Arab world helping it not only develop its resources by the modern technological methods 5. but also to industrialize these resources. 6. Therefore, education has to meet the needs of this renaissance, 7. by paying more attention to vocational training, 8. and encouraging agricultural, industrial and and commercial education. "9ilm 'al'ijtima9," p.86.

A.11

1. It is not the Islamic society that made the Islamic law, 2. but it is the Islamic law that made the Islamic society. 3. The law defined the features of this society, 6. It directed and developed the Islamic society, 5. the islamic law was not a mere response to temporary and local needs, 6.; but it was a godly law for the development of humanity, 7. through time and through the increase in knowledge, the ideal society develops. 8. These features played an important role in defining the nature of the Islamic society. "Qutb," p.64.

A.12

1. The industrial government realized the danger of this situation. 2. they put forward great programs to study the means of preventing pollution. 3. Some of these plans remove the impurities, 4. others prevent the sources of pollution. 5. Some governments prevented the use of

certain materials whose use causes pollution. 6. In the U.S.A., for example, the refineries stopped adding lead compounds to the gasoline, 7. and this necessitated some modifications in the engine of the car. 8. Some governments prevent the diesel cars from operating in towns, 9. because diesel causes more pollution than gasoline. "Readings," p.15.

A.13

1. The first thing that surprises you is that I doubled the value of the pre-Islamic poetry, 2. or, say, that I was obliged to doubt it, 3. so therefore, I started to research, think and read carefully, 4. until I arrived at an almost true conclusion 5. that the pre-Islamic poetry has nothing to do with the pre-Islamic era. 6. but it was made up after the advent of Islam. 7. It is Islamic representing the life needs of the Muslims. 8. I am almost sure tha what was left of the pre-Islamic poetry does not represent the pre-Islamic era at all. "Major Themes," p.110.

A.14

1. We have two choices: Either we accept what the old said about literature 2. with little criticism that allows us to say 3. that Al-asmai was right or wrong, 4. and Abu Ubaida was successful or not, 5. and Al Kisiy was on the right path or not, 6. or else we suspect and investigate what the old said. 7. I do not want to suggest research 8. but suspicion. 9. I do not want to accept anything the old said without making sure it was true. "Major Themes," p.106.

A.15

1. Despite the fact that Islam does not prevent benefiting from human experience as long as they do not conflict with the Islamic law. 2. For example there is not harm in making use of people's experiences in specifying the renewed social needs, 3. there is no harm in utilizing these experiences in implementing the Islamic principles. 4. The principles of Islam are constant, 5. but ways they are achieved are changeable. 6. Therefore, these principles can make use of those experiences in any field, provided that they do not conflict with any principle. "Qutb," p.139.

A.16

1. The notion of Islam replaces the notion of homeland in its good sense. 2. which leads to no exploitation of a piece of land at the expense of another one 3. or some people at the expense of others. 4. Consequently, the land over which Islam prevails belongs to all the people, 5. and every Muslim is a part of the Muslim community, 6. undoubtedly, having faith in this notion does not lead to undesirable consequences brought about by competition in a certain state of affairs, 7. and the desire to propagate a nation does not lead to the evil consequences caused by colonialism. "Qutb," p.97.

A.17

1. Researchers and those who are interested in education in Jordan, noticed that the teachers attachment to their career started to weaken in the 1970s. 2. This is due to several factors, 3. some are related to the living conditions of the teachers. 4. These observations were based on personal experiences, 5. complaints of teachers, 6. the complaints of parents, 7. and the complaints of administrators. 8. In addition, the image of the teacher began to change in the society. 9. This observation is reinforced by the several educational conferences held in Jordan to discuss this issue, 10. and by some studies related to the acceptance of teachers of their career. "Dira:sa:t," p.31.

A.18

1. There is an observation that should be mentioned, that is, people may move from a place to another especially bedouins, 2. this means that they change a place for another. 3. But as far as language or culture is concerned, it is not changed. 4. They do not replace a culture by another. 5. But they make some adjustments by addition or loss. 6. Their culture and heritage remains a distinguishing feature for them. 7. Whoever changes his culture by changing his place loses his character. 8. and when these people adopt a new culture, they will have a new personality. "Alkawmiyah Alarabiyyah," p.20.

A.19

1. The attitude of the teacher of social education towards controversial issues depends on the nature of these issues. 2. If these matters are related to national

or human affairs, the teacher has to teach them to his students, 3. because they lead people to be unified. 4. But if those issues are not basic or if they are related to certain parties, the teacher should bring them up in his classes, 5. because he will offend his students and his nation. 6. He will offend them the student tend to be influenced by his impressions, 7. what he should do is teach his students to think before they judge what they hear 8. so as not to believe in whatever they hear, 9. and get astray, 10. while his offense to the nation comes from widening the gap between groups and parties. "9ilm 'ali'ijtima:9," p.100.

A.20

1. When Islam removes the racial and geographical barriers on which the notion of the national homeland is based, 2. it does not abolish the notion of homeland at all. 3. It keeps the good sense of this concept, 4. the sense of cooperation, brotherhood and organization. 5. Therefore, the notion of the homeland becomes a thought common to all people 6. within which people of diverse races and places live together, 7. as if they were from the same country; 8. they act like brothers, 9. they cooperate among each other for the sake of good to themselves and to all humanity.

A.21

1. Others think that a nation with several social diseases, can be cured by establishing public schools. 2. By the fashion known in Europe, 3. so that education will be available for everyone in a short period of time. 4. Once education is available to everyone, people become more unified and more integrated. 5. But this notion is hard to be realized, 6. because this great job will only be achieved by a powerful leader 7. who forces people to do things undesirable to them, 8. so that they will appreciate their achievement and will get accustomed to perform whatever good is required. 10. This leader needs plentiful resources to establish schools and cover its expenses. 11. Had the nation these two assets, then it would not be considered inferior. "Major Themes," p.53.

A.22

1. It is known that standard Arabic spreads by the spread of education and culture. 2. But we have noticed that the new generations are poor in Arabic despite the

availability of schools and education. 3. One can also notice that colloquial Arabic has infiltrated the mass media such as the television and the broadcasting stations, 4. and this is a dangerous phenomenon that should not be overlooked 5. because forgetting it is a crime in the religious and nationalistic senses. 6. Therefore, there is no justification for this phenomenon to spread. 7. All scholars and religious leaders should work together to stop the spread of colloquial Arabic, 8. otherwise we will suffer from a disaster that is not easily curable. "Islam and Hadarah," p. .

A.23

1. Among the mysteries of the earth is the high temperature inside it. 2. But the age of the air is undecided yet. 3. Until recently, people used to think that the earth is six thousand years old, 4. and then some geologists said that the age of the earth is not less than a million years. 5. Nowadays, some say that the age of the earth is several billion years. 6. All these estimations are not true, 7. and God is right when He says we have created the heavens and the earth and what is in between them in six days, and we were not fatigued. 8. Then the age of the earth is related to the age of the heavens, 9. and no one knows that except God. "Readings," p.25.

A.24

1. And the proofs for that are many. 2. History is full of controversies and fights between people about the dominance of a thought over the other. 3. Dominance was sometimes to the right and sometimes to the wrong. 4. The Islamic nations were like that in the middle ages. 5. The situation is still the same in the Arab world: a struggle between the right and wrong, 6. a struggle among all people in branches of knowledge, 7. to the extent that thousands of people went abroad to seek knowledge. 8. And, if a well known scholar writes a book, it will be published in five or six languages at the same time. "Major Themes," p.82.

A.25

1. Similarly when we consider the attitude of Islam towards slavery, 2. we find that slavery is no longer apparent as it was before, 3. and all that Islam has to do with it is that it found it already existing. 4.

Therefore, it started eliminating its resources, 5. restricting its sources to war captives, 6. and also it started wiping it out by establishing the principle of social welfare and establishing equality among people, 7. moreover Islam made slaves equal to others and even allowed some to become leaders. 8. Because of all of that, it can be confidently said that the Islamic society did not recognize the era of slavery and feudalism 9. and it did not recognized their features as well. "Qutb," p.76.

A.26

1. And while the proponents of the new, the road ahead of them is winding, 2. full of innumerable obstacles. 3. And they can hardly move on except with great care and deliberation which are closer to slowness than to speed. 4. For they do not move on with faith and confidence, 5. or they have not been granted this faith and confidence. 6. God had granted them brains that enjoy suspicion and anxiety. 7. They do not want to move on in the history of literature without being certain. 8. They don't care whether they agree or disagree with the old. "Major Themes," p.109.

A.27

1. The European societies have known a new system, that is, capitalism. 2. They have had this system in later times. 3. It started with the crusader in the 11th century. 4. That is, after the Europeans had been exposed to the social systems in the Islamic countries, 5. and so they hated feudalism that was prevailing in Europe. 6. And this reason is always neglected by materialistic theories, 7. because they do not want the human element to be involved in the development of history. 8. It is sufficient for them to mention the economical causes accompanying the crusaders. "Qutb," p.79.

A.28

1. Islam had perpetuated the Arabic language 2. when God guaranteed the protection of Koran, which is meaning and form, 3. and it cannot be understood unless it is in Arabic. 4. Therefore, Arabic should survive, 5. for the sake of understanding the Koran. 6. That is why the Indian scholar Abdel-Majid Farahi insists on writing in Arabic, 7. and when asked about that, he said that he wanted his books to survive. "Islam and Hadarah."

A.29

1. In my studies, I did not mean to deny religions for personal reasons 2. and I did not deny them haphazardly as many people would think. 3. I did not try to make up excuses as others 4. who do not believe in any religion. 5. They go their own ways 6. so as not to be labeled as backwards. 7. They are like someone who became a Muslim at noon but died at dusk; so Jesus forsook him and Mohammad did not know him. 8. I committed myself to science, 9. I mean the natural science that's open to any scholar. 10. I really hate every research based on abstraction. "Major Themes," p.77.

A.30

1. There is a close relation between planning at schools and at the universities 2. because schools and universities provide private and public administrations with trained man-power, 3. therefore, it is necessary to establish a close link between the planning institutions and the educational establishments. 4. This might seem easy 5. but meeting the future needs, 6. and achieving coordination between the administrative governmental offices and the educational establishments, 7. and establishing specialized colleges 8. and influencing the attitudes of people are all not easy matters, 9. they really look impossible at the first impression. "Dirasat," p.105.

A.31

1. And when anthropologists became interested in studying the origin of language, 2. some of them claimed that language started when man tried to imitate the sounds of animals and the cries of nature around him, 3. others believed that the earliest manifestations of language were involuntary voices 4. that later developed until it became a language with its grammar and sounds, 5. but these beliefs about the origin of language had been proven wrong in the light of the results of analytical studies of modern languages, 6. which emphasized that language is an entity composed of sounds, words and sentences, 7. and all of these components are arbitrary. 8. For example, the relationship between the word horse and the animal it refers to is arbitrary, 9. the individual lives in a society and learns from his family a number of conventional signs used by people to refer to the surroundings, to the social relations, and to the

ideas, 10. and he cannot change it or deviate from it, 11. because it will be difficult for him to communicate with his friends, 12. therefore, language is considered as a conventional arbitrary system of symbols used by a particular society, 13. and the only function of language is to be used as a means of communication among people, 14. by means of language an individual can transmit his experience and skills to others, 15. and he can coordinate between his experiences and those of others. "Islam and Hadarah," p.90-91.

A.32

1. Arabic nationalism was born as a result of distinguishing the Arabic nationalism from the Ottoman religious link. 2. The Turkish racial nationalism practiced dictatorship on Arabs. 3. Therefore, the Arabic nationalism movement had to be accurate in understanding the national and the religious links. 4. And it really was. 5. These conditions disconnected Arabic nationalism from the religious links 7. and put it on the way of national liberation. "Alkawmiyah Alarabiyyah," p.220.

A.33

1. Scientific theories aim at explaining the causes for the appearance of any phenomenon. 2. For example, it tries to explain the development of national income through time, 3. or the behavior of people in a particular event, 4. or the precipitation in certain seasons of the year. 5. If a theory succeeded in this explanation, we can then use it in predicting how these phenomena will be in the future. Abu-Ali, p.2.

A.34

1. Whereas the role of advertisements in threatening the freedom of the press in Africa comes from finance. 2. The reliance on advertisements as a source of finance enables the advertisers to control the content of the newspapers unless they are under the control of the government 6. and this neutralizes the role of advertisers, 5. although this does not eliminate the possibility of encounter between the government and the strong advertisers, 6. whose pressures aim at distorting the national development plans in the African countries. 7. The conflict between the government and advertisers increases especially when they are representatives of foreign companies. "qaza:ya 'attaba9iyyah," p.178.

A.35

1. But they go beyond this 2. when they think that diglossia goes back to the pre-Islamic era, 3. and Arabs had two distinct linguistic levels, 4. the first in the common language used for communication among the tribes, 5. and the second is realized in the local dialect at the level of each tribe. Al-Mousa, chapter 2.

A.36

1. The national press played an important role in the liberation movements in both Asia and Africa. 2. The development of the press related to the appearance of the national elite. 3. National newspapers in Africa and Asia were not only reaction against colonialism, 4. but also a symbol for the perfection of national movements. 5. Undoubtedly, the laws and restrictions imposed by the colonial authorities convinced the national leaders of the necessity for establishing national newspapers to express the pains and aspirations of the people, 6. especially that colonial press used to establish a sense of psychological alienation among the national leaders, 7. It used to remind them of their marginal role 8. and convince them that independence is impossible. "qaza:a 'attaba9iyyah," p.18.

A.37

1. Language facilitates and organizes teamwork 2. because it requires many factors together 3. and these factors are only available in man, 4. such as the brain that categorizes things into similar groups, 5. and then it adds the sound symbols for each group. 6. The second factor is the speech apparatus, 7. in addition to the social factors 8. since man has to learn language from his family and society. 9. If man lives in isolation, he will produce various sounds. 10. These factors are put together only in man, 11. while the first and the second factors, the brain and the speech apparatus are only found in man, 12. that is why man is considered a speaking animal, 13. and speech is a distinguishing feature of man. 14. Consequently, a society without a language is unable to organize any simple teamwork, 15. and unable to transfer its experiences to other societies. 16. consequently, we can say that language plays a role in forming culture, although it is a part of it. 17. but it is the most important factor because it is

the means of transmitting culture from one generation to another. "Islam and Hadarah," p.91.

A.38

1. Pure monopoly is characterized by having one seller of a particular thing. 2. This good must be different from all other goods, 3. so as not to be influenced by the prices of other goods, 4. and the change of prices will not affect the policies of other products. 5. Pure monopoly is rare in practicality. 6. It is almost restricted to the public utilities such as light, water and the telephone services. Abu-Ali, chapter 8.

A.39

1. The broadcasting is the commonest mass media in the whole world. 2. The developing countries used it greatly in the last two decades. 3. The broadcasting is the only public mass medium. 4. There is no other medium that has the same effect as that of the broadcasting. "qsza:ya 'attaba9iyyah," p.14.

A.40

1. The critic is the man who can distinguish the good from the bad depending on artistic gift, and long experience in literature. 2. He depends on two assets: talent and study. 3. The talent is natural in man, 4. it can be polished by practice 5. and if the reader wants to practice the process of criticism, he must appreciate the literary piece then he has to explain and criticize it 7. thus appreciating the literary text comes first, 8. then knowing it and discovering its mysteries is the second step. Hussein, p.37.

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Appendix B

E.1

1. In many ways, the quality of our environment has deteriorated with each new advance of the gross national product. 2. Increases in electric power production mean the burning of more coal and fuel oil, and hence the discharge of more sulphur dioxide into the air. 3. The growth of the paper industry has brought a vast increase in trash. 4. The production of new automobiles and the discard of old ones has resulted in unsightly piles of old hulks. 5. The growth of urban automobile transportation is choking both the mobility of the city and the lungs of the city dwellers. "Our deteriorating environment," in Writing Prose, p.173.

E.2.

1. Thirdly, I hold it essential for a teacher to be both intellectually and morally honest. 2. This does not mean being a plaster saint. 3. It means that he will be aware of his intellectual strengths, and limitations, 4. and will have thought about and decided upon the moral principles by which his life shall be guided. 5. There is no contradiction in my going on to say that a teacher should be a bit of an actor. 6. That is part of the technique of teaching, which demands that every now and then a teacher should be able to put on an act 7.--to enliven a lesson, correct a fault, or award praise. 8. Children, especially young children, live in a world that is rather larger than life. "The Personal Qualities of a Teacher," in English Studies Series 2, p.74.

E.3

1. Education has always presupposed authority--the rightful authority, in respect of teaching, of those who know over those who do not know. 2. It has lost its authority 3. because its practitioners have lent themselves to the production and perpetuation of deadly error. 4. Authority stripped of its rightfulness is authoritarianism. 6. Both they are mortally wrong if they think that they will improve their situation by replacing their elders' authoritarianism with their own. "The ecological problem" in Syntax and Style, p.165.

E.4

1. To turn to zoology, suppose that a gazelle, a graceful little creature with long thin legs, is to become large; 2. it will break its bones unless it does one of two things. 3. It may make its legs short and thick, like a rhinoceros, 4. so that every pound of weight has still about the same area of bone to support it. 5. Or it can compress its body and stretch out its legs obliquely to gain stability, like the giraffe. 6. I mention these two beasts because they happen to belong to the same order as the gazelle, and both are quite successful mechanically, being remarkably fast runners. "On Being the Right Size," in Patterns for College Writing, p.129.

E.5

1. For the first part, he has to bring the body into the proper relation to the particular sport involved. 2. This means that he has to analyze the various factors of a peak performance for each boy on the team, on one hand things like speed and timing in general, and on the other, special aspects of the action belonging to the sport, such as passing, line backing, broken field running. 3. For the requirements of the game (and the position the boy is to play) the coach has to analyze the elements and then weld them back together in a fluid performance. "What is a Good Coach?" in Modern Rhetoric, p.90.

E.6

1. American men don't cry, 2. because it is considered unmasculine to do so. 3. Only sissies cry. 4. Crying is a "weakness" characteristic of the female, 5. and no American male wants to be identified with anything in the least weak or feminine. 6. Crying, in our culture, is identified with childishness, with weakness and dependence. 7. No one likes a crybaby, 8. and we disapprove of crying, even in children, discouraging it in them as early as possible. 9. In a land so devoted to the pursuit of happiness as ours, crying really is rather un-American. 10. Adults must learn not to cry in situations in which it is permissible for a child to cry. 11. Women being the "weaker" and "dependent" sex, it is only natural that they should cry in certain emotional situations. 12. In women, crying is excusable. 13. But in men, crying is a mark of weakness. 14. So goes the

American credo with regard to crying. "American Men Don't Cry," in Writing Prose, p.199.

E.7

1. The first peoples of the Americas--we call them Indians--had been as inventive as most others on earth. 2. They had developed extensive networks of trade. 3. They moved from one place to another, 4. concentrated in some places, 5. avoided others, 6. and pushed weaker peoples into peripheral backwaters. 7. They built cities 8. and destroyed them; 9. created great art and forgot it. 10. They spoke complex languages, 11. and developed elaborate myths, rituals, and religions. 12. They lived their daily lives as most human beings do, 13. eager to fulfill themselves, 14. convinced of the singularities of their ways of doing things, 15. and annoyed when the world outside forced itself upon them. 16. Geniuses among them invented tools and technologies, 17. devised ways to build with stone and wood and mud, 18. invented games, calendars, techniques of record keeping, agriculture, textiles, baskets, posts, metallurgy, boats. 19. They had elaborate pharmacopeia, laws, medicine, 20. and they speculated about the nature of the universe and man's place in it. 21. They were self-centered, kind, cruel, humanitarian, generous, proud, arrogant, humble, and frightened in about the same proportion as others are, 22. and they expressed themselves and their emotions in ways conditioned by their own beliefs, languages, and cultures. "The First Peoples of the Americas," in Writing Prose, p.202.

E.8

1. The one human activity, other than sex itself, for which male specialization is indispensable is armed conflict involving hand weapons. 2. On the average, men are taller, heavier, and more muscular than women. 3. Men can throw a longer spear, 4. bend a stronger bow, 5. and use a bigger club. 6. Men can also run faster--toward an enemy in attack and away from one in defeat. 7. To insist along with some women's liberation leaders that women too can be trained to fight with hand weapons does not alter the picture. 8. If any primitive group ever trained women rather than men as its military specialists, it make a big mistake. 9. Such a group surely committed suicide 10. because not a single authentic case is known from any quarter of the globe. "Primitive War," in Writing Prose, p.237.

E.9

1. Natural, or innocent, anger is the necessary reaction of a creature when its survival is threatened by the attack of another creature and it cannot save itself (or its offspring) by flight. 2. Such anger, accompanied by physiological changes, like increased secretion of adrenalin, inhibits fear 3. so that the attacked creature is able to resist the threat to its extinction. 4. In the case of young creatures that are not yet capable of looking after themselves, anger is a necessary emotion when their needs are neglected: 5. a hungry baby does right to scream. 6. Natural anger is a reflex action, not a voluntary one; 7. it is a response to a real situation of threat and danger, 8. and as soon as the threat is removed, the anger subsides. 9. No animal lets the sun go down upon its wrath. 10. Moreover, Lorenz has shown that, in fights between the social animals, when, by adopting a submissive posture, the weaker puts itself at the mercy of the stronger, this inhibits further aggression by the latter. "Anger," in Writing Prose, p.297-298.

E.10

1. The first and most obvious result of the technological revolution has been to increase the amount of wealth in the form of material things which can be produced in a given time by a given population. 2. For example, in 1913 there was produced in Great Britian seven billion yards of cotton cloth for export alone. 3. In 1750 the total population of Great Britian, working with the mechanical appliances then available, could have produced only a small fraction of that amount. 4. A second result of the technological revolution is that, as machines are perfected and become more automatic, manpower plays a relatively less important part in the production of a given amount of wealth in a given time. 5. Fifty years ago, when all type was set by hand, the labor of several men was required to print, fold, and arrange in piles the signatures of a book. 6. Today machines can do it all, and far more rapidly; 7. little manpower is required, except that a mechanic, who may pass the time sitting in a chair, must be present in case anything goes wrong with the machine. 8. And finally, a third result of the technological revolution is that, under the system of private property in the means of production and the price system as a method of distributing wealth, the greater part of the wealth produced, since it is produced by the machines, goes to those who own or control the machines,

while those who work the machines receive that part only which can be exacted by selling their services in a market where wages are impersonally adjusted to the necessities of the machine process. "The Technological Revolution," in Writing Prose, p.241.

E.11

1. Anger as a sin is either futile (the situation in which one finds oneself cannot or should not be changed, 2. but must be accepted) or unnecessary (the situation could be mastered as well or better without it). 3. Man is potentially capable of the sin of anger 4. because he is endowed with memory--the experience of an event persists--and with the faculty of symbolization (to him, no object or event is simply itself). 5. He becomes actually guilty of anger 6. because he is first of all guilty of the sin of pride, of which anger is one of many possible manifestations. "Anger," in Writing Prose, p.298.

E.12

1. If anyone wants to exemplify the meaning of the word "fish," he cannot choose a better animal than a herring. 2. The body, tapering to each end, is covered with thin, flexible scales, which are very easily rubbed off. 3. The taper head, with its underhung jaw, is smooth and scaleless on the top; the large eye is partly covered by folds of transparent skin, like eyelids--only immovable and with the slit between them vertical instead of horizontal; 5. the cleft behind the gill-cover is very wide, 6. and, when the cover is raised, the large red gills which lie underneath it are freely exposed. 7. The rounded back bears the single moderately long dorsal fin about its middle. "The Herring," Modern Rhetoric, p.63.

E.13

1. Thanks to this universality of athletic sports, 2. English training is briefer and less severe. 3. The American makes, and is forced to make, a long and tedious business of getting fit, 4. whereas an Englishman has merely to exercise and sleep a trifle more than usual, and this only for a brief period. 5. Our oarsman work daily from January to July, about six months, 6. or did so before Mr. Lehmann brough English ideas among us, 7. the English varsity crews row together nine or ten weeks. 8. Our football players slog daily for six or seven

weeks; 9. English teams seldom or never "practice" and play at most two matches a week. 10. Our track athletes are in training at frequent intervals throughout the college year 11. and are often at the training table six weeks; 12. in England six weeks is the maximum period of training, and the men as a rule are given only three days a week on the cinder track. 13. To an American training is an abnormal condition; 14. to an Englishman it is the consummation of the normal. "An American at Oxford," in Modern Rhetoric, p.59.

E.14.

1. Grant was, judged by modern standards, the greatest general of the Civil War. 2. He was head and shoulders above any general on either side as an over-all strategist, as a master of what in later wars would be called global strategy. 3. His Operation Crusher plan, the product of a mind which had received little formal instruction in the higher art of war, would have done credit to the most finished student of a series of modern staff and command schools. 4. He was a brilliant theater strategist, as evidenced by the Vicksburg campaign, which was a classic field and siege operation. 5. He was a better than average tactician, 6. although, like even the best generals of both sides, he did not appreciate the destruction that the increasing fire-power of modern armies could visit on troops advancing across open spaces. "Lincoln and his Generals," in Modern Rhetoric, p.59.

E.15

1. There is then this matter of superior education; 2. the modern student willingly agrees that he is superior and believes that 3. therefore he sees more clearly, 4. carries proper banners, 5. is better able to undertake correct and elevating action. 6. He grants that he is young 7. but is convinced that his superiority to previous college generations equips him to lead at a much earlier age. 8. He is also a creative thinker (teachers of English constantly attack his inability to spell and punctuate, but they say little against his creativity); 9. he sees all the old problems in a new perspective. 10. For his own survival, he must get control soon, 11. an impulse that is setting campus leaders to a faster timetable. 12. After all, their idol, John F. Kennedy became president in his 40's. 13. If one of today's students exerts enough pressure and keeps his elders

sufficiently unnerved, he too may become the youngest President, 14. and may have a world to take care of. "Why Students Revolt," in Reading, Writing, and Rhetoric, p.5.

E.16

1. These stories have become the epitome of our own fears. 2. We have been inventing machines at a growing pace now for about three hundred years. 3. This is a short span even in our recorded history, 4. and it is not a thousandth part of our history as men. 5. In that short moment of time we have found a remarkable insight into the workings of nature. 6. We have used it to make ourselves far more flexible in our adaptation to the outside world than any other animal has ever been. 7. We can survive in climates which even germs find difficult. 8. We can grow our own food and meat. 9. We can travel overland and we can tunnel and swim and fly, all in one body. 10. More important than any of these, we have come nearest to the dream which Lamarck had, that animals might inherit the skills which their parents learnt. 11. We have discovered the means to record our experience 12. so that others may live it again. "Science, the Destroyer or Creator" in Reading, Writing and Rhetoric, p.278.

E.17

1. The people insist that it is unfair to generalize about the police. 2. The good cop is held up for public inspection 3. and he is supposed to be the example of law-enforcement officers everywhere. 4. Just as the one rabbi, priest or minister who goes to Alabama to demonstrate is supposed to represent the whole church. 5. The one beautiful cop in a neighborhood will stand out. 6. He has pride in his job. 6. He is sensitive to human problems 7. and knows how to talk to the person on the street corner. 8. He has not chosen his job 9. because he couldn't get hired any place else. 10. He is a cop because he wants to be; 11. perhaps his father and grandfather before him had devoted their lives to law enforcement. "The Ghetto Cop," in Patterns of Expositions, p.27.

E.18

1. Country music is for the small-town American. 2. Country music and its image of America pleases those millions of quiet people in traditional, socially conservative communities who daily face erosion of the values that make their lives meaningful. 3. America is moving from the nineteenth century into mass society not in a smooth glide, 4. but in a series of painful little shocks, 5. and the person most likely to appreciate country music is the person for whom those shocks hurt most. 6. Country music's function is to replenish the system of values that we seem to be losing. "A Rose-Colored Map," in Prose Models, p.243.

E.19

1. Happiness is never more than partial. 2. There are no pure states of mankind. 3. Whatever else happiness may be, it is neither in having or being, 4. but in becoming. 5. What the Founding Fathers declared for us an inherent right, we should do well to remember, was not happiness 6. but the pursuit of happiness. 7. What they might have underlined, could have foreseen the happiness market, is the cardinal fact that happiness is in the pursuit itself, in the meaningful pursuit of what is life-engaging and life-revealing, 8. which is to say, in the idea of becoming. "Is Everybody Happy?" in Prose Models, p.227.

E.20

1. To know a person's language is to understand his culture, 2. for language grows out of 3. and reflects culture. 4. The Tzeltal tribe in Mexico, for instance, has twenty-five different words for expressing the idea to carry. 5. Tzeltal speakers can indicate by one word each of the following concepts: carrying on the shoulder, carrying on the head, carrying in a container. 6. To carry rolled up is expressed by bal; 7. to carry coiled up is ch'et; 8. to carry with tongs is lut. 9. We know from his language that the Tzeltal does a lot of carrying. "Language and Culture," in Writing English, p.76.

E.21

1. An important aspect of human uniqueness is the power of free will. 2. In his books and lectures, Dr. Van Dusen frequently spoke about the exercise of this uniqueness. 3. The fact that he used his free will to prevent life from becoming a caricature of itself was completely in character. 4. In their letter, the Van Dusens sought to convince family and friends that they were not acting solely out of despair or pain. "The Right to Die," in Subject and Strategy, p.271.

E.22

1. An obvious factor in many instances is the geographical one. 2. Shared territory can play an important role in the development of a people with a conscious identity. 3. It normally provides the context in which other factors get an opportunity to emerge. 4. In the self-conscious associated with the achievement of, or aspiration towards, statehood it plays a significant role. 5. Natural boundaries do not of themselves constitute nations 6. and the eventual state boundaries which operate in the major landmasses owe little enough to great natural dividing points. 7. A fixed territory, however fixed, is characteristic of most peoples in their claim to nationhood. "Is Nationalism Obsolete?" in Language and Culture, p.208.

E.23

1. Bull fighting is not a sport. 2. It is a tragedy, 3. and it symbolizes the struggle between man and the beasts. 4. There are usually six bulls to a fight. 5. A fight is called a cordia de toros. 6. Fighting bulls are bred like race horses, 7. some of the oldest breeding establishments being several hundred years old. 8. A good bull is worth about \$2000. 9. They are bred for speed, strength and viciousness. 10. In other words a good fighting bull is an absolutely incorrigible bad bull. "The Bull Fight as Symbolism," in Patterns of Exposition, p.137.

E.24

1. Nationalism as we commonly, if rather imprecisely, speak of it is a relatively recent phenomenon. 2. Of course it can trace its roots far back into prehistory 3. and these roots broke surface in a particular way in the

Jewish tradition to which Christianity and the western world is so much indebted. 4. Yet the nationalism which now confronts us developed in the nineteenth century with its immediate roots in the American and French revolutions. 5. It was this kind of nationalism which dominated much of the settlement at the end of World War II as well as in the breakdown of colonialism in Africa and Asia in subsequent decades. "Is Nationalism Obsolete?" in Language and Culture, p.206.

E.25

1. There is nothing to prepare you for the experience of growing old. 2. Living is a process, 3. an irreversible progression toward old age 4. and eventual death. 5. You see men of eighty still vital and straight as oaks; 6. you see men of fifty reduced to gray shadows in the human landscape. 7. The cellular clock differs from each one of us, 8. and is profoundly affected by our own life experiences, our heredity, and perhaps most important, by the concepts of aging encountered in society and in oneself. "Aging in the Land of the Young," in Patterns of Exposition, p.257.

E.26

1. To define a word, then, the dictionary-editor places before him the stack of cards illustrating that word, 2. each of the cards represents an actual use of the word by a writer or some literary or historical importance. 3. He reads the cards carefully, 4. discards some, 5. rereads the rest, 6. and divides up the stack according to what he thinks are the several senses of the word. 7. Finally, he writes his definitions, following the hard-and-fast rule that each definition must be based on what the quotations in front of him reveal about the meaning of the word. 8. The editor cannot be influenced by what he thinks a word ought to mean. 9. He must work according to the cards or not at all. "How Dictionaries are Made," in Patterns for College Writing, p.149.

E.27

1. Everywhere we turn, we see the symbolic process at work. 2. Feathers worn on the head or stripes on the sleeve can be made to stand for military leadership; 3. cowrie shells or rings of brass or pieces of paper can stand for wealth; 4. crossed sticks can stand for a set of religious beliefs; 5. buttons, elks' teeth, ribbons,

special styles of ornamental haircutting or tattooing, can stand for social affiliations. 6. The symbolic process permeates human life at the most primitive as well as at the most civilized levels. "Language as Symbolism," in English Studies Series 1, p.124-125.

E.28

1. 'Primitive' is a word that is often used ill-advisedly in discussions of language. 2. Many people think that 'primitive' is indeed a term to be applied to languages, though only to some languages, 3. and not usually to the language they themselves speak. 4. They might agree in calling 'primitive' those uses of language that concern greetings, grumbles and commands, 5. but they would probably insist that these were especially common in the so-called 'primitive' languages'. 6. These are misconceptions that we must quickly clear from our minds. "Primitiveness' in Language," in English Studies Series I, p.107.

E.29

1. So far as we can tell, all human languages are equally complete and perfect as instruments of communication: 2. that is, every language appears to be as well equipped as any other to say the things its speakers want to say. 3. It may or may not be appropriate to talk about primitive peoples or cultures, 4. but that is another matter. 5. Certainly, not all groups of people are equally competent in nuclear physics or psychology or the cultivation of rice or the engraving of Benares brass. 6. But this is not the fault of their language. 7. The Eskimos can speak about snow with a great deal more precision and subtlety than we can in English, 8. but this is not because the Eskimo language (one of those sometimes mis-called 'primitive') is inherently more precise and subtle than English. 9. This example does not bring to light a defect in English, a show of unexpected 'primitiveness'. 10. The position is simply and obviously that the Eskimos and the English live in different environments. 11. The English language would be just as rich in terms of different kinds of snow, presumably, if the environments in which English was habitually used made such distinction important. "Primitiveness' in Language," in English Studies Series I, p.107.

E.30

1. TV broadcasters can no longer plead that they are unaware of the potential adverse effects of such programs as *Born Innocent*. 2. During the last decade, two national violence commissions and an overwhelming number of scientific studies have continually come to one conclusion: televised and filmed violence can powerfully teach, suggest--even legitimize--extreme antisocial behavior, 3. and can in some viewers trigger specific aggressive or violent behavior. 4. The research of many behavioral scientists has shown that a definite cause-effect relationship exists between violence on TV and violent behavior in real life. "How TV Violence Damages Your Children," in Subject and Strategy, p.225.

E.31

1. A parallel view states that language at first consisted of emotional ejaculations of pain, fear, surprise, pleasure, anger, and so on. 2. This theory--that the earliest manifestations of language were "cries of nature" that man shared with animals--was the view proposed by Jean Jacques Rousseau in the middle of the eighteenth century. 3. Rousseau, a founder of the Romantic movement, became concerned with the nature and origin of language while seeking to understand the nature of the "noble savage." 4. Two of his treatises deal with the origin of language. 5. According to him, both emotive cries and gestures were used by man, 6. but gestures proved to be too inefficient for communicating, 7. and so man invented language. 8. It was out of the natural cries that man "constructed" words. "The nature of human language," in "An Introduction to Language."

E.32

1. Language alone is not, of course, enough to explain the rise of modern nationalism. 2. Even language is a shorthand for the sense of belonging together, of sharing the same memories, the same historical experience, the same cultural and imaginative heritage. 3. When in the eighteenth century, nationalism began to take form as a modern movement, its forerunners in many parts of Europe were not soldiers and statesmen 4. but scholars and poets who sought to find in ancient legends and half forgotten folksongs the 'soul' of the nation. 5. But it was language that enshrined the memories, the common

experience and the historical record. "Nationalism," in English Studies Series, p.97.

E.33

1. Scientific theories differ widely among the physical and social sciences. 2. But the theories have the common goal of formulating predictions concerning some aspect of reality--predictions that are verified in empirical tests--together with logically consistent explanations for the predictions. "The Nature of Scientific Theory," in Intermediate Microeconomics, p.2.

E.34

1. One indicator of the potency of mass-media persuasion can be seen by the increased reliance that professional persuaders place on the media. 2. More than \$37 billion were spent by advertisers in 1977; 3. a 40 percent increase over 1972. 4. Newspapers attract the most advertising, followed by television (which is limited by the amount of available time; 5. the networks have "sold out" every prime-time minute). 6. Typical effects, in order of incidence, are maintenance of current share of market (e.g., Hertz Rent-A-Car), increased rate of purchasing through reinforcement of loyal users (e.g., McDonald's Restaurants), creation of new demand by repositioning old products or introducing new ones with appropriate media fanfare (e.g., Miller Lite Beer), and conversion of those who prefer a competing brand (e.g., the Un-cola campaign). "The Influence of Advertising," in Human Communication, p.213.

E.35

1. The most obvious difference between diglossic and normal English-speaking societies is that no one in the former has the advantage of learning the High variety (as used on formal occasions and in education) as his first language, 2. since everyone speaks the Low variety at home. 3. Consequently, the way to acquire a High variety in such a society is not by being born into the right kind of family, 4. but by going to school. 5. Of course, there are still differences between families in their ability to afford education, 6. so diglossia does not guarantee linguistic equality between poor and rich, 7. but the differences emerge only in formal public situations requiring the High variety, rather than as soon as a speaker opens his mouth. 8. We shall have more

to say about the situation in non-diglossic societies in 6.2 and 6.4. "Varieties of Language," in Sociolinguistic, p.54.

E.36

1. The role of the mass media in the manipulation of public opinion has received a great deal of anguished but misguided attention. 2. Much of the commentary assumes that the problem is to prevent the circulation of obvious untruths; 3. whereas it is evident, as the more penetrating critics of mass culture have pointed out, that the rise of mass media makes the categories of truth and falsehood irrelevant to an evaluation of their influence. 4. Truth has given way to credibility, 5. facts to statements that sound authoritative without conveying any authoritative information. "Truth in the Mass Media," in Writing Prose, p.177.

E.37

1. The value of the use of language to transmit information is well embedded in our cultural mythology. 2. We all believe that it is the faculty of language which has enabled the human race to develop diverse cultures, each with its distinctive social customs, religious observances, laws, oral traditions, patterns of trading, and so on. 3. We all believe, moreover, that it is the acquisition of written language which has permitted the development within some of these cultures of philosophy, science and literature (see Goody, 1977). 4. We all believe that this development is made possible by the ability to transfer information through the use of language, 5. which enables man to utilise the knowledge of his forebears, and the knowledge of other men in other cultures. "Linguistic Forms and Functions," in Discourse Analysis, p.2.

E.38

1. A pure monopoly exists when an industry consists of only one firm; 2. the pure monopoly firm is the only producer and seller of the industry's product. 3. As contrasted with the competitive firm, the monopoly firm chooses output and an associated price for his product. 4. The demand curve facing the pure monopolist is the industry demand curve. 5. If the law of demand holds, the demand curve is downward-sloping to the right; charging a higher price for output decreases the number of units

sold. "Pure Monopoly," in Intermediate Microeconomics, p.340.

E.39

1. The mass media have also been used extensively to produce short-term effects in political campaigns. 2. They have unquestionably had a major impact on the political process in the United States. 3. Candidates devote much effort to trying to get their messages on the mass media in the most persuasive form possible. 4. Communication consultants play a major role in influencing the ways campaigns are conducted. 5. Political campaigns use the mass media in two ways. 6. They depend on the mass media to present advertisements for their candidate; 7. in this use they are much like other advertisers. 8. They also use the mass media to try to present a favorable image of the candidate on news programs and other special programs. 9. They try to get maximum media coverage of the candidate; 10. and they try to insure that the candidate will always be seen in the most favorable situations. "Reasons People Use the Mass Media," in Speech Communication, p.361.

E.40

1. The intention of judgment is a salient motive of all critical theories. 2. They undertake to say what literary excellence consists in 3. and how discriminations between various degrees of excellence are to be made. 4. But if criticism were confined to its judicial function, it would be a far less engaging activity than in fact it is. 5. Actually, however, as has been seen, criticism is anterior to any particular act of judgment 6. in that it defines the nature of the object to be judged 7. and lays out the grounds on which judgment is to proceed. 8. And criticism continues after judgment has passed, if by judgment we mean simply the attribution to a work, or a canon of work, of a certain degree of excellence. 9. For example, the peculiar excellence of Shakespeare's plays was very fully recognized in their own time 10. and the first superlative judgement has really never been questioned in a decisive way. 11. Yet the body of Shakespeare criticism that has come into being in the intervening years is of such magnitude that is scarcely to be encompassed by a any reader in a lifetime, 12. and there is no liklihood of falling off in its rate of increase. 13. What is all this activity about? "??" in Literary Criticisms, p.10.

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