THE EFFECTS OF CULTURE AND SCHEMATA
ON READING COMPREHENSION
OF UNIVERSITY READERS

BY

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ABSTRACT

This thesis sets out to investigate the effects of culture and schemata on reading comprehension. It is concerned about cultural attitudes partly as those attitudes express themselves through reading. Since some broad hypotheses were formulated, research instruments were designed to account for the role of culture and schemata in reading comprehension.

The literature reviewed reveals that there are some direct links between culture and language. Different schools of thought related to cross-cultural behaviour were reviewed. Also, the review shows the interaction between schemata and culture, and the role that 'context of situation' plays in the interpretation of meanings, and its vital role in reading comprehension. As reading comprehension is one of the focal points of this thesis in terms of the effect of culture and schemata, different models of reading as elaborated by de Beaugrande have been explored.

The social and economic environment of Saudi Arabia is discussed in this study as the primary reference point of social behaviour. An effort is made to show the impact of religion on the overall behaviour of students. This is reflected by the Saudi Arabian philosophy of education, and the rationale for the inclusion of EFL in their curriculum. The questionnaire was designed to determine attitudes towards Western culture, and the extent of their impact on reading comprehension.

The findings of this study revealed that there was a significant difference in the scores obtained by those students having positive attitudes and those having negative attitudes. The correlation coefficient of such students shows
that the degree of relationship is highly positive, and that students with positive attitudes tend to perform significantly better than those with negative attitudes.

The findings of this research also support the view that students from different cultures bring different systems of background knowledge to the comprehension process. Therefore, it was recommended that ‘cultural studies’ be included in the foreign language syllabus because language learning is culture learning and consequently language teaching is culture teaching.

Finally, the value of this thesis is that it contributes to cross-cultural understanding between the Arab countries and the West. It will also increase our knowledge of the role of schemata in foreign language reading comprehension. It will reveal the significance of introducing culture to language learning. The need for further investigation concerning the connections linking schema theory and comprehension is given additional importance by the fact that foreign language teaching performance has entered a new era. Understanding a foreign culture can lead to positive attitudes towards the language of that culture. Also, by teaching cultural studies, students' ethnocentricity is often reduced and they become aware of the common bonds they have with others. They also learn to become more tolerant of existing differences between the target culture that will lead to cross cultural awareness.
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# TABLE OF CONTENTS

## ABSTRACT

ABSTRACT 2

## ACKNOWLEDGEMENT

ACKNOWLEDGEMENT 4

Lists of Charts, Graphs and Tables 10

## CHAPTER ONE : INTRODUCTION

1.1 Background 11
1.2 Statement of the problem 11
1.3 Arab Students' problems with Western culture 18
1.4 Research hypotheses 20
1.5 Purpose of the study 21
1.6 The need for the study 22
1.7 Limitations of the study 23
1.8 The plan of the thesis 24

## CHAPTER TWO : REVIEW OF THE RELATED LITERATURE

2.1 Introduction 25
2.2 Definitions of Culture 27
2.2.1 Cognitive definition 30
2.2.2 Functional definition 32
2.2.3 Symbolic definition 33
2.3 The importance of culture in Language Learning 37
2.3.1 Communicative competence 41
2.3.2 Cross-cultural awareness 44
2.4 Language versus Culture 48
2.5 Cultural Factors that may affect language learning 52
2.5.1 Attitude and Motivation 56
2.5.1.1 Integrative motivation 57
2.5.1.2 Early studies 58
2.5.1.3 Critical review of Montreal Research 58
2.5.2 Interpretation of context of situation 63
3.3.1.2.1 Religion as a source of social and cultural
values 152
3.3.1.1.2 The institution of the family as the main
element in social values 154
3.3.1.1.3 Traditions as a central element in social values 156

3.4 Collectivism versus individualism 157
3.5 Philosophy of the Saudi educational system 160

CHAPTER FOUR : METHODOLOGY AND RESEARCH DESIGN

4.1 Introduction 165
4.2 Major difficulties facing research in Saudi Arabia 165
   4.2.1 Sex segregation 166
   4.2.2 Unawareness of the value of time 167
4.3 The research instruments 168
4.4 Subjects of the study 171
4.5 The comprehension texts 173
4.6 Method of data analysis and the development of
   the instrument 179
   4.6.1 The pilot study 181
   4.6.2 Data collection 182
   4.6.3 Administration of the tests 183
   4.6.4 The null hypotheses 185
   4.6.5 Statistical tools used 185

CHAPTER FIVE : PRESENTATION AND ANALYSIS OF
THE DATA

5.1 Introduction 187
5.2 Statistical analysis of the data 188
   5.2.1 Null hypothesis one 195
   5.2.2 Null hypothesis two 197
   5.2.3 Null hypothesis three 197
   5.2.4 Null hypothesis four 198
   5.2.5 Null hypothesis five 199
   5.2.6 Null hypothesis six 199
5.3 Correlation coefficient 200
5.4 Discussion and interpretation of the five reading
texts 210
CHAPTER SIX: INTRODUCING CULTURAL STUDIES TO THE KSU ENGLISH SYLLABUS

6.1 Introduction 219
6.2 Philosophy of teaching culture 220
6.3 The content and status of ‘cultural studies’ within TEFL 226
6.4 Major criteria for the selection of ‘cultural studies’ elements 230
6.5 Techniques of ‘cultural studies’ teaching 233
   6.5.1 Language awareness 237
   6.5.2 Cultural analysis 240
6.6 The elements of ‘cultural studies’ 247
   6.6.1 Approved cultural elements of the questionnaire 249
   6.6.2 Results 253
   6.6.3 Conclusions 254

CHAPTER SEVEN: SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND SUGGESTED RESEARCH

7.1 Summary 256
7.2 Interpretation of the findings 258
7.3 Conclusions 261
7.4 Implications 262
7.5 Recommendations 269
7.6 Suggestions for future research 270

REFERENCES 272

APPENDIX A  Questionnaire 296

1. Questionnaire on the effects of culture and schemata on reading comprehension 297
2. Arabic Version 301

APPENDIX B  Comprehension 306

1. Text One
   Document Statistics 310
<table>
<thead>
<tr>
<th></th>
<th>2. Text Two</th>
<th>Document Statistics</th>
<th>311</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3. Text Three</td>
<td>Document Statistics</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td>4. Text Four</td>
<td>Document Statistics</td>
<td>319</td>
</tr>
<tr>
<td></td>
<td>5. Text Five</td>
<td>Document Statistics</td>
<td>323</td>
</tr>
<tr>
<td></td>
<td><strong>APPENDIX C</strong></td>
<td>Questionnaire on the elements of ‘cultural studies’</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td><strong>APPENDIX D</strong></td>
<td>Statistical data</td>
<td>334</td>
</tr>
</tbody>
</table>
### Lists of Charts, Graphs and Tables

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>From Anderson and Pearson 1984:43</td>
<td>86</td>
</tr>
<tr>
<td>Figure 2</td>
<td>A portion of a hierarchically organized memory structure</td>
<td>99</td>
</tr>
<tr>
<td>Table 1</td>
<td>Frequency distribution of scores for Texts 1 and 2</td>
<td>189</td>
</tr>
<tr>
<td>Graph 1</td>
<td>Distribution of comprehension scores for Text 1</td>
<td>189</td>
</tr>
<tr>
<td>Graph 2</td>
<td>Distribution of comprehension scores for Text 2</td>
<td>190</td>
</tr>
<tr>
<td>Table 2</td>
<td>Frequency distribution of scores for Texts 3 and 4</td>
<td>191</td>
</tr>
<tr>
<td>Graph 3</td>
<td>Distribution of scores for Text 3</td>
<td>192</td>
</tr>
<tr>
<td>Graph 4</td>
<td>Distribution of scores for Text 4</td>
<td>193</td>
</tr>
<tr>
<td>Table 3</td>
<td>Frequency distribution of scores for Text 5</td>
<td>194</td>
</tr>
<tr>
<td>Graph 5</td>
<td>Distribution of scores for Text 5</td>
<td>194</td>
</tr>
<tr>
<td>Table 4</td>
<td>One Way ANOVA for 10 groups</td>
<td>196</td>
</tr>
<tr>
<td>Table 5</td>
<td>One Way ANOVA for 20 groups</td>
<td>197</td>
</tr>
<tr>
<td>Table 6</td>
<td>One Way ANOVA for 20 groups</td>
<td>198</td>
</tr>
<tr>
<td>Table 7</td>
<td>One Way ANOVA for 20 groups</td>
<td>198</td>
</tr>
<tr>
<td>Table 8</td>
<td>One Way ANOVA for 20 groups</td>
<td>199</td>
</tr>
<tr>
<td>Table 9</td>
<td>One way ANOVA for 20 groups</td>
<td>200</td>
</tr>
<tr>
<td>Table 10</td>
<td>Scores of all the questionnaire items and their mean values</td>
<td>202</td>
</tr>
<tr>
<td>Tables 11-25</td>
<td>Correlation Coefficient Results</td>
<td>204 - 210</td>
</tr>
</tbody>
</table>
INTRODUCTION

1.1 Background

English is the only foreign language taught in Saudi Arabian intermediate and secondary schools. Instruction begins in the 7th year of the educational system (6 years elementary, 3 years intermediate and 3 years secondary). English is also taught in the first two years of most of the colleges and military, police and air force academies. In this rapidly developing country with its ever increasing need for effective worldwide communication, learning English as a foreign language is indispensable. Furthermore, the reliance of Saudi Arabia on the West in many aspects of life is so great that the King promulgated a royal decree in April 1992 that the teaching of English should begin at the elementary stage in the future.

It is necessary to draw the reader’s attention to the fact that the subject of this thesis is not reading nor is it the development of reading skills for Saudi students. Rather it is concerned with attitudes towards culture in as far as these attitudes express themselves through reading.

1.2 Statement of the problem

A marked deficiency in English language performance is a major problem facing King Saud University and its graduates. Despite considerable time devoted to teaching English (6 years at the rate of 4 hours a week), Saudi
students graduate from the university unable to comprehend what they read. In Acheson’s words, “The general proficiency and achievement of the majority of students who completed the English language program is totally unsatisfactory and disproportionately low” (Acheson 1974:3).

In 1979, several science colleges in the disciplines of medicine, dentistry and allied health responded to the problem by establishing intensive remedial English programs. A great deal of committee work was undertaken at these colleges to introduce reforms in English language teaching. Yet proficiency in English remains a hurdle facing every student and a contributing factor to the high drop-out rate. It continues in fact to be the most persistent problem (Al-Gaeed 1983). Consequently a group of English educators at King Saud University discussed the causes of the problem. The Head of the English Department stated that students shared more of the responsibility for weakness than teachers, though teachers are also partly to blame. Some cited teachers’ methods and easy tests as the reason. The simple English tests were perfunctory, offering a pass grade but doing little to measure real language proficiency. Others said that students aimed at merely passing tests with little interest in mastery of the language. One suggestion was that their weakness may also be due to their strong religious inclination: the strength of their beliefs must shape their attitudes to what they learn, and the limited background knowledge they bring to texts may render it difficult to comprehend them. Suggestions were also made to make English an optional subject at schools and universities (Al-Gaeed 1983). These suggestions are perhaps predictable, and there is no doubt a degree of truth in all of them. What struck the present researcher, however, was the possibility that KSU students’ cultural attitudes, of which their religious belief system was a strong part, might play a significant role in their success or failure. In one
sense, this is an assumption that can safely be made - it would be odd if cultural differences, loosely defined, had absolutely no general impact: however, the specifics of the interaction have never been examined in much detail.

Foreign language learners of course vary considerably both in how quickly they learn and how successful they are. The evidence suggests that the explanation for this lies in differences in a wide variety of what have been termed personal and general factors. Ellis (1986) offers a five-way classification of the latter: (a) age, (b) aptitude, (c) cognitive style, (d) attitudes and motivation, and (e) personality. The issue of cultural attitudes falls most naturally into category (d), it will be apparent, though this is nevertheless an uneasy match, given that what is usually meant here are motivational and attitudinal studies in the Gardner and Lambert tradition, which focus on attitudes towards the target culture rather than, as I shall try to do in this study, focussing on the attitudes towards their own culture that learners bring with them. (See Brown 1981 here, however, and my brief remarks on pp., 15-16).

All these five general factors are, as the name suggests, generalisable: the learning path of any learner can be explored in their light. In contrast, personal factors are highly idiosyncratic, features of each individual’s approach in learning a foreign language. Some examples are provided by Schumann and Schumann (1977) in a report on their own language learning experiences. They include ‘nesting patterns’ - the need for a secure and orderly home before learning can effectively begin, ‘transitional anxiety’ - the stress generated by moving to a foreign place and the desire to maintain a personal language learning agenda.
The purpose of this investigation then is to look at one aspect of one of the general variables above, that of cultural attitude. In particular, the study aims to examine the influence of culture and schemata on reading comprehension and to make plausible recommendations for solutions to the problem. The study will incorporate a thorough research of available literature and will undertake experimental work in light of the literature review. My starting-point is an intuition (rather than a hypothesis, at this stage), that students who relate positively to British or American culture will demonstrate good performance, and that those who are strongly attached to their own culture, in the sense that they most rigorously interpret what they read in its light, will demonstrate relatively weaker performance.

The term 'culture' has come to be used with a wide range of meanings which cover a wide range of activities. 'Culture' is one of the most complicated words in the English language - or, more properly put, one of the most difficult concepts to grasp in any language. This is partly because of its intricate historical development, but mainly because it has now come to be used for important concepts in several intellectual disciplines and in several distinct and non-comparable systems of thought. For the purpose of this thesis, the view adopted here and justified in a later chapter is the 'symbols and meanings' conception of culture associated with Geertz and others. Thus, culture may be defined as the whole way of life, which consists of the mores of a given society; their religion, values, traditions, habits, educational systems, family and social structures, political and governmental hierarchies, and use (or lack of it) of advanced technology. Thus, Saudi culture may reasonably be presumed to be different from British or American culture. Certainly many people perceive it as very different. As a deeply religious society wherein God's word is an absolute, there is none of the liberalism
demonstrated in Western culture, where values are apparently more relative. This significantly patterned difference often results, it may be presumed, in the rejection of not only the foreign culture, but the foreign language as well. The negative attitudes surrounding cultural differences create learning blocks which may inhibit proficiency in English language development. Incidentally, as we shall see, some students with negative attitudes do nevertheless succeed, as one might reasonably expect: but part of the reason they succeed appears to be a desire to proselytise, a belief that Islam can be spread through learning a foreign language.

It is necessary to explain what an attitude is at this stage. According to Ryan et al. (1982:7), “language attitude will be taken in a broad, flexible sense as any affective, cognitive or behaviour index of evaluative reactions toward different language varieties or their speakers.” To say that we have a certain attitude towards something or someone is a shorthand way of saying that we have feelings or thoughts of like and dislike, approval or disapproval, attraction or repulsion, trust or distrust and so on. Therefore, an attitude is a subjective experience involving an evaluation of something or somebody influenced by his/her culture. Every learner has a set of cultural beliefs in this sense, and these are referred to as attitudes. But it will be seen at a glance from this attempt that the problems of defining attitude are considerable. One concept which is difficult to define (‘culture’) is accompanied by others (‘liking’, ‘approving’ etc.) which are no easier.

A common sense view is that a person’s behaviour is governed by certain needs and interests which influence how he actually performs. However, these influences cannot be directly observed. They have to be inferred from what the individual actually does. Brown (1981) uses the term ‘attitude’ to
refer to the set of beliefs that the learner holds towards members of the target language group (e.g. whether they are seen as ‘interesting’ or ‘boring’, ‘honest’, or ‘dishonest’, etc.) and also, significantly for the present study, towards his own culture. Stern (1983: 376-7) on the other hand divides attitudes into three types, and makes no reference to the parent culture:

a) attitudes towards the community and people who speak the foreign language;

b) attitudes towards learning the language concerned; and

c) attitudes towards languages and language learning in general.

It seems too that the results of the empirical research based on Gardner and Lambert’s theoretical framework are mixed and difficult to interpret (see Section 2.6 for a more detailed discussion).

However, everyone seems to agree that learning a foreign language depends in part on the learner’s attitudes towards the people who use that language, and on his motives for studying it. With positive attitudes towards the other group, a learner is more likely to be successful, regardless of his talent for languages, than if his attitude is negative (Lambert et al. 1973). Some students may not accept a new culture or even try to become acquainted with it. Experience seems to show that students who are negative or indifferent to British culture are less successful in learning the English language (Trivedi 1970). In a foreign language context, an English lesson is an occasion to bring a sample of British or American culture into the classroom. The lessons are often structured around life and people in English-speaking countries. Many foreign language lessons include textual descriptions of scenes in the foreign country. Some lessons might well also include a
discussion and evaluation of the way of life in the foreign country as an activity worthwhile in itself.

How important one feels cultural matters are depends to some extent on one’s view of what language is. It can be viewed either as (a) ‘a system of signals conforming to the rules which constitute its grammar’ (Greenberg 1963:1), or as (b) ‘a set of culturally transmitted behaviour patterns shared by a group of individuals’ (idem), with i.e. the code conditioning one part of ‘culture’ (Bell 1976). This latter view implies that language and culture are inseparable. Since language is part of culture, it would follow, most Arabic speakers will encounter difficulty when they try to express themselves in English. Politzer (1960) says that this problem is common to all foreign language learners. Thus, too, Brooks (1964:85) asserts that “language is the most typical, the most representative, and the most central element in any culture. Language and culture are not separable.” And Lamerand (1977:64) believes that:

for many language teachers and linguists, language is above all a vehicle of culture, and if language use does not express a culture, it is empty.

It is in this sense that the inaccessibility of a culture may hinder language learning, whether the accessibility or lack of it is governed by objective differences (Arab and Western cultures really are different) or by the learner’s attitudes (the learner declines to access the new culture).

Introducing culture to English language teaching brings us to the issue of the role played by background experience and knowledge (see Section 2.7). As de Beaugrande (1980:30) famously remarks:
The question of how people know what is going on in a text is a special case of the question of how people know what is going on in the world at all.

Thus understanding discourse is partly a process of retrieving stored information from memory and relating it to the encountered discourse. In other words when we read a piece of text, we presumably only use that limited subset of our knowledge which is required for the understanding of that text.

1.3 Arab students' problems with Western culture

Gezi (1959) conducted an experiment on the acculturation of Middle Eastern students in some American colleges. He found that these students were unaware of American social manners, and unfamiliar with the American way of speaking English. This caused problems for Arab students to adjust easily to American culture because they were not prepared for what to expect in the United States. In a study with a narrower focus, Youssef (1968) found that Middle Eastern students might misunderstand a text because of the absence of cultural orientation.

Davis (1960) also undertook an early study of the cultural perceptions of Middle Eastern students in the United States. His research (1960:256-264) resulted in the following conclusions:

1) Middle Eastern Students have favourable views towards some aspects of American life such as efficiency, punctuality and hard work.

2) Middle Eastern students view Americans as industrious and democratic, but materialistic and ill-informed about the rest of the world.
3) Middle Eastern students showed favourable and unfavourable opinions about American education and family life.

Davis' study showed that Middle Eastern students do not easily tolerate the cultural contrasts that exist between the two cultures. These students come from different, and sometimes drastically different cultural backgrounds and value systems, and were led to judge American cultural patterns using their own cultural values. The process which led them to like or dislike what they saw in the United States was, self-evidently, a process of comparison, and then of acceptance and/or rejection. It would be interesting to know to what extent these findings could be replicated after an interval of more than 30 years.

On the specific issue of Saudi students, Al-Khedaire (1978) found that they have problems of adjustment because they lack cultural insights and knowledge. Therefore, they isolate themselves from American society and they remain with friends from their native country who are living in the United States. To prevent culture shock and isolation, Al-Khedaire suggests a pre-departure orientation program for all students. This program would provide students with cultural insights about lifestyles and values in the West. But Albadah (1985:36-37) does not agree that pre-departure orientation programs are the answer to Saudi students’ problems in dealing with the American culture. He claims that current practices are insufficient and inadequate because of the shortage of time and the insufficient amount of literature given. Hence, interestingly and somewhat controversially, he advocates the inclusion of American culture in the Saudi curriculum.
1.4 **Research hypotheses**

Two broad hypotheses are investigated in this thesis:

a) Students with positive attitudes towards British culture will perform significantly better in English comprehension than those with negative attitudes.

b) Students with background knowledge of Anglo-American culture will perform significantly better in discourse than those without such knowledge. Underpinning these hypotheses is my belief that negative attitudes are formed during the lessons: that this inhibits future interest: that the student may, because of his attitudes, resist reading about the new culture, and that therefore he interprets the language in relation to his own culture. It is assumed (see Carrell 1981, 1983a) that those who have positive attitudes will have the motivation to read Western books. Of course it is hard to tell - and not within the scope of the present study to examine whether students who read Western books a) understand their cultural message or b) understand and reject it or c) understand and are influenced by it. (These informal hypotheses are formally restated below (Section 4.6.4)) as null hypotheses and are intended to support the list of objectives given on pages 21- 22 immediately below).

To prove or disprove the above research hypotheses, three experimental studies were conducted to account for the role of culture and schemata in reading comprehension. The population of the study was 107 students specializing in science and arts. The first study aimed at investigating two passages, which were on Islam and Saudi marriage. The second study (British Holiday and Wedding texts) attempted to explore the effect of a
second culture (Western) on reading comprehension, and the sample was
tested and the results analysed. Finally, the third study was meant to examine
the effect of totally unfamiliar culture on comprehension. Johnson (1981)
demonstrated that the cultural origin of a text has a greater effect on reading
comprehension than does linguistic complexity. However, both linguistic
skills and the cultural origin of a text interact with each other and facilitate
reading comprehension. Therefore, the researcher does not claim that the
student will understand a text without having linguistic skills (for a detailed
discussion of the reasons for the choice of passages, see Section 4.5).

1.5 Purpose of the study

The purpose of the study is to investigate the attitudes of Saudi students
towards Western culture, and how their progress is affected by their
attitudes. In other words, the study is an attempt to explore the relationship
between positive attitudes towards the target language culture, and reading
comprehension performance. More specifically, this study will pursue the
following objectives:

(a) To analyse the students’ awareness of their reasons for learning English
despite the fact that their culture is different from the target language.

(b) To analyse the students’ desire to learn English.

(c) To analyse the students’ attitudes towards learning English, and towards
English as a subject on the college syllabus.

This study is also intended to answer the following questions which are
related to the broad hypotheses mentioned in (1.4).

(a) What is the extent of the Saudi students’ awareness of the instrumental
reasons for learning English, and does this awareness affect their progress?
(b) Do positive attitudes correlate with high performance?
(c) Do negative attitudes correlate with low performance?
(d) What is the effect of schemata on comprehension?
(e) Would prior exposure to Anglo-American culture affect foreign students’ comprehension of a passage on a topic relating to a specifically British custom, for example, the changing of the guards?

Questions (b), (c), and (e) are related to the broad hypotheses which are investigated in this thesis. If they could be answered in the affirmative, this would be a matter of considerable significance.

1.6 The need for the study

The literature reviewed reveals that there are direct links between culture and language. Having appropriate background knowledge of the context domain of a text is as important for a foreign language learner encountering scientific texts, news, stories and other texts as it is for culture-specific texts (Alderson and Urquhart 1984). However, no study of this type has been conducted on King Saud University students before. Yet as this study partly deals with background knowledge effects on comprehension, it may be considered as an extension of the work using schema undertaken by Anderson and Pearson (1984), and Carrell (1981, 1983a, 1983b, 1983c, 1983d, 1984a, 1984b, 1984c, 1987). This information will increase our knowledge of the role of schemata in foreign language comprehension. It will also help us to understand the significance of introducing Western culture to English language learning. The need for further investigation on the connections between schema theory and comprehension is given additional importance by the fact that the foreign language teaching
profession has entered a new era. Currently, there is a great awareness of the necessity to teach and evaluate language use, as opposed to emphasizing discrete surface linguistic features. To enhance this development of functional proficiency, teachers need to know much more about how written or spoken material interacts with the learner's own previously-acquired knowledge base to produce meaning. Therefore, it is hoped, this study will provide useful information to linguists, syllabus designers and teachers.

1.7 Limitations of the study

This study is limited in scope by the following factors:

(a) It is limited to 107 students studying at King Saud University only.

(b) It is primarily concerned with the influence of cultural-content schemata on reading comprehension and not on broader philosophical speculations about the nature of meaning or knowledge. English is the only foreign language considered in the tests.

(c) The reader should bear in mind that this study approaches areas which, for cultural reasons, required tactful handling. In particular, the opinions expressed in the questionnaire cannot be easily investigated further because of the sensitivity of Saudi society in religious and cultural matters. Similarly, despite the potential richness and value of such a study, specifically Christian writing was excluded.

(d) Tests comprised reading comprehension passages only: it was felt this was sufficient because the comprehension of written discourse requires readers to use their cognitive linguistic abilities and background knowledge while processing the text.

(e) It is primarily concerned with attitudes to culture insofar as those attitudes express themselves through reading.
1.8  **The plan of the thesis**

This study is divided into seven chapters. Chapter Two presents a brief critical review of the literature and considers key studies of the relationship between culture and language. It also describes schema theory and its role in discourse. Different reading models are then presented with an attempt to evaluate the merits and demerits of each one. Chapter Three describes Saudi Arabian cultural and social values. It is meant to shed light on the research environment, and to shed some light on the restrictions that the researcher may encounter. Five applied studies are discussed and interpreted. Chapter Four describes the research design, methods and procedures used in this study. Suitable statistical methods are adopted, and null hypotheses tested. Chapter Five presents the results of the data analysis, and interpretations of the role of background knowledge are attempted. Chapter Six introduces culture by providing a theoretical framework and rationale for the teaching of ‘cultural studies’. A list of British cultural items are recommended for syllabuses at Saudi institutions. Finally, Chapter Seven summarizes and interprets the main findings, and provides recommendations and suggestions for future research. Some implications and conclusions are drawn.
CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

2.1 Introduction

The literature reviewed will be divided into the following topics:

1) The significance of culture in language teaching (this will be preceded by a discussion of definitions of culture).

2) Language versus culture, and cultural factors that may affect language learning.


4) The status of the neo-Firthian context of situation in relation to culture, and the part context of situation plays in the interpretation of meanings.

5) The role of schemata in language comprehension, preceded by a brief look at the historical background to the notion of a schema,- this section will include a discussion of schema theory, its structure and elements. It will also include psycholinguistic and mental models. These issues are central to the focus of this research.

Finally, criteria for designing process models, as well as issues in text processing will be explored.

The evidence is that language is a vital constituent of culture. Language is a mode of human behaviour and therefore inevitably a part of that 'patterned behaviour' which, as Sapir says, is what culture is (Sapir 1949: 546). These cultural patterns develop in the process of learning a language in its native environment (Goodenough 1964), and of course grouped cultures coincide
with specific language areas (Hoijer 1964). Language functions not only to communicate thought, but serves as a vehicle of culture as well (Whorf 1956b; Lamerand 1977). Sapir (1949:15) explains:

It is difficult to see adequately the functions of language, because it is so deeply rooted in the whole of human behaviour that it may be suspected that there is little in the functional side of our conscious behaviour in which language does not play a part.

Without necessarily offering commitment to the Sapir/Whorf hypotheses in its entirety, there is clearly a sense in which language cannot be extracted from culture. Furthermore, the extent to which cultures as well as languages, differ gives rise to significant and serious obstacles to foreign language learning and cross-cultural communication (Hoijer 1953:94). Therefore, learning a foreign language necessitates changing some of the learner’s behaviour and bringing something of a new way of life and new values into already settled behavioural patterns.

It has also been pointed out by Clyne (1969:344):

that much of the foreignness of the second language user arises directly from an inability to comprehend and use social roles of this kind (e.g., switching between language systems); clearly a major aim of the language teacher should be to reduce the non-native behaviour of his learners.

This can be effected by introducing cultural patterns to language teaching as I shall attempt to argue later. Firstly, however, it is necessary to analyse the concept of culture and to present various definitions in the section below.
2.2 **Definitions of Culture**

In the anthropological literature, behaviourists focus upon the patterns of behaviour rather than the discrete practices. Spradley (1972:53) states that:

> the behavioural definition focuses upon observable patterns of behaviour within some social group. For this approach, the culture concept comes down to behaviour associated with particular groups of people, that is, to 'customs' or to 'a peoples' way of life.

Various definitions of culture reflect different theoretical standpoints not only about what it is in essence, but also about what should be studied in the quest for cultural understanding, and the methodology that is most appropriate for achieving our objectives. Robinson (1988:12) claims that bilingual and second language educators:

> most frequently conceive of culture in the categories of ideas, behaviours, or products, which are shared by members of a given group. All in all, it is not too much to say that one of the really important functions of language is to be constantly declaring to society the psychological place held by all its members.

On the other hand, Halliday (1989:4) has adopted a semantic definition when he says that culture is “a set of semiotic systems, a set of systems of meaning, all of which interrelate.” He uses the term ‘social’ in the sense of social system which he takes to be synonymous with culture. When he says ‘social-semiotic’, he simply refers to the definition of a social system or a culture as a system of meanings.
Culture is the behavioural patterns or lifestyles of a group of people; when and what they eat, how they make a living, the way they organize their society, attitudes they express towards friends and members of their families, how they act in different situations, which expressions they use to show approval and disapproval, traditions they must observe, and so on. Sapir (1949:207) defines culture as “the socially inherited assemblage of practices and beliefs that determine the texture of our lives.” These cultural patterns may relate to (a) static units: men, women, children, teachers, employers, workers, etc.; (b) processes: how to rest, study, relate to others, work together, etc.; and (c) qualities: what is good, bad, moral, immoral, etc. (Lado 1968:112).

Thus, culture can be thought of as a system of rules governing behaviour and activity; the ‘ways of a people’ (ibid. 1968:110). Culture embraces all aspects of shared life in a community and these ‘ways’ might be highly revered by the people who share them. Different cultures have different views on what constitutes ‘moral and ‘immoral’ behaviour. Definitions of what is moral may differ vastly in other societies from those associated with Islamic culture. Values tend to be absolute and immutable, and this in itself has a direct influence on culture. As a specific example, polygamy is immoral in Western culture, whereas in Islamic culture it is considered immoral if one objects to it. Quite apart from such specific instances of difference between the two cultures, anything that does not comply with Islamic teaching may well be considered positively immoral. Lado (1968:111) cites an anthropological definition of culture:

Cultural anthropologists, during the last twenty-five years, have generally moved from an atomistic definition of culture, describing it as a more or less haphazard collection of traits, to one which emphasizes pattern and configuration.
Kluckhohn and Kelly perhaps best express this modern concept of culture when they define it as ‘all those historically created designs for living explicit and implicit, rational, irrational, and non-rational, which exist at any given time as potential guides for the behaviour of men’. Traits, elements, or, better, patterns of culture in this definition are organized or structured into a system or set of systems, which, because it is historically created, is therefore open and subject to constant change (Hoijer 1953:554).

Traits, elements or patterns of culture in this definition are organized or structured into a system or set of systems, which, because it is historically created, is therefore open to and subject to constant change (Hoijer 1964:554). Margaret Mead (1966) defines culture as the traditions, customs and norms, beliefs, values, and thought-patterning which are passed down from generation to generation: but she would presumably not disagree that as a culture is passed on in this way it may alter and develop.

The importance of understanding culture lies in the fact that it is a man-made part of man’s environment: the sum of man’s knowledge, beliefs, art, morals, laws, customs and other capabilities and habits acquired by man as a member of society. Differences in cultures produce differences in beliefs, moral standards and customs. This results in the different behaviours of people and may well also account for the differences in the attitudes of students.

However, it is not easy to define exactly what is meant by the term ‘culture’. According to Schermerhorn (1985) there have been more than 164 different definitions offered in the literature. Kluckhohn (1945:86) has put forward a definition that is often used, that is, “variations in value orientations.” He explains that “value orientations are complex though definitely patterned principles, resulting from transactional interplay of the three analytically
Kaplan et al. (1972:3) also point to the difficulty of reaching a definition: "Culture is admittedly an omnibus term. Many investigators have suggested that it is too omnibus to be useful as an analytical tool." As opposed to this, Byram (1989:80) argues that ‘culture’ is unproblematic outside the anthropological literature by saying: “Culture is as good a label as any for the overall phenomenon or system of meanings within which sub-systems of social structure, technology, art and so on exist and interconnect.” Williams (1965:57) refers to these in his definition:

There are three general categories in the definition of culture. There is, first, the ‘ideal’ in which culture is a state or process of human perfection, in terms of certain universal values... Then, second, there is the ‘documentary’ in which culture is the body of intellectual and imaginative work, in which, in a detailed way, human thought and experience are variously recorded. The analysis of culture, from such a definition, is the activity of criticism ... Finally, there is a ‘social’ definition of culture, in which culture is a description of a particular way of life, which expresses certain meanings and values not only in art and learning but also in institutions and ordinary behaviour (in Byram 1989:80).

2.2.1 Cognitive definition

Each discipline reflects its own theoretical concepts about what culture is. One way of looking at it is to say that it somehow has a cognitive definition: this is a way of looking at the problem which shifts attention from the observable aspects of what is shared to what is felt ‘inside’ the ‘cultural actor’. What is shared is a means of organizing and interpreting the world, a
means of creating order out of the inputs. The idea of culture as a world view is related to this definition. By extension, as Goodenough (1964:36) argues, culture is not a material phenomenon:

A society’s culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. Culture is not a natural phenomenon; it does not consist of things, people’s behaviour or emotions. It is rather an organization of these things. It is the form of things that people have in mind, their models of perceiving, relating, and otherwise interpreting them.

The cognitive approach emphasizes the mechanism of organizing inputs. Robinson (1988:10) deals with this mechanism in more detail when he writes:

Culture itself is a process through which experience is mapped out, categorized and interpreted. From this perspective, culture is like a computer program. The program differs from culture to culture. The program refers to cognitive maps. Unlike the somewhat fixed notion of world view suggested by Sapir and Whorf, the program is subject to modification.

According to Goodenough’s definition, culture is therefore knowledge. However, it is knowledge which is shared and negotiated between people, knowledge which belongs to all of them and is not the idiosyncratic property of any individual. Knowledge is defined in terms of an internal program or system of organizing.

By focusing on this internal perspective, a cognitive approach to culture adds something to the behaviourist and functionalist approaches. However, it is limited in two ways. First, the approach tends to be limited to knowledge conveyed through analytic and cognitive modes, whereas in fact, “other
sensory modes may also contribute to the type of understanding that
occasions positive reactions to and interactions with people from different
countries” (ibid.1988:10).

Porter and Samovar (1976) in fact substantiate Robinson’s views when they
write:

Intercultural communication is fairly easy when it is ‘cognitive’ or based on what we know, but experiential communication is nearly impossible because it is based on what we feel (in Robinson 1988:11).

Second, cognitive theory is generally used to describe and interpret the way other people process information and structure their world. However, cognitive theory has less often been applied to a pedagogy for learning culture on the part of non-members of the culture. In Robinson’s (1988:11) words, “culture viewed as a shared process would imply an approach to teaching and learning culture which takes the learner’s own program or internal cognitive map into consideration in processing the new, target cultural information.”

2.2.2 Functional definition

In anthropology, functionalism is closely associated with Malinowski and Radcliffe-Brown. Malinowski (1944:150) emphasized the importance of explaining any cultural element in terms of its relationship to other elements of the culture and its contribution to the operation of the culture of which it is a part. He also considered that the ultimate function of culture is the satisfaction of biological needs. Unlike Malinowski, Radcliffe-Brown was uninterested in the relationship of social customs to biological and psychological factors. Functionalists focus on the underlying structure or
rules which govern and explain observable events. Awareness of cultural
behaviours and underlying rules help people anticipate how others are going
to act and why.

In the broad sense, functionalism consists of two aspects: one is that any
culture is a system of ‘functionally interdependent’ parts rather than a
collection of unrelated customs; the other is that any culture is a component
of a larger system that includes features of alien cultures and, also,
biological habitat, and population characteristics.

2.2.3 **Symbolic definition**

The range of possible definitions which focus on the ability of a culture to
act as a vehicle for socially meaningful symbols, correspond broadly to
symbolic definition which is the third category that Williams describes. In
this view, cultural understanding seen as processing within the learner leads
to a symbolic definition of culture. Thus, while cognitive anthropologists
focus on the mechanism for processing, symbolic anthropologists focus on
the product of processing, i.e., on the meanings derived.

The symbolic definition is a rejection of the behaviourist-influenced view of
culture as individuals’ environmentally influenced capacities to adapt
appropriately to existence in a particular society. Culture is knowledge, but
knowledge which is shared and negotiated between people, belonging to all
of them and not being idiosyncratic to any single one. Geertz (1975:89)
defines culture as:

> an historically transmitted pattern of meanings embodied in
> symbols, a system of inherited conceptions expressed in sym-
> bolic form by means of which men communicate, perpetuate
> and develop their knowledge about and attitudes toward life.
The above quotation makes more explicit a view of knowledge as systematic and inherited, a view which distinguishes it from other schools of thought and makes it more appropriate to use when we teach culture.

Byram (1989) concludes that this view clearly puts language at the heart of culture, as one of the main carriers of meanings, and reinforces the argument that language teaching inevitably involves teaching culture. In this view, to teach culture is to teach the systems of meanings and the symbols which carry the meanings, symbols both linguistic and non-linguistic. Culture is knowledge formulated as rules, norms, and expectations.

Hundeide (1985) contributes to the above school of thought when he states: “Much of that knowledge is symbolically expressed in artefacts and behaviours and is formulated as rules, norms, expectations, as moral and legal codes, as proverbs, as parental injunctions to children; but much of it is tacit, scarcely conscious until someone does the unexpected.” Taylor (1971:27) argues that there are a range of meanings, which are part of social reality. He expresses his views as follows:

The means and norms implicit in these practices are not just in the minds of the actors but are out there in the practices themselves, practices which cannot be conceived as a set of individual actions, but which are essentially modes of social relation, of mutual action.

Writing as an anthropologist, Leach (1982:43) deals with symbolic definition in more detail when he writes:

Almost all empirical societies (i.e., political units, which are territorially delimited) are socially stratified ... and each stratum in the system is marked by its own distinctive cultural attributes - linguistic images, manners, styles of food, housing, etc., .... But not only is there no uniformity in
symbolic usage throughout any one society but the culture’s differentia that are thus employed are highly unstable over time, as our concept of fashion clearly shows.

Both Williams’ and Leach’s accounts have in common a view of culture as symbols of meanings. Leach shows that the artefacts used as symbols of meanings are available for a variety of uses by different sections of a society and that the usage is highly unstable.

Symbolic anthropologists view culture as a system of symbols and meanings. Culture is therefore conceived of as a dynamic system - an ongoing, dialectical process, giving rise to symbols which may be viewed historically. Past experience influences meaning, which in turn affects future experience, which in turn affects subsequent meaning, and so on.

Dolgin et al. (1977) refer to the above when they write:

> Meaning is the product, not only of the association of ‘raw’ experience with an already-defined ‘code’ of name, but of the integration of successive past and present (and future, we experience our expectations, too) experiences into a coherent whole, a life-world, which each individual creates, but also internalizes (the creations of others becoming one’s own experiences) and projects onto his or her interactions with others (in Robinson 1988:11).

The concept of culture as a creative historical system of symbols and meaning has the potential to fill the gaps left by behaviourist, functionalist and cognitive theories.

Like the potential implications of the cognitive theory, the implications of symbolic theory have not been applied to a pedagogy for developing cultural understanding within non-members of the culture. Many symbolic anthro-
pologist do not view their task as one of developing meaning, rather they perceive of their principal task as being to explain meanings, i.e., to find out how other people structure their meaning.

Benedict (1961) explains that the basic issues of human existence are dealt with in all cultures, but 'they deal with them in many different ways'. In her view, societies function as long as they are internally consistent regardless of the premises on which they are based. This position has been supported by others since Benedict, as a common view emerged that looks at culture as experience which has become mentally programmed so that it can and does interpret new experiences in particular ways. According to Winston (1984:21), ‘it (i.e. culture) is a conditioning that is shared with other members of a nation, religion, or group. Such cultural programming endures and is hard to change.’ Moreover, Winston adds that the changes come slowly, because the ways people think are crystallized into institutions such as government, legal systems, education systems, industrial relations systems, family structures, religious organizations, clubs, settlement patterns, literature, architecture and even science.

It will be clear from what has been said that the more a definition of culture emphasises its symbolic nature, and the fact that symbols may change as societies alter, the more useful it is for our purposes. Let me conclude this section, however, by paraphrasing at length from Ayisi’s (1979:1-3) avowedly practical definition:

1) As a term, ‘culture’ is a heuristic device which serves as a conceptual tool for indicating certain features of the important landmarks in the social field, so that certain objects may have a meaningful existence in the social system;

36
2) culture embodies a reflection of man’s struggle for survival and his need to reconcile himself to nature;

3) it ‘embodies everything which contributes to the survival of man, and this will comprise not only physical factors but also sociological factors’;

4) it comprises ‘the ways of behaving... the way we do things’;

5) this includes the means by which we do things. Implements, artefacts, paintings ... and all integrative forces such as religion...;

6) ecological factors have an influence on human behaviour, so cultures have a symbiotic affinity with their environments, including geographical factors.

Studies have demonstrated that the relative importance of different needs varies across cultures. They show that the ways various needs manifest themselves are quite different in different cultures. Winston (1984) found considerable differences in the need for achievement among those with different cultural backgrounds. He observed that achievement for example, was valued in North America much more than in South America.

After discussing various definitions of culture, an important question arises: To what extent does culture affect language learning? This role is touched upon in what follows.

2.3 The importance of culture in language learning

The idea that it is important to teach culture in the foreign language classroom is not new. Jesperson (1904:11) states that “the highest purpose in the teaching of language may perhaps be said to be the access to the best thoughts and institutions of a foreign nation, its literature, culture...in short, the spirit of the nation in the widest sense of the word.” Equally these days
there is a growing recognition that some sort of reference to culture in any foreign language teaching is often necessary.

Thus the literature shows the significance of culture in language learning for the achievement of meaningful communication and the understanding of a particular language. At the heart of all this is a recognition that a foreign language learner may draw incorrect assumptions which are due to cultural misunderstandings when reading unfamiliar texts (Gatbonton and Tucker 1971). Similar findings were reported by Steffensen, Joag-dev and Anderson (1979), who demonstrated that text in a foreign language based on one’s own culture is easier to read and understand than syntactically equivalent texts based on less familiar, more distant cultures.

Language is so integrated in culture that in order to learn, understand and speak a foreign language correctly, one must know something about the cultural setting in which the language operates (Sapir 1949). Nostrand (1968:2) elaborates on the significance of culture in the foreign language classroom:

> Language, moreover, is not self-dependent; it cannot be wholly understood without reference to the culture of which it is a part and the social relations which it mediates. Literature, likewise, cannot be wholly understood without reference to the culture that produced it.

Because of this profound correlation between language and culture, successful teaching of any foreign language almost always lends itself to teaching about the culture of that language. Language cannot be separated completely from the culture in which it is deeply embedded. Any listening to the utterances of native speakers, any attempt at authentic use of the language to convey messages, any reading of original texts, any examination of
pictures of native speakers engaged in natural activities will introduce cultural elements into the classroom. Wilga Rivers (1981: 315) explains:

... by failing to draw students’ attention to cultural elements and to discuss their implications, the teacher allows misconceptions to develop in the students’ minds. When they misunderstand the culturally determined bases for the reactions and behaviour of other peoples, students can develop contempt for and hostility toward the speakers of the language they are learning. Mere fluency in the production of utterances in a new language without any awareness of their cultural implications or of their appropriate situational use of assumptions underlying them - these so called skills are of little use even on a practical level, and certainly leave open to question the claims of language study to a legitimate place in a program of liberal education.

For if learners are to understand aspects of foreign culture in the traditions of social anthropology, then the aim must be to participate in the culture and experience it from within, as well as observe it and understand it from without. Any other perspective would be insignificant because it would leave learners firmly planted in their own culture, judging the foreign culture by inappropriate standards, seeing the foreign culture from a tourist viewpoint and failing to apprehend the nature of the intimate relationship between the language they are learning and the culture it embodies.

At King Saud University, English is taught via grammar. First and second year final examinations for last semester (1990 -1991), and this semester (1991-1992) consisted of grammar and comprehension. Comprehension only accounted for 16% of the total marks, perhaps in part because, since Islamic values are embedded in Saudi society, and they differ from Western values, we may not be able to teach some parts of English literature that contradict Islam. For example, *Paradise Lost* by John Milton has been recently
dropped from the English literature syllabus, in order that the approved English literature does not contradict Islamic values (KSU 1992). One of the differences between Islamic and British culture was observed by Parker (1976:14) when he wrote:

One cannot survey common characteristics of Middle Easterners without noting the significance of language in their lives. We have already noted how even a casual encounter may be surrounded with formal and specific words of greeting and departure. Proverbs and verses of the Koran are common in conversation and writing. Among traditional Islamic 'sciences' one finds philology, rhetoric, literature and lexicography, grammar, literature and poetry.

Apart from the pedagogical significance of teaching cultural studies in the foreign language classroom, to do so can work as a motivational factor towards learning the foreign language. Hendon (1980:192) believes that introducing culture to foreign language classes:

... stimulates interest in foreign language study, besides being a welcome change from much of the oral drill of grammar exercises. Most students are curious to know more about the foreign peoples and their way of life, and they will find the discussions about culture an exciting experience. Cultural materials provide many topics of personal interest to a student, thereby increasing motivation. The inclusion of culture in the foreign language classroom could well provide an important bridge for the language student in his search for relevance.

Thus the inclusion of culture in the classroom generally adds meaning to foreign language learning. The recognition of culture in foreign language teaching will call for embodying it in any language's four skills: speaking, understanding, reading and writing. In order to obtain the above mentioned skills, which resemble those of native speakers, and in such a way as to
master the cultural content of text, it is necessary that the language instructor broaden his perspective to include culture in most types of language teaching. Therefore, language teachers should provide their students with materials that permit students to acquire a sense of linguistic and social appropriateness in the use of the language they are striving to learn.

The importance of culture is highlighted by Grindhammer (1978:64) when she claims that “culture learning is actually a key factor in being able to use and master a foreign linguistic system” and not just a “rather arbitrary claim that culture learning is a part of language teaching.” Language learning leads to learning about the native speakers of a language in order to understand, accept, and tolerate values. Hence teaching of culture in the foreign language classroom is necessary to add meaning to learning a foreign language. Since our concern is with the integration of linguistic theory with a more general theory of communication and culture, it becomes imperative for us to elucidate the term ‘communicative competence’ below.

2.3.1 Communicative competence

Byram (1989:61) claims that “the assumption that cultural studies will be an aid to efficient communication and cooperation is further reinforced by recent emphasis on ‘communicative competence’ as a broader concept than ‘grammatical competence.’ For communicative competence involves an appreciation of appropriate language use which, in part at least, is culture-specific.” This recent development is therefore a renewal of emphasis on, and an extension of, the pragmatic function of cultural studies.

Dressler, Reuter and Reuter (1980) suggest that since communicative competence involves interaction in a foreign culture, a focus on the
ethnography of communication will provide a framework for the proper integration of cultural studies into language learning. The framework will identify the different aspects of speech acts which a learner must master in order to be competent. Some of these will be specific conventions and rites.

Many foreign language learners lack the confidence to initiate or contribute anything substantial to a conversation. The learner's poor communicative skills force the native speaker to carry the conversational load. Irving (1986:XI) suggests a solution:

Good communication skills depend on becoming familiar with the cultural context to which a language naturally belongs and seeks to help students bridge the gap between linguistic and cultural competence that often exists for students who have already spent some time studying the English language by focusing on its linguistic features instead of its cultural features.

Cultural competence, one may presume, can be considered as part of communicative competence: and I now turn briefly to this topic. Savignon (1983:9) explains the meaning of communicative competence when she states:

There is a theoretical difference between 'competence' and 'performance'. Competence is defined as a 'presumed underlying ability', and performance as the 'overt manifestation' of that ability. Competence is what one knows. Performance is what one does. Only performance is observable, however, and it is only through performance that competence can be developed, maintained and evaluated.

The term 'communicative competence' has of course received widespread interpretation. Coined by a sociologist, Hymes (1971), to include knowledge of sociolinguistic rules, or the appropriateness of an utterance, in addition to
knowledge of grammar rules, the term has come to be used in language teaching contexts to refer to the ability to convey meaning, to successfully combine a knowledge of linguistic and sociolinguistic rules in communicative interactions (Savignon 1972). However, as it is only performance which is ‘overt’, as Savignon says, it is typically only performance that we try, as teachers, to improve. Indeed, in general, when we talk about communicative competence in the context of language teaching or learning, we are really talking about communicative performance (Taylor 1988). Thus it is natural that performance, which consists of the comprehension and production of language, is the target of any language learning. Because language learning is the main focus of this thesis, I shall necessarily be more concerned with performance, though not exclusively so.

Robinett (1979:152) too offers a standard comment on what constitutes communicative competence:

Knowledge of how a society uses language involves the concepts of acceptability and appropriateness. Obviously, a grammatical choice must be made, but is the chosen language form one that is acceptable to native speakers as appropriate for the particular situation? There are, then, both grammatical and social restraints on what a person says.

In teaching and learning a second language, much of the time is spent on practising grammatically correct language. Less emphasis is usually placed on demonstrating which of the correct forms are appropriate in a given situation. But for non-native speakers of a language this information is as important as knowing the correct grammatical form.

Therefore, teachers of a foreign language should give the learner a chance to practise what he is learning, (to ‘perform’ it) in order to achieve communicative competence. Practising to learn a foreign language should be
arranged around patterns of cultural activities such as dialogues used in communicative settings, the introduction of friends or relatives, asking for and giving directions, dialling, posting a letter, or catching a bus.

Since communicative competence is related to culture, it is necessary to offer insights into the culture and civilization of the foreign language being taught. In other words, we shall consider the notion of ‘cultural awareness’ which contributes to communicative competence and shows the importance of culture.

2.3.2 Cross-Cultural awareness

An anxiety often felt about cross-cultural teaching is that an increase in awareness of other cultures results in a denigration of the home culture. However, teaching culture in the foreign language classroom contributes, or at least can and ought to contribute, to the idea of establishing a world view understanding. It should not be thought of as (putting it strongly) a way of brainwashing or robbing learners of their native patterns of thinking nor affecting the patterns by which they lead their own lives. This general point is well made by Kimball (1974), whose emphasis is precisely on the fact that learning something about another culture does not mean that one should change one’s native cultural patterns. On the contrary, one should think of it as offering an increased awareness of the meaning of one’s culture through the examination of other cultures, as a reinterpretation and revaluation of the known in the light of the previously unknown - though even such a revaluation can be seen as dangerous by some people.
Foreign language teaching naturally often aims to promote an understanding of other cultures. Irving (1986:31) says:

It is the ability to understand cultures of your own and others - by means of objective, non-judgmental comparisons.

He further suggests that we:

... get rid of our ethnocentric tenderness and...accept another culture on its own terms”; that “many cross-cultural interactions go sour due to a lack of such awareness. It is a lack of cross-cultural awareness when the learner uses his own cultural norms to judge someone from another culture, or when people from another culture use the cultural norms of their own culture to judge our action or someone from the host country.

To increase cross-cultural awareness, it is necessary to offer insights into the culture and civilization of Anglo-American countries, and to encourage positive attitudes to foreign language learning and to speakers of foreign languages and a sympathetic approach to other cultures and civilization. Since effective communication is a key factor in cross-cultural awareness, successful communication cannot be accomplished by language alone, without consideration of the cultural patterns that accompany it. Hall (1959) believes that any communication pattern of a given society is part of its culture pattern and that it can only be understood in context. Chastain (1971:303) asserts that introducing culture to the foreign language classroom gives learners a sense of reality because “the explanation of cultural topics through the course helps students to relate the often abstract sounds and forms of a foreign language to real people and places.”
Since cultural awareness focuses on the question of change from monocultural to intercultural competence, helping pupils to understand the cultural knowledge of social structures becomes important. The teacher would then invite pupils to examine their own cultural competence, generally not previously articulated, and begin to make them aware of the nature of cultural behaviour in general as well as of how to act acceptably in British culture, if they were intending to visit: or at least of comprehending it from a distance.

Al-Khedaire (1978) conducted a study to determine cultural perceptions and attitudinal differences about American culture among Saudi college students in the United States. The study indicated that newly arrived students did not have the cultural knowledge needed to function properly in American society. To increase cross-cultural awareness, Al-Khedaire suggested a pre-departure orientation program for students. This program would provide students with cultural insights about lifestyles and values in the United States. Thus, it would help them adjust properly in the American society during their sojourn. Similarly, Albadah’s (1985) study tells us that Arab students studying in the United States are ignorant of American social manners and lifestyle, and that has a negative impact on their sojourn because they lack cultural awareness (for more details on Albadah’s work, see below pages 49-50).

The researcher does not believe that pre-departure orientation programs are the answers to Saudi students’ problems in dealing with Western culture for the following reasons:
1) Current pre-departure orientation programs do not include a sufficient amount of Anglo-American culture to help students who intend to study in the West.

2) Pre-departure orientation programs are limited to Saudi students who are planning to study in the United States and do not include high school students who will deal with Anglo-American literature in high school and home universities.

3) Pre-departure orientation programs are administered in a very short time span which is insufficient to cover a considerable amount of Anglo-American culture.

Hence, I believe that the inclusion of Anglo-American culture in the Saudi institution English language curriculum may be the best answer to Saudi students’ problems with American or British culture for the following considerations:

1) Teaching Anglo-American culture can become an important constituent of English language education in Saudi Arabia;

2) Time will permit a systematic presentation of a significant amount of Anglo-American culture; and

3) Teaching Anglo-American culture at Saudi institutions will benefit all Saudi students whether they study after graduation at home colleges or in the West.

To summarize, cultural awareness would examine the phenomena of, say, British culture and by so doing would have a number of purposes. It would provide a further opportunity for a comparative study of English and the learners’ mother tongue by examining the use of English in British culture, for example by concentrating on key concepts such as contrasts and similarities between the structures of the mother tongue and the foreign lan-
guage and their linguistic manifestations. It would cause learners to reflect on and explain their own key cultural concepts, however disconcerting this may be, thereby making them see themselves as others do and, by this process of reinterpretation and revaluation, modifying their existing schemata and cultural competence.

After having discussed the importance of cultural awareness in language teaching, I shall turn to the relationship between language and culture.

2.4 Language versus Culture

Key studies on the links between language and culture were undertaken by Sapir (1949); Hoijer (1953); Hymes (1972); Geertz (1975); Halliday (1978); and Wierzbicka (1986). By and large, the research of these authors substantiates the link between language and culture. Most of their findings conclude, unsurprisingly, that one does not exist fully without the other.

Indeed, one cannot speak a dialect, make a particular choice of vocabulary, without disclosing a social and cultural aspect. Often, in fact, the language is transparent and inconspicuous. In a working class milieu, there might be a specifically working class dialect, which is not often a conscious choice by the speaker. In a middle class milieu, the working class accent might well deviate from the original and in so doing connote certain values, such that it is interpreted as a statement of social allegiance. Thus language above everything else includes the values and meanings of a culture, and refers to cultural artefacts and signals people’s cultural identity. Byram (1989:41) concludes that:
language can stand alone and represent the rest of a culture’s phenomena because of its symbolic and transparent nature. Therefore, language cannot be used without carrying meaning and referring beyond itself, even in the most boring environment of the foreign language class.

Then he continues:

The meanings of a particular language point to the culture of a particular social grouping, and the analysis of these meanings - their comprehension by learners and other speakers - involves the analysis and comprehension of that culture.

Looked at in this light, if language is separated from culture, the separation cannot be justified because the nature of language itself is then disregarded. In Saudi Arabian secondary education, English is taught from textbooks which refer mainly to the native culture of the learners. From the cultural analysis collected, Albadah (1985:95) found the following:

1) The Saudi high school English language curriculum is permeated with Saudi and Islamic culture.

2) It contains very little Anglo-American cultural material.

3) The Anglo-American cultural material found in this curriculum is very superficial and can be classified as of a type which could be found in many societal settings, without any difference, in all three stages of the education system.

4) Most textbook chapters are permeated with Saudi Arabian historical information which does not provide many cultural insights of Saudi Arabia or any Arab country.

5) The English textbooks and readers deal with famous men, but women are not mentioned at all.
6) It was noticed there were no exercises in the textbooks and readers which could be used to provide insights into Anglo-American culture.

Of course, the reasons for the Saudi high school English language syllabus are clear. Saudi respect for and pride in their own culture, and above all in their own culture as a representative of Islamic culture, means that there is a tendency to strip the educational curriculum of references beyond the culture. To do so would be seen as somehow contaminating the purity of those Islamic and Saudi ideals which are at the heart of society.

It is not my concern to argue for or against this position, though I would repeat the point made earlier: that contact with other cultures need not be, and ought not to be, damaging to one’s own culture. What is more important, however, is the possibility that by separating the language from the culture, the former is actually made more difficult to learn.

However, the absolute separation of lexical items from their original reference is in any case extremely difficult. There is a need to take more careful account of the implications of separating language from culture for pedagogical reasons, particularly when, the representations of that cultural whole are largely limited to the foreign language classroom, and the learners’ experience of the foreign culture is largely vicarious.

Language teaching depends for help and guidance in the teaching of syntax and phonology on linguistics and, in the increasing concern with functions of language, on pragmatics and sociolinguistics. In so far as language teachers attempt to give learners more than grammatical competence, taking note of Hymes’ (1972) and others’ definitions of ‘communicative competence’, language teachers find themselves relying on analysis of how native speakers
use the particular language for social intercourse. Such sociolinguistic analysis introduces culture-specific pragmatics, and begins to uncover some of the values and norms of the culture for language teachers (Riley 1984). Sociolinguistics is therefore a necessary and natural extension of linguistic disciplines to which language teachers must look.

However, in addition to the cultural meanings carried by the functions of language, language also embodies the values and artefacts of a culture through referential meaning. The academic discipline which has concerned itself with the analysis of other cultures is social anthropology.

Therefore, language is part of culture and can capture cultural meanings and experiences. Thus, it is possible to interpret and describe a culture in its language. The language holds the culture through the denotations and connotations of its semantics. There exists, however, an association of personal experiences and emotions with the acquisition of shared, cultural meanings. In this respect the individual cannot hope to repeat in his own language the experience of an individual in the culture under description. A similar problem arises if the individual attempts to understand the other culture through the foreign language; the personal, affective dimension will be lacking. The lack can be made up only in part, as there are some experiences of childhood in particular, which are not repeatable for the adolescent or adult. Byram (1989) concludes that direct experience of the foreign culture can enrich the description of culturally shared meanings and connotations by acquisition of personal associations in the flux of complex interactions of cultural meanings. As analysed above, the interaction between culture and language goes on indefinitely. Hence, in the following section,
we will discuss cultural factors that may affect language learning, which is the main theme of this research.

2.5 **Cultural factors that may affect language learning**

Culture includes not only the material features of the human environment, but also its ‘conceptual’ features - the beliefs, knowledge, myths, religion, laws, etc., held by a group of people. Therefore, cultural influences on language learning are worth pursuing. There were many experiments that were conducted to prove or disprove cultural influence on foreign language learning. Sometimes the results of these experiments on people’s beliefs have been inconsistent, as we shall see below. However, I believe that culture may influence attitudes which directly or indirectly affect learning, because motivation is embedded in one’s cultural attitude.

At this point, it is necessary to survey people’s attitudes towards culture. Lambert (1974) investigates whether people’s beliefs about culture and language affect the learning process. More specifically, he wonders if beliefs about a particular ethnolinguistic group affect learners in the mastery of that group’s language.

Gardner et al. (1972) expected that success in mastering a foreign language would depend not only on intellectual capacity and language aptitude, but also on the learner’s perceptions and beliefs about the other ethnolinguistic group, his attitudes towards that group, and his willingness to accept distinctive aspects of behaviour, linguistic and non-linguistic, characterizing the other group.
Sapir and Whorf believed that language determines perception rather than the reverse. From their perspective, members of a culture share a world view by virtue of the language which they use in communicating with each other. Particular languages channel perception or thought in particular ways. Perceived reality is 'relative' to the language of the perceiver (Sapir 1949 and Whorf 1956c). This hypothesis has also been referred to as 'linguistic relativity' or 'linguistic determinism'. For example, a speaker of Arabic, by virtue of speaking Arabic, perceives the world differently from a speaker of English. Whorf cites the different uses of grammatical categories across cultures. Particular tense markers or the lack of them are considered to influence and define the concept of time. If a language has no grammatical marker to distinguish between, say, present simple and present continuous, then the speaker does not perceive these temporal distinctions. Different colour terms across languages have been cited as evidence that members of different cultures perceive and divide the spectrum of colours differently. If certain languages do not have a colour for, say, brown, then according to this hypothesis, speakers of that language do not perceive the colour brown.

There are problems with this hypothesis. First, it is difficult to conclude from such linguistic evidence that users of different languages perceive the world differently. Second, it is difficult to conclude that different language use is the cause of differences in perception.

More recent research shows that ecological conditions, the level of technology, and related socio-cultural institutions affect perception and subsequent language development, rather than the reverse. For example, a Saudi Arabian dialect which had no exposure to the coloured dye used in magenta
did not have a word for the colour magenta, and perhaps could not have
distinguished the colour itself readily on first sight; however, with the
introduction of the dye into the local region, the colour term developed.
Both colour perception and language development appeared to be dependent
upon the sensory experience.

This has important implications for second language and bilingual education.
If actual exposure to particular stimuli affects perception and language, then
instruction to develop cultural understanding must provide students of
another culture with target culture stimuli or sensory experience. Merely
telling students verbally about the target culture will not suffice to modify
the perception of unperceived or differently perceived experiences.

However, the study of language provides some essential components for
developing cultural understanding. It is known that language expresses per-
ception and the categorization of experience. Once language is associated
with particular meanings and values, language itself ‘filters’ perception in
some way.

Students of a foreign language may not see the target stimuli as intended by
the teacher or textbook writer. In a film, learners from different cultures
may not be seeing what one expects them to see. Therefore, the teacher has
to draw the attention of the learner to those aspects which are the intended
goal of instruction.

Previous experience with a culture affects the ‘preferred perceptual mode’,
referred to as ‘field independence’ and ‘field dependence’. These two con-
cepts originated in the research of Witkin et al. (1962):
In a field dependent mode of perception, the organization of the field as a whole dominates perception of its parts; an item within a field is experienced as fused with the organized ground. In a field independent mode of perception, the person is able to perceive items as discrete from the organized field (in Ramirez and Castanenda 1974:65).

Experience within a culture may contribute to the tendency towards ‘field dependence’ - i.e., emphasis on the whole, or ‘field independence’ - i.e., emphasis on the part. The concepts of ‘field independence’ and ‘field dependence’ have now been widely applied to learning styles and teaching strategies. The term ‘field dependence’, however, has been largely replaced by ‘field sensitivity’, because of the negative connotations associated with ‘dependence’ in Western societies. People would argue that there is some evidence that ‘field-independent’ learners are better language learners. We may (though with some hesitation) generalize that ‘field independence’ is the characteristic of individualist societies, whereas ‘field dependence’ is the characteristic of collectivist societies, as will be shown in Chapter Three.

Students’ learning styles vary from individual to individual within one culture, and differ from culture to culture. However, experiences within a particular culture may contribute to the dominance of one style over the other; generally speaking, ‘field independence’ is supposed to be more salient in individualist societies, whereas ‘field sensitivity’ is likely to be more salient in collectivist societies.

In general, cultural factors that affect language learning are so intricate that it is rather difficult to isolate one factor from the other. As mentioned above, students’ learning styles differ from individual to individual within
one culture, and differ from culture to culture. Thus, it is imperative to point out how other criteria affect language learning.

2.5.1 **Attitude and Motivation**

The theoretical basis for research on attitude and motivation in foreign language learning stems originally from Mowrer's (1950) studies of talking birds. In the early 1960s Mowrer generalized his findings about the development of talking birds to human first language acquisition. In his theory of first language acquisition Mowrer claims that the child’s acquisition of his first language is motivated by a fundamental desire to integrate himself and become a valued member of his family and, later, his community. Mowrer maintains that this desire is strong and persists until the child masters his first language and becomes a member of his family and community.

As early as 1954 Ervin expanded this theory to include second language acquisition and he assumed that emotional dependence, a desire for integration, and a respect for the foreign language community would lead to success in acquiring the foreign language. Similarly, Gardner and Lambert adopted Mowrer’s theory of first language acquisition to second language learning in a slightly modified form. They assumed that the learner of a second language, though he does not have the same basic urge to communicate to satisfy his essential biological needs, as is the case for the first language learner, nevertheless, he must still be willing to identify or integrate himself with the second language community and culture. They assumed that this motivation is similar to a child’s motive for learning his
first language, and thus it must be strong and play an important role in learning the second/foreign language. Furthermore, Gardner and Lambert (1972) hypothesized that the learner of a second language must want to identify himself with members of the other ethnic-linguistic group and be willing to assimilate very subtle aspects of their behaviour, such as the mastery of their language, in preparation to being accepted as a member of the other group.

2.5.1.1 Integrative motivation

A second finding of Gardner and Lambert’s original research indicates that the desire to associate with the new culture (integrative motivation) influences attitudes, values and personality traits as motive-like constructs of major significance in determining behaviour. They consider that motivation is determined by attitudes. Gardner and Lambert (1972:3) go on to say that:

the learner’s ethnocentric tendencies and his attitudes towards the members of the other group are believed to determine how successful he will be, relative to learning the new language. His motivation to learn is thought to be determined by his attitudes towards the other group in particular and toward foreign people in general, and by his orientation toward the learning task itself.

To determine the validity of Gardner and Lambert’s basic assumptions, further discussion of the empirical evidence supporting them is necessary. We shall begin with the research that took place in Great Britain.
2.5.1.2 Early studies

The research in the affective aspect of second/foreign language learning started as early as 1940, when Jordan (1941) reported that attitudes towards learning French in some British schools had a positive relationship to students’ achievement. He also noticed that attitudes were more favourable during the first year, and declined afterwards. Jones (1949) constructed an attitude scale for estimating the attitude of children towards learning Welsh as a second language in some British schools. The results of Jones’ study were consistent with those of Jordan’s. Jones found significant positive relationships between attitude towards Welsh as a second language and final achievement in Welsh, and that attitude was most favourable during the first year and declined afterwards. The study showed that students coming from Welsh-speaking backgrounds revealed more favourable attitudes towards Welsh than those from non-Welsh speaking homes.

Gardner and Lambert extended and modified the preliminary work started by Jordan, Jones and others, and conducted several studies in Canada, the United States and the Philippines. The theory behind Gardner and Lambert’s studies simply states that a person’s motivation to learn a second/foreign language is determined by his attitudes towards that language and people who speak it.

2.5.1.3 Critical review of Montreal research

Gardner and Lambert (1959) initiated their studies in Montreal, Canada. Their first study examined Anglophones studying French. The results of this study showed that achievement in French is dependent upon aptitude,
intelligence and a positive attitude towards French-Canadian people. Furthermore, they found that integrative motivation, as they measured it, was a strong predictor of French achievement. Gardner and Lambert concluded that students with positive attitudes towards the second language and the second language community are more motivated to acquire the language than those with negative attitudes. They attributed this strong motivation to learn French to the learners’ desire to become accepted members of the new linguistic group (the French).

Gardner (1960) expanded the 1959 study and made some methodological changes to make the results more reliable. As in the previous study, the subjects were high school Anglophone students in Montreal learning French as a second language. The results of this study reinforced the findings of the 1959 study and further showed that language aptitude and integrative motivation are two relatively independent factors contributing to successful learning of French. However, unlike the previous study, in which positive attitudes were related to integrative motivation, this study showed that integrative motivation is independent of favourable attitudes towards French Canadians. This showed that the desire for integration did not necessitate a positive attitude towards the second language culture as was assumed by Gardner and Lambert. Furthermore, this study demonstrated that attitudes and motivation are two distinct constructs that may function independently from each other.

There are some doubts about the importance of integrative motivation which Gardner and his associates considered important in learning French in the Montreal area, as compared to learning a second or a foreign language in general. There are also strong indications that the context of Gardner and
Lambert's research in Montreal affected their results. Montreal is a bilingual, bicultural area where French and English Canadians live together, and by necessity of that situation, any English speaker who wants to be successful in learning French has to have a positive attitude towards the French speakers because French and English speakers depend on each other continually. It is very natural in Montreal that what is termed as 'integrative' motivation will prevail and correlate with communicative measures because English speakers have no immediate use for French except to communicate with French speakers. Age is another factor which affected the results of these studies. The subjects were all high school students, and at such an age students are still under the influence of their parents' attitudes towards many things, including learning a second language. We believe that many Canadian parents in general, and parents in Montreal in particular, are trying hard to make Canada a bilingual country. It has also been demonstrated in many studies in Canada itself that the influence of parents' attitudes on their children is enormous, especially with respect to learning a second language (Gardner (1960; Lambert and Klineberg 1967).

The studies which were then carried out in the U.S.A., the Philippines and India did not confirm the significance of integrative motivation as we will illustrate below.

Gardner and Lambert (1972) replicated their Canadian studies in two bicultural settings in the States of Maine and Louisiana and one monocultural setting in the State of Connecticut. The subjects were high school American students learning French as a second language. In all three studies the researchers found that students with a strong motivation and desire to learn French obtained good marks in French. However, the findings of Gardner
and his associates with respect to the importance of integrative motivation for learning a second language do not hold true even in similar bicultural settings in the Maine and Louisiana communities, where integrative motivation is expected to prevail among students. The role played by attitudes towards one’s own group and the foreign group emerged again as an important influence on the learning process. The Louisiana study concluded:

that positive attitudes of the French-American teenagers towards the French-American culture, coupled with favourable stereotypes of the European French were highly correlated with expressive skills in French (Lambert 1974:100).

It seems that the findings of Maine and Connecticut contradict the Montreal results. The results were that (a) integrative orientation was negatively related to achievement, (b) that the desire to learn French and motivational intensity to learn French were positively related to achievement.

The same researchers (Gardner and Lambert) tested these notions further to see if they would apply in more foreign settings. The research led them to the Philippines, where English has become a second national language. Instruction begins in the early grades in a culture that believes that English is an essential language for economic advancement and success. The results of this investigation brought to light certain cross-nationally stable relationships and certain others that are tied to particular cultural contexts. Thus Gardner et al. (1974:101) conclude:

It seems that in settings where there is an urgency about mastering a second language - the instrumental approach to language study is extremely effective.
In a similar U.S.A. study, Oller, Hudson and Liu (1977) tested the motivation of Chinese students learning English. The researchers found that these students were instrumentally motivated and not integratively-motivated to learn English. Lukmani (1972) conducted the same study in Bombay, India. In this study, Lukmani presents more conclusive evidence concerning the importance of instrumental motivation in learning a foreign language.

Another study in the United States surveyed 60 Mexican-American females in New Mexico. Results also suggested that English proficiency was due to instrumental motivations (Oller, Baca and Vigil 1977). Oller et al. cited political ill-will of Mexicans towards Americans as a reason for their lack of integrative motivation.

Abashar (1977) directed an attitudinal/motivational study using Arab graduate and undergraduate students learning English at Indiana University. He adopted certain attitudinal scales from Gardner and Lambert as data collecting instruments. His results were that (a) attitudes failed to have a significant explanatory value in achievement in English as a foreign language; (b) that neither integrative nor instrumental orientation contributed significantly to achievement in English as a foreign language; and (c) high aptitude was significantly related to achievement.

Clearly, the literature points to significant cultural influences affecting foreign language learning. Investigations by Gardner and Lambert and many others confirm that beliefs about foreign people and one’s own ethnicity are powerful factors in learning a foreign language as well as maintaining one’s native language. Various findings indicate that bilingualism need not mean
losing cultural identity, in fact, it may be instrumental in the economic development of one’s own culture.

We have conducted a series of experiments on King Saud University students. The results have been similar to previous findings. However, the researcher will introduce a further factor that has come out of the experiments, that is, the role of schemata and background knowledge in language comprehension. The comprehension passages (see Appendix B) suggest that there are multiple factors that affect language learning.

After having shed light on the importance of culture in language teaching, we ought to explicate the status of the neo-Firthian school of thought in relation to the effect of culture or context of situation on language learning.

2.5.2 Interpretation of context of situation

This section attempts to survey briefly the origin of the notion of context of situation and its role in the interpretation of meanings. Like American linguists, Firth drew on the work and thought of anthropologists, in his case particularly that of Malinowski, who developed the theory of context of situation, whereby the meanings of utterances and their component words and phrases were referred to their various functions in the particular situational context in which they were used. As Firth was interested in the cultural background of language, he adopted Malinowski’s notion of the context of situation into his own linguistic theory. In Firth’s view, linguistics was the study of meaning, and meaning was functional in a context (Firth 1957 in Halliday 1989:8).
Context has come to be considered as of great importance in the interpretation of sentences since it enables us to look at the environment or the circumstances in which language is used. By understanding the context, it generally becomes easier to understand the text. However, the implications of taking context into account are well-expressed by Sadock (1978:281):

There is, then, a serious methodological problem that confronts the advocate of linguistic pragmatics. Given some aspects of what a sentence conveys in a particular context, is that aspect part of what the sentence conveys in a particular context, is that aspect part of what the sentence conveys in virtue of its meaning... or should it be ‘worked out’ on the basis of Gricean principles from the rest of the meaning of the sentence and relevant facts of the context of utterance?

Accordingly, we need to be able to specify what the ‘relevant facts’ of the context of utterance mentioned by Sadock actually are. Fillmore raised the same problem and he wondered what the effect would have been if the context had been slightly different (Fillmore 1977).

Firth’s view is that ‘context of situation’ is best used as a suitable schematic construct to apply to language events (Mitchell 1957:182). This approach emphasizes the importance of an ethnographic view of communicative events, which was subsequently developed by Hymes. Hymes (1962) views the role of context in interpretation as, either limiting the range of possible interpretation, or as supporting the intended interpretation:

The use of a linguistic form identifies a range of meanings. A context can support a range of meanings. When a form is used in a context it eliminates the meanings possible to that context other than those the form can signal: the context eliminates from consideration the meanings possible to the
form other than those the context can support (in Wootton 1975:44).

It seems that Hymes' view of context of situation is not incompatible with schema theory. Since it is people who communicate, and people who interpret, the interpretation is a reflection of the schema the reader stores in his memory. Therefore, the reader’s ability to interpret the texts we present relies on both syntax, phonology and the context of situation.

2.5.2.1 The Neo-Firthian Context of situation

The era that followed Firth saw the rise to prominence of neo-Firthian linguistics, a movement associated with Halliday, and Mitchell, (Robins 1969). Halliday uses the notion of ‘social-semiotic’ to refer to the definition of a culture as a system of meanings. Halliday of course is not an anthropologist like Malinowski or Geertz. His treatment of culture is complex and subtle, a fact which distinguishes him from some other scholars. He is influenced by the ‘symbols and meanings’ conception of culture associated with Geertz. Thus, Halliday looks at language as a ‘social-semiotic’ and as a resource for meaning. Mitchell (1970:17) states in relation to meaning that “our knowledge of meaning is deeper if we are able to classify language in terms of its use in social settings.” Social settings are outside the realm of language. Halliday (1989:4) lists these extralinguistic modes of meaning:

art forms such as painting, sculpture, music, the dance, and so forth, and other modes of cultural behaviour such as modes of exchange, modes of dress, structures of family, and so forth. These are all bearers of meaning in the culture.
Therefore, Halliday formulates a definition of culture to match his linguistic system by stating that culture is "a set of semiotic systems, a set of systems, all of which interrelate." Mitchell considers that language is a social activity, which is used to meet the personal and social requirements of day-to-day living and to maintain the values and attitudes of a society.

Halliday's context of situation may, as with Hymes' approach, be broadly compatible with schemata, which are necessary for the adequate understanding of the text as will be shown in Section 2.6.2. The semiotic concepts of meanings that are created by a social system are exchanged by the members of a culture in the form of verbal or non-verbal discourse. Context usually precedes text. The general notion of context of situation is necessary for the understanding of English or any other major language. The particular contexts of culture are different. The activities that people engage in may differ from place to place, or from time to time, but the general principle that all language must be understood in its context of situation is just as valid for every community in every stage of development. This will lead us to the following question: How can we characterize a discourse in relation to its context of situation? The answer will give us an understanding of how learners make predictions about the kinds of meaning that are embodied in the discourse.

What is a context of situation? According to Halliday (1989:12), a context of situation has three features: the field, the tenor, and the mode. These concepts serve to interpret the social context of a text, the environment in which meanings are being exchanged. These features, as Halliday cites them, are:
1) The Field of Discourse refers to what is happening, to the nature of the social action that is taking place: what is it that the participants are engaged in, in which the language figures as some essential component?

2) The Tenor of Discourse refers to who is taking part, to the nature of the participants, their status and roles.

3) The Mode of Discourse refers to what part the language is playing, what it is that the participants are expecting the language to do for them in that situation: the symbolic organization of the text, the status that it has, and its function in the context, including the channel and also the rhetorical mode.

2.5.2.2 Halliday’s views on culture and language

Here we discuss Halliday’s qualified agreement on the links between culture and language, as explained and analysed by Wierzbicka (1985). Her claims were challenged by Halliday. The latter wonders whether it is justified to link individual linguistic phenomena with non-linguistic aspects of culture directly. Wierzbicka (1986:349) states:

Halliday acknowledges that in some cases direct links do seem to exist, but he was inclined to confine such cases to the lexicon. As far as grammar is concerned, he was more cautious. He agreed that, for example, the rich systems of honorifics in languages such as Japanese do appear to reflect aspects of culture, but he is reluctant to accept a similar claim concerning rich systems of affectionate diminutives in Slavic Languages, and on the whole he was sceptical of any search for direct correlation between language and ‘social reality’.

In particular, Halliday raised the following difficulty: If one language (e.g., Russian) has three genders, another (e.g., Arabic) has two, and yet another (e.g., English) has none, would it be justified to try to link these differences
with some extralinguistic differences in culture? Halliday believes that there are some selected features of grammar which one might seek to correlate with something outside language itself. However, it is difficult to decide which linguistic phenomena can be interpreted as culturally significant outside language itself. If genders do not reflect extralinguistic culture, it may not be right to suggest that honorifics or diminutives do.

Wierzbicka (1986:350) elaborates Halliday’s reservation about the direct links between culture and language as:

Lexicon tends to change more quickly than grammar in response to changes in “social reality”. Nevertheless, lexicon, too, is subject to conservative forces, and not all lexical differences between languages reflect current differences in culture. Presumably, however, we would not want to deny, on this basis, that some lexical differences are readily open to cultural interpretation.

There are many lexical differences between Arabic and English whose contemporary cultural significance could not be reasonably doubted. For example, in addition to words for Saturday and Sunday, English has a special word for a ‘weekend’, while Arabic does not (so that Arab immigrants in English-speaking countries have to borrow the English word ‘weekend’ to speak in Arabic about weekend-related aspects of their life in those countries).

Now let us take an example from grammar: distinctions embodied in the third person personal pronouns may be less likely to reflect the ongoing culture than those included in the second person personal pronouns. Thus, the fact that English does not have a distinction in the second person pronouns seems to mirror the culture directly and tends to modify the
nature of the personal relationship in response to a changing cultural context (Brown and Gilman 1960; Wierzbicka 1985).

While Halliday (1989) does not deny the correlation of language and culture, he claims that some linguistic phenomena cannot be interpreted according to culture. However, in his most recent research, he equates a social system with culture, which implies that culture may have an effect on language learning.

Since the introduction of culture is generally in conformity with background knowledge, it is therefore necessary to examine it in the section below.

2.6 Background knowledge

A review of the literature in EFL/ESL methodology shows that the role of cultural knowledge as a factor in reading comprehension has been an issue for some time. Fries (1945, 1963) talked about meaning at the social-cultural level - that is, the meaning that transcends the language code and is related to the background knowledge of the native speakers of that code. Reading comprehension occurs when the total meaning of a passage is fitted into this network of information, organized in ways meaningful to a society. The following passage from an ESL reading text illustrates Fries's concept of social-cultural meaning:

By voting against mass transportation, voters have chosen to continue on a road to ruin. Our interstate highways, those much praised golden avenues built to whisk suburban travelers in and out of downtown have turned into the world's most expensive parking lots. That expense is not only economic - it is social. These highways have created great walls separating neighborhood from neighborhood,
disrupting the complex social connections that help make a city livable (Baudoin et al. 1977:159).

In reading this passage, some EFL students fail to perceive the connection between mass transportation and highways. According to Carrell et al. (1983:563), “in the United States, where individual ownership of cars results in an overabundance of highways and a reduced need for mass transportation, this passage makes sense. Sometimes, however, students perceive that highways are built for mass transportation, which renders this passage rather incomprehensible.”

Rivers (1968) recommends that the strong bond between culture and language must be maintained for the student to have a complete understanding of the meaning of language. She believes that differences in values and attitudes are the main sources of problems in foreign language learning. Culture-specific values can be a significant block to comprehension if the values of the text differ from the values held by the reader. For example, devout Muslim students have problems with the following statement:

There is a question about the extent to which any one of us can be free of a prejudiced view in the area of religion (Baudoin et al. 1977:185).

While this sentence is excellent for developing critical reading skills, Carrell et al. (1983:564) comment:

The mention of religion in this context does not coincide with Islamic values. A subsequent exercise requires the student to analyze the relation of the original text to the following sentence: ‘Because we cannot be free of prejudice in the area of religion,’ we should not practice a religion. One
student refused to even consider the premise of this sentence; his only comment: 'for me, it's false.

More recently, Rivers and Temperley (1978) have stressed the importance of supplying background information, explaining high-frequency but culturally loaded terms, and using illustrations with reading passages to provide additional meaning to texts. The important point is that problems with individual lexical items may not be as pervasive as these problems related to the absence of appropriate generalized information assumed by the writer, and possessed by a reader sharing that writer's cultural background.

Paulston and Bruder (1976) discuss covert information and reading. Proficient readers, they say, must draw on their own experience in order to supply a semantic component to a message. They argue that texts with familiar settings, and even specialized low-frequency vocabulary, are appropriate because they are relevant to the students' world (and are, thus, easier to read). Robinett (1979) agrees that covert cultural information is a factor in reading comprehension, and he suggests that the teacher facilitate reading by providing specific background experience.

When covert information is assumed by the writer, it must be supplied by the reader, and this is sometimes done erroneously. Another example from Baudoin et al. (1977:83) "I saw by the clock of the city jail that it was past eleven, so I decided to go to the newspaper immediately." After reading the above sentence, some students were convinced that the writer had been in jail at the time because, as they said, "an outside clock is only on a church." They had concluded that the only place the writer could have seen "the clock of the city jail" was from inside the jail itself.
Background knowledge is a general term that represents conventional knowledge of the world, which is used as a basis for the interpretation of discourse. This background knowledge involves the utilization of the ‘real world’. This knowledge about the world underpins our interpretation of virtually every aspect of our lives.

In order to understand discourse we ought to combine world knowledge with knowledge of the structure of language and the meaning of the parts of the discourse. According to Schank (1982),

the key point is that a child must have a well developed sense of the world around him to understand stories about the world. This explicates that a great deal of what must be taught to enable reading is not language per se. Rather, it is world knowledge that constitutes the key issues in reading comprehension.

For instance, (a) “Though his clothes and manners were coarse he did not seem to be an ordinary seaman.”

Would a learner recognize an ordinary seaman from an extraordinary one? Without some knowledge of what a seaman does, looks like, wants, and so on, it is difficult to understand the sentence. Therefore, the key issue in comprehension is the application of appropriate knowledge to a situation. Such knowledge helps to fill in the details behind that situation. There are two primary issues related to such background knowledge:

1) Learners cannot be expected to understand discourse where they lack background knowledge required to comprehend such discourse.

2) Learners can be taught to expand their background knowledge, and thus what they can read (e.g., see Carrell 1983a).
Different researchers have tried to develop this general sense of background knowledge into something more sophisticated - a theory capable of explaining how it is, precisely, that we use what we know of the way the world is in general to interpret particular events in it.

Thus, in addition to schemata, other terms commonly used are ‘frames’ (Minsky 1975; Fillmore 1976; Tannen 1979), ‘scripts’ (Schank and Abelson 1977), ‘event chains’ (Warren, Nicholas and Trabasso 1979), and ‘expectation’ (Tannen 1979). These terms are not all identical. Yet they share some basic assumptions, and yield some of the same important insights into discourse. All of the terms emanate from basic research at the intersection of artificial intelligence, cognitive psychology, and linguistics. According to Carrell et al (1983:557), they “are not identical, however, they may all be broadly characterised as part of a schema - theoretical orientation to text processing.”

It is, however, on the label 'schemata' that I wish to concentrate. Background knowledge, as was remarked above, is a general notion, which includes previously acquired knowledge. A schema on the other hand is a specific concept which involves previously acquired knowledge that is structured (ibid.: 1983).

All our knowledge is not contained in schemata (Schank 1982). A great deal of what we know, and thus what helps in reading, is in the form of knowledge about what someone is likely to do in a situation with which we are unfamiliar.

The emphasis on storage of world knowledge is most apparent in computational approaches to discourse understanding. In order to provide a
computer with the background knowledge needed to ‘understand’ discourse, many investigators in Artificial Intelligence (AI) attempted to create large, fixed data-structures, in which knowledge was organized and stored. It quickly became apparent that generalized knowledge about the world was too large to be incorporated, in any encyclopaedic fashion, within the computer’s memory. The answer, for some AI workers, was to produce specialized knowledge structures for dealing with discourse requiring a particular type of knowledge. That is, world knowledge could be incorporated if the ‘world’ was a very limited one. A ‘world’ consisting of a fixed number of coloured blocks and other shapes is an example (see Winograd 1972). It then became plausible to think of world knowledge as organized into separate but interlinked sets of knowledge area that humans, in comprehending discourse, appear to use. “This is intuitively a very reasonable idea since, when we read a piece of text, we presumably only use that limited subset of our knowledge which is required for the understanding of that text,” (Brown 1983:237). In other words, when we read a story involving a ‘doctor-visit’, for example, we use our knowledge of visiting a doctor, but not our knowledge of going to a dentist or a restaurant - that is, unless some part of the text also requires that other particular subset of our knowledge be involved.

We shall consider some related attempts in research on psychological processes to provide ways of representing knowledge stored in memory, and how these processes relate to comprehension processing. This type of representation is the knowledge structure or schema, developed primarily by Bartlett (1932); Rumelhart and Ortony (1977); Anderson (1976).
The plan for this section is as follows: First, we shall consider psycholinguistic models, developed by Goodman, and elaborated by Coady. Second, we will survey the historical antecedents of schema theory. Third, we will outline the basic elements of the theory and point out problems and possible solutions. Fourth, we will explicate mental models as well as de Beaugrande’s models and their influence on language discourse. Finally, we will evaluate de Beaugrande’s text types and the facilities they give for the understanding of reading comprehension by surveying the experimental work which was conducted on schemata.

2.6.1 The Psycholinguistic model of reading

There are a variety of factors that account for the conceptualization of knowledge and theory about the reading process in the form of explicit reading models. The changes that occurred in language research and the psychological study of mental processes played a major role in elevating reading research to a more respectable stature (Samuels et al. 1988).

Goodman worked out a reading model, which has had considerable impact on conceptions both about the nature of reading and about reading instruction. Samuels et al. (1988:23) describe Goodman’s model by saying:

So strong has been this impact that it is not uncommon to hear or read about the psycholinguistic approach to reading or the whole language approach to reading.

Goodman (1967) has described reading as a ‘psycholinguistic guessing game’ in which the “reader reconstructs, as best as he can, a message which has been encoded by a writer as a graphic display” (Goodman 1971:135). Its
most distinctive feature is its procedural preference for allowing the reader to rely on existing syntactic and semantic knowledge structures. Therefore, his reliance on the graphic display and existing knowledge about the sounds can be minimized. Another basic characteristic of Goodman's model is that it centres on the use of the term decoding. Decoding is usually used to describe what happens when a reader translates a graphemic input into a phonemic input; whereas Goodman uses the term to describe how either a graphemic input or a phonemic input gets translated into a meaning code. Goodman uses the term recoding to describe the processes of translating graphemes into phonemes. Thus decoding can be either direct (graphemes to meaning) or mediated (graphemes to phonemes to meaning).

Although Goodman did not characterise his theory as a top-down model, and indeed continued to resist this characterization, it is difficult to perceive it as anything else, given that it clearly involves the reader starting with hypotheses and predictions and attempting to verify them by working down to the printed stimuli.

One of the deficiencies in a top-down model such as Goodman's is that for many texts, the reader has little knowledge of the topic and cannot generate predictions. A more serious deficiency is that even if a skilled reader can generate predictions, the amount of time the skilled reader takes to generate a prediction may be greater than the amount of time the reader needed simply to recognize the words. In other words, it is easier for a skilled reader simply to recognize words in a text. Thus, while the 'top-down' models may be able to explain beginning reading, with slow rates of word recognition, they do not accurately describe skilled reading behaviour. (The
researcher will examine 'bottom-up' and 'top-down' processing in more detail in Section 2.6.4 below).

Consequently, dissatisfaction arose with decoding models as well as with the audiolingual method as teachers became aware that aural-oral proficiency did not automatically produce reading competency. Reading researchers began to call for more attention to be paid to teaching reading in its own right (Eskey 1973 and Saville-Troike 1973). Coady (1979:5-12) has elaborated on this basis a model in which the EFL reader's background knowledge interacts with conceptual abilities and process strategies to produce comprehension. By conceptual ability here, Coady means general intellectual capacity: and by processing strategies, he means the various subcomponents of reading ability, including many which are also more general language processing skills and also apply to oral language (e.g., grapheme-morpheme correspondence, syllable-morpheme information, lexical meaning and context meaning). Coady (1979: 7) observes of the importance of background knowledge that:

it becomes an important variable when we notice, as many have, that students with a Western background of some kind learn English faster, on the average, than those without such a background.

Coady (1979: 12) also suggests that background knowledge may be able to make up for certain syntactic deficiencies:

The subject of reading materials should be of high interest and relate well to the background of the reader, since strong semantic input can help compensate when syntactic control is weak. The interest and background knowledge will enable the student to comprehend at a reasonable rate and keep him involved in the material in spite of its syntactic difficulty.
Although Goodman's psycholinguistic model of reading involves the reader in ongoing interaction with the text, it has generally failed to highlight the role of background knowledge. Carrell (1983a) confirms that recent research indicates that what the reader brings to the reading task is more pervasive than the general psycholinguistic model suggests:

More information is contributed by the reader than by the print on the page. That is, readers understand what they read because they are able to take the stimulus beyond its graphic representation and assign it membership to an appropriate group of concepts already stored in their memories...The reader brings to the task a formidable amount of information and ideas, attitudes and beliefs. This knowledge, coupled with the ability to make linguistic predictions, determines the expectations the reader will develop as he reads. Skill in reading depends on the efficient interaction between linguistic knowledge and knowledge of the world (Clark and Silberstein 1977:136-137 in Carrell et al. 1983).

It is, then, as we have seen, the role and organisation of background knowledge in language comprehension which has been developed and formalized as *schema theory* (Bartlett 1932; Rumelhart and Ortony 1977, Rumelhart 1980; Anderson 1976). I shall discuss this topic in detail below.

2.6.2 **Historical background of the notion of a schema**

A little more than two hundred years ago, the term schema was used by Kant. In fact, it was the year 1787 when Kant utilized a notion of schemata that “in many ways appears to be more similar” to the current formulation than even Bartlett’s (Rumelhart et al. 1977:101). While the concept of schema was first introduced to psychological theory by Sir Frederick
Bartlett in his 1932 book *Remembering*, we must give historical precedence to Gestalt psychology.

The name Gestalt is a German word with no precise English equivalent. It is usually translated as ‘organized whole’ or ‘configuration’. The name captures the essence of the Gestalt protest against the school of structuralism, founded by Wilhelm Wundt, who held that perception, thought, and emotion could be resolved into elemental sensations. The protest addressed primarily structuralism’s insistence on the exclusive study of consciousness and the elements of the mind through introspection. Gestalt psychologists argued that psychological experience neither consists of nor is compounded by static, discrete, and denumerable elements that come and go in time, but rather comprises an organized but dynamic ever changing field of events which interact or mutually affect each other. When an organism experiences its environment, it does not perceive or react to individual elements, but rather to the whole configuration of forces. Properties of the whole field are different from the simple sum of its parts. Gestalt psychology can be characterized as “anti-elementaristic; sensations, perceptions, images, associations, reflexes, and the like are not accepted as meaningful psychological units” (Bourne et al. 1979:22). To understand psychological processes, one must consider a system of stimulation in which the alteration of any part can affect all other parts.

Wulf (1922; translated, 1939) undertook an experiment on memory for geometric pictures to obtain evidence on visual perception. Subjects were requested to make drawings that reproduced the pictures shortly after exposure, after 24 hours, and after a week. Changes in the reproduced figure were classified by Wulf under three headings, ‘leveling’, ‘sharpen-
ing’, and ‘assimilation’. Leveling means that the reproduced figures lacked certain detail contained in the original figures; sharpening refers to emphasizing or exaggerating a salient feature; and assimilation means that the figure was normalized, that is, made to look like a more familiar object.

Wulf (1922:141) explained his results in these terms:

In addition to, or even instead of, purely visual data there were also general types or schemata in terms of which the subject constructed his responses ... The schema itself becomes with time ever more dominant; visual imagery of the original disappears, ... details contained in the original are forgotten and incorrectly reproduced, yet even the last reproduction will usually show a steady progress towards representation of the type or schema originally conceived.

The results obtained by Wulf were later seized upon by Bartlett (1932) and shown to be almost entirely the same as results on the retention of stories. According to Bartlett (1932:201), “the term ‘schema’ refers to an active organization of past reactions or of past experiences, which must always be supposed to be operating in any well adapted organic response.” He continues by saying that people cannot remember many of the specific details of an event but reconstruct them by “turning around upon (their) own schemata” (ibid.:202).

Although many authors find Bartlett’s (1932) “turning around” metaphor to be somewhat opaque, the fragmentary nature of memory representations and the reconstruction of events are often emphasized in contemporary schema theory, as will be shown below.
We turn now to an eminent figure in the recent history of psychology, David Ausubel. His thinking bears resemblances to that of Bartlett and Gestalt psychologists. According to Ausubel et al. (1968:171), in meaningful learning and memory, "the (more) general and inclusive ideas of a discipline subsume or anchor" the new particular propositions available in texts. This happens when the existing ideas are "clear, stable, discriminable from both similar and different (but potentially confusable) concepts and principles in the learning material (ibid.:164), and specifically relevant to the to-be-understood propositions. The reader has to be aware of which aspects of his knowledge are relevant. When this is not clear, and the text is not explicit, an 'advance organizer' may be prescribed. An advance organizer is an abstract knowledge structure which is deliberately introduced before a text and intended to provide a conceptual bridge between what the reader already knows and the propositions of the text that it is hoped to understand and learn. An 'advance organizer' is a piece of abstract knowledge which involves the manipulation of adjunct materials for the purpose of providing a conceptual framework for materials to be studied later. Anderson and Pearson (1984:41) state that "Ausubel has not called his theory a schema theory, but it already is." His own research has dealt mainly with advance organizers, which have proved to have facilitative effects (Luiten, Ames, and Ackerson 1980; Mayer 1979).

In the last 15 to 20 years, the schema construct has been highly influential in Western psychology. Indeed, today schemata appear in explanatory accounts in many diverse fields: in perception, memory and motor skills; in psycholinguistics, abnormal, social and developmental psychology. Indeed, the schema is part of the conceptual stock-in-trade of many contemporary psychologists. However, no matter how natural or useful the schema con-
struct may seem, it is important to look closely at just what is at stake when the concept is used.

In 1975 a number of papers were published, (e.g. Minsky 1975; Rumelhart 1975; Schank and Nash-Weber 1975; Winograd 1975) concerning schemata or related concepts (frames, scripts). Since then, innumerable theoretical and empirical studies of these concepts have been made. Our efforts, then, face the immediate difficulty of trying to come to terms with this vast literature. This problem is compounded by the fact that the term ‘schema’ has no fixed, universally agreed upon definition in psychological writings, as Alba and Hasher (1983), Brewer and Nakamura (1984) and Thorndyke and Yekovich (1980) have all noted. However, this does not mean that schema can mean anything an individual psychologist would like to posit. There is a consensus around the meaning of ‘schema’ and the kinds of properties that schemata are held to have.

2.6.2.1 General characterization of schema theory

Cognitive research has recently witnessed a surge of interest in developing a set of ideas about memory structures that can be collectively referred to as schema theory. A schema comprises a cluster of knowledge representing a particular generic procedure, object percept, event, sequence of events, or social situation. This cluster provides a skeleton structure for a concept that can be ‘instantiated,’ or filled out, with the detailed properties of the particular instance being represented. For example, a schema for a ship christening, would encode the standard characteristics of a ship christening, as will be shown in the next sections.
Schema theory refers to the collection of models and presumes that humans encode such knowledge clusters in memory and use them to comprehend and store new instances of the concept. In particular, a schema guides comprehension of new instances of the concept by providing expectations for, and constraints on, the set of related properties associated with that concept.

The term 'schema' is most often used to refer to the general knowledge a person possesses about a particular domain. "(Schemata) exist for generalized concepts underlying objects, situations, events, sequences of events, actions, and sequences of actions" (Rumelhart and Ortony 1977:101). Schemata are not specific to particular instances but constitute general knowledge: "schemata are not atomic" (ibid. 1977:101).

A schema is often supposed to consist of a set of 'slots' or 'terminals' which correspond to things which are generally true or expected within the knowledge domain in question. To give one of Minsky's (1975) examples, in the schema for a child's birthday party, there would be slots for 'present', 'games', 'party meal', 'room decoration', and 'cake', etc. In the schema for a face, there would be slots for 'eyes', 'nose', 'mouth', 'ears', 'chin', etc. (Rumelhart and Ortony 1977). The slots also contain information as to what specific instances usually 'fill' them. For example, party meals usually involve birthday cakes and eyes are usually two in number. By containing information about typical instances, schemata are sometimes held to represent knowledge of ideals or prototypes (e.g., Johnson-Laird 1983; Posner and Keele 1970; Rosch 1978). (This knowledge of ideals will be discussed in Section 2.6.3).

Finally, the slots of one schema can contain, in turn, sub-schemata. For example, the slot for an 'eye' in a face schema could have a sub-schema.
consisting, in turn, of slots for ‘pupil’, ‘iris’, ‘eyelid’, etc. This property of schemata is usually called ‘embedding’. Although lower level schemata might be embed in higher level ones, this process does not continue *ad infinitum*. There are primitive feature detectors which do not have sub-schemata (Rumelhart and Ortony 1977).

Two other terms are sometimes used which are closely related to ‘schema’. Minsky (1975) referred to ‘frames’ and this term still has considerable currency within the Artificial Intelligence (AI) community. For our purposes, we shall treat ‘schema’ and ‘frame’ as being synonymous. Schank and Abelson (1977) use the term ‘scripts’ to refer to the general knowledge people have of such stereotyped activities as going to a restaurant or theatre. We shall take scripts to be a subclass of schemata because schemata need not be confined to just stereotyped action sequences (Anderson 1977).

2.6.2.3 Structure of schemata

Anderson et al. (1984:37) show how reading comprehension involves the interaction between old and new information. They focus on: “how the reader’s schemata, or knowledge already stored in memory, function in the process of interpreting new information and allowing it to enter and become a part of the knowledge store.”

According to Anderson and Pearson (1984:42),

a schema is abstract in the sense that it summarizes what is known about a variety of cases that differ in many particulars. An important theoretical puzzle is to determine just how much and what sort of knowledge is abstracted and how much remains tied to knowledge of specific instances. A
schema is structured in the sense that it represents the relationships among its component parts. The theoretical issue is to specify the set of relationships needed for a general analysis of knowledge.

We will discuss these issues by taking a concrete case, ‘the ship christening schema’. This schema is represented in Figure 1 below, which can be analyzed into six components representing the average person’s knowledge of ship christening: that it involves a new ship, that it is done to bless a ship, that it usually takes place in a dry dock, and so on. Schema theorists call these components ‘slots’, ‘terminals’, ‘nodes’ or ‘variables’. When the slots in a schema are satisfactorily filled, a schema is said to be ‘instantiated’ (Minsky 1975; Rumelhart and Ortony 1977; Schank and Abelson 1977). The instantiation of schemata does not proceed by the passive encoding of environmental data. Rather, in Rumelhart’s (1980:39) terms, “schemata are active computational devices which seek out relevant information in the environment.”
The active processing of new information is guided by the pre-existing knowledge contained in schemata. Thus, if the (dignitary) slot of the ship christening schema has been satisfactorily filled, then information in the environment that might fill the ‘bottle broken on bow’ or ‘dry dock’ slots, etc., would be sought. It is in this manner that the important features of an event are selected and accounted for.

Schema theorists typically suppose that there is a very close relationship between the schemata used in the comprehension of an event and the event’s subsequent memory representation. For example, Minsky (1975:113) claimed that “very little can be remembered unless embedded in a suitable frame.” This comment suggests that information in the environment that is
not selected and accounted for by suitable frames/ schemata will soon be lost from memory.

Similarly, Schank and Abelson (1977:161) argued that it is the gist (or “main conceptualizations”, in their terms) of an event that is retained. The specific details that make up the event tend not to be included or are soon lost from the event’s memory representation.

Suppose you read in the newspaper that:

Princess Diana participated in a long delayed ceremony in Southampton in England, yesterday. While there is still bitterness here following several months of labour unrest, on this occasion a crowd of shipyard workers numbering in the hundreds joined the guests of honour in cheering as the H.M.S. Queen Elizabeth ‘slipped into the water’ (adapted from Anderson and Pearson 1984).

In the passage above, the actions of the participants and other pieces of information are consistent with our prior knowledge of ‘a ship christening’ schema. For example, Princess Diana fits the (dignitary) slot, the fact that Southampton is a well-known shipbuilding port and that shipyard workers are involved is consistent with the (dry dock) slot, the H.M.S. Queen Elizabeth is obviously a ship and the information that it ‘slipped into the water’ is consistent with (the Just before launching) slot. Therefore, the ceremony mentioned is likely to be a ship christening. No mention is made of a bottle of champagne being broken on the ship’s bow, but this ‘default’ inference is easily made. Inferences will be discussed below.
2.6.2.3 Inferencing

The literature on discourse analysis indicates that systematic inferences are made in the interpretation and comprehension of events. That is, when confronted with new information, people go beyond what is explicitly present and make inferences in the light of their prior knowledge. Furthermore, inferences made at the time of original learning may be incorporated into memory representations and be present in recall or bias recognition performance.

Inferences are made in the comprehension of an event on the basis of general knowledge embodied in schemata. Instantiation refers to a kind of inference where a general concept is concretized by an exemplar of the concept. For example, Anderson et al. (1976) presented people with general concepts (e.g., container) in sentences that suggested the general concepts should be understood as more specific exemplars. Thus, the sentence ‘the container held the apples’ suggests that the container is a basket. On the other hand ‘the container held the orange juice’ suggests that the container might be a bottle. These authors showed that the suggested but never-presented specific terms (basket and bottle, respectively) served as better recall cues than the actually presented general terms (e.g., container). This result indicates that people interpret sentences containing general terms on the basis of their prior knowledge of likely exemplars (default values) in the given context.

Haviland and Clark (1974) and Kintsch and van Dijk (1978) have argued that information in a text can be most easily comprehended when it can be related to immediately preceding information. For example, a new sentence
in a text will be most readily understood if it shares some terms of common reference with some part of the text that has gone before. However, if new material does not share such terms, then readers must generate an inference to bridge the gap. McKoon and Keenan (1974) present evidence that people do, in fact, make bridging inferences during comprehension. Furthermore, Thorndyke (1976) has shown that bridging inferences are often misremembered as having been actually presented. Finally, even in texts that do not require inferences to make them coherent, inferences might still be made if they enhance the coherence of all the information in the text.

The importance of inferences to comprehension has been especially emphasized in script theory (Schank and Abelson 1977). Consider the following short text concerning a restaurant visit:

Richard went to a restaurant. He asked the waitress for coq au vin. He paid the check and left.

We can understand many non-stated aspects of this story: "... we assume that Richard ate coq au vin, that he waited for a while before being served, that he looked at a menu, and so on. All this information is brought up by the restaurant script" (Schank and Abelson 1977:40). In general, non-stated features of an event can be inferred by default from a script or schema in the absence of environmental input (e.g. a bottle of champagne being broken on the ship's bow). That schemata are able to license inferences in this way is one of their important properties, and has attracted a good deal of empirical study.

We have discussed how the instantiation of 'a ship christening' schema depends upon filling the slots with appropriate data derived either from the
environment or by default. Slots can also be filled by old information retrieved from memory (see Rumelhart and Ortony 1977:105). That is, some related memory representation(s) might be retrieved and used in the comprehension of new input. This process of combining information from different sources is commonly called integration.

As schema theorists often hold that there is a close relationship between comprehension and memory, a representation of a particular event is typically thought to be a product of event-specific input, old information from memory and inferences made by default. In the words of Brewer and Nakamura (1984:201):

> The integration hypothesis states that during the process of schema instantiation, old schema-based information becomes integrated with new episodic information. Thus, the memory representation will contain both generic information from the schema and episodic information from the input.

The foregoing treatment of the schema activation process can be made more precise. It seems likely, for instance, that a person’s ‘ship christening’ schema is more likely to activate the component concept of a dignitary than the mention of a dignitary is to activate the schema. The reason is that (dignitary) is a component of many schemata and ‘ship christening’ is not very prominent among them; therefore, the probability that words about a dignitary will activate ‘ship christening’ is low. As schema theorists often hold that there is a close relationship between comprehension and memory, a representation of a particular event such as ‘a champagne bottle’ being broken on the ship is typically thought to be a product of event-specific
input, old information from memory and inferences made by default. In the words of Anderson and Pearson (1984:44),

A final assumption in this simple model of schema activation is that, when two or more components of a schema are mentioned, the aggregate probability of the whole schema being activated is a function of the sum of the probabilities that the individual components will activate the schema.

Ross and Bower (1981) presented subjects with a list of four-word clusters. The four words in each cluster were semantically related. Later subjects were presented with one, two or three words from each cluster in a cued recall test. It was the subjects’ task to recall the remaining word(s) from each cluster in response to the cue. Ross and Bower (1981) formalized a number of mathematical models from which predictions of recall levels were derived from the various cueing conditions. One of their models assumed that people derive an integrated memory from each cluster which represents the semantic relationships between the four words. This model gave a good account of the recall patterns. In fact, it did better than a model based on S-R learning theory. This model can also be compared to Bransford and Franks’ (1971) concept of a holistic semantic structure.

To get a feeling for how a model of schema activation of this type might work with text, consider the following two sentences:

a) Princess Anne broke the bottle on the ship.
b) The waitress broke the bottle on the ship.

In (a) the (dignitary) slot as well as the (ship ) and (bottle breaking) slots are consistent with ship christening schema. The only problem is that the bottle was broken on the ship not on the bow. For most people, sentence
(b) does not suggest a ship christening but instead, perhaps, a scene in the ship’s bar because a waitress will not fit in the (dignitary) slot and thus there is less evidence for a ship christening interpretation.

The simple model which is being considered is likely to fail with the following sentence, though:

c) During the ceremony on the ship, Princess Anne took a sip from the bottle of champagne.

Here many slots in the schema are matched and the model cannot resist predicting activation of the ‘ship christening’ schema. How could the model be made smarter, like a person, so that it would not come to this conclusion?

As a general rule, people are unlikely to include in their schemata knowledge of the form, “in a ship christening, the ceremony does not take place on board the ship and the dignitary does not drink from the bottle of champagne.” The problem is that there are an infinite number of things that are not true of any given type of event. Thus, it seems reasonable to assume that what is not true of a type is ‘directly stored’ only in special circumstances. For instance, one might store that a canary does not have a thick beak if this is the critical feature that distinguishes it from the otherwise very similar song sparrow.

In general, though, determining what is not true requires an inference from what is true or is believed to be true. In the case of the Princess Anne sentence, the inference chain might look like the following (Anderson et al. 1984):
1) A ship christening takes place on a platform on the dock next to the bow of the ship (from stored knowledge).

2) The dignitary playing the key role in the ceremony stands on this platform (from stored knowledge).

3) If Princess Anne were the dignitary taking the principal part in a ship christening ceremony, then she would have been standing on this platform (inference).

4) A platform on the dock next to the bow of a ship is not on the ship (inference).

5) During the ceremony, Princess Anne was not on a platform used for ship christening (inference).

6) The ceremony in which Princess Anne was participating was not a ship christening (inference).

Since Princess Anne took a sip of the champagne, the ceremony was probably not a ship christening. We will now discuss the basic problems that the representation of the “ship christening” encounters.

2.6.2.5 **Representation problems**

The basic problem with the representation of the ‘ship christening’ schema diagrammed in Figure 1 is that it is not adequate enough to support the chains of inferences required to cope with the Princess Anne sentence. One problem is that some pieces of knowledge, such as that the christening takes place on a platform under the bow of the ship, are missing. According to Anderson and Pearson et al. (1984), the above is the least of the problems with the representation.
Another problem with the representation of the ‘ship-christening’ schema is that it does not make explicit the temporal, causal, spatial, part-whole and member-set relations among the components of a ‘ship christening’ schema. For example, the representation does not include the information that the ceremony took place on a platform on the dock, next to the bow of the ship, but not on the ship, and that no mention was made that a bottle of champagne was broken to bless the ship.

Since the representation of the ‘ship christening’ schema in Figure 1 is poor, the relationships among the six components and between the individual components and the whole are arbitrary and unmotivated. According to Anderson et al. (1984), we can predict with some confidence that a person who had the knowledge, and only the knowledge on the ‘ship christening schema’, would face the following problems:

1) He would have trouble making clear inferences using similarly arbitrary additional facts about ship christening;

2) he would also have trouble learning similarly arbitrary, additional facts about ship christening;

3) he would be liable to confusion when attempting to recall and use facts about ship christening;

4) he would be quite slow to retrieve even prominent or salient facts.

The foregoing problems would become worse if the number of arbitrarily related facts that were known increased.

Schema theorists have stressed the non-arbitrary nature of knowledge. Notably, John Bransford (1983) has emphasized ‘seeing the significance’ of the parts in terms of the whole is the sine qua non of a schema-theoretic
view of comprehension. Stein and Bransford (1979) found that subjects were slightly worse at recalling core sentences such as:

a) The fat man read the sign.

When (a) was arbitrarily elaborated, as in:

b) The fat man read the sign that was 2-feet high.

In contrast, recall of the above sentence improved greatly when the core sentences were ‘precisely elaborated’, as in:

c) The fat man read the sign warning of the thin ice.

A precise elaboration clarified the significance of the concepts in the core sentence and pointed out how the concepts fit together.

Some strong evidence showing the benefits of integrating arbitrary information under the aegis of a schema has been presented by some schema theorists. Subjects learned pairs of clearly unrelated propositions attributed to member of some profession. For example:

d) The Exchequer broke the bottle.
e) The Exchequer did not delay the trip.

Then, a third proposition was learned that either permitted the subject to integrate the three sentences in terms of a common schema or which was unintegratable with the other two sentences, as is illustrated below:

f) The exchequer was nominated to christen the ship.
g) The exchequer was asked to address the demonstrators.

Anderson et al. (1984:47) state that:
subjects required fewer study opportunities to learn the third sentence (i.e. f) when it was readily integratable than when it was unintegratable. Most interesting was the fact that after all of the sentences had been learned to a high criterion of mastery, it took subjects longer to verify that sentences from the unintegratable sets were ones they had seen.

The explanation for this finding is that, in an unintegrated set, all of the propositions fan out from a single common slot representing, for instance, 'the exchequer'. This means that there is a systematic increase in the time to recognize a target or reject a foil as more facts are studied about the person and location. This is the fan effect, and it has been replicated in numerous experiments (e.g. Anderson 1976; Hayes-Roth 1977). We should note that as the number of facts associated with a concept increases, the 'fan' of network paths out of that concept increases.

Current explanations of the fan effect relate it to spreading activation. The basic idea is that when the subject is presented with a cue like 'the lawyer is in the bank,' the network nodes corresponding to the concepts, 'lawyer', 'in', and 'bank' become active and activation spreads from these nodes out through the network. Various associated nodes are activated, including the proposition node that encodes the memory of having studied that the lawyer was in the zoo. The basic assumption is that rate of response will be a function of the level of activation of that particular proposition node. This level of activation will depend on the amount of activation it receives from the concept nodes. A concept node is supposed to be limited in terms of the amount of activation it can emit. Therefore, if it is associated to more propositions less activation will be spread to any particular proposition. Thus, propositions with high-fan concepts will be responded to more slowly.
One deficit of this explanation as stated is that it does not address the issue of how subjects reject foils or, more generally, how they decide they do not know something. Note that the fan manipulation has the same effect on foil rejection as it does on target acceptance. If this spreading activation analysis of target acceptance is correct, one would think it should extend somehow to foils.

Most discussions of schema theory have stressed the use of schemata to assimilate information. Here, instead, we will discuss how a schema may be modified to accommodate new information. At this point it is necessary to know what assimilation and accommodation mean. In general, assimilation refers to the use of preexisting knowledge, or schemata, to interpret information; accommodation refers to modification of previous schemata in light of new information. Obviously, a person may change a schema when confronted with new information. For instance, a person might add to his ‘ship-christening’ schema upon being told that the platform on which the ceremony takes place is decorated with the national flag of Great Britain.

We presume that an educated person will check to make sure new information is consistent with or related to his prior knowledge, and if it is not, will either reject the new information or modify the old. We suppose that a careful person will investigate whether the source of new information comes from creditable sources or the evidence is persuasive before changing a schema. Lipson (1983) has evidence that suggests that even young readers will reject text information if it is unrelated to an already possessed interpretation that they believe to be correct.
Morris et al. (1979) presented subjects with stories concerning various participants and their actions. For some of these stories, the actions of the participants were consistent without prior knowledge of their likely characteristics (e.g. the fat man got stuck in a cave; the strong man lifted the piano), for other stories, the actions were inconsistent with, or unrelated to, our prior knowledge of the participants (e.g. the bald man got stuck in the cave; the old man lifted the piano). Recall was better for the stories with participant consistent actions. In the absence of appropriate schemata, comprehension cannot be guided by relevant knowledge. Hence, memory is generally poor under these circumstances.

2.6.2.5 Relationship between schematic knowledge and specific-instance knowledge

We turn now to the question of the relationship between the knowledge embodied in schemata and the knowledge of specific instances. Collins and Quillian (1969) postulated that the items stored in semantic memory are arranged in a giant network and connected to each other by links. A portion of such a network is shown in Figure 2. The network may be arranged in an hierarchical tree structure of sets and super-sets, the organization being similar to that revealed by the recall experiments which showed category clustering. In the Collins and Quillian model (Quillian 1968; Collins and Quillian 1969) words are defined by class membership and a property list, and the storage system generates quite specific predictions about sentence comprehension. New input sentences are mapped on to the existing knowledge structure. The model assumes that in understanding sentences, or judging them to be true or false, the time taken is determined by the distance
between the relevant nodes, so that it should be faster to verify the truth of a sentence like (A canary is a bird) in which only one link separates the nodes, than (A canary is an animal) in which two links must be traversed.

Figure 2. A portion of a hierarchically organized memory structure. (From Collins & Quillian 1969:241)

In this version of the model, properties specific to an exemplar are stored with that exemplar, and properties common to the class are stored only at the class node. This arrangement means that (A robin has a red breast) should be verified faster than (A robin can fly). The property of being red-breasted is stored at the ‘robin’ node; but the class property of being able to fly is only stored at the ‘bird’ node so that a rather cumbersome two-stage retrieval process is necessary. This makes the model economical in storage space, in the sense that a property characterizing a particular class of objects
is assumed to be stored only at the place in the hierarchy that corresponds to that class. This assumption has been called, not surprisingly, the assumption of ‘cognitive economy’. To illustrate, a property that characterizes all birds, such as the fact that they have wings, is stored only at ‘bird’. It is not stored with each of the different types of birds, even though they all typically possess wings. However, it is clearly uneconomical in retrieval time. While economy in storage may be the most important constraint in computer simulation, speed of access may be more important in humans. In subsequent versions properties may often be stored with the specific exemplars. When, for example, an individual learns that robins lay eggs before he learns that egg-laying is a general property of birds, then egg-laying will be initially stored at the robin node, and later re-duplicated at the bird node. It is not necessarily assumed the earlier specific entry must be erased when the class entry is made later.

Collins and Quillian’s model was designed for computer simulations, so that it is necessarily on a small scale, and incorporates only a small sub-set of possible relations. The major links consist of “isa” and “hasa” relations, as in (A robin is a bird) or (A robin has a red breast). Other links consist of conductive relations, disjunctive relations and a residual class of other relations which are not specified.

If information is organized into a hierarchical structure, how is it retrieved from that structure? To answer this question, Collins and Quillian presented subjects with simple statements such as:

a) A canary can sing.
b) A canary is a bird.
c) A canary is pink, or
d) A canary is a fish.

The subjects had to decide whether the statement was true or false, and their reaction time was measured. According to Collins and Quillian model, it is easier to verify that 'A canary is yellow' than it is to verify that 'a canary has skin.' This is due to the fact that 'yellowness' has been directly stored with 'canary', whereas 'skin' has been stored with animals.

One must therefore 'search' longer in order to verify that a canary has skin. Similarly, it may be easier to verify that 'nurse' and 'doctor' are both words than to verify that 'nurse' and 'butter' are both words. Typical, theoretical explanations assert that the former two words are stored closely together in a semantic memory, hence, 'spreading activation' can more readily occur (Loftus et al. 1975).

Current theories of concepts postulate the information represented in specific concepts, such as robin, overlaps with the information in general concepts such as bird (Smith and Medin 1981). In fact, robin is a 'good' example of a bird since the overlap is large, whereas 'penguin' is a 'poor' example because the overlap is small.

What is the best way in a theory of knowledge representations to cope with exceptional cases? According to Anderson and Pearson (1984:50), "people probably place an implicit hedge on all the facts they think they know, of the form, 'This proposition is true in only normal states of the world,' (see Section 2.6.2.6). At the very least, such a hedge helps fend off philosophers who ask questions like, "If a dog is a four-legged animal, what is a creature that has three legs but is otherwise a dog?"
The real, theoretical difficulty, however, is not with abnormal instances such as dogs with three legs and hens that do not lay eggs, but with mundane exceptions: most birds fly, however some, such as penguins, do not; canaries are often domesticated, however many more are wild; cups tend to be used to hold fluids, but they can be used to hold solids.

The classical issue in concept analysis, according to Anderson and Pearson (1984: 50), "was to specify the features that were individually necessary and jointly sufficient before a thing could rightly be called an instance of a concept." For instance, following Katz (1972), some of the essential features of bachelor are said to be (human), (male), and (unmarried). These are three of its features. The word 'wife', on the other hand, has one feature in common with bachelor, (human), but two that are different, (female) and (married). If a feature is essential, then all instances of the concept show that feature. However, a feature that all instances possess, may not be an essential one. It may be safe to suppose that every bachelor has ears, but (having ears) is not an essential feature. If an unmarried, human male without ears did turn up, no one would be reluctant to call him a bachelor. In contrast, calling a married man a bachelor would be considered a violation of selection restrictions, because 'bachelor' includes the feature (unmarried). Thus, having ears is a characteristic feature, while (unmarried) is an essential feature, even though, by hypothesis, every bachelor displays both features. When a feature appears in more than one word, the two words can be said to have something in common. A bachelor and a wife are both (human).

Anderson et al. (1984:51) state that "the idea that concepts or schemata (there is no principled distinction between the two) have necessary features
has come under lethal attack in recent years.” Wittgenstein (1953) noticed that it can be difficult to specify the defining (essential) features of most ordinary concepts. Putnam’s (1975) notion of ordinary concepts seems to correspond to a schematic model defined in terms of default values. The meaning of lemon, for instance, might be decomposed into such characteristics as round, yellow, having peel, have a tart taste, and so on. Yet none of these components is essential: a green lemon is still a lemon, a sweet peel-less lemon is still a lemon. Putnam has shown that features of ordinary concepts that might seem to be necessary are really only characteristic.

2.6.2.7 Evaluation of the Collins and Quillian model

The cognitive economy assumption fell on hard times with the experimental results of Conrad (1972). Collins and Quillian’s (1972:118) assumption was:

Information true of birds in general (e.g., can fly, have wings and have feathers) need not be stored with the memory node for each separate kind of bird. Instead, the fact that ‘A canary can fly’ can be inferred by finding that a canary is a bird and that birds can fly. By storing generalizations in this way, the amount of space required for storage is minimized.

Conrad tested this assumption by choosing level 3 properties and varying the level of the subject of the statement. (Recall that Collins and Quillian used level 0 subjects, and varied the level of the property). For example, she used ‘A shark can move, A fish can move and An animal can move’ which use increasingly higher-level subjects. If ‘can move’ is stored only with animal, it should take subjects longer to verify. ‘A fish can move’ than ‘An animal can move’ and longer still to verify that ‘A shark can move’. Conrad failed
to find a difference in reaction times that corresponded to the number of levels separating a subject and a property.

A further problem for the Collins and Quillian model is the typicality effect. It is difficult for them to account for observed differences in reaction times to judge sentences of the form "An S (subject) is a P (predicate)" for different instances of S when the objective semantic distance is equal. Why is it easier to agree that a robin is a bird, than that a flycatcher or an osprey is a bird? Unfamiliar or atypical examples are more difficult, so either the frequency principle or a typicality principle must be invoked to explain these findings: semantic distance on the network is not the only determinant of retrieval time, and some paths are stronger or faster than others. Originally the model made the assumption that the time to move between any two nodes should be equal, constant and additive, but a model in which the activation of associative paths is all-or-none is counter-intuitive.

One final difficulty with the model arises from our natural language use of "hedges." Hedges are linguistic modifiers that are used to qualify statements that we make about things we encounter in the world. "Strictly speaking" and "technically speaking" are hedges. "Technically speaking, a chicken is a bird" illustrates the use of a hedge in a sentence. It means something like "A chicken isn’t a very good example of a bird, but it actually is a bird." "Loosely speaking, a bat is a bird" is another hedge, which means something akin to "A bat is a little like a bird, but it is not really a bird." The bat category and the bird category have no members in common, no overlap, no intersection.
In conclusion then, it seems promising to explore models of memory of schema, in which multiple episodic memories are retrieved and schemata are computed by combining them. Interestingly, it is quite possible that this is what Bartlett had in mind in *Remembering* (Bartlett 1932). In a little quoted passage at the end of Chapter X, "A Theory of Remembering" Bartlett (1932:214) writes "(This theory) merely jumbles together innumerable traces and calls them 'schemata'... ." To be sure this passage is a self-caricature but it is not the trace concept nor their means of combination that Bartlett goes on to defend himself against (q.v.).

As the number of studies blithely employing the schema concept proliferates daily, and as what is at stake in its usage is rarely examined, Bartlett's (1932:201) own complaint is worth noting: "I strongly dislike the term 'schema'. It is at once too definite and too sketchy. The word is already widely used in controversial, psychological writing to refer generally to any rather vaguely outlined theory." With the failure of story grammars to account for the structure of discourse, there is an obvious alternative hypothesis: a necessary and sufficient condition for discourse to be coherent, as opposed to a random sequence of sentences, is that it is possible to construct a single mental model from it (Johnson-Laird 1980); Garnham, Oakhill and Johnson-Laird (1982). This will lead us to the discussion of mental models.

2.6.3 Mental models

The reader may wonder what exactly mental models comprise, and how they differ from other postulated forms of mental representations. According to Johnson-Laird (1983:397), "schemata and prototypes, for example, appear
to be special cases of procedures for constructing mental models, but we cannot be certain until we have an adequate explanatory theory that specifies the set of all possible models, and comparable theories from the proponents of schemata and prototypes. At present, no complete account can be given - and indeed such an account would be premature since mental models are supposed to be in the people’s heads.” Nevertheless, there are three immediate constraints on possible models. The first follows from the doctrine of functionalism (see Section 2.2.2):

1) Mental models, and the machinery for constructing and interpreting them, are computable. The second constraint follows from the assumption that the brain is a finite organism: 2) A mental model must be finite in size and cannot directly represent an infinite domain. The third constraint arises from the primary function of mental models, which is to represent states of affairs. Since the number of states of affairs that can be represented is infinite, it follows that models must be built out of more basic constituents: 3) A mental model is constructed from tokens arranged in a particular structure to represent a state of affairs.

Now the plan for this part is as follows: First, we will survey Craik’s mental models. Second, we will outline different approaches to mental models. Third, we will explore Johnson-Laird’s typical representative of the cognitive science approach. Fourth, we will consider the theoretical framework of mental models. Fifth, we will explore theories of text processing and mental models. Sixth, we will discuss the rejection of lexical decomposition theory. Finally, we will discuss syllogistic inferences in relation to mental models.
2.6.3.1 Craik’s mental models

An early attempt to characterize the notion of a ‘mental model’ was Craik’s (1943) discussion of a mental model as a basis for explanation and understanding. Craik proposes that human beings are processors of information. He also suggests three distinct processes in reasoning.

1) A translation of some external processes into an internal representation in terms of words, numbers, or other symbols.

2) The derivation of other symbols from them by some sort of inferential process.

3) A ‘retranslation’ of these symbols into actions, or at least a recognition of the correspondence between these symbols and external events, as in realizing that a prediction is fulfilled.

A model has, in Craik’s phrase, a similar ‘relation structure’ to the process it models, and hence it can be useful explanatorily; a simulation only mimics the phenomenon without relying on a similar underlying relation structure. Many of the models in people’s minds are little more than high-grade simulations, but they are none the less useful, provided that the picture is accurate.

2.6.3.2 Recent approaches to ‘mental models’

Since Craik’s early use of the term ‘model’ for cognitive representations, the theme has been considered from two different points of view. Mental models are the bridge between the work environment to be controlled and the mental processes underlying this control. Consequently, a study can be approached by an investigation of human mental processes, as well as by an examination of work requirements, and these approaches result in different
concepts. The approach from the psychological point of view quite naturally focuses on the explanation of human performance, which often will be influenced by the AI related cognitive science. The focus of this approach will be on the nature and form of the mental model, together with its role in human reasoning and its relation to the 'mind'. Consequently, the criterion of success will often be whether a theory can be phrased explicitly in procedural form for simulation on a computer (Johnson-Laird 1983). Since we are interested in human mental processes in relation to natural language, we shall exclude other approaches and concentrate on Johnson-Laird's mental models.

2.6.3.3 Theoretical framework of mental models

Johnson-Laird's (1983) mental models are a typical representation of the cognitive science approach. He has made a claim about mental representation that applies at two distinct levels. At the first level, human beings understand the world by constructing working models of it in their minds. Since these models are incomplete, they are simpler than the entities they represent. In consequence, models contain elements that are only imitations of reality.

At the second level, since cognitive scientists aim to understand the human mind, they must construct a working model. Like other models, however, its utility is not improved by embodying more than a certain amount of knowledge. A psychological theory of mental models should be - in Chomsky's 1965) terms - explanatorily adequate. It must list the elements and operations from which mental models can be composed. Hence such a theory would provide a potential, though abstract, account of how children acquire mental models. Some mental models may be highly artificial, e.g.,
models governing domains of pure mathematics. Other models, however, are presumably natural, acquired without explicit instruction, and used by everyone in the course of such processes as inference and language comprehension.

Johnson-Laird has put forward a model of how we interpret comprehension which does not appeal to stereotypic knowledge or fixed storage systems. He distinguishes three major kinds of mental representations: mental models which are structural analogues of the world, propositional representations which are strings of symbols that correspond to natural language, and images which are the perceptual correlates of models for a particular point of view. Basically, he categorizes the form of representations rather than their content - which corresponds with his discussion from the point of view of modelling the reasoning mechanisms.

Johnson-Laird (1983:406) derives his concepts of mental models from a discussion of basic reasoning procedures, (e.g., syllogistic or propositional reasoning which will be discussed in Section 2.6.3.4.7). He takes the position that “a natural mental model of discourse has a structure that corresponds directly to the structure of the state of affairs that the discourse describes.”

The structure that Johnson-Laird (1983:406) has in mind appears to correspond directly to the physical world. He claims that the nature of mental models “owe their origin to the evolution of perceptual ability in organisms with nervous system.”

Referring to David Marr’s (1982) work, he concludes:
It is therefore safe to assume that a primary source of mental models - three dimensional kinematic models of the world - is perception (ibid. 1983:406)

Mental models can take other forms and serve other purposes, and, in particular, they can be used in interpreting language and in making inferences. These roles are a natural extension of their perceptual function: “if the perception of the world is model-based, then discourse about the world must be model-based, and the ability to make inferences from what we perceive enables us to anticipate even quite remote events. Discourse, however, may be about fictitious or imaginary worlds, and hence our propensity to interpret it by building models of the state of affairs it describes free us from the fetters of perceptual reality” (ibid. 1983:407).

Thus, Johnson-Laird’s mental models basically are representations of the context of reasoning, the ‘background’ (Searle 1981). The comprehension of discourse depends on three main levels of representation: first, there is a phonemic (or graphemic) representation that encodes the sounds (or letters) of an utterance; second, there is a propositional representation, which is close to the surface form of the utterance; third, there is a mental model. The mental model is built on the basis of the truth conditions of the propositions expressed by the sentences in the discourse. According to Johnson-Laird (1983:407),

the meaning of a sentence, according to the principle of compositionality, is a function of the meanings of its words and the syntactic relations between them. Meaning, however, is an abstract notion that reflects only what is determined by a knowledge of the language. The significance of an utterance goes beyond meaning because it depends on recovering referents and some minimal idea of the speaker’s intentions. The truth conditions of the proposition expressed
by a sentence therefore depend on the meaning of the sentence, its context of utterance (as represented in the current mental model), and the implicit inferences that it triggers from background knowledge.

If a mental model is based on discourse, there is a problem. Discourse is nearly always indeterminate and in accord with many different states of affairs. It is natural to assume, however, that any mental representation should be as economical as possible, and this assumption leads to the following constraint on models of discourse: a single mental model represents a description of a single state of affairs, even if the description is incomplete.

The notion of economy of representation constrains what is possible. In the case of an assertion such as: 'All the fathers are liars' it is economical to represent the fact that there may be liars who are not fathers, which indicates that such liars may, or may not, exist.

Therefore, Johnson-Laird's mental models are representations of the context or background by which propositional reasoning is possible, i.e., his 'mental models' include the intuitive knowledge which escapes the representation by the explicit formulation in terms of the semantic nets of the AI community.

In this respect, Johnson-Laird continues a well established tradition. The need for a representation of the context for understanding language, as well as for control of skilled movements has long been discussed in the philosophical literature. Polanyi (1967) has made thorough studies of the importance of 'tacit' knowledge. Mackie (1975) found it necessary to introduce the notion of a 'field' as the representation of the context in his efforts to define causality in common sense descriptions of event sequences.
Recently, Searle (1981:51) has argued the importance of the ‘background’ which in his terms is the ‘non-representational’ something underlying mental representations, ‘intentional states’. Mental representations form a network of intentional states, and the semantic content of a state depends on its location in this network. However, “anyone who tries seriously to follow out the threads in the network will eventually reach a bedrock of mental capacities that do not themselves exist in intentional states (representations), but nonetheless form the preconditions for the functioning of intentional states. His arguments for the existence of the background is very analogous to the present arguments for the internal world model.” The background is necessary to account for the fact that the literal meaning of a sentence is not a context-free notion, for understanding of metaphors, and to explain physical skills, as for instance those needed in mountaineering, (see Section 2.6.3).

2.6.3.4 Characteristics of mental models

Although mental models are an old idea that goes back at least to Craig’s (1943) programmatic work, they are, in comparison to current psychological theories of meaning, a new sort of representation with a new sort of form, and in this section we are going to discuss how a constraint on their structure distinguishes them from other forms of representation postulated by theories of meaning. The constraint derives, in part, from the notion that representations should be economical, and hence that every element in a mental model should play a symbolic role. There should be no aspects of structure that are lacking in significance. This principle, together with our knowledge that all our world depends on mental models, leads to the following constraint:
The structures of mental models are identical to the structures of the states of affairs, whether perceived or conceived, that the models represent (Johnson-Laird 1983:419).

Mental models may be dynamic and represent a sequence of events: they may take on an even higher number of dimensions in the case of certain gifted individuals. But a propositional representation, as Simon (1972) points out: "can be scanned only in these directions that have been encoded in the representation."

There is clearly a relation between images and mental models, and Johnson-Laird assumes that images correspond to views: as a result either of perception or imagination, they represent the perceptible features of the corresponding real-world objects.

A characteristic difference in the contents of mental models, images, and propositional representations concerns their specificity. Models, like images, are highly specific - a characteristic which has often drawn a comment from philosophers. We cannot form an image of a triangle in general but only of a specific triangle. Hence, if we reason on the basis of a model or images we must be sure that our conclusion goes beyond the specific instance we consider. Johnson-Laird (1983:157) points out:

Although a model must be specific, it does not follow that it cannot be used to represent a general class of entities. The interpretation of a specific model depends upon a variety of interpretative processes, and they may treat the model as no more than a representative sample from a larger set.

Once again, the function of the model cannot be ignored: a specification of structure and content must always be supplemented by an account of the
processes using the model if one is to formulate what the model represents. However, since language is inherently vague, the content of models usually embodies some arbitrary assumptions, whereas there is no such need in the construction of propositional representations.

Pylyshyn (1973:15) has pointed out a major difference between images and propositional representations:

It would quite be permissible...to have a (propositional) mental representation of two objects with a relation between them such as ‘besides’. Such a representation need not contain a more specific spatial relation such as ‘to the left of’ or ‘to the right of’. It would seem an unreasonable use of the word ‘image’ to speak of an image of two objects side by side, without the relation between them being either ‘to the left of’ or ‘to the right of’.

This distinction is useful because of its empirical consequences: a propositional representation should be able to cope with both determinate and indeterminate spatial relations with equal ease, whereas a mental model should handle determinate relations more readily than indeterminate ones. According to Johnson-Laird (1983:158),

the only way to build a model of one object beside another that is neutral with respect to left and right would be to build a set of such analogue representations to the various possibilities. A picture may be worth a thousand words, but a proposition is worth an infinity of pictures.
2.6.3.4.1 **Theories of text processing and mental models**

We will make a distinction between the two different functions a particular proposition can serve in a text recall task. The first function will be called its coherence function. A proposition can be thought of as a relation followed by a series of arguments (Kintsch et al. 1973). The second function will be called plausibility. Coherence must be distinguished from plausibility, since a discourse may be perfectly coherent yet recount a bizarre sequence of events. The possibility of constructing a single mental model depends on the main factors of co-reference and consistence. Each sentence in a discourse must refer, explicitly and implicitly, to an entity referred to in another sentence, since only this condition makes it possible to represent the sentences in a single integrated model. Plausibility depends on the possibility of interpreting the discourse in an appropriate temporal, spatial, causal, and intentional framework - a framework that, as Miller and Johnson-Laird (1976) argued, “cross-classifies all sentence fields.”

We have drawn a distinction between the coherence and the plausibility functions of text propositions. This distinction was required because certain aspects of the data were explainable in terms of one function but not the other. That the two functions explain different aspects of the data causes problems for the earlier theory of Kintsch and van Dijk (1978). They claim that discourse is interpreted propositionally. Thus, the following extract:

A series of violent, bloody encounters between police and Black Panther Party members punctuated the early summer days of 1969. Soon after, a group of Black students I teach at California State College, Los Angeles, who were members of the Panther Party, began to complain of continuous harassment by law enforcement officers
can be represented as a set of separate propositions, written in predicate-argument notation:

1) (SERIES, ENCOUNTER)
2) (VIOLENT, ENCOUNTER)
3) BLOODY, ENCOUNTER)
4) (BETWEEN, ENCOUNTER, POLICE, BLACK PANTHER)
5) (TIME: IN, ENCOUNTER, SUMMER)
6) (EARLY, SUMMER)
7) (TIME: IN, SUMMER, 1969)

The first stage in interpreting the text is to establish what Kintsch and van Dijk call its 'microstructure': the referential links between propositions. For these authors, people construct a text-base while reading, according to the principles of argument overlap. In addition, 'macro-rules' are applied to the text-base to construct a 'macro-representation' of the text's theme. We see nothing wrong, in principle, with the notion of a 'text-base'. However, we see problems with specifying powerful enough macro-rules which can operate on the text-base to construct a theme representation. Those propositions capturing the theme of the text and those of prominent coherence function need not necessarily coincide. See also Johnson-Laird (1983) for a similar argument.

The later theory of van Dijk and Kintsch (1983) makes a sharp distinction between the propositional text-base, on the one hand, and the situational model on the other. According to van Dijk and Kintsch (1983), readers construct a model of the situation described by the text. This model is not necessarily propositional in nature, (see also Anderson 1983). These proposals are similar to those of Johnson-Laird (1983), who suggests that the theme of a text might be embodied as a mental model. The current data
are consistent with these theories of text processing and representation. We seem to require at least two levels of representation (text-base and theme model). This view opposes most of those schema theories of text representation called, collectively, story grammars, (see Rumelhart 1975; Thorndyke 1977). For these theories, a text’s theme is supposed to be embodied in a hierarchical representation of text propositions (but see Mandler and Johnson 1977, and Johnson and Mandler 1980 for a dissenting view). The major drawback of Kintsch and van Dijk’s theory is its reliance on a single propositional format for the representation of both microstructure and macrostructure. According to Johnson-Laird (1983:380), “the first point at which this format effectively destroys the credibility of the theory concerns co-reference. It simply will not do to assume that if two arguments overlap, they are co-referential. The principle works in the example: (SERIES, ENCOUNTERS) and (VIOLENT, ENCOUNTER) are co-referential, but there are many cases where it would fail disastrously.”

Let us consider the following example:

‘Anne’s husband died in 1956. She married again in 1970. Her husband now lives in Germany.’ This example contains two propositions about Anne’s husband, but despite this overlap in argument, they are obviously not co-referential. This failure of the theory is a symptom of an ultimately fatal debility. The real difficulty is that two propositional representations that have no overlap in the argument can nevertheless be co-referential - for example, the prime minister, John, Mr Major, and that man, may all refer to the same individual.

According to Johnson-Laird (1983:381),
the distinction between a representation of the sense of a text and a representation of its significance is no mere philosophical trifle. It is crucial to the way in which people understand and recall discourse, a point that has been demonstrated by Alan Garnham (1981).

2.6.3.4.2 Theory of Lexical decomposition

Johnson-Laird (1981a) argues against an approach to the meaning of sentences which depends on a decomposition of lexical meaning having to take place. An example of a decomposition view is that of Katz and Fodor (1963) where the meaning of 'woman' is decomposed into 'human', 'female', and 'adult'. Johnson-Laird claims that we can decompose word-meaning, but that we do not usually do so in our normal understanding of sentences. He suggests that a sentence like (a) receives an immediate interpretation which makes sense to most people as praise for the novel.

a) This novel fills a much needed gap.

Brown et al. (1983:251) point out: "Upon further analysis, however, we can work out that the sentence is actually saying that it is the gap, not the novel, which is needed." To give an explanation to this everyday non-analytic process of comprehension, Johnson-Laird (1981a:122) suggests that we employ words in a sentence as "cues to build a familiar mental model." Although mental models are not described as stereotypic or fixed storage systems, "the term 'familiar' is rather smuggled into the description without any account of what 'being familiar' is based on" (op.cit. 1983:251). There are, moreover, theoretical problems with the notion of an internal model, which Johnson-Laird acknowledges (1981a:117). However, he notes that experimental evidence on instantiation (Anderson et al. 1976 and Garnham
1979), supports a view of understanding by means of mental models, rather than via the decomposition of word-meaning.

2.6.3.4.3 **Instantiation**

R.C. Anderson and his associates have shown experimentally that situation narrows down the interpretation of words (see Section 2.5.2). When subjects are presented with a sentence such as (b) below, and later asked to recall it, their memory is better when they are given a more specific term such as ‘shark’ as a recall cue than when they are given ‘fish’.

b) The fish attacked the swimmer.

Johnson-Laird accounts for this finding by suggesting that readers interpreted the sentence by constructing a mental model in which the relevant event was represented. Brown et al. (1983:251) comment:

> We should note that this is, at least, a text-specific, since it is very easy to imagine texts in which the term ‘fish’ would not bring ‘shark’ to mind at all.

Furthermore, readers make implicit inferences about events that are being referred to. They infer that what attacked the swimmer was a shark; and hence the word ‘shark’ provides a better cue to help them recall the sentence than the word ‘fish’. According to Johnson-Laird (1983:239),

> the advantage of this explanation over the ‘instantiation’ hypothesis is that it also accounts for the well-known findings of Bransford and his colleagues, e.g. Bransford and McCarrell (1975), which show that subjects in memory experiments go beyond what is linguistically given.
If, for instance, subjects are presented with sentence (c) below, they readily assume that the sentence asserted that the fish swam beneath the log.

c) ‘Three turtles rested on a floating log and a fish swam beneath them’.

This sentence, according to Johnson-Laird (1983:239),

cannot be explained on the grounds that a more specific meaning was instantiated, but it is readily accounted for by assuming that a mental model of the relevant state of affairs was constructed to which the alternative sentence equally applies.

The above quotation can be considered as a rejection of the ‘instantiation hypothesis’, which is one of the themes of schema theory (see Section 2.6.2.2).

2.6.3.4.4 Inference

An inference is a process of thought that leads from one set of propositions to another. An inference is valid if it is impossible for its premises to be true and its conclusion to be false. Consider the following inference:

d) The ring is in the box.
The box is in the parcel.
Therefore, the ring is in the parcel.

This inference is valid. The psychological problem is to specify the nature of the mental processes that make it possible for us to recognize the truth of the conclusion given, the truth of the premises.

The same strategy, however, runs into difficulties with other spatial inferences. The following inference is valid.
e) Mr. Major is at his office.
   His office is at 10 Downing Street.
   Therefore, Mr. Major is at 10 Downing Street.

But an inference of seemingly the same form is not valid.

f) Mr. Major is at his desk.
   His desk is at the window.
   Therefore, Mr. Major is at the window.

According to Johnson-Laird, one possible defence is to argue that the expression ‘at’ designates two different relations, one transitive, one not. However, this interpretation violates the normal criteria for ambiguity. A term is generally considered to be ambiguous, following Zwicky and Sadock (1973), if it generates nonsensical constructions based on conjunction reduction.

Moreover, consider the following inference which faces a more serious difficulty:

g) Nick is on Jack’s right.
   Jack is on David’s right
   Therefore, Nick is on David’s right.

When the premises are true, the truth of the conclusion depends upon how Nick, Jack and David are seated. Suppose, for example, that there is a slightly large number of individuals seated round a circular table; then it is possible for the inference above to generate a true conclusion, but the one below to be false.

h) Nick is on Jack’s right.
   Jack is on David’s right.
David is on Allen’s right.
Therefore, Nick is on Allen’s right.

Johnson-Laird (1983:241) points out:

In fact, the extent of the transitivity of the relation varies as a function of the seating arrangements up to any arbitrary number of individuals, and would accordingly require an infinite number of different meanings in order to cope with each possible extent from zero upwards. The only way in which to accommodate this requirement within a meaning-postulate theory is to propose higher-order postulates that generate specific meaning postulates as a function of information about seating arrangements, or whatever feature of the world is relevant. But such an assumption plainly violates the psychological autonomy of intensions.

2.6.3.4.5 Ambiguity of the situation

We contrast the use of situations in semantics with a simple ‘world’ account in which a sentence is true if it corresponds to the world. Consider the sentence ‘John took the drugs.’ On the simple world theory, this would be ambiguous, since there are two possible senses of ‘take’. But this sentence would probably be unambiguous when coupled with the situation that it describes. For example, interpretation of the sentence with respect to a ‘doctor-visit’ situation and a ‘chemistry-robbery’ situation produce quite different, but unambiguous readings.

In fact, the striking feature of natural language is that, grammatical function words apart, the more frequently used a word is, the more likely it is to be ambiguous (see Miller 1951). The processes that determine the intended meaning of a word are extremely efficient. They readily bring to mind the appropriate sense of a word from the context in which it occurs. Indeed, one has the impression that it is more difficult to think of all the different
meanings of a word presented in isolation than to retrieve a relevant sense when the word takes place in context.

The theory of decomposition, Katz and Fodor (1963), uses selectional restrictions, i.e., constraints that one sense of a word places on the meaning of other words with which it occurs. However, an interaction between meaning and reference is apparent in the way in which disambiguation actually works. An assertion such as: ‘They are handsome’ constrains the referent of ‘they’, not its meaning. Hence, if we know that ‘handsome’ is intended to mean ‘generous’, then we will infer that ‘they’ refers to acts of some kind. Of course, if instead we happen to know what ‘they’ refers to, then we will have no difficulty in determining in what meaning to take the word ‘handsome’. It is nonsense to assume that the meaning of ‘they’ is affected by a selectional restriction: what changes is its referent, and, in general, what have to be constrained are the referents of expressions.

According to Johnson-Laird (1983:234), “the notion that it is possible to formulate exhaustive and definitive selectional restrictions on the different senses of words turns out to be a fiction.” Consider the following sentence.

i) Collins and Stevens were the first to fly X from New York to London.

One has to find the constraints that are on the categories of things that X could refer to. The most obvious category is a vehicle of some kind.

j) Collins and Stevens were the first to fly a plane from New York to London.
However, the above sentence takes on a different sense if another type of vehicle is substituted:

k) Collins and Stevens were the first to fly a bicycle from New York to London.

These selectional restrictions fail to correct constraints of the different meanings of 'fly'. Consider the sentence:

l) 'I saw the Azores flying the Atlantic.'

This sentence is open to the following interpretations according to the proposed selectional restrictions:

m) As I was flying over the Atlantic, I saw the Azores.

n) I saw the Azores as they were flying over the Atlantic.

The second of these interpretations is nonsensical. No normal human being is likely to make such an interpretation, but how is it that one knows at once that the Azores were not flying through the air?

2.6.3.4.6 Model-theoretic semantics

Johnson-Laird (1980) appeals to the ideas of model-theoretic semantics in support of his notion of mental models. In formal semantics, a model structure can be employed to represent a possible state of affairs at a particular point of time and space which can correspond to the 'meaning' of a sentence. We shall not describe formal model-theory in any greater detail here, except to point out that it is not intended as a psychological description of meaning or understanding. As Johnson-Laird observes, model theory relates language to the real world, but not by way of the human mind. What
a psychologically interesting model-theory has to be concerned with is that "in so far as natural language relates to the world, it does so through the mind’s innate ability to construct models of reality" (Johnson-Laird 1981b:141). These models of reality are, of course, representations of the way the world is. They may differ from individual to individual. This is nearly always the case when such models are the result of a reader’s comprehension of discourse. According to Johnson-Laird (1981b:139),

a major function of language is to enable one person to have another’s experience of the world by proxy: instead of a direct apprehension of a state of affairs, the listener constructs a model of them based on a speaker’s remarks.

As a simple example, Johnson-Laird and Garnham (1979) show that the interpretation of definite description is not controlled by uniqueness in the world, but uniqueness in the local model constructed for the particular discourse. Consider the sentence ‘The waiter brought the soup.’ On the simple world theory, this sentence would be true if there is one waiter in the world who brought the soup. So the sentence is likely to be false, or may be undefined, because the definite description ‘the waiter’ does not uniquely identify an individual.

2.6.3.4.7 Syllogistic inference

A theory of syllogistic inference is based on the assumption that reasoners construct integrated mental models of the premises. These models have an important structural property deriving from a constraint on the set of possible mental models: a natural mental model of discourse has a structure that corresponds directly to the structure of the state of affairs that the discourse describes, (see Section 2.6.3.3). For example, a premise such as:
o) All of the artists are teachers

describes a state of affairs in which one finite set of individuals is mapped into another.

The suggestion that understanding takes place by means of the construction of mental models leads Johnson-Laird to a view of comprehension and inference which, is quite different from those we have already considered. In this view, "there is a level of comprehension which is based on the formation of an initial mental model which, as we noted with example (a) need not result from any elaboration of the text encountered. There are, however, other levels of comprehension of the mental model constructed which can lead to the abandonment of the initial model and the construction of another. In this process of manipulation, there are no rules of inference, there are only procedures for testing the constructed mental model to find out if it fits the state of affairs described by the text" (Brown et al. 1983:252-253). As an illustration of this process, Johnson-Laird employs an example of the type used in discussion of syllogistic inference:

p) All of the artists are teachers
   All of the poets are teachers

Given the pair of premises in (p), we can construct a model with, for example, six persons in a room and assign the roles of poet and teacher, artist and chemist to those individuals in a way that fits the state of affairs described by the two sentences in (p). One model which comes to mind is that, for all six individuals, the following representation is true:

In short, a tableau of the following sort is set up:

q) artist = teacher
There are three actors playing the joint roles, and two actors taking the part of the teachers who are not artists - the parentheses designate a directorial device establishing that the latter may or may not exist. The tableau is easily extended to accommodate the second premise:

\[ \text{r)} \text{ artist } = \text{ poet } = \text{ teacher} \]

According to this model, the conclusion that 'all of the artists are teachers' or 'all of the poets are artists' is justified. It is possible to test the model in \( r \) and find that it is not necessarily a correct representation. By manipulating the model, it is possible to arrive at a representation \( s \) in which (1) is true for three individuals and (2) is true for the other three.

\[ \text{s)} \]
\[1. \text{ artist } = \text{ teacher} \]
\[2. \text{ poet } = \text{ teacher} \]

On the basis of \( s \), one might conclude that 'none of the artists are teachers.' On further manipulation, one might arrive at a model \( t \) in which (1) is true for four individuals, (2) is true for one, and (3) is true for the other one.

\[ \text{t)} \]
\[1. \text{ artist } = \text{ teacher } = \text{ poet} \]
\[2. \text{ artist } = \text{ teacher} \]
\[3. \text{ poet } = \text{ teacher} \]

So, one could conclude that 'some of the artists are teachers'.
It should be apparent from the consideration of the sentences in (o) how Johnson-Laird intends us to understand his claim that, in the mental model approach to understanding, there are no rules of inference. While the formulae in (p), (q), (r), (s) and (t) are normally considered inferences from (o), in Johnson-Laird's analysis, they are different versions of a mental model for the text. "That is, what we normally describe as a process of inferring one state of affairs on the basis of another is presented in this alternative view as building a model of one state of affairs, or building another model from another state of affairs. From a discourse analyst's point of view, this distinction is of little practical significance" (Brown et al. 1983: 254).

Johnson-Laird's view of discourse understanding via mental models is never described in terms of stereotypical elements found in 'frames' or the sets of characteristic events of a narrative 'schema'. Brown et al. (1983:254) state that "possibly for this reason, the practical details of mental models remain elusive."

When we construct a mental model for a piece of discourse, we use some of our prior knowledge and experience to get a 'picture' of the state of affairs described by the discourse. How is it that we do not employ all of our prior knowledge? "Putting this question in more specific terms, will a mental model theory predict that, in asking subjects to recall a sentence like 'The fish attacked the swimmer', not only is 'shark' a better cue than 'fish', but that 'blood' or 'teeth' or 'ocean' or 'bite' or 'splash' are also better? At the moment we have no answers to these questions" (Brown et al. 1983:255).

The theory of mental models actually predicts massively detailed mental representations of any event encountered, whether in life or via text.
Admittedly, one of the advantages of the concept of a mental model is that it allows for a richer representation than the rather bare outlines of the conventional schema (Johnson-Laird 1983).

2.6.4 Models of reading (comprehension)

de Beaugrande (1981) sets out some pre-requisite criteria which a comprehensive model has to meet so that it can be applicable to different types of texts and reading tasks. These criteria are selected not because they are logically unified in any axiomatic sense, but because they are operationally compelling for the model designer who strives towards a functional, diversified theory of reading. According to de Beaugrande (1981:263), some of the criteria have been expressly addressed in the literature... Others were postulated on the same grounds as any theory: they are useful in promoting functional consensus by allowing diverse domains to be characterized in a common descriptive idiom. (for a detailed discussion of these criteria for models of reading, refer to de Beaugrande 1981; de Beaugrande and Colby 1979; de Beaugrande and Dressler 1981).

Some of these characteristics include the following. I have dealt briefly with each in turn: for further detail: see (de Beaugrande 1981; de Beaugrande and Colby 1979; Craik and Tulving 1975).

1) Processor contribution

In terms of the reader’s application of ‘stored knowledge’, and ‘prior expectations’, two models can be distinguished. Bottom-up models view the processor as being limited to the analysis of surface structures (e.g., letters, words, phrases, or sentences). In this case, the processor reconstructs the
author's intended meaning for a text from the smallest textual units at the bottom, that is, the reader works out the meaning of words and structures of a sentence and builds up a 'composite' meaning for the sentence (this approach is therefore 'data-driven'). On the other hand, 'top-down' models see the processor start with a general idea of what should be in the text; that is, the reader reconstructs meaning from written language, but he uses cues from three levels of language to predict meaning, and confirms those predictions by relating them to his language background.

The principle that every input is mapped against existing schema results, then, in these two basic modes of information processing:

a) bottom-up processing; b) top-down processing.

Our processing of incoming discourse can in fact be thought of, most sensibly, as the combination of both these two activities. In one part of this more complex view of processing, we work out (as we have seen) the meaning of the words and structures of a sentence and build up a composite meaning. At the same time, we are predicting, on the basis of the context plus the composite meaning of the sentences already processed, what the next sentence is most likely to mean (i.e., top-down processing). This occurs as the system makes general predictions based on higher level, general schemata and searches the input for information to fit into those partially satisfied, higher order schemata. 'Top-down' processing is, therefore, often described as being 'conceptually-driven'.

Furthermore, schemata have been shown to guide the comprehension not only of events and scenes and activities as suggested by Rumelhart, but also the interpretation of the linguistic representation of these events, scenes and
activities (Carrell 1983b and Brown 1983). It is this aspect of schema theory that is relevant to those of us interested in processing of linguistic texts and in comparing processing when reading English as a foreign language.

Rumelhart (1977) maintains that ‘top-down’ and ‘bottom-up’ processing occur at all levels of analysis simultaneously. The data that are needed to fill out the schemata become available through ‘bottom-up’ processing; top-down processing facilitates the assimilation of the data if they are consistent with the listener’s or reader’s conceptual set. According to Rumelhart, ‘bottom-up’ processing ensures the listener’s or reader’s sensitivity to novel information, whereas ‘top-down’ processing helps the reader to resolve ambiguities and to select between alternative possible interpretation of the incoming data.

2) **Memory storage: abstraction, construction or reconstruction**

de Beaugrande (1981) identifies three approaches in terms of the effect of memory on text comprehension. The abstractive approach maintains that a reader only extracts ‘features’ from the presented material and stores them away. These features are activated at the time of recall. The constructive approach views the reader’s role as integrating the stored knowledge into the text, and hence expanding and modifying the experience received by the memory. The modified version of experience is presented when the material is recalled. The third approach, the reconstructive, stipulates further contributions from the processor, even after the experience is retained in memory. The current state of storage is assembled by a ‘general organizational pattern’ at the time of recall.
3) **Utilisation**

Some models require that the processor make use of every feature on every language level; others assume that the presented material will be used occasionally, so that a reader elicits cues and confirms predictions.

4) **Scale**

Some models point out the size of elements, ranging from a *local-scale* to *global*. The former is a basic characteristic of ‘bottom-up’ models; whereas the latter is a feature of ‘top-down’ models. Therefore, *local-scale* elements yield micro-structure; whereas *global-scale* elements yield ‘macro-structure’. In fact, current models integrate various scales. de Beaugrande (1981:265) posits the question of how these local and global scales are correlated.

5) **Automatisation**

To put the concept into the simplest possible terms, good readers process second language in the form of written text automatically, that is, without requiring attention. It is only this kind of automatic processing which allows the good reader to think about the larger meaning of the text - to recover, on the one hand, the message that the author intended to convey and, on the other hand, to relate the new information to what he/she knows about the subject, and to his/her reasons for reading about it. In short, it is only this kind of local processing that allows for global reading with true comprehension.
6) **Depth of processing**

Experiments have shown that there is a crucial difference between stored knowledge and what is recalled. It has also been found that words are remembered better after disambiguating them than after checking the corrections of their spelling (Bobrow and Bower 1969), and that fitting words into contexts is deeper than finding rhymes for them (Craik and Tulving 1975). (For more details on depth of processing, see Section 2.6.3.4.2).

7) **Power**

The term ‘power’ is used by Minsky and Papert (1974) for the capacity to apply general operations and typologies to a wider range of occurrences. Power points out the extent to which a type of definition is ‘general’ versus ‘specific’. The more general, the higher power the model is (see Section 2.6.3.4 for contrast). ‘High-powered’ models aim at solving general problems; ‘low-powered’ models, on the other hand, stress the generation of every activity by “a specific occurrence from the environment” (de Beaugrande 1981:265).

8) **Serial versus parallel processing**

Processing takes place either serially, (a maximum of one task is performed at a time) or in parallel, (one or more tasks being performed concurrently). The need for parallel processing has recently arisen to account for “complex tasks performed in limited time” (de Beaugrande 1981). The fact that serial and parallel models are mathematically equivalent (cf. Townsend 1974 in de Beaugrande 1981), though allowing us to postpone a final commitment, does
not answer our questions about real human activity” (de Beaugrande 1981:266).

9) **Freedom**

The freedom of a model is determined by its applicability to “all readers under all conditions” (ibid.1981:266); its ability to deal with idiosyncratic readings of particular individuals; and the possibility of modifying its operations when necessary (for more details, see Sections 2.6.2.1 and 2.6.3). These issues are important for ‘empirical’ evidence.

10) **Learning**

de Beaugrande (1981:267) suggests that the learning factor “complicates model design”. Various kinds of learning seem to be involved in reading a text. Learning occurs when a processor adopts and refines one’s predictions and expectations during either one operation or a series of operations.

11) **Typology of materials**

A model should be able to account for different types of texts (e.g. narrative versus expository prose). However, most models are not designed to explain such differences (for more details on text types, see Section 2.6.5).

12) **Logical versus Procedural adequacy**

The adequacy of a model is its ability to operate consistently and free of obstacles on particular tasks. A model is logically adequate if it can accommodate the demands of conventional logic: formal proofs, derivations, quantification, identity, and the like. (See especially Anderson 1976 for
discussion); whereas it is procedurally adequate if it represents the operations done in actual language use.

13) **Decomposition**

This is one of the basic features of ‘bottom-up’ processing, which occurs when processing breaks elements down into components of words and meanings. An intermediate position one, that is, not exclusively committed to bottom up processing, suggests that decomposition occurs when necessary. (For more details on decomposition, see Section 2.6.3.4.2).

14) **Modularity versus Interaction**

A modular model stipulates little interaction between the language levels and among the operations which understanding “traverses in real time” (op.cit. 1981:265). In an interactive model, this interaction is steadily taking place. Modular models are easy to design and examine, yet their operations are problematic. On the other hand, interactive models eliminate “needless dead-end pathways” by internal interchange”, though they are more difficult to design and test experimentally.

After a summary of de Beaugrande’s (1981) ‘Criteria for Designing Process Models’, a significant question arises: To what extent do existing models meet the above criteria? To answer this question, some models representing the ‘bottom-up’ and ‘top-down’ approaches will be reviewed. For this purpose, four models, two for each approach, are discussed briefly below. The models that are selected are based on what de Beaugrande (1981) considers as illustrative of each approach, and are presented here to draw
the attention of researchers towards some models that merit more attention than they have received so far.

2.6.4.1 **Bottom-up processing models**

As has been indicated above, the distinction between bottom-up and top-down approaches lies in the processor contribution. In bottom-up models, these contributions are restricted to analysing sentences and their underlying propositions (see van Dijk 1977 for an example of this approach). The researcher will discuss, very briefly, two models for each approach. I do not, however, intend to examine these models in any detail. Chomsky’s work in particular is too complex to deal with at greater length without getting involved in issues which are not central to my own concerns. I consider Chomsky and Clark, therefore, purely as exemplars of a particular type of approach.

2.6.4.1.1 **Chomsky (1965)**

Chomsky’s model is an example of a serial model which stresses the reader’s ‘competence’ in converting ‘surface structures’ into ‘deep structures’ by means of certain formal rules. While heavily appealing to the listener/reader’s tacit knowledge of linguistic rules, the Chomskyan model excludes the listener/reader’s world knowledge and the contribution of memory to understanding.

This model requires heavy utilization and decomposition because every element has to be described, and the text is to be decomposed into unreducible units. Processing operations are held to occur automatically
because Chomsky and his associates have used the notion of ‘abstract automata’ (de Beaugrande 1981).

Chomsky’s model operates serially and on a local scale since operations are carried out by ‘modular components’. And because this model largely depends on formal logic, logical adequacy is inherent in its use, whereas procedural adequacy is ‘quite poor’ (Woods 1976 in de Beaugrande 1981). This model also lacks power because ‘generalisation across wide ranges of texts’ cannot be made out of the rules constraining its operations.

Since memory is excluded from this model, it does not store any data. Processing depth is not an issue either: The concept of ‘deep structure’ is not related to it (processing depth). This model treats all readers as a ‘homogeneous community’, and hence it does not account for various tasks. The fact that all sentences are processed in the same way makes Chomsky’s model lack freedom and to a great extent learning. Thus, it does not envision a definite typology of material.

For these reasons, this model has been criticised for being inadequate for effective programming and for excluding many factors that perform important functions in human communication (see de Beaugrande 1981 for other shortcomings of this model).

2.6.4.1.2 Clark (1977)

Clark (1977) has developed a model which requires parsing sentences into their constituents and underlying propositions. These propositions are nearly the same as syntactic units rather than semantic ones. However, the Clark model, unlike the previous one, makes use of world knowledge, and hence
the processor contributions are not limited to handling sentences, and propositions. It requires making inferences which are admitted by the text producer.

de Beaugrande (1981) views this model to have taken no stand on memory storage since Clark (1978) conceives of comprehension as grasping the speaker’s intended message. Therefore, it is not clear whether this model is constructive or reconstructive.

This model is also very much concerned with linguistic analysis. Therefore, like the Chomsky model, it appeals heavily to utilization which is done on a local scale. In contrast, its power is poor since sentences and propositions are ‘closely intertwined’. Thus, this model stipulates decomposition.

The Clark model seems to be void of automatisation, freedom and procedural adequacy and to a great extent processing depth. These criteria have not been addressed by this model (de Beaugrande 1981). However, learning could be possible when listeners/readers “adapt to distributions of ‘given’ and new’ information” (ibid. 1981:272).

Being restricted to sentence analysis, the model does not offer a typology of materials. Nor can it be programmed.

2.6.4.2 **Top-down processing models.**

Unlike the bottom-up models which focus on surface features, top down models take into consideration the processing of the entire text. Again two models are illustrated below as an example of this approach.
2.6.4.2.1 **Bonnie Meyer’s Model**

Meyer’s model is a parallel model, which proposes a top-level rhetorical structure approach. It requires students not only to identify the hierarchy of ideas but to label these patterns as well. (e.g., as time order, comparison, collection of descriptions or cause/effect). It must also be remembered that reading operates most efficiently if this hierarchy is discovered and utilised. Meyer describes these four top-level organization patterns and illustrates words that are typical clues to each organizational pattern.

Meyer is evasive about whether the ‘top-level structures’ which she equates with ‘schemas’ are located in the text or in the reader (de Beaugrande 1981:276). In this model some processor contributions of readers are situated in the ‘importance judgements’ drawn from passage structure. Meyer admits that a text may follow the ‘top-level structure’ in a ‘normal’ or ‘distorted’ way, as has in fact been shown by Thorndyke (1977). Meyer’s solution is to appeal to the schema used by the author. Readers who fail to use the same schema because they refuse to accept the author’s arguments will not perform as well. This model is understood by readers who follow the author’s guidance.

Since this model requires readers to accept the author’s argument, it appeals quite heavily to utilization; scale and power are mixed as required to build a hierarchy. There is no decomposition in this processing model. Since Meyer has no stand on the relationship of texts and readers as indicated above, automatisation, freedom and adequacy are not clear and they are still under investigation. However, she lays great emphasis on a typology of materials developed to reflect top-level structures. Meyer’s approach does not meet
other design criteria such as processing depth, but it fulfills the learning requirements. Meyer (1977:310) points out that:

recall is facilitated when passages have the same structure but different content, while it is inhibited if passages have different structures but the same content.

According to Beaugrande (1981:277), “Meyer’s model is open to admitting reader activities, and empirical results are impressive and intriguing. Her exploration of global organization was clearly a pioneering effort at a time when few other researchers had realized the importance of this factor.”

2.6.4.2.2 Schank (1975)

Unlike the models discussed above, Schank’s approach was devoted to building functioning computer ‘understanders’ which simulate human processors in reading stories and answering questions about or summarising what is read. Accordingly, Schank (1975) refused to accept low-powered, bottom-up models of conventional linguistics and psychology. He also rejected the view that memory is ‘semantic’ and argued in favour of ‘episodic memory’ for making our own personal experiences systematic (Schank 1975 in de Beaugrande 1981).

For Schank (1975), processing requires the reader to recover underlying concepts, draw inferences and make predictions about future expectations. Thus, the reader’s stored knowledge is of great significance in this model, that is, the processor contributions are “upgraded in scale and power to use scripts as global sequences of routine actions commonly done in human affairs” (de Beaugrande 1981:279).
The actual text is lightly utilized in Schank’s model, and hence it is highly constructive. The ‘understander’ skips certain words and focuses on those which are necessary for generating expectations. Decomposition, in this model, is concerned with events, actions and objects. In its use of ‘syntactic knowledge’ to convert word meanings into utterance meaning, Schank’s model is highly interactive.

Being designed for computers, this model entails serial processing and procedural adequacy. Finally, Schank’s model meets other important criteria such as freedom and learning. It calls for predictions on the processor’s part and it is constantly evolving. This model can also apply to texts of different typologies.

2.6.5 Issues in text processing

It should be noted from the outset that the issue of text processing and comprehension is too vast to be thoroughly reviewed in the limited space of this section. Nor is text processing per se the pivotal concern of this thesis. Rather, the main interest here is to illuminate the role typology can play in reading comprehension.

The researcher will introduce typology and how it contributes to a communicative text, and act as a “prominent determiner of efficiency, effectiveness, and appropriateness” (de Beaugrande and Dressler (1981:186). Since identifying text types contributes to a communicative text, it is therefore relevant to discuss text typologies so that we can shed light on the comprehension passages which were given to KSU students. According to de Beaugrande (1980:149),
..... the issue of text types is one of global controls. People are probably able to utilize texts without identifying the type, but efficiency suffers, and the mode of interaction of speaker/writer and hearer/ remains vague.

A text is essentially a ‘communicative occurrence’ and ventures beyond the domain of ‘linguistics proper’. This is the main theme of de Beaugrande and Dressler’s framework for the study of texts. They outline seven categories of textuality (viz. cohesion, coherence, informativity, intentionality, acceptability, situationality, and intertextuality) which need be satisfied in order for a text to be communicative. A communicative text is a cohesive, coherent and an informative occurrence, which is produced with the intention to communicate, and is accepted as a communicative text by the text receiver. It is also representative of a particular text type. The category of intertextuality refers to both the producer’s and the receiver’s knowledge which enables the production and reception of communicative text.

Hatim (1988:73) defines a text type by spelling out the various values that go beyond the domain of linguistics proper:

> What the various values identified in the communicative, pragmatic and semiotic environments of texts cumulatively define is text type.

A text type, according to de Beaugrande (1980:197), “is a distinctive configuration of relational dominances obtaining between or among elements of: (1) the surface text; (2) the textual world; (3) stored knowledge patterns; and (4) a situation of occurrence.” de Beaugrande (1980) outlines some conventional categories of texts along the development of a text theory, viz. descriptive, narrative, argumentative, literary, poetic, scientific, didactic, and conversational.
Texts 1, 2, 4 (see appendix B) are in these terms examples of a 'descriptive text type'. The intention of the text is to review the basic characteristics of Islam, and the marriage procedures in Saudi Arabia and England. The three texts are evidently not evaluative (perhaps more precisely one should say that the presumptions on values which the text makes are well-hidden) because of the nature of the expository text-type. Expository typological focus, according to Hatim (1988:73)

stipulates that the text in question be non-evaluative, handling concepts and notions in terms of analysis or synthesis, objectively and rationally.

Text 3 (see appendix B ), on the other hand, is negotiated along different lines. The intention of the text is to give an "episodic and diverse range of sources for admissible knowledge." The surface organization of the text assumes a characteristic mode because of the changes in speaking turn which reflects the conversational text.

Finally, Text 5 (see appendix B) is an example of a narrative text. The overall intention of the text is to arrange the main event and action concepts in an ordered directionality of linkage.

Thus, the texts chosen represent a range of possibilities: the two 'mirror-image Texts 2 and 4 being of the same type, and 3 and 5 representing different types from these and from each other. The 'benchmark' Text 1 is, of course, also straightforwardly descriptive.

Britton and Graesser (1983) conducted six experiments to investigate the difference in comprehension between narrative and expository discourse. They suggest that narrative texts are easier to comprehend than expository
texts for several reasons. One is that narrative texts are time ordered, they describe sequences of events which are presumably familiar to readers who “experience them so often” (ibid. 1983:51). Second, narrative material is more familiar to people than expository discourse. Narrative texts also maintain a regular and consistent structure, which may facilitate their comprehension. Expository texts, on the other hand, do not maintain such a consistent structure because exposition is not “subject to temporal constraints, causal constraints, and other constraints of ‘human nature” (ibid. 1983:52). Finally, narrative texts are basically used to introduce concepts. It has been suggested that “descriptions of sequences of events may have a developmentally privileged status in informational processing” which “may facilitate the processing of narrative texts (ibid. 1983:52).

The above discussion sheds some light on variable factors which characterize each passage. Such characteristics will be dealt with in later chapters. It is known that students from different cultures bring different systems of prior knowledge to the comprehension process. We have shown, in Sections 2.6.2.1 and 2.6.3.4.1, how schemata and text processing, as well as mental models facilitate reading comprehension.

2.7 Unresolved issues

The study of individual learner variables is not easy, and the results of research are not entirely satisfactory. This is partly because of the vagueness of many of the concepts that have been investigated. This reflects a common refrain in the research literature that the texts chosen to measure a particular concept may not have been valid. Another reason lies in the interrelatedness of the various factors. However, some of the problems are the result of the
quantitative research material used. The nature of the experimental work on culture and schema theory leaves a number of issues unresolved. For example, the results of previous research have not been consistent as shown in (2.5.1.3). Moreover, despite the ‘quantification’ of the questionnaire, used in this study, the students’ answers were not expected to be well-reasoned because of the nature of this Islamic society.

Since this research deals with human beings, it may be expected that similar research findings can produce conflicting and contradictory results, which have been pointed out in, Spolsky’s (1969); Lukmani’s (1972); Oller, Baca and Vigil’s, (1977); Abashar’s (1977); Oller and Perkins’s (1978) findings. Replicating this research in the future will help language instructors, as well as applied linguists, to arrive at more conclusive answers about the problem. Moreover, replication will give insight to policy makers, and provide them with a rationale for introducing culture to language teaching.

The limitation of the experimental work on the effects of culture and schema theory in language comprehension leaves a number of issues unresolved. The researcher does not claim that this study will resolve all the issues. Rather it serves to provide useful information to educators and teachers of English who work on these problems on a daily basis, that is, culture should be included in the syllabus to act as a language background to foreign language students. On the other hand, the literature on this topic lacks a definite answer concerning the role of culture and background knowledge. Many people, especially the Saudi Arabians, may consider the inclusion of culture in English language learning a menace to the nation’s identity. It is beyond the competence of any individual to convince Saudi Arabians that they should believe that bilingualism does not mean losing one’s identity.
This is an important issue which requires utilization of mass media to influence people to build positive attitudes towards learning foreign languages.

A second issue is the need to adopt a longitudinal study for a good number of students who have various attitudes towards Western culture for a number of years. This is far beyond the scope of this study because the researcher is not in a position to follow up such cases for a long period of time.

A third issue is the need to further study individual learner variables. It is difficult to investigate the importance of one variable (attitudes) among a wide range of factors that potentially influence language discourse. It is almost impossible to isolate the attitudinal variable from other variables (age, aptitude, motivation, personality and cognitive style) which are interrelated.

Finally, a fourth issue, the background knowledge of the learner, may prove useful concerning students with positive attitudes. The researcher has made an attempt to prove the fruitfulness of the role of language background in English discourse. Yet, this needs further experimentation.

Some or all of the above issues may prove useful for further research. Attempts should be made to resolve these issues so that an adequate understanding can be achieved. Future research projects might replicate this study and attempt to assess the accuracy of the comprehension scores obtained.
CHAPTER THREE

SAUDI ARABIA: ITS CULTURAL AND SOCIAL VALUES

3.1 Geography

Saudi Arabia occupies over 80% of the Arabian Peninsula, extending from the Red Sea to the Gulf and Qatar, bounded on the north by Jordan, Iraq and Kuwait, and on the south by Yemen, Oman and the United Arab Emirates. The land rises abruptly from the Red Sea Rift to the scarp-edges of the mountains of Jizan and Asir, in which there are ranges that rise to over 6,000 ft with peaks over 9,000 feet above sea level. In these highlands are scattered oases, as at Medina, Mecca, and Taif. To the east the tilted land mass falls away to the shallow shores of the Gulf. The interior is principally desert; to the south extend the great sand deserts of the Empty Quarter. The total population, according to the World Bank, was about 10,900,000 in 1985.

3.2 Saudi Arabia: unique characteristics

Saudi Arabia is the only nation that uses the Koran as a constitution. King Faisal, on a state visit to Malaysia, stated that he felt:

sorry for those who think Islam impedes progress or stands as an obstacle in the way of advanced development. Those who think so cannot have understood the essential principles of Islam. The opposite is the truth. The most important requirements Islam calls for are: to maintain progress, to carry out justice, to create equality, and to breed in people good behaviour and in nations moral conduct.
A second unique characteristic is the huge amount of petroleum deposits which add to its political and economic weight. It ranks as the third largest oil producer in the world. Thirdly, Saudi Arabia is the religious site for about 800 million Muslims (est. 1983) all over the world. This cannot be overlooked, especially when it is realized that Islam for Muslims is a way of life closely intertwined with daily living. Fourthly, Saudi Arabia is a unique model in which a country within two decades has been able to transform its polity from the 18th century to that of the 20th century. Al-Farsy (1987:22) states:

... modernization and development occurred and is still occurring at a slower but forceful pace and in a manner which will enable the Kingdom to maintain and preserve its culture, heritage, and distinctive identity.

3.3 **General character of Saudi society**

No society can completely ignore its history and evolve into a different society, with new attitudes, social characteristics and cultural notions. Thus the present social, political and economic practices of any society are the result of its heritage from the past, and its capacity to adopt new notions and practices which have emerged from human experience elsewhere. The major purpose of this section is to introduce the socio-economic environment of contemporary Saudi Arabian society. In this process we will briefly examine social values (religion as an origin of social values, family institution as an element in social value and traditions as a central element in the social values in Saudi Arabia), which will help us to clarify the impact of culture on language learning performance.
Religion is the fundamental motivating force in most aspects of Saudi culture, and has vital significance in practically every act and moment of life. The values related to the views held by human beings, consciously or unconsciously, are about what is right or what is wrong. Social values indicate the standards by which members of an organization are influenced in guiding their behaviour. They also serve as a system of shared beliefs which provide norms for human conduct (Blau 1962).

Therefore, Islam goes far beyond political and related institutions in its directives. Ba Yunis (1985) confirms that it is a way of life for which there is a much better term in the social sciences, which is culture.

The term 'culture' as used in this study is an all inclusive term to indicate the religious outlook and practices, the social norms and values, the customs and mores and the specific and behavioural attitudes governing the life of people in specific societies.

In order to understand KSU students' behaviour, it is essential to understand the Saudi social structure and the traditional institutions of this society, its values and cultural environment as important influences on both past and present patterns of behaviour.

The major purpose of this chapter is to introduce the social and cultural environment of Saudi Arabian society. In this process, we will examine (i) the social structure of Saudi Arabian society; (ii) social values.

3.3.1 The social environment

This section is concerned with the social environment of Saudi Arabian society. In this respect, we will look into the character of Arab society in
general, and the structure of Saudi Arabian society and its basic social values in particular.

3.3.1.1 **Character of the Arab society**

The Arabs live in three broad kinds of community, each with its own social and economic structure: (a) desert nomads: a small and declining number who live wholly within a tribal structure. Tradition has a strong influence on this group; (b) village people: a majority of the Arabs live in villages and make their living by cultivating the land. Like desert nomads, they are bound by traditions; (c) city people: a powerful minority of Arabs who live in cities. They control economic, political and natural life (Shiloh 1969).

Berger (1962:23) shows the significance of Islam by saying:

> This fact (e.g., Islam) has greater significance than it would have elsewhere, because it has been traditionally imposed not merely as a religious doctrine, but as a legal and moral code, a social system and a culture as well.

Religion is the fundamental motivating force in most aspects of Arab culture, and has its impact on practically every act and moment of life. Examination of fundamental social characteristics which can be attributed to the influence of Islam are ‘collectivism’ and ‘fatalism’ (Hamady 1960). A society in which the family and not the individual is the basic social unit can be described as a collectivist society. The Arab community is in this sense a collection of groups rather than individuals (See below, 157ff, for a more technical discussion of these terms). This implies that students (like every other category of people in the Kingdom) are sensitive to the group, and behave in conformity with the general policy of the tribe. If they fail to do so, they will be rejected by their tribe.
Consequently, mutual cooperation between families and groups is imperative. The interest of the individual is normally subordinated to those in the family, partly because of traditional principles of loyalty and responsibility and partly for the sake of convenience and mutual advantage. In return for this loyalty and service, the individual receives family support and security, and above all self-fulfilment, for kinship is in many cases, a powerful source of prestige and social status.

Fatalism is one of the most important characteristics of Arab life. It means that whatever happens to anybody is God’s will, and hence there is little a person can do to change the course of events. Berger (1962: 176) notes:

> Fatalism is a way of defeating the fear of the unknown, if one expects something, one is not surprised, but if something unexpected happens, a fatalistic attitude immediately encompasses it as one’s appointed, predetermined share or lot.

This fatalism stems from the fact that all Muslims believe that God controls all workings of the Universe and when He creates human beings, their destiny, happiness and misery is already assigned. This does not mean that a person should not exert effort and find opportunities in life, it rather means that everybody accepts what God has assigned to them, despite the fact that they have their own behaviour.

3.3.1.2 The basic social values of Saudi society

Religion so permeates the fabric of Saudi Arabian society that it both shapes and restricts the cultural and artistic life of the country. It has always been a dominant force in Saudi Arabian society, and still regulates the lives of most of the people and controls the minutest part of their existence. Their fatalism
is very strong and, the existence and significance of tribal bonds are not controversial.

Values can be considered at five levels: (1) at the individual level, the values of an individual affect and influence his/her actions; (2) at the group level, whether it is a large group or a small one, formal or informal, the values of the group affect the behaviour of the individual who comprises the group and also the actions of the group itself; (3) at the organizational level, the values of the individuals, groups and the total organization interact and affect organizational behaviour; (4) at the environmental level, organizational behaviour is influenced by those who are members of the formal organization, such as students, teachers, technicians and administrators; (5) finally, at the cultural level, the values of the society are influential on its members.

The social values system in Saudi Arabia can be classified into three major systems: (1) religion; (2) the family; (3) and traditions.

3.3.1.2.1 Religion as a source of social and cultural values

We can conclude that Islam offers the following belief system: God created the universe and provided the directives and the laws of structure and change for everything in it because all objects in the universe function with consistency within and harmony without. Without His law, it is impossible to conceive of the harmony that sustains the universe. Without following His law, human beings would move towards calamity. Thus what the principles of physics and biology are to the physical and biological objects in the
universe, Islam is to harmony and peace among interacting human objects (Ba Yunis 1985).

Islam, then, is not merely a formula of rituals. It is the process of obedience to the rule that God has laid down regarding the relation of man with Him and the relationship among human beings whether they be in terms of the family, polity, economy, education, recreation, reproduction and all those matters which together sustain full societal and interactive life on this Earth. Ba Yunis (1985:47) goes on to say:

In short, Islam is a way of life in which the emphasis is on deliberation and not instincts. What it means is that even if a Muslim society chooses to follow a path in contradiction to Islam, it will inevitably proceed towards destruction and decline. Even if a non-Muslim society manages to follow this law or any aspect of it, it will prosper to the same degree. It is like the law of gravity. If someone jumps from the top of a skyscraper, he will die - even if he is a Muslim.

Nyrop (1977:113) confirms the above by saying:

Religion is one of the most important factors in Saudi culture. But Islam is more than a religion, it is a way of life. All desires and daily acts are coloured by recognition of their appropriateness or inappropriateness in the light of Islamic precepts, and verbal expression is invariably interspersed with references or appeals to God.

Therefore Islam is the source of political legitimacy, the judicial system and the moral code of the society.

Patai (1952:70) confirms what has already been said about the influence of Islam on every aspect of life:

Religion is the fundamental motivating force in most aspects of Arab culture and has its say in practically every act and
moment of life. It is a complete civilization in itself; it is interested even in the most ordinary acts of the individual.

Moreover, Grunebaum (1953:108) explains the Islamic impact on Saudi Arabian life:

Islam aims at comprehending life in its totality. The distinction between important and unimportant detail of daily routine loses much of its meaning, when every step is thought of as prescribed by divine ordinance. No sphere is left in which our doings are inconsequential for our fate in the hereafter. The relevancy of our failing will vary according to their moral and social significance, but nowhere shall we find a no-man’s land to which religion does not lay claim.

3.3.1.1.2 The institution of the family as the main element in social values

The Islamic family ordinarily means something beyond the nucleus of a married couple and their children. The Koran emphasizes the rights of the parents (2:187) and those of other relatives (2:83; 4:7), while not rejecting the extended relations which characterise pre-industrial and tribal organization almost universally. First of all, Islam always takes precedence over everything else, including the family. One is supposed to forego all family relations if and when they conflict with the demands of Islam. Marriages are annulled when one of the spouses becomes a nonbeliever, or, conversely, when he or she becomes a believer while the other does not. The history of the Prophet is full of such cases. Moreover, the Koran warns against ‘asabiyyah’ a trait which often characterizes tribal or family solidarity. Further, while the Koran recognizes the tribes as a matter of individual identity, it defines the Islamic limits (49:13).
Therefore, Arab society is collectivist. This is not a matter of the power of the state over the individual, but of the power of the group. In most collectivist societies, the ‘family’ within which the child grows up consists of a number of people living closely together; not just the parents and other children, but, for example, grandparents, uncles, and aunts. This is known in cultural anthropology as the extended family. When children grow up, they learn to think of themselves as part of a group. The group (or ingroup) is the major source of one’s identity, and the only secure protection one has against the hardship of life. Therefore, one owes lifelong loyalty to one’s ingroup, and breaking this loyalty is one of the worst things a person can do. Between the person and the ingroup a dependence relationship develops which is both practical and psychological.

On the other hand, in Western societies most children are born into families consisting of two parents and, possibly, other children. Other relatives live elsewhere. This is the nuclear family type. Children from such families, as they grow up, soon learn to think of themselves as ‘I’. This ‘I’, their personal identity, is distinct from other people’s ‘I’s’, and these others are not classified according to their group membership but to individual characteristics. The purpose of education is to enable the child to stand on its own feet. This has various implications, as will be shown later.

The Arab is known by the family to which he belongs. However great his personal talents are, a man without a family to back him is unlikely ever to count for much in the community. It is not surprising then that the individual’s loyalty and duty to his family are greater than any other social obligation. The rights and duties of the individual are drawn in terms of the family, the centre of community life (Hamady 1960). Consequently, Arab
society starts with the family rather than with the individual and is patterned on it. Relations extend outward from the family and remain within its orbit.

Moreover, the Saudi family comprises more than direct members of the nuclear unit of procreation and orientation. Thus the family consisting of the parents and the children is not what we mean by the basic social unit. Instead we refer to the joint family, a larger or extended family group consisting of the parents, their children, grandparents, uncles and aunts, and ascendant and collateral relatives to the third or fourth degree or more (ibid. 1960: 88-89).

George Lipsky (1959:45) states:

All social relations in Saudi Arabia are indirectly if not directly tied to family considerations and the family is the fundamental and essential repository of every individual’s personal identity. In practice, family obligations take precedence over all others.

The role of the Arab family differs from the role of the family in the West, where the freedom and independence of the individual outweigh his obligations to the family, while with the Arab, membership in the family defines his identity and primary social relationships, and provides him with security and status. His personal freedom and individuality are secondary to the needs and demands of the broader kinship group in which he is inextricably bound, from birth to death.

3.3.1.1.3 Traditions as a central element in social values

The primary development of Saudi Arabian society has evolved from two factors, the first of which are the Arab traditions, i.e., practices deeply
rooted in history and still strongly maintained. These traditions are perhaps the main force of the family’s social legitimacy. The other source is Islam which, on numerous occasions, asserts the priority of the family and the kin. Both the Koran and ‘Sunna’ (the body of Islamic tradition based on Prophet Mohammed’s words and practices) have frequently called upon the Moslem to favour kin. However, according to Reuben Levy (1931) Islam was a continuity of pre-Islamic Arab traditions in many moral issues.

To conclude this discussion, it may be said that both tradition and Islam regard the family institution as a central element in the social life in Saudi Arabian society, as well as in other parts of the Arab World. Since the aim of this section is to study the cultural environment of the KSU students, and how the socio-cultural environment affects the students’ performance in reading comprehension, the analysis will be limited to values and characteristics which are deemed to be relevant to the topic under consideration.

3.4 Collectivism vs. Individualism

Hofstede (1991) describes as ‘individualist’ those societies in which the ties among individuals are loose: everyone is expected to look after himself or his immediate family. ‘Collectivism’, as its opposite, pertains to societies in which people from birth are integrated into strong cohesive in-groups, which throughout people’s life times continue to protect them in exchange for unquestioning loyalty.

Data about values of people in over fifty countries, including Saudi Arabia, were surveyed. Questionnaires were distributed to people working in the local subsidiaries of one large multi-national corporation, IBM. From this
information, Hofstede summarizes the key differences between collectivist society, as applied to Saudi Arabia, and individualist societies, which are the Western ones. It is necessary to draw the reader’s attention to the fact that Arab countries differ from one another: Hofstede’s point that “impressionistically the Saudis within this region are more collectivist than some other Arabs like Lebanese or Egyptians” is easy to agree with, for example (Hofstede 1991:55).

Hofstede (1991:57-67) summarizes the key differences between collectivist and individualist societies as follows:

1) People are born into extended families or other ingroups which continue to protect them in exchange for loyalty. Most extended families have patriarchal structures with the head of the family exercising strong moral authority. But in an individualist society, everyone grows up to look after himself and his immediate (nuclear) family only.

2) Identity is based in the social network to which one belongs in a collectivist society; whereas identity is based in the individual in the individualist society.

3) The loyalty of the group which is an essential element of the collectivist family also means that resources are shared. Obligations to the family in a collectivist society are not only financial, but also ritual. Family celebrations like marriage, and funerals are extremely important and should not be missed. In individualist cultures, parents will be proud if children at an early age take small jobs to earn pocket-money of their own.

4) In a collectivist society, children learn to think in terms of ‘we’, whereas they learn to think in terms of ‘I’ in an individualist society.

5) In most collectivist cultures direct confrontation of another person is considered rude and undesirable; therefore harmony should always be maintained. The word ‘no’ is seldom used, because saying ‘no’ is a confrontation; ‘you may be right’ or ‘we will think about it’ are examples of
polite ways of turning down a request. In individualist cultures, on the other hand, speaking one’s mind is a characteristic of an honest person.

6) High context communication characterizes a collectivist society, whereas low context communication is a characteristic of an individualist society. In the latter, when people meet they feel a need to communicate verbally. Silence is considered abnormal. But in the former, the fact of being together is emotionally sufficient.

7) Individualist societies have been described as guilt cultures: persons who infringe upon the rules of society will often feel guilty and lose self-respect. Collectivist societies, on the contrary, are shame cultures: persons trespassing will lead to shame and loss of face for self and group. Shame is social in nature, guilt individual; whether shame is felt depends on whether the infringement has become known by others.

8) In an individualist society, education aims at preparing the individual for a place in a society of other individuals. This means learning to cope with new, unknown, unforeseen situations. The purpose of learning is less concerned with knowing how to do, and more concerned with knowing how to learn. The assumption is that learning in life never ends. In the collectivist society there is a stress on adaptation to the skills and virtues necessary to be an acceptable group member. This leads to a premium on the products of tradition. Learning is more often seen as a one-time process, reserved for the young only, who have to learn how to do things in order to take part in society.

9) The role of diplomas as a result of successful completion of study is also different between the poles of the individualism-collectivism dimension. In the individualist society the diploma not only increases the holder’s economic worth, but also his self-respect. It provides a sense of achievement. In the collectivist society a diploma is an honour to the holder and his ingroup which entitles the holder to associate with members of higher-status groups; for example, to obtain a more attractive marriage partner.

10) In a collectivist society, hiring and promotion decisions take the employees’ ingroup into account; whereas in an individualist society hiring and
promotion decisions are supposed to be based on skills and qualifications only.

11) In the individualist society, the task is supposed to prevail over any personal relationship; whereas in the collectivist society the latter controls the former and should be established first.

12) A last concept bred in the collectivist family is 'face'. 'Losing face' in the sense of being humiliated, is an expression which penetrated into English language from the Chinese; the English had no equivalent for it. Ho You-fai (1976:867) a Hong Kong social scientist, defines it as follows:

'Face' is lost when the individual, either through his action or that of people closely related to him, fails to meet essential requirements placed upon him by virtue of social position he occupies. In the individualist society the counterpart characteristic is 'self-respect', but this again is defined from the point of view of the individual, whereas 'face' is defined from the point of view of the social environment.

3.5 Philosophy of the Saudi educational system

From the foregoing account of the nature of Saudi society, it becomes easier for the observer to understand the educational system of the country. As shown earlier, this system stems from the recognition that the Koran and the teachings of Mohammed are the sources of knowledge. They are the sources of instruction in all matters related to worship, education, legal life, economics, and politics. Hence, the educational system prepares the individual to acquaint himself with God and religion and to adjust his conduct accordingly. Some general principles (Ministry of Education 1977:8-12) which highlight the Saudi educational philosophy are:

1) The faith in God as God, in Islam as religion and in Mohammed as God's prophet and Envoy.
2) Life on earth is a stage of work and production during which the Muslim invests his capacities with a full understanding of and faith in the eternal life in the other world.

3) The determination of the girl’s right to obtain education which suits her nature and prepares her for her task in life provided this is done in a decent and dignified manner and in the light of Islamic law, as women are the sisters of men.

4) Religious education is a basic element in all the primary, intermediary, secondary and university education in all their branches. Islamic culture is a basic course in all the years of higher education.

5) Steering sciences and knowledge in all their forms, items, curricula, writing and teaching in an Islamic orientation in treating their problems, judging their theories and means of their exploitation so that they spring out of Islam and fall in harmony with sound Islamic thinking.

6) The search for education is a duty dictated by Islam on every individual. It is the duty of the State to provide and spread education in its various stages within the State’s capacity and resources.

7) Respecting the general rights guaranteed and decreed by Islam in order to maintain law and order and achieve stability for the Moslem community in its religion, soul, family, honour, mind and property.

The goals of Saudi education stem from the general philosophy of the educational system. Literally, these goals are adhered to in teaching the individual about the Islamic religion and how to become a good Moslem. Some of these goals and their subgoals are (Ministry of Education 1977:15-44):

1) strengthening the student’s active feeling of belonging to the Islamic nation which carries the banner of belief in the One God.
Subgoals:

a) To know the characteristics of Islam and how they differ from other beliefs.

b) To sharpen the students’ insights in order to help them understand how Islam offers solutions to many problems in all aspects of their lives.

c) To provide students with knowledge regarding God’s principles about man, society, life, and the universe.

2) Looking after students’ gifts and various capacities which unfold at this stage and directing them in the direction that suits them and achieves the objectives of Islamic education in its general sense.

Subgoals:

a) To enlighten students about the basis of civilization arising from the Islamic nation.

b) To enlighten the student about his responsibilities and his roles within the society and the family.

c) To provide students with opportunities to take part in community services.

3) Developing the student’s scientific thinking and entrenching in him the spirit of research, systematic analysis, the use of reference sources, and the practice of sound academic methods.

Subgoals

a) To inform students about their abilities and capacities.

b) To inform students about how to direct these abilities and capacities equally to the welfare of the individual and the society.

c) To develop the ability to communicate ideas and feelings effectively.
4) Establishing the feeling of family solidarity to construct the solid Islamic family.

   a) To develop understanding and appreciation of the principles of living in a family group.

   b) To develop attitudes leading to acceptance of responsibilities as a family member.

   c) To maintain an understanding of relationships with parents and other family members.

5) Shaping up in the student positive consciousness with which he can confront subversive ideas and misleading trends.

   a) To develop a sense of responsibility to Islamic law.

   b) To develop pride in being a Moslem.

   c) To know the characteristics of Islam and how it differs from other beliefs.

With regard to curriculum design, the Ministry of Education adopts, naturally, subject matter designed to carry out the goals and subgoals mentioned above. With regard to this subject matter, the Ministry calls for the organisation of various types of desired knowledge into disciplines to be learned, such as religion, history, and mathematics. Teachers have to teach whatever is found in the textbooks distributed by the Ministry of Education. The subjects taught at this stage are Islamic religion, Arabic, English, mathematics, physics, chemistry, biology, geology, history, geography, sociology, psychology and physical education.

The general principles, goals and subgoals are steered towards instilling Islam. The Saudi educational philosophy confirms the views held by
Hofstede (1991) about collectivism, fatalism and 'field dependence'. In due course, the researcher will introduce 'cultural studies' which will include the rationale for introducing it to the Saudi Arabian educational system.
CHAPTER FOUR

METHODOLOGY AND RESEARCH DESIGN

4.1 Introduction

This chapter presents the methods and procedures adopted by the study in its empirical explorations regarding the effect of culture and schemata on KSU students’ performance in reading comprehension. First, this study will discuss the major difficulties of conducting research in the Saudi Arabian culture. Then it will give an account of the rationale for excluding a certain number of subjects.

The research procedures, the design of the research population, the sources of the data and the research instrument will be discussed. In addition, an account is given of the statistical techniques used. Finally, six null hypotheses, which will be tested in the next chapter, are stated.

4.2 Major difficulties facing research in Saudi Arabia

As pointed out in chapter 3, the influence of religion, tradition and customs permeate all aspects of Saudi society. This has resulted in the fact that Saudis have become very sensitive to the values, customs, traditions, norms and expectations of their society. Sensitivity to, and consideration for, the feeling of others, is one of the important characteristics of Saudi society which stems directly from their religious and traditional values (see chapter 3). So it is essential for researchers to be equally sensitive towards the Saudis if misunderstandings are to be avoided.
The key to good research is to design a research strategy to fit a particular context. Bouchard (1976) noted that methods are the means to ends, no more, no less. The key to good research lies not in choosing the right method, but rather in asking the right questions and picking the most powerful method for answering that particular question. Methods are neither good nor bad, but more or less useful for answering particular questions at a particular time and place. It seems that the ‘right questions’ and the ‘best methods’ to apply to Saudi Arabia are likely to be those which take into account religion and traditional values which generally shape many aspects of the Saudi Arabian lives and behaviour. Since methods which are of conventional use in the Western industrial societies may have serious and unanticipated effects when modified to suit the Saudi context, any researcher is strongly advised to design and apply techniques and methodologies which take into consideration the Saudi culture. In order to explain this point, some of the most important Saudi culture issues which may affect research design in this area will be identified.

4.2.1 **Sex segregation**

Women in Saudi Arabia are veiled before strangers: they have to cover their entire body including the face with clothes. They are not allowed to study in any place where they meet men, nor to have any direct contact with a man (other than their fathers, brothers and sons). Moreover, it is quite impossible to interview women for research purposes. Kelly (1990:450) states that: “Saudi Arabia is a male-dominated society, and the position of women is a subordinate one.”
4.2.2 Unawareness of the value of time

Saudis do not seem to budget their time in the same way as Western societies do. Time is a much more flexible commodity in the Arab World generally. This may be a result of their fatalistic attitudes (see chapter 3). Therefore, Saudis do not like to be hurried in doing their duties as ‘haste comes from the devil’ according to an old proverb. This patience is a very important consideration which has to be kept in mind by the researcher conducting research in Saudi Arabia. A researcher should be prepared for the fact that everything takes a little longer.

By contrast, Western society has a keen sense of the value of time, coupled with the highest regard for punctuality (Jeannière 1977). This is reflected in the precision of time-tables and calendars. Thus the importance of a business transaction is measured to a large extent by the time devoted to it. On the other hand, Hasnaoui (1977:53) talks of ‘the experience lying at the root of the Arab concept of time.’ This, he says:

can only be found in this ethico-cosmological perception of ‘dahr’ as an unending recurrence ‘of night and day’, the substance of things, the element in which they move and are fulfilled, but also an anonymous power, the irreversible development of which carries things and beings in its wake and, as Imru’u-u-l-Qays says, ‘permits nothing on its path to exist independently’. ‘Dahr’ is also the place of testing, of ‘sabr’, which in spite of what is often said, is not indifference to events but rather the ability to cope with events. This experience should be understood in the sense of ‘ethos’, that is to say, of a mode of behaviour which is not yet reflective or philosophical but which is a way of dwelling in the world and entering into interhuman relationships.
Both concepts of ‘dahr’ (an ending recurrence ‘of night and day’) and ‘sabr’ (perseverence) elucidate our submission to time. This is confirmed by the meaning of the celebrated phrase of ‘Imru’u-u-l-Qays’, who on learning of the death of his father and postponing the decision to seek vengeance said: ‘Today I have drained too deep the cup of feeling, tomorrow will come the time of decision’. However, vengeance never happened. One small insight into the lack of concern for time is shown by the negotiations between a Swedish high-technology corporation and a Saudi engineering firm. Hofstede (1991) says that discussions often dwelt on issues having little to do with the business - like Shakespeare, of whom the company managers were fans.

4.3 The research instrument

The study was designed to determine the extent of similarities and differences in attitudes among different types of students at King Saud University (KSU). Also, as mentioned in the introduction, this research was the first attempt to study students’ attitudes in relation to reading comprehension performance in Saudi Arabia in general and at KSU in particular. Since there has been no serious study before, a descriptive and analytical approach was used. An exploratory study needs to be undertaken when nothing is known or there is no information on the problem to be investigated, and extensive work needs to be done initially before one can scientifically investigate the matter.

The research instrument was used to validate the cultural elements to be introduced in the foreign language syllabus, which took the form of a ‘Yes/No’ questionnaire. As this type of questionnaire does not accept partial
agreement, the researcher has opted for a ‘Yes/No’ questionnaire. The important benefit from ‘Yes/No’ formulation is that both possible responses, ‘Yes’ and ‘No’ are explicit.

The aim of using this approach was to:

1) rely on simple direct methodologies, in order to avoid being significant in the statistical sense only;

2) explain what kind of relationship exists between the subjects under investigation; and

3) relate these findings to the teaching of EFL at KSU and to consider possible areas for further investigation in Saudi Arabia. It is hoped this study will shed some light on this important subject.

The survey was conducted using 25 questions (see Appendix A) to measure students’ attitudes towards Western culture. The questionnaire was designed by the researcher for KSU students and was given a primary translation from English to Arabic by the researcher. It was subsequently submitted to a team of translation specialists at KSU in order to obtain a valid and accurate translation which would best serve the purpose of the study. In addition, to measure the validity of the questionnaire, a pilot test was conducted by the researcher with a randomly chosen sample of 25 per cent of the original sample. The questionnaire items were finally answered by those respondents, with the researcher noting any ambiguity, misunderstanding or sensitivity that might occur.

The positive reaction of the respondents towards the questionnaire items and their interesting comments were noted and taken as an indication that the questionnaire was meaningful. In a research project such as this, it is
important that questionnaire response data are authenticated. Furthermore, students were not asked to write down their names until they had finished answering the questionnaire. Under normal circumstances, personal interviews with questionnaire respondents, and other forms of cross-checking, would have been employed in testing the validity of such responses. Owing to the sensitivity of the subject in Saudi Arabia, the researcher was precluded from this course of action, and, as a consequence, much of the data collected has to be taken at face value. He fully recognizes, however, that had the country and the circumstances been different, then checking the validity of the data responses would have been accorded a priority.

All data were verified and computerized in order to produce the highest attainable level of accuracy. The data collected using the research instrument were analysed by several statistical techniques. These included percentages, means, modes, ANOVA and correlation coefficient.

It is necessary to note that the questionnaire is one of the sources of data concerning attitudes and behavioural manifestations of KSU students.

Then a ‘Yes /No’ questionnaire was used to validate the cultural content to be introduced to the syllabus, that is, that it does not contradict the values and traditions of the society. A group of scholars at KSU were consulted formally and informally to explore their opinions. This was done by a group of ten Saudi professors, who judged the cultural elements in terms of their consistency with Saudi society norms and traditions and in terms of their appropriateness for use in the teaching of English as a foreign language. These were Saudis teaching in the Sociology, Anthropology, and English Language and Literature Departments. Therefore, this group had a
background in related disciplines such as anthropology, linguistics, sociology, literature and the teaching of English as a foreign language.

In developing ‘cultural studies’ elements to be taught in Saudi Arabia, the researcher did the following:

a) Described these ‘cultural studies’ elements in terms of their philosophy, goals, subgoals, syllabus design and evaluation.

b) Designed ‘cultural studies’ elements to teach Anglo-American culture which is consistent with the Saudi policy.

c) Designed a ‘Yes-No’ questionnaire of these elements to be answered by a team of specialists.

d) Omitted all the items that had received negative responses.

4.4 Subjects of the study

The population of the present study were 110 Arab students enrolled at King Saud University in Riyadh, Saudi Arabia. They were classified into three groups. Group one was made up of 73 male students, who were admitted to Faculties of Agriculture, Science, Education, Computer Science and Engineering. Group two was composed of 22 students whose majors were either English Language and Literature or Translation. Group three was composed of 15 female students who were reading translation or English Language and Literature. The participants came from six different countries. They were selected randomly according to their university registration numbers. The ages of the 110 students ranged from 18 - 39 with a mean of 20.33.
In general, students’ direct contact with English is limited. The educational background of the subjects is, to a large extent, similar because of the homogeneity of the group and because of the centralization of the Saudi educational system. Arabic was the native language of all subjects, and mainly the medium of instruction at different colleges.

Of the 110 students who participated in the study, only 88 were included in computing the correlation coefficient. The other students’ data were excluded because of one or more of the following reasons:

a) The students did not take all five comprehension tests administered;

b) the students withdrew from the university during the administration period;

c) the students did not take the questionnaire; and

d) group three, consisting of 15 female students, was excluded from computations because there was no supervision when the tests were conducted, owing to the nature of the society as discussed earlier; moreover, this group had no counterpart, that is, all these students appeared to have positive attitudes only.

However, before excluding some of the students’ work from analysis, two alternatives were considered:

a) First, rather than eliminating students who missed one or more comprehension tests, we analyze only those tests which have been done by all subjects.

b) Second, instead of lowering the number of comprehension tests to two or three, we examine the data of all students who answered some comprehension tests regardless of the number.

These alternatives, however, were rejected on the following grounds:
a) Since some students failed to answer one or two comprehension passages, it would then be inappropriate to examine the data available regardless of the number of the comprehension tests.

b) As for the questionnaire, data revealed that those students who failed to answer one or two comprehension passages also failed to take the questionnaire. Therefore, it was decided to analyze the data of 88 students in order to have complete information about the role of culture and schemata in language discourse.

4.5 The Comprehension texts

The texts were ‘Five Pillars of Islam’, and ‘Saudi Wedding’ (Morgan et al. 1981); ‘British Holiday,’ ‘Tommy and the Indian Boy’ (Allen 1971), and ‘British Wedding’ (adapted from the Registrar Office, District of Surrey South-Western Handbook, as well as Encyclopaedia Britannica 1967). The procedure of administering the tests is explained in Section 4.6.3 below.

In this section, first, I shall discuss the rationale for the selection of the five reading texts (see Appendix B). I shall then turn to a consideration of some of the particular questions asked to illustrate the general principles underlying their selection. Next, I shall consider the readability of these five texts, by using the General Service List, the Flesch, as well as Gunning’s Fog formulae. Finally, I shall outline some of the main differences between recognition and recall, and point out the reasons for choosing a multiple choice format for the research, rather than a recall format.

As regards the first of these points, then: the rationale for the selection of the comprehension texts. Text 1 was originally selected simply to be representative of ‘Saudi culture’ in some ill-defined sense. A little reflection,
However, made it clear that the information contained in the passage was so typical of, and deeply rooted in, Saudi culture, that it was knowledge that every Saudi reader could be expected to have. However, after a great deal of consideration it was decided to retain the passage, on the grounds that it would at least provide a benchmark against which the other texts could be measured.

Somewhat curiously, however, scores on the passage were in the event evenly distributed though, as anticipated, both the raw scores and the ANOVA scores are significantly different from those obtained on the other passages.

Text 2 was included in the experiment to provide information that would accord broadly with the schemata of Saudis about weddings in their own country. The intention was to see how KSU students' schemata would accord with the facts of this text, since they (schemata) are consistent with the students' cultural knowledge. In the above texts, students do not need to revise their interpretation to accommodate the information about 'the Five Pillars of Islam' and the 'Saudi Wedding', because they are generally a good fit (in the former case, as good a fit as possible) for most of this information.

Texts 3 and 4 have been included in this experiment to represent typical schemas for British Holidays and British Weddings (see statistical analysis of the data, Section 5.2); the cultural information embedded in these two texts is different indeed from KSU students' prior knowledge. For example, given a text about a 'British Holiday', a Saudi reader would not anticipate that the wind is considered as one of the components of the 'golf-schema': hence the
inclusion of Question 7. Thus, these two texts have been chosen to assess the effect of cultural knowledge and values on reading comprehension. (Passage 4 is, at first sight, somewhat odd: it is not clear who the intended audience is. In fact, its source is British, as shown above).

In these two texts, KSU students must activate an appropriate schema against which they try to give the text a consistent interpretation. Much of the meaning understood from a text is really not actually in the text, *per se*, but in the reader, in the background or schematic knowledge of the reader. What is understood from a text is a function of the particular schema that is activated at the time of processing (i.e., reading) the text.

The function of Text 5 is to assess the effect of a culturally neutral text on KSU students. It is hypothesised that KSU students would be neither advantaged nor disadvantaged, compared with British students, with respect to this passage. From research conducted within the framework of schema theory, there is considerable evidence that KSU readers may understand Text 5 better than Texts 3 and 4.

As regards the choice of specific questions, I shall attempt to set out the principles involved with specific reference to Passages 3 and 4.

Passage 3 is a passage (from an ELT textbook) whose overt Britishness is part of its essence, and was perhaps intended to be instructive. The choice of questions in all circumstances where a passage of this length is used must necessarily be conditioned in part by the number of questions - inevitably limited - to which the passage lends itself. However, an attempt was made, firstly, to tackle the salient and obvious differences implicit in the passage. These seem to be: a) family relationships, (Question 1) ‘aunt’ being a
potential distractor for those accustomed to more extended family groups, and ‘maid’ acting as a distractor for inhabitants of a country where maids are more common; b) pastimes (Questions 5 and 7); c) holiday destinations (Question 3); and, d) pre-holiday routines (Question 9) and attitudes to (and expectations of) the weather (Questions 6 and 7). Secondly, however, an attempt was made in this passage to retain some questions which were, in themselves, more culturally neutral, though correct answers would, it was anticipated, depend on the subjects’ global understanding of the passage.

Passage 4 is intended to mirror Passage 2, and in both cases the questions attempt to address the information given on a point-by-point basis. In the questions for Passage 4, I have tried to suggest contexts which would be more typical of a Saudi marriage, as a distractor for the students. Thus Questions 1 and 4, made possible by the curious use in the passage of the term ‘matchmaker’ for the couple, invite students to stay within their own cultural expectations, and I have tried to ask questions to check on understanding of the roles of people and things which are unmistakably different, and different in ways which cannot be predicted simply from commonsense - for instance, the mother-in-law, the dowry and the person (here, the registrar) who marries the couple.

Now we shall consider the readability of the passages. There are five in this experiment, varying from 331 to 418 words in length, and these were written within the limits of 2000 words of the General Service List and the simpler English structures as specified by the authors (see Appendix B). As Klare (1963) notes, three types of variables appear to have fairly consistent effects on readability. One is word difficulty, which usually correlates with word frequency. According to Alderson et al. (1984),
word difficulty may relate to infrequency of its occurrence, and has been indexed either by reference to frequency lists, or by reference to word length, usually measured to number of syllables, since, on the whole, longer words tend to be less frequent and therefore might be expected to cause processing problems.

Two standard works dealing with the frequency of English words are Michael West’s *A General Service list of English words* (1953), a list with semantic frequencies of 2000 words considered suitable as a basis of vocabulary for learning English as a second language, and Thorndike and Lorge’s *The Teacher’s Word Book of 30,000 Words* (1944). This is a much more extensive list which does not, however, indicate the relative frequency of the various meanings of the words it includes.

Although these word counts are useful, the text author must be alert to their several shortcomings: (for more details, see Harris 1969:49-50).

1) Word counts are usually based on the written language only (see Jones et al. 1966 for a spoken word count).

2) The word lists classify words according to relative frequency rather than their absolute difficulty.

3) Some of the word lists do not differentiate among the various meanings of a word.

The second variable is sentence length, with longer sentences leading to greater complexity. The third, related variable is sentence complexity (including such factors as the number of subordinate clauses or prepositional phrases). Note that sentences could be equally long yet differ in complexity (see the work by Kintsch and Keenan 1973), “so that the second and third factors are not necessarily equivalent” (Bransford 1979:124).
A number of researchers have worked on developing measures of the readability of various texts (e.g. Flesch 1948; Gunning 1952; and Coleman 1964). According to the Flesch and Gunning's Fog formulae, the five texts come under the category of 'easy' (see Appendix B for more details on 'document statistics').

As mentioned above, there are five texts, each followed by a set of multiple choice items. The passages are of three kinds: descriptive, conversational and narrative (see Section 2.6.5 for more details on text types and how each one acts as a facilitative factor).

Similar experiments with other cultural groups have been conducted using recall (of these Steffensen and Joag-dev (1984) is the best known). The advantage of recall is that by imposing no constraints on what the respondent offers, one gets more obviously direct access into their thinking. The disadvantage is, as in all experimental work involving recall, the question of comparability of data. These problems are precisely reversed for multiple choice. This experiment was undertaken with multiple choice firstly because the students are accustomed to it as a teaching and testing technique, while they have never been asked to use recall. Secondly, a multiple-choice study is, by its nature, potentially objective, and its results replicable.

Moreover, subjects in a text-recall task are not so much regurgitating all that they can remember about the text, as communicating what they can remember. On this view, subjects will shape their recalls in the light of the demand to communicate information to the experimenter. What sorts of factors are likely to influence recall? From now on, we talk about recognition to mean multiple-choice items.
A text recall has to be coherent and well formed (see our discussion of text processing and coherence functions of propositions, Section 2.6.3.4.1). That is, the recall of a proposition will depend, in part, upon the recall of others which overlap or cohere with it. However, when recognition procedures are employed, a decision is required from the subject about recognition items presented individually, usually in a randomly ordered list. Under these circumstances, a decision about one item can be made independently of decisions about others. Or, in other words, in recognition, there is no analogue of the coherence demand that exists in recall. Furthermore, there is no implicit demand on subjects to make their recognition decisions contingent upon the relevance of recognition items. Thus, recognition decisions are not influenced by pragmatic factors in the same way as recall (see Brewer and Nakamura 1984). The differences mentioned are mainly the reasons for using multiple-choice items in the texts (see Appendix B).

4.6 Method of data analysis and the development of the instruments

The procedure for selecting the subjects was successive random sampling because the number of students is large, exceeding one thousand. From each year, a number of students were randomly selected using students’ registration numbers where the first three digits show the year they attended the university. Each third, or fourth and seventh was selected from each class list. By doing this, the sample has covered a wide variety of modes or majors. The students were enrolled in different sections of EFL or English Language and Literature/Translation majors. We shall now turn to the development of the questionnaire.
For assessing the subjects’ attitudes towards English language, a questionnaire of 25 items with five response categories was developed. As explained in the theoretical framework, the attitude to learning a foreign language is based on the learner’s response to its culture. Some previous studies on motivation and attitude, for example, Gardner and Lambert (1959, 1972); Gardner (1960, 1968, 1977, 1979, 1980, 1985, 1988); Clement, Gardner and Smythe (1977); Gardner, Smythe, and Gliksman, (1976); Youssef (1968) Gatbonton and Tucker (1971) have provided ample evidence of an association between attitudinal variables and foreign language achievement. One of the most important attitudinal factors is the attitude of the learner to the foreign language community. Theoretically, positive attitudes are considered as a supportive factor to motivation, because students are likely to read more about Western culture which acts as background knowledge to reading comprehension. On the other hand, the effect of negative attitudes on motivation depends on the strength of the need for foreign language. Youssef (1968) found that even after an intensive cultural orientation, Middle Eastern students were not able to interpret texts from American culture because of negative attitudes. He concluded that the students’ resistance to American culture reduced their motivation and efforts to learn. Gatbonton and Tucker (1971), similarly, suggest that inappropriate values, attitudes, and judgments led to a misunderstanding of American literature.

To estimate the subjects’ attitudes towards learning English, an attitude scale was adopted from Gardner and Lambert (1972) and was modified to suit the purpose of this study so as to fit the theoretical framework of this research. Some items in the scale were changed or modified to fit the context as well. The scale consists of 25 positively worded statements about the subjects’
attitudes towards learning English. Each statement is followed by a Likert-type scale with a five point continuum. The scale has the following categories and their numerical values: Strongly Agree (5 points), Agree (4 points), Neutral (3 Points), Disagree (2 points) and Strongly Disagree (1 point). The maximum on this scale is 125 points. A high score on this scale indicates a positive attitude towards Western culture. A low score on this scale indicates a negative attitude towards Western culture.

This scale is the measuring instrument used for estimating the subjects overall attitude. Then the following research topics were addressed:

a) Given two reading comprehension texts describing the fundamental basis of Islam and a Saudi wedding, owing to the participants’ background, EFL (English as foreign language) students will achieve a higher level of comprehension than on the other three passages;

b) Given two reading comprehension texts describing a typical British trip and a wedding, it is expected that the subjects will achieve a lower level of comprehension score than they do on the native texts;

c) Given a reading comprehension text describing a fictitious story about a fish brought up on land by an Indian, it is expected the subjects will achieve a higher level of comprehension score than on the passages described in (b) (based on previous research results).

4.6.1 The pilot study

Early in April 1989, a pilot study was conducted to determine the appropriateness of the elicitation instruments in terms of the clarity of the test items and instruction, the time allotment, the cultural background questionnaire, and the administration procedures.
30 subjects (20 from group one, five from group two, and five from group three) participated in the study. Based on the results of the pilot study some helpful minor changes were made. The first one was when the researcher discovered that the multiple choice item questionnaire was not appropriate, so it was modified accordingly into a five-point scale as shown in (Appendix A). Some items were also altered or modified to fit this study, and irrelevant items were deleted. Secondly, the pilot study revealed that the English version was too difficult for the students to understand. Hence, the English version of the questionnaire was translated into Arabic, which made the task simpler and more convenient. Finally, the vocabulary sections of the comprehension passages were dropped from the test. Two more passages were added to make the study much more significant, reliable and worthwhile.

4.6.2 Data collection

After developing the instrument, it was translated into Arabic, the mother tongue of the subjects. The instructions for answering the questionnaire were simplified. Moreover, an oral explanation by the researcher was provided before answering it. Subjects were encouraged to ask about any item that was not clear to them before responding to it. The researcher, however, was not able to provide an explanation that might influence the results. Since marks and tests are important in a Pass/Fail education system like the educational system of Saudi Arabia, the participants were assured both in written and oral instructions that the questionnaire was not a test of their abilities in any way. Furthermore, the subjects were told that their answers would in no way affect their marks in the English language course they were taking regardless of the results. The subjects were also assured
that their answers would remain confidential and that no official in the university would see them or evaluate them.

The items were finally answered by those respondents, with the researcher noting any ambiguity, misunderstanding or sensitivity that might occur. The positive reaction of the respondents towards the questionnaire items and their interesting comments were noted and taken as an indication that the questionnaire data collected were authenticated.

Under normal circumstances, personal interviews with the questionnaire respondents, and other forms of cross-checking, would have been employed in testing the validity of such responses.

After the random selection of the subjects from different sections, they were grouped together in separate rooms, and the questionnaire was administered. The comprehension passages were given as bimonthly tests. There were five bimonthly tests and consequently five passages were given.

4.6.3 Administration of the tests

The tests were administered five times within six months during the regular English classes. In order to minimize any task sequence effect, the five tests were given in a random order. The students’ English language instructors helped in the administration of the tests and collection of students’ responses. Instructions were read aloud and explained to the students.

Prior to the administration of the tests, 50% of the participants answered a cultural background questionnaire before the tests were administered. Copies of the tests and the cultural background questionnaire appear in
appendices A and B. Students’ responses in the comprehension tests were scored using a method developed by TOEFL (Testing of English as a foreign language). Students were given ten points on each item of the comprehension passage, but no points were given for two answers of the same item.

It was indicated in the theoretical framework that language is deeply-rooted in culture, and it cannot be wholly understood without reference to the culture of which it is a part and the social relation which mediates literature. Also it was shown that familiarity with foreign culturally related topics may be effective for reading comprehension on that topic.

The data for this study were obtained during the academic year 1990-1991. The students were given 50 minutes to finish each comprehension test and the length of time taken by the students was noted down for each passage.

The students’ strategies and their performance were identified, and compared with the culture language questionnaire. Furthermore, an attempt was made to see if subjects whose attitudes to Western culture were positive, attained higher scores on the comprehension passages. Finally, the results of the analysis were discussed in relation to the questions raised and the hypotheses stated.

Finally, to recap: the main research questions of the study were: What is the effect of positive attitudes towards Western culture on reading comprehension? What is the role of background knowledge in reading comprehension?
4.6.4 The null hypotheses

The following null hypotheses were tested at the .05 level of significance: one way of analysis of variance (ANOVA) allows us to compare several group means simultaneously. Consequently, it was used to compute the six null hypotheses. All the five comprehension passages will be used for the purpose of computation.

1) There is no difference between the scores obtained in the five passages for those who have positive attitudes.

2) There is no difference between the scores obtained in the native culture passages and the other three passages.

3) There is no difference between the scores obtained in the Western culture passages and the other three passages.

4) There is no difference between the scores obtained in the Indian culture passage and the other four passages.

5) The performance of the students is not different from one another regardless of their attitudes.

6) The performance of the students is not different regardless of the origin of the comprehension passages.

4.6.5 Statistical tools used

The following statistical measures were used to test the null hypotheses. One Way Analysis of Variance (ANOVA) was computed to determine the significance of differences in the five group students’ means. This statistical measure was used in computing the first six null hypotheses.
On the other hand, to test the hypotheses stated in Section 1.4, the correlation coefficient for all subjects with both positive and negative attitudes was computed to find out how much correlation there is between the scores on the questionnaire and scores on the comprehension passages. The same procedure will be followed for students with positive or negative attitudes for each comprehension passage.
CHAPTER FIVE

PRESENTATION AND ANALYSIS OF THE DATA

5.1 Introduction

As was stated in Section 1.4, this study was intended to analyse and compare KSU students' comprehension performance in relation to positive and negative attitudes towards British culture. The data were first subjected to statistical analysis where six null hypotheses were tested. An examination and interpretation of the results obtained are presented later. Henceforth, the reading comprehension passages will be referred to as 'texts'.

This chapter, divided into four sections, will be devoted to the presentation and discussion of the data. In the first section, graphs are plotted to show the distribution of comprehension scores for each text. In the second section, ANOVA results are tabulated and presented. These results will determine whether there are significant differences among the randomly selected subjects. In the third section, the results of coefficient correlation are displayed, discussed and interpreted. These results will determine how much correlation there is between the scores on the questionnaire and comprehension texts. The fourth section is devoted to the discussion and interpretation of the findings and their relationship to the results of previous research on this aspect of foreign language learning (Youssef 1968; Gatbonton et al. 1971; Clark et al. 1977; Rivers 1968; Steffensen et al. 1979; Goodman 1979; Coady 1979; Carrell 1983abcd, 1984ab, 1985, 1987).
5.2 Statistical analysis of the data

Prior to the testing of the null hypotheses, the scores obtained in the texts were shown to have more or less normal distribution. However, the normal distribution is an idealized model which we can use in dealing with natural behaviour. Prior to plotting the scattergrams by ‘StatView 512+’ (statistical program) on Macintosh, the comprehension scores against their frequencies for each text will be tabulated. For example, Graph 1 shows the distribution of comprehension scores for Text 1 of the two groups combined together (see Appendix B). Thus by comparing the distribution of our data with the normal distribution curve, we claim that our data matches this expected distribution.

By first examining the data of the Islamic text for 88 students (Text 1), the mean on the tests was found to be 63.07%. The EFL students who scored above the mean were 37, and those below it were 51. Ideally, the probability of getting a score above 63.07 should have been half. But such results are too difficult to attain in a realistic situation, and in a society where strict supervision can hardly be enforced. Therefore, these results are partly caused by the nature of the society as discussed in Chapter 3. Second, the mean of the ‘Saudi Wedding’ text of the two groups combined was 61.82. The number of students who got above the mean was 34 students, and those who got below it were 54. On the other hand, the means on the ‘British Holiday’, ‘British Wedding’, and Tommy & the Indian boy’ texts were 54.21, 56.71, and 58.07 respectively. Therefore, the number of EFL students who scored above the mean was 41, 43, and 47 respectively; whereas EFL students who scored below it were 47, 45, and 41 respectively.
The following graphs, which show the distribution of comprehension scores for each text, tell us whether the scores on the questions in the reading texts are normally distributed or not. Thus, we will have five graphs, that is, one graph for each text.

**Table 1**

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**Frequency distribution of scores for Texts 1 and 2**

**Graph 1**

Scattergram of Comprehension Scores vs. Frequency

Graph 1 shows the distribution of comprehension scores for Text 1 (the Five Pillars of Islam) of the two groups.
Graph 1 shows the scores that each of the groups to which 88 subjects have been distributed received in the native culture text. The x-axis shows the scores of the comprehension text, and the y-axis shows the frequency of the scores obtained. The mean as shown above provides information on the average performance of the two groups who took the test. It also shows that the lowest mark that KSU students scored was 30, and the highest one was 100. It is worth noting that 51 students out of 88 got scores below the mean and 37 students got scores above the mean. The mode is 60 and the standard deviation is 17.96. The mode and the mean nearly have equal values. This implies that the curve is normally distributed.

**Graph 2**

Graph 2 shows the distribution of comprehension scores for Text 2 (Saudi Wedding).

Graph 2 shows all the scores obtained in Text 2 by the two groups that are under investigation. The x-axis shows the scores obtained in the Saudi Wedding text, and the y-axis shows the frequency of the scores obtained. The data strongly suggest that cultural background knowledge significantly
influences EFL students’ reading comprehension. The subjects achieved higher mean scores compared to the foreign texts. It seems that this graph is more or less a bell-shaped curve. The mean on the test is 61.82 and the students who obtained above the mean were 34, and those who got below it were 54. This may be due to the common background of the sample. The mode is 80 and the standard deviation is 26.59

<table>
<thead>
<tr>
<th>Score</th>
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<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>7</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
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<td>20</td>
<td>5</td>
</tr>
<tr>
<td>40</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2: Frequency distribution of scores for Text 3 and 4
Graph 3 shows the distribution of comprehension scores for Text 3 (the passage on a British Holiday).

This graph is more or less bell-shaped. The mean on this text is 54.21. The KSU students who scored above the mean were 41, and those who scored below it were 47. It seems that there is a kind of even distribution of the scores among the different questions on which students were tested. The mode is 60 and the standard deviation is 19.64. Since the mean and the mode have approximately equal values, the curve is normally distributed.
Graph 4 shows the distribution of comprehension scores for Text 4 (British Wedding).

This graph shows all the scores obtained in Text (4) by the two groups that are under survey. The data generally suggest that background knowledge significantly influences KSU students' reading comprehension. 45 obtained scores above the mean and 43 scored below it. The scores on the foreign culture texts are lower than those on the native culture because our students lack schemata and cultural background knowledge. The minimum score is 10, and the maximum is 100. The mode is 60 and the standard deviation is 23.67.
Graph 5 shows the distribution of comprehension scores for Text 5.

Prior to the testing of the null hypothesis, the scores obtained in the comprehension texts were generally shown to have normal distribution after the
graphs were plotted. Graph 5 above shows the scores that the 88 subjects received in the text based on Indian culture. It also shows that 47 students obtained scores above the mean, and 41 students scored below it. The mode is 50 and the standard deviation is 22.584. Therefore the curve is normally distributed. Since the students lack the schema that a 'fish' can be brought up on land as can other animals, there was some distortion as will be discussed in Section 5.4.

Now we will discuss, analyse and interpret six null hypotheses, which are related to the students' performance in the comprehension tests. The null hypothesis is usually characterized as Ho. We usually try to reject the null hypothesis and support either the negative or the positive relation hypothesis. These hypotheses and their results are stated below:

5.2.1 H01 There is no difference between the scores obtained in the five texts for those who have positive attitudes.

This is a null hypothesis, which states that there is no difference between the scores obtained in the five comprehension texts. If these null hypotheses are rejected, then our research hypotheses are accepted. To test these null hypotheses, ANOVA was computed to determine the significance of differences in the means of the five texts for those who have positive attitudes, as shown below. An F (Fisher, a mathematical genius) value of (3.896) produced a level of significance less than .05 (p<.05), as shown in Table 4 which indicates a significant difference between the nature of the texts. Since the F ratio is larger than 1, we know that there is a meaningful difference among the means. As our ratio is much greater, we can assume that we are safe in rejecting the null hypothesis.
Analysis of variance between the scores obtained in the five texts for those who have positive attitudes.

One Way ANOVA 10 Groups

<table>
<thead>
<tr>
<th>Source</th>
<th>DF:</th>
<th>Sum Squares:</th>
<th>Mean Square:</th>
<th>F-test:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>9</td>
<td>12911.424</td>
<td>1434.603</td>
<td>3.896</td>
</tr>
<tr>
<td>Within groups</td>
<td>250</td>
<td>9204.73</td>
<td>368.199</td>
<td>.0001 &lt; p ≤ .005</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>104961.154</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model II estimate of between component variance = 41.848

Since the F-ratio is larger than one as shown in Table 4 above, we know there is a meaningful difference among the means, but how important is the difference? To find out, we must now use our statistics as estimates of the population parameters. Our MSB (Mean square between) and MSW (Mean square within) are the two relevant estimates. The MSB is an estimate biased for treatment and belongs to a distribution with 9 degrees of freedom (K - 1 = 10 - 1 = 9).

The second estimate, MSW, is one that is unbiased for treatment, and belongs to a distribution with 250 degrees of freedom (260 ratings in ten groups = 260 -10 = 250). The F-distribution is made up of families of such distributions. Our family has 9 d.f.’s for group and 250 d.f.’s for observations, so we turn to the F-distribution table for the intersection of 9/250. We find that we need a ratio of 1.88 for .05 level of probability. Since 3.896 exceeds 1.88 for the value of F0.05, we can assume that we are safe in rejecting the null hypothesis. Therefore, the difference among the means is highly significant.
5.2.2 $H_{02}$. The scores obtained in the native culture texts and those obtained in the other three texts are not different.

To test this null hypothesis, ANOVA was computed to determine the significance of differences in the native culture texts and the other three. An F value of (9.254) produced a level of significance less than .05, that is, ($p<.05$) as produced in Table 5.

**Table 5**

Analysis of variance between the scores obtained in the native culture texts and the other three.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF:</th>
<th>Sum Squares:</th>
<th>Mean Square:</th>
<th>F-test:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>19</td>
<td>65197.968</td>
<td>3431.472</td>
<td>9.254</td>
</tr>
<tr>
<td>Within groups</td>
<td>420</td>
<td>155739.305</td>
<td>370.808</td>
<td>$p \leq .0001$</td>
</tr>
<tr>
<td>Total</td>
<td>439</td>
<td>220937.273</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model II estimate of between component variance = 141.225

Since 9.254 is much greater than 1.57, we are safe in rejecting the null hypothesis for both significance levels of $F_{0.05}$ and $F_{0.01}$. We can assume that such different scores between the native culture texts and the other three texts could not be due to chance. Therefore, the scores obtained in the native culture texts and the other three are different.

5.2.3 $H_{03}$. There is no difference between the scores obtained in the Western texts and the other three.

To test this null hypothesis, ANOVA was computed to determine the significance of differences in the Western texts and the other three. An F-value of (9.254) produced a level of significance less than .05 ($p<.05$) as
shown in Table 6 below, which indicates a significant difference between the scores obtained in the Western texts and those obtained in the other three. Therefore, we are safe in rejecting the null hypothesis. We can also assume that such different scores could not be due to chance, and the difference among the means is highly significant.

**Table 6**

Analysis of variance between the scores obtained in the Western texts and the other three.

**One Way ANOVA 20 Groups**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF:</th>
<th>Sum Squares:</th>
<th>Mean Square:</th>
<th>F-test:</th>
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</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>19</td>
<td>65197.968</td>
<td>3431.472</td>
<td>9.254</td>
</tr>
<tr>
<td>Within groups</td>
<td>420</td>
<td>155739.305</td>
<td>370.808</td>
<td>p ≤ .0001</td>
</tr>
<tr>
<td>Total</td>
<td>439</td>
<td>220937.273</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model II estimate of between component variance = 141.225

5.2.4 **H04** There is no difference between the scores obtained in the text on Tommy and the Indian boy and those obtained in the other four texts.

**Table 7**

Analysis of variance between the scores obtained in the text on the Indian boy and the other four texts.

**One Way ANOVA 20 Groups**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF:</th>
<th>Sum Squares:</th>
<th>Mean Square:</th>
<th>F-test:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>19</td>
<td>65197.968</td>
<td>3431.472</td>
<td>9.254</td>
</tr>
<tr>
<td>Within groups</td>
<td>420</td>
<td>155739.305</td>
<td>370.808</td>
<td>p ≤ .0001</td>
</tr>
<tr>
<td>Total</td>
<td>439</td>
<td>220937.273</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model II estimate of between component variance = 141.225

Since F = 9.254 exceeds 1.57, the value of F0.05 for 19 and 420 degrees of freedom, the null hypothesis that the five texts are the same must be
rejected. Therefore, there is a difference between the scores obtained in the text on Tommy and the Indian boy and those obtained in the other four texts.

5.2.5 \( H_05 \) There is no difference between the scores obtained in the performance of students regardless of the students' attitudes.

An F value of (9.254) produced a level of significance less than .05 (\( p < .05 \)) as shown in Table 8 below. It indicates that there is a significant difference between the groups' performance in reading comprehension and their attitudes. As our ratio (9.254) is much greater than 1.57, we are safe in rejecting the null hypothesis.

**Table 8**

Analysis of variance between the scores obtained in the students' performances regardless of their attitudes.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF:</th>
<th>Sum Squares:</th>
<th>Mean Square:</th>
<th>F-test:</th>
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</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>19</td>
<td>65197.968</td>
<td>3431.472</td>
<td>9.254</td>
</tr>
<tr>
<td>Within groups</td>
<td>420</td>
<td>155739.305</td>
<td>370.808</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Total</td>
<td>439</td>
<td>220937.273</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model II estimate of between component variance = 141.225

5.2.6 \( H_06 \) There is no difference between the scores obtained in the performance of students regardless of the origin of the comprehension texts. Since \( F = 9.254 \) exceeds 1.57, the value of \( F_{0.05} \) for 19 and 420 degrees of freedom, the null hypothesis must be rejected; in other words we conclude that there is a difference in the mean performance depending upon the origin of the comprehension text.
Table 9

Analysis of variance between the scores obtained in the students' performance regardless of the origin of the comprehension texts

One Way ANOVA 20 Groups

<table>
<thead>
<tr>
<th>Source</th>
<th>DF:</th>
<th>Sum Squares:</th>
<th>Mean Square:</th>
<th>F-test:</th>
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</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>19</td>
<td>65197.968</td>
<td>3431.472</td>
<td>9.254</td>
</tr>
<tr>
<td>Within groups</td>
<td>420</td>
<td>155739.305</td>
<td>370.808</td>
<td>p ≤ .0001</td>
</tr>
<tr>
<td>Total</td>
<td>439</td>
<td>220937.273</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model II estimate of between component variance = 141.225

Therefore, students' performance significantly differ from text to text depending upon the origin of each one.

5.3 Correlation coefficient

We will investigate the degree to which the two variables (reading comprehension performance and attitudes) vary in such a sample. After the six null hypotheses were tested and rejected, it was also found that the differences among the group means is highly significant. Now such an investigation must ask the question “As attitude varies (positive or negative), what tends to happen to performance in reading comprehension?” This question will be investigated below.

There is considerable evidence that familiarity with Western culture may help to improve understanding between Saudi culture and Western culture. Learning a foreign language does not imply under any circumstances that learners will lose their identities (for more details, see Section 2.5.1.3). The students' attitudes were assessed by presenting them with a questionnaire.
consisting of 25 statements expressing different views about Western culture (see Section 4.6).

The motive to 'live and integrate in the British way of life' scored the lowest of all in all groups. This item (No. 25) scored 160 as shown in Table 10 and it had a mean of 1.74. Most of the respondents strongly objected to living in England, and living in England as a motive to learn English was declared not to be very important by the students under survey. Item 22, which states that "Anglo-American people are sincere, helpful and kind", scored next lowest and it had a mean of 2.36. Besides this, 25 respondents commented that the researcher should not have included such an item in his questionnaire. Item 7, which states that "if English were not taught at college, I would go to England to study it", scored a mean of 2.71, which reflects a negative attitude to the study of English in England.

On the other hand, the feeling that "English is an important part of the university curriculum" scored the highest of all in all groups implies that many people have a motive to learn the language. This item (No. 1) as shown in Table 10 below scored 377, and it had a mean of 4.1. This indicates that most of the subjects strongly agree that English is an important subject, which gives Saudi students the motive to learn this language in spite of the scores the other items obtained. This is due to the philosophy of learning English in Saudi Arabia (For more details, see Section 3.5). The resistance to learning English as part of cultural studies is tremendous for religious and traditional reasons. Item (2), states that "every Saudi should learn English", scored 353, and it had a mean of 3.84. As indicated above, Saudi students desire to learn English, but without getting involved in its culture. We may conclude that there is a conflict between the desire to learn
the language, and the reservations they have shown towards items 7, 8, 14, 16, 17, 18, 22, and 25 (see Appendix A).

Table 10

<table>
<thead>
<tr>
<th>No.</th>
<th>score</th>
<th>mean</th>
<th>No.</th>
<th>score</th>
<th>mean</th>
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</thead>
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<tr>
<td>1</td>
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<td>279</td>
<td>3.03</td>
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<td>353</td>
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<td>15</td>
<td>351</td>
<td>3.82</td>
</tr>
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<td>341</td>
<td>3.71</td>
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<td>3.25</td>
</tr>
<tr>
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<td>17</td>
<td>284</td>
<td>3.09</td>
</tr>
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<td>3.59</td>
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<td>341</td>
<td>3.71</td>
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<td>305</td>
<td>3.32</td>
<td>24</td>
<td>356</td>
<td>3.87</td>
</tr>
<tr>
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<td>324</td>
<td>3.52</td>
<td>25</td>
<td>160</td>
<td>1.74</td>
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<tr>
<td>13</td>
<td>344</td>
<td>3.74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scores of all the questionnaire items and their mean values.

KSU students have rejected item 8 which says, “English is an important course that teaches new values.” These students claimed that item had been inconsistent with Islamic teaching since the Koran is the source of all values. I believe that the resistance to learning English as part of cultural studies is tremendous for religious and traditional reasons (for more details, see Chapter 3).

Correlational techniques were used for analyzing scores on the questionnaire and the scores obtained in each text of the two groups under investigation. When a high, positive relationship is obtained between these two variables, it means that some students are likely to perform significantly better in reading comprehension than those with negative attitudes. In order to
compute correlations, the researcher needs to obtain two sets of measurements on the same groups of individuals. In this correlational study, a number of variables are being connected with one another and the coefficients are displayed in the following tables:

Table 11 indicates an overall positive relationship of (.673) between the scores on the questionnaire and the scores obtained in the Islamic text for all the students with positive and negative attitudes. While Tables 12 and 13 show the correlation coefficient for students with positive and negative attitudes respectively. This implies that students with positive attitudes are likely to perform significantly better than those with negative attitudes.

As shown in Tables 11, 12, and 13, the correlations are: .673, .608, and .472 respectively. These are positive correlation coefficients, which may be scaled as fairly considerable, considerable and weak. As the researcher is interested in the per cent of variation, the obtained correlation coefficient should be squared as shown in the tables below: a correlation of .673 actually indicates 45% variation in common between the two measures. In other words, the 45 per cent of the variation of the scores obtained in the comprehension text accounts for the scores obtained in attitudes; whereas a correlation of .608 indicates 37% variation, and a correlation of .516 indicates less than 30% variation. Such results show the influence of prior knowledge as discussed in Section 2.6.
Table 11

Corr. Coeff. X: questionnaire scores Y: comprehension scores

<table>
<thead>
<tr>
<th>Count</th>
<th>Covariance</th>
<th>Correlation</th>
<th>R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>198.186</td>
<td>.673</td>
<td>.453</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and the scores obtained in the Islamic passage of the two groups under investigation.

Table 12

Corr. Coeff. X: questionnaire scores Y: comprehension scores

<table>
<thead>
<tr>
<th>Count</th>
<th>Covariance</th>
<th>Correlation</th>
<th>R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>101.931</td>
<td>.608</td>
<td>.37</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and the scores obtained in the Islamic passage for students having positive attitudes.

Table 13

Corr. Coeff. X: Questionnaire scores Y: Comprehension scores

<table>
<thead>
<tr>
<th>Count</th>
<th>Covariance</th>
<th>Correlation</th>
<th>R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>50.524</td>
<td>.472</td>
<td>.223</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and the scores obtained in the Islamic text for students with negative attitudes.

On the other hand, Tables 14, 15 and 16 show the correlation coefficient between the scores obtained in the Saudi Wedding text for (a) all students; (b) students with positive attitudes only; (c) students with negative attitudes.
only. The correlation coefficients may be scaled as moderate for Table 14 and also moderate for Table 15, and weak for Table 16. The R-squared shows the per cent of variation: a correlation of about 28%, 21%, and 11% respectively. This indicates that students with negative attitudes do not perform well in the reading comprehension texts in spite of their access to Islamic schema.

**Table 14**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X: questionnaire scores</th>
<th>Y: comprehension scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count:</td>
<td>Covariance:</td>
<td>Correlation:</td>
</tr>
<tr>
<td>88</td>
<td>230.125</td>
<td>.528</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and those obtained in the Saudi Wedding for all students with positive and negative attitudes.

**Table 15**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X: questionnaire scores</th>
<th>Y: comprehension scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count:</td>
<td>Covariance:</td>
<td>Correlation:</td>
</tr>
<tr>
<td>52</td>
<td>100.392</td>
<td>.454</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and those obtained in the Saudi Wedding text for students having positive attitudes.
This table shows the correlation coefficient between the scores obtained in the questionnaire and those obtained in the Saudi Wedding text for students having negative attitudes.

Tables 17, 18 and 19 indicate the correlation coefficient between the scores obtained in the British holiday text for all students (a) with positive and negative attitudes; (b) with positive attitudes; (c) with negative attitudes. The correlation coefficients can be scaled as strong, also strong, and weak respectively.

A high correlation coefficient indicates that the two variables tend to vary systematically. Such a relation permits the prediction of one variable from attitudes score and the reading text scores, but does not permit statements about causation. We must bear in mind that a high correlation coefficient should not be taken to mean that variation in one factor (attitudes) causes variation in the second factor which is reading comprehension.

A correlation of .786 of Table 17 actually indicates more than 60% variation between the attitude scores and the reading comprehension scores for students having positive attitudes. While Table 18 which has a correlation of .712 indicates more than 50% variation. However, the correlation of .432 for students with negative attitudes indicates less than 20% variation between the attitude scores and the reading comprehension scores. These findings confirm the research hypotheses that are stipulated in Section 1.4.
Comparing Tables 14 and 17, we conclude that there is a significant relation between different degrees of attitudes and reading comprehension. For example, Table 14 shows a positive correlation coefficient of .528 of students having positive and negative attitudes, whereas the same students scored a correlation coefficient of .786 on a text based on British culture.

**Table 17**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X : questionnaire scores</th>
<th>Y : comprehension scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count: 88</td>
<td>Covariance: 252.776</td>
<td>Correlation: .786</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and those obtained in Text 3 of all the students under survey.

**Table 18**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X : questionnaire scores</th>
<th>Y : comprehension scores</th>
</tr>
</thead>
</table>

This table shows the correlation coefficient between the scores obtained in Text 3 for students with positive attitudes.

**Table 19**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X : questionnaire scores</th>
<th>Y : comprehension scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count: 36</td>
<td>Covariance: 46.119</td>
<td>Correlation: .432</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in Text 3 for students with negative attitudes.
Now the researcher will discuss the correlation coefficients of Tables 17, 18, and 19. Text 3 has a correlation coefficient of .786 for all students with both positive and negative attitudes. Table 18 reflects a high and strong correlation coefficient of .712, which has important implications for teaching foreign languages. A correlation of .712 actually indicates more than 50% variation in common between the attitude and comprehension measures. This implies that attitudes affect students’ performance in reading comprehension. On the other hand, Table 19 shows a rather weak correlation, that is, there is less than 19% variation in common between the two variables (attitudes and performance). At this stage, it is necessary to mention that these findings support the research hypotheses.

**Table 20**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X : questionnaire scores</th>
<th>Y : comprehension scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count:</td>
<td>Covariance:</td>
<td>Correlation:</td>
</tr>
<tr>
<td>88</td>
<td>236.138</td>
<td>.609</td>
</tr>
</tbody>
</table>

This Table shows the correlation coefficient between the scores obtained in the British Wedding text for all students with both positive and negative attitudes.

**Table 21**

<table>
<thead>
<tr>
<th>Corr. Coeff.</th>
<th>X : questionnaire scores</th>
<th>Y : comprehension scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count:</td>
<td>Covariance:</td>
<td>Correlation:</td>
</tr>
<tr>
<td>52</td>
<td>110.407</td>
<td>.533</td>
</tr>
</tbody>
</table>

This Table shows the correlation coefficient between the scores obtained in the British Wedding text for all students with positive attitudes.
Table 22

<table>
<thead>
<tr>
<th>Count</th>
<th>Covariance:</th>
<th>Correlation:</th>
<th>R-squared:</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>36.69</td>
<td>.231</td>
<td>.053</td>
</tr>
</tbody>
</table>

This Table shows the correlation coefficient between the scores obtained in the British Wedding text for all students with negative attitudes.

Tables 20, 21 and 22 show positive correlation coefficients between the scores obtained in the questionnaire (attitudes) and the British Wedding reading text at three levels: a) both positive and negative attitudes; b) positive attitudes; c) negative attitudes. The correlation coefficients can be scaled as fairly considerable, moderate and weak. These results give further support to the researcher's hypotheses.

Table 23

<table>
<thead>
<tr>
<th>Count</th>
<th>Covariance:</th>
<th>Correlation:</th>
<th>R-squared:</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>228.933</td>
<td>.619</td>
<td>.383</td>
</tr>
</tbody>
</table>

This table shows the correlation coefficient between the scores obtained in the questionnaire and the scores obtained in Text 5 (the text on Tommy and the Indian boy).

Table 24

<table>
<thead>
<tr>
<th>Count</th>
<th>Covariance:</th>
<th>Correlation:</th>
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<tr>
<td>52</td>
<td>139.382</td>
<td>.664</td>
<td>.44</td>
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</tbody>
</table>

This Table shows the correlation coefficient between the scores obtained in Text 5 for all students with positive attitudes.
Table 25

<table>
<thead>
<tr>
<th>Count:</th>
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<th>Correlation:</th>
<th>R-squared:</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>72.381</td>
<td>.458</td>
<td>.21</td>
</tr>
</tbody>
</table>

This Table shows the correlation coefficient between the scores obtained in Text 5 for all students with negative attitudes.

Finally, Tables 23, 24, and 25 on the Indian culture text indicate similar results as above. Schemata play an important role in reading comprehension performance. These findings support the main theme of this research: (a) students with positive attitudes towards British culture perform significantly better in reading comprehension than those with negative attitudes. Consequently, students with background knowledge of British culture perform significantly better in discourse than those without such knowledge. Therefore, these findings generally support previous research done in this area.

5.4 Discussion and interpretation of the five reading texts

We shall attempt to discuss and interpret some of the results of the five reading texts that have been administered to KSU students to show the effects of culture and schemata on reading comprehension. The fact remains that after six years of English, KSU students find it quite difficult to read English texts, a disconcerting fact which was the researcher’s motivation behind this study. These students were given five reading comprehension texts: two texts described ‘the Five Pillars of Islam’ and ‘Saudi Wedding’; the other three texts described a ‘British Holiday’, a ‘British Wedding’, and
‘Tommy & the Indian boy’. The response protocols were then analysed for error types and misunderstandings.

The conceptual framework for the study was the schema theory of reading. Schemata are abstract cognitive structures which incorporate generalized knowledge about objects or events (Anderson, Spiro, and Anderson 1978). These abstract structures contain ‘slots’ which are filled with specific information bits as a text or message is processed (for more details on schema theory, see Section 2.6.2.1). For example, most adult Saudis possess well-developed schemata relating to Islamic doctrines and national wedding ceremonies. Given a text about a wedding, a Saudi reader would anticipate references to, and specific information about ‘matchmakers’, ‘dowry’, ‘wedding cake’, ‘drum-beatings’ and engagement procedures, etc. On the other hand, there is no reason to predict that a Saudi reader would expect a different set of information or would have the pre-existing knowledge relating British marriage procedures.

First, schemata provide the basis for ‘filling the gaps’ in a text: no message is ever completely explicit, and schemata permit a consistent interpretation through inferential elaboration. Second, schemata constrain a reader’s interpretation of an ambiguous text: if readers possess background information and assumptions which differ from those of the author, they will reinterpret vague aspects of the text to conform with their own schemata and will be unaware of other possible interpretations which in fact conform to the author’s schemata. Third, it is by establishing a correspondence between things known, as represented by schemata, and the ‘givens’ in a message that readers monitor their comprehension and know if they have understood the
text. In research on reading comprehension in a foreign language, Johnson (1982:514) found that:

familiarity with a foreign culturally related topic, knowledge obtained from real experiences in the foreign culture is effective for reading comprehension of a passage on that topic.

On the basis of schema theory, three predictions were made for the present experiment: (a) KSU students would have a higher score on the native texts than on the foreign texts. The mean scores for the native texts were 63.07, and 61.82; whereas the mean scores for the foreign texts were 54.21, 56.71 and 58.07. (b) Subjects would demonstrate more misunderstandings of the foreign texts than of the native ones, e.g. they would assimilate events in the foreign wedding, and the other foreign texts and produce incorrect responses to those events, as will be shown below. (c) It would take subjects longer to read the foreign texts than the native ones. For example, it took KSU students 40 minutes to read and answer the native texts; whereas it took 60 minutes each to answer the foreign texts. These findings are similar to those of Steffensen (1986) and Bransford (1979). We should note that no subject under scrutiny has ever attended a British Wedding ceremony or presumed any familiarity with British marriage customs. Differences in the connotation values of terms appeared to have a profound effect on correct responses.

In the Saudi Wedding text, there was a reference to the groom’s parents which read:

it is part of the marriage custom that the family of the bridegroom pays a visit to the family of the bride to make acquaintance with her and verify her suitability for their son.
The discussion starts on the amount of dowry and a day is fixed for the engagement.

But in the text on the British Wedding, Saudi students could not understand:

The matchmakers are usually the couple-to-be. The dating and courtship among couples usually precedes marriage.

In fact, dating and courtship are two components representing the average person's knowledge of a wedding ceremony. This is why KSU students misunderstood these components because they lack the schema for 'British Wedding'. Saudi students' prior knowledge is not consistent with the 'British Wedding' schema. They understood 'matching' and 'dating' before marriage as an engagement period. As a result of this, a good number of KSU students responded to the 'engagement' distractor as the correct response (Question 3, Text 4).

Another set of errors were misunderstandings that could be related to gaps in the subjects' knowledge about the foreign wedding customs or intrusions of native customs and beliefs into the foreign text. In the Saudi Wedding text, subjects were expected to distort the fact about question seven (Appendix B). Yet most of them responded accurately to this item. The text involved read:

On the day relatives and friends from both sides attend the party during which sweets and soft drinks are served, perfumes sprinkled and incense burnt. When all this is over, the men go about their business.

In the British Holiday text, there was a reference to an event which preceded the trip and the other was on the holiday site: the text involved read:
She was busy checking her list: lock windows, turn off gas and electricity... leave note for the newspaper boy... give neighbours our address... When can we fly our kites? asked Paul. There is plenty of wind. ‘Just right for golf if the rain holds off’, said Mr. Baker.

In the above text, Saudi students could not understand “Before the Bakers went away on holiday, they had to lock the doors and leave a note for the newspaper boy”, because KSU students lack the schema for the newspaper boy who delivers newspapers to houses. The difficulty here could also be due to a set of errors related to gaps in the subjects’ knowledge of British Holidays. For example, since KSU students lack the knowledge about the steps involved before going away on holiday, it may be difficult to understand these two sentences:

a) We left a note for the newspaper boy.
b) We gave neighbours our address.

Some schema theorists agree that people must elaborate to-be-learned information by relating it to previously acquired knowledge (e.g., Craik and Tulving 1975). However, there is a need to specify the kind of knowledge that must be activated in order for people to understand the message. These authors also argue that the activation of additional knowledge will facilitate learning as this knowledge is semantically coherent with to-be-learned information. As an illustration, the sentences presented earlier might be elaborated as follows:

(c) We left a note for the newspaper boy to stop delivering newspapers for two weeks.
d) We gave neighbours our address in case of emergency.
Each of these elaborations renders the relationship between the messages and the reasons for leaving a note and giving neighbours our address. For example, the fact that Mrs. Baker left a note for the newspaper boy so that he could stop delivering newspapers while they were on holiday would help KSU students realize the significance or relevance of leaving a note (for more details, see Section 2.6.2.4).

Moreover, KSU students could not understand a simple sentence because of the specific cultural information which did not fit in with their background knowledge. For example, most students answered Question 2 on the British Wedding text ‘during winter’. Since these readers did not share the cultural background of the writer, it would thus be possible for us to say that they were not equipped with the appropriate schemata. At this point, we should not ignore the role of the students’ linguistic abilities. We can also attribute their failure in understanding the question mentioned on the British Wedding text to their language failure. It is when language fails that students will resort to their schema.

Eskey (1986:17) identifies two categories of knowledge that must interact if there is to be “full, or at least native-like, comprehension of written texts”: knowledge of form and knowledge of substance, formal knowledge includes recognition of syntactic/semantic, and rhetorical patterns of language; knowledge of substance encompasses background knowledge. Eskey and Grabe (1988:226) assert:

Reading requires a relatively high degree of grammatical control over structures that appear in whatever readings are given to L2 students.
The idea that second language readers must reach a level of general language competence in order to read successfully in the target language is no longer seriously challenged.

While it was conceivable that some subjects did not know the meaning of the word 'golf', much more than vocabulary interference or affective meaning must have been involved to produce such effects (for more details, see Section 4.5). Finally, a set of errors was not obviously related to cultural backgrounds, such as selecting the time people get married incorrectly.

Students have had to learn all the normative cultural behaviour (for more details, see Section 2.3.2). This gives further evidence of the importance of introducing 'cultural studies' to foreign language teaching. Moreover, cross-cultural experimentation demonstrates that reading comprehension is a function of cultural background knowledge. If readers possess the schemata assumed by the writer of a text, they understand what is stated and make the inferences intended. If they do not, they distort meaning as they attempt to accommodate even explicitly stated propositions to their own preexisting knowledge structures as shown above.

Now we will discuss the role that attitudes play in reading comprehension. This present study reports significant differences in attitudes among different groups of students; students with positive attitudes scored higher in reading comprehension than those with negative attitudes. Moreover, it seems that Saudi Arabian students are not interested in knowing about the special characteristics of the British way of life, that is, British culture. This corroborates the findings of Clement et al. (1983).
The results indicating that students with the best marks also score highest on the instrumental motivation variable and lowest on the integrative motivation variable, may appear to be in disagreement with Gardner’s findings. The disagreement may be due to a difference in methods used to assess attitudes, Gardner using a more comprehensive test battery than the present study. More probably, the difference is due to the emphasis in Gardner and Lambert’s study on immigrants. On the other hand, several studies have found a positive relationship between attitudes and achievement in foreign languages. The basic work is the study by Gardner and Lambert (1972) wherein they described the two types of motivation most relevant for foreign-language learning; integrative and instrumental motivation. Those who were interested in studying the language in order to be able to identify with the target people, or because they were interested in the culture of the target people, were said to be integratively motivated. However, this study does not agree with Gardner’s findings, nor does it agree with Spolsky’s.

As shown in section 2.5.1, motivation was considered an important factor in language acquisition; however, the results were not clear. Gardner also finds an instrumental motivation to be positively related to language learning in a foreign language setting. Oller (1977) finds an instrumental motivation to be the best predictor of language proficiency in a second-language setting, and also finds a negative correlation between integrative motivation and language proficiency. More research on the interrelationships of these factors seems to be needed. Among such different results, this study simply shows a high positive correlation between attitudes and performance in reading comprehension. Since schemata are interrelated to culture, the reader should take into consideration that background knowledge is embedded in culture, that is, background knowledge offers simple solutions to
these inconsistent results that have dominated research in language proficiency and the huge funds and time that are allocated to this field.
CHAPTER SIX

INTRODUCING CULTURAL STUDIES TO KSU SYLLABUS

6.1 Introduction

The findings of this research generally support the view that students from different cultures bring different systems of background knowledge to the comprehension process. As a result of such different cultures, EFL students tend to make incorrect assumptions when reading unfamiliar texts. Similar findings were reported by Youssef (1968); Gatbonton and Tucker (1971); Steffensen and Anderson (1979); Johnson (1982); Floyd and Carrell (1987). However, this area has been the most neglected in EFL reading (Carrell and Eisterhold 1983) because “it is easier to identify and teach specific features of phonology and grammar in a methodical and concise way than it is to teach features of culture” (Steffensen 1986:48). These findings confirm the view that cultural background is an integral part of foreign language teaching.

Byram (1989) uses the term ‘cultural studies’ (this term was used by Kramer 1976, for example), to refer to any information, knowledge or set of attitudes about the foreign culture which is evident during foreign language teaching. ‘Cultural studies’ is taught and learnt both overtly and implicitly, both consciously and incidentally (Byram 1989:3). Byram continues: “cultural studies has a rightful place as part of language teaching, not just as an adjunct to language learning, not just as a means of creating communication, but as an integral component with appropriate aims and methods” (ibid.1989: 3-4).
‘Cultural studies’, as shown above, plays an important part in language teaching in the sense that words in English refer to meanings in its cultural system, creating a semantic relationship which the learner needs to comprehend. Therefore, the term ‘cultural studies’ will be adopted in this chapter.

Since the relationship between language and culture has been established, it is necessary to give an outline of the fundamental elements to be included in the foreign language syllabus. This raises an important question: what are the basic elements that constitute British culture? The relationship of language and culture has led to the notion of a disciplined study of a culture. Thus, for example, it can be argued that culture has two purposes which are ‘interdependent’ (Byram 1989). First, to facilitate learners’ use of language and second, to help learners apprehend the concept of cultural ‘otherness’, what Leach (1982:17) calls “the constant puzzle in all kinds of anthropological enquiry, that is, the problem of how far we are all the same and how far we are different.”

The literature reviewed above outlines the role of culture in language teaching. The issues that will be tackled in this chapter are: what to teach about culture, why, how and when. This will include a statement of philosophy which is an attempt to give a rationale to ‘cultural studies’.

6.2 Philosophy of teaching culture

In line with the symbolic definition of culture, language chiefly includes the values and meanings of culture. As language teaching is part of general education, cultural teaching is a result of language learning, which broadens
the horizons, and Byram (1989:41) says “once that is recognized then the need for good ‘cultural teaching’ becomes quite evident.”

Albadah (1985) asserts that the rationale of including the teaching of ‘cultural studies’ in Saudi institutions and in the English language curriculum stems from the recognition of the close relationship between the Saudis and the West. Also Anglo-American institutions are popular among Saudi graduates who pursue higher education. Albadah continues to say that the USA attracts Saudi higher education students more than any other country in the world. Currently, there are more than ten thousand Saudi students learning in the US compared to about one hundred thousand high school graduates who are learning at Saudi universities. Hence teaching Western culture can help students communicate effectively with native speakers and prepare them to adjust properly during their sojourn in the USA.

Furthermore, teaching Anglo-American culture to Saudi students can help them understand American literature properly when they study at this stage and at Saudi colleges if they opt to continue college studies in their home country. This claim may appear to contradict Youssef’s (1968) findings. The subjects of the study were Middle Eastern males. As these were observed, it became clear they “would never be able to reach an understanding of the people and the culture of the United States by studying American literature. Instead, the study of American literature actually seemed to increase misunderstanding and confusion” (Youssef 1968:228). This would imply that a degree of cultural orientation was necessary before literature could be taught in a meaningful way. However, the above unstated and implied conclusion was that it is futile to expect students to absorb culture unconsciously from literature.
Thus 'cultural studies' reinforces the significance of introducing students to new meaning systems, and their associated symbols and values. By teaching such systems, one can help in establishing a minimum understanding of British culture. Starting from the position that 'cultural studies' is an integral part of foreign language teaching, it is important to consider its precise relationship to the 'subject' and to higher education as a whole.

Language teaching, native and foreign, plays a role in the learners' personal education in terms both of individuals learning about themselves and of social beings learning about others. We are, after all, linguistic animals. We are basically cultural at the same time because language cannot be separated from culture. Thus as learners learn about language, they learn about culture and as they learn to use a new language, they learn to communicate with other individuals from a new culture. Learners are taught to use a foreign language as part of the 'personal education' element of language teaching. However, the ability to use a foreign language is difficult to acquire under the prevailing conditions of language teaching; instead of exploring the cultural essence of language teaching, teachers have been pre-occupied with methods and teaching language skills.

As the cultural learning aspect has been explained, discussed and analysed earlier, it is reasonable to discuss the philosophy and psychology related to it. The inclusion of language teaching in the Saudi curriculum is mainly justified in terms of religious and traditional values. Byram (1989) claims that there is the feeling that education is not complete without a foreign language. On the other hand, the Ministry of Education (1980:2) in Saudi Arabia has justified the inclusion of foreign language teaching by setting out the goals of teaching English in the following manner:
The ultimate aim of teaching English is to enable the student to communicate orally and in writing, to understand foreign culture, to convey theirs to others, to keep pace with some of the latest scientific, literary, and technological findings and to help the pupil gain reasonable command of English in order to be in a better position to defend Islam against adverse criticism and to participate in the dissemination of Islamic culture. We feel that if the teaching of English is to be fruitful at all, it must be geared to these general aims. Teaching in a vacuum is both mechanical and lifeless. To work within a set of aims motivates the learner and satisfies his mind.

The Saudi syllabus is, it will be observed, vague about the extent to which it aims at understanding foreign culture. Yet the section just quoted may be considered as an opening to permit the introduction of culture to language teaching. This is despite the fact that the Saudi syllabus subordinates all goals and subgoals to the service of Islam: there is no theoretical contradiction between the promotion of one culture and the understanding of another.

The roles of educators in implementing the plan of teaching ‘cultural studies’ include the following though a list of this type cannot be exhaustive:

1) Broadening their own horizons and scope of knowledge about British culture by reading about it.

2) Illustrating to learners the importance of learning about British culture when they are learning its language.

3) Giving acceptable reasons to learners that there are no superior and inferior cultures, but simply different ways of living, thus reducing learners’ culture-bondage. (Arguing that foreign language teaching aims to instil new values in the learner, values associated with language and culture, Alptekin and Alptekin (1984) suggest that teaching English as a foreign language in Third World Countries can lead to cultural colonization, and it is important to guard against this possibility).
4) Helping learners understand their culture by providing contrasts and similarities between Saudi and British cultures.

5) Acquainting the learner with the lifestyles of the British.

6) Providing the learner with a sense of forgiveness and flexibility in cross-cultural encounters.

7) Helping the learner to acquire cultural awareness and tolerance.

8) Bringing individuals into contact with new phenomena, and new experiences, in order to bring about changes in schemata by 'patterned generation' or by 'induction'.

9) Developing teaching strategies which can help in bringing about language awareness and tolerance.

10) Broadening their own scope of knowledge about 'cultural studies' by reading about it.

The objectives of teaching 'cultural studies' are to:

1) Help the learner understand some characteristics valued by the British. This can be achieved, for example, by the following:

   a) Discussing with learners the importance of punctuality in British everyday life.

   b) Explaining to the learners the importance of having a solicitor when it comes to signing contracts.

   c) Explaining how the British conceive their social relationships.

   d) Discussing the significance of respecting one's privacy.

   e) Illustrating the role of competition in British achievements.

2) Expose the learner to the lifestyles of the British through video-tapes and films. The features which can be discussed with learners are:
a) Explaining to learners how the British dress: casual and formal.

b) Giving the learner a clear picture of the British educational system.

c) Presenting to the learner a picture of the structure of the family in England, which can be compared with the Saudi family as elaborated in Chapter 3.

d) Explaining to learners such British activities, indoors and outdoors as sports, dancing and playing, going to cinemas, operas and concerts.

e) Helping the learner understand what types of accommodation are available in the United Kingdom.

f) Developing an awareness of the types of insurance British people have and their significance.

3) Provide opportunities and programs for ongoing cross-cultural meetings. The following are examples of this cross-cultural education.

a) Developing an awareness of cross cultural understanding.

b) Relating cultural similarities and cultural contrasts between Saudi and British societies to the understanding of cultural values.

c) Helping the learner avoid culture shock, which is the state of distress following the transfer of a person to an unfamiliar cultural environment. This state of shock may be accompanied by physical symptoms.

4) Increase the speed at which a student learns to use and comprehend the English language.
6.3 The content and status of ‘cultural studies’ within TEFL

As shown above, language learning ought to involve culture learning, and consequently that language teaching is culture teaching. Teachers look for support and this can be provided by the linguistic, pragmatic and sociolinguistic input necessary to language teaching. In addition to the cultural meanings carried by the functions of language, language embodies the values and artefacts of a culture through referential meaning. In order to teach these linguistic meanings, the language teacher has to account for an analysis of the values and artefacts to which they refer, an analysis which is other than linguistic. For the language teacher needs a discipline on which to depend for this aspect of his teaching, just as much as he/she needs a discipline in order to teach grammar. Linguistics is the discipline underlying the teaching of syntax, pragmatics and phonology, and at a different level, underlying awareness of the nature of language. The academic discipline which has concerned itself with the analysis of other cultures is social anthropology.

Curricular aims reflect the type of philosophy that is dominant at a certain period of time. Stenhouse (1975:82), discussed in Byram, (1989:44) has, for example, provided a general critique of the behavioural model, summarized in the statement: “Education as induction into knowledge is successful to the extent that it makes the behavioural outcomes of the students unpredictable.” As the symbolic definition was adopted in teaching foreign culture, new meaning systems and their associated symbols are introduced.

Therefore, Stenhouse proposes the alternative of determining content and methods from within the disciplines or forms of knowledge. The advantage
of his proposal is that content and methods are not a reflection of pre-determined objectives, nor do they themselves determine any particular set of outcomes. This is the potential role for social anthropology in ‘cultural studies’.

There are some precedents for drawing on anthropology for the school curriculum, for example, ‘Man: a Course of Study’, MaCoS (1968:70) discussed in Byram (1989:45-46), may offer a valuable starting point for developing content and methods in ‘cultural studies’. There are two aspects of ‘Man: a Course of Study’ which should be emphasized immediately.

First it shows how the complex and powerful issues of an academic discipline can be presented to young pupils. What could be more ‘abstract’ and ‘difficult’ than the content of the course as described by Bruner (1966:74)?

The content of the Course is man: his nature as a species, the forces that shaped and continue to shape his humanity. Three questions recur throughout. What is human about human beings? How did they get that way? How can they be made more so?

A course of ‘cultural studies’, oriented towards Anglo-American culture, especially Great Britain, might be formulated in a not dissimilar way:

The content of the course is man in his particular manifestation in British culture as a dimension of the humanity of people born and raised in it. Three questions are basic: in what ways does the cultural dimension of their nature make people British and not Arabs, or British and not Koreans, for example? How can people who are in a similar way uniquely Arabs understand British culture and communicate with British people? How might this experience of British people and culture affect Arabs?
The second point to be emphasized is Bruner’s (1966:74) recognition of the problem of teacher expertise:

The . . . most obvious problem is how to construct curricula that can be taught by ordinary teachers to ordinary students and at the same time reflect clearly the basis or underlying principles of various fields of inquiry.

The solution proposed is that teachers become learners alongside their pupils, but superior in their understanding of the rationale of the whole learning process. On the one hand this would be reassuring to language teachers with no training in social anthropology. On the other hand, it is in the nature of most language teaching until recently that the teacher is the sole provider of knowledge, and the role of learner is one which language teachers more than some others would find difficult to accept.

Since the emphasis of our selected material is on man, the inclusion of film in cultural studies becomes highly desirable. In addition, the language teacher has the opportunity of taking his pupils to the country in question, which ‘MaCoS’ teachers do not have. Thus it should be clear that ‘people study’ (Lambert 1974) is accessible in principle to all kinds of pupils. Pupils would learn about other people and, by using the foreign language to do so, would learn the language incidentally.

Lambert’s (1974:60) proposal is a radical ‘‘Alternative to the Foreign Language Teaching Profession’’ in which he suggests that the lack of interest among American pupils for language learning could be remedied by making the language process “incidental not only to the communication process and the learning of content taught via the language, but also that it be made incidental to the learning about different peoples and their styles of life.”
His proposal may be too radical to be acceptable to a profession which identifies themselves as language teachers, and his further suggestion that the focus should be on “the cultural mosaic at home” (ibid. 1974:58) within the American borders - now comparable to the situation in European countries - ignores the significant differences created by territoriality.

Lambert’s (1974) suggestion implies quite different criteria for the selection of content, although he does not expand this point himself. If the object of study is a people and their culture, then the criteria are surely to be found in social anthropology, the discipline devoted to the study of people and culture. The selection from the potential content must be carried out on criteria developed partly in social anthropology, and in pedagogy and psychology. For the selection from the numerous and complex phenomena contained in the phrase ‘British people and culture’ must be non-arbitrary, must be made on grounds of what is in some sense central to the culture, influenced by considerations of pedagogical feasibility and of the psychological development of the learners.

Let us consider the particular case of Saudi learners learning English and being presented with an account of how British people live, in the course of their language learning. Typically this account will be largely incidental to the process of language learning, and be evident in accompanying pictures. The account will therefore include deliberately chosen and accidental elements and will typically emphasize those which are different from comparable elements in the learners’ native culture. They will tend to focus on those elements which are different from their own customs, behaviours and systems of meanings. Using Hundeide’s terminology they will focus on deviations from Arabic normative expectancies.
In what terms should the analysis be made? Societal institutions? Cultural artefacts? Overt signals or signs - to show identity - dress, language, house-form, or general life-style? Societal institutions (school, transport, sport, or to cultural artefacts (art, literature, dress, housing)? Both 'auxiliary' and 'textbook' material portray implicitly social, familiar roles, and habitual routines and customs.

6.4 Major criteria for the selection of 'cultural studies' elements

The criteria for selection depends largely on what we want to achieve from teaching culture in the foreign language classroom. Reichmann (1970:69) states three important ends to be accounted for in the selection of 'cultural studies' material: (1) the student must gain an understanding of the nature of culture; (2) his cultural bondage must be reduced; (3) he must achieve a fuller understanding of his own cultural background. Seelye (1976:34-45) explains that introducing culture in the foreign language classroom should concentrate on the following seven goals:

1) The student should demonstrate an understanding that people act the way they do because they are using options the society allows for satisfying basic physical and psychological needs.

2) The student should demonstrate an understanding that such social variables as age, sex, social class, and place of residence affect the way people speak and behave.

3) The student should indicate an ability to demonstrate how people conventionally act in the most common mundane and crisis situations in the target culture.
4) The student should indicate an awareness that culturally conditioned images are associated with even the most common target words and phrases.

5) The student should demonstrate the ability to evaluate the relative strength of a generality concerning the target culture in terms of the amount of evidence substantiating the statement.

6) The student should show that he has developed the skills needed to locate and organize information about the target culture from the library, and mass media, people, and personal observation.

7) The student should demonstrate intellectual curiosity about the target culture and empathy towards its people.

Reichmann’s three ends of selecting cultural materials and Seelye’s seven goals of cultural teaching are by no means exclusive, and they can supply us with a good framework within which we can select relevant materials to introduce culture to the foreign language classroom. Seelye’s purpose is to enable students to behave appropriately in a foreign culture, and he bases his work on human needs.

The rationale for teaching ‘cultural studies’ is to understand how the language concerned operates. Hence, the selection of relevant materials should focus on patterns of culture observed in the country whose language is being studied. These patterns of culture can provide learners with ‘insights’ and a meaningful comprehension of how a language functions. Understanding a foreign culture can lead us to have positive attitudes towards the language of that culture, whereas a lack of understanding can lead to negative attitudes or destructive behaviour. By teaching ‘cultural studies’, our ‘ethnocentricity’ is often reduced, and we become aware of the common bonds we have with others. We also learn to become more tolerant of existing differences between the target culture and the native culture, which will lead to ‘cross-
cultural' awareness. In other words, in trying to become less ethnocentric, we should not only attempt to become more aware of the common bonds we have with others, but we should also learn to become more tolerant of existing differences between the source and target cultures.

Seelye (1976:22) believes that it does not really matter how culture is defined as long as this definition is broad. While Rivers (1981:321) tells us about the evidence we seek which shows that students are gaining 'insights' to a particular culture:

Once students have realized that a new language is much more than a code to be cracked in order to transform ideas back into the familiar ones of the native language, they have gained an important insight into the meaning of culture. As they strive to understand another culture, they will learn much by comparison and contrast about their own culture and its relationship to their use of their native language.

The selection of appropriate materials should focus on patterns of culture in the country that speaks a particular language. These patterns of culture, which focus on comparison and contrast of the source and target cultures, can provide learners with 'insights' to the ways a particular society leads its life. This should give them a meaningful comprehension of how a language functions in that particular society.

Nostrand (1968:245) offers some questions which should be considered by the language teacher concerning the selection of cultural materials:

1) How to select what is worth teaching;
2) what techniques to use;
3) how to get materials; and
4) how to gain knowledge a teacher lacks.
The idea of teaching culture as part of language teaching is a matter of controversy in terms of what to teach about culture, how and when. Concerning what to teach about culture will depend largely on what we want to achieve from teaching culture in the foreign language classroom.

6.5 Techniques of ‘cultural studies’ teaching

The foreign language teacher often faces a group of students who are unaware at the conscious level of the basic patterns of their own culture. This naivety can make it easier for transference of the students’ native cultural patterns to related situations in the target culture, and this in turn means that an appropriate methodology is a major requirement.

With regard to the methodology of teaching cultural studies, Rivers (1981) states that culture can be taught through the presentation of what she terms ‘cultural series’. These series are divided into different stages at elementary, junior and advanced levels. At the elementary stage, discussions include daily life of the peer group in the target culture, their families, their school activities, their living conditions, and their free time activities. At this stage, it is possible to consider teaching culture through the learners’ own language.

The main objective of introducing some patterns of culture in the learner’s own language is an attempt to create modifications in the students’ concepts and schemata by a process of further ‘socialization’ and ‘experiential’ learning in the foreign language. Byram (1989:137) cites two possible approaches to enable implementation of the modification process: first, the use of learners’ mother tongue as the medium of instruction of British
culture without the intention of introducing the learner to the totality of the culture. Second, the integration of language and culture learning by using the language as a medium to develop pupils’ cultural competence from its existing stage, by changing it into an intercultural competence. In schema-theoretical terms, this involves a modification and change of existing schemata to accommodate new experiences. It also involves a modification of monocultural awareness. Learners have to acquire an intercultural awareness which recognizes the target culture.

By teaching ‘cultural studies’, two objectives can be achieved: (1) misunderstandings can be avoided and (2) comprehension of the text and the context may be attained. It is important to say that this stage is very significant because pupils are likely to accept what they are taught.

At the junior and advanced stages, attention could be directed to geographical factors and their impact on the daily life of the target people, the structure of their society, buying and selling, the law, the value system, and religion. These features are presented either by the teacher using the target language in lecture or discussion form, or by students in the form of diagrams, pictures, slides, films, and maps which can accompany the presentations and discussions.

The use of techniques such as role playing, comparison of cultures, culture assimilators, culture capsules, and cultural asides can be used to teach cultural insights in the foreign language classroom (for details, see Brooks (1968); Allen and Valette (1972); Robinett (1979); Hendon (1980); Rivers, (1981)).
These techniques will be elaborated below:

1) Students can learn about themselves and others, by means of role playing. Role playing can be used in the classroom to enable students to enact roles in the target culture. This technique is helpful in teaching something about the ways things are done in the target culture and can be motivating to learners.

2) Comparison of cultures is a good technique to use because it shows similarities and differences between native and target cultures. In comparing the target culture with the native culture of students, the teacher chooses one aspect and compares it in the two cultures.

3) A culture assimilator is a programmed learning tool for developing intercultural communication skills, which may lead to cross-cultural understanding. In its simplest form, the culture assimilator is a short description of an incident of cross-cultural interaction between people in the native language and foreign cultures where natives are most probably to be misunderstood.

4) Culture capsule is a short presentation in the target language which runs for a few minutes and considers one minimal difference that might be misunderstood, but it involves an oral presentation accompanied by visuals such as pictures and slides to single out the difference. After the presentation, the teacher asks some stimulating questions.

5) Cultural asides are a very few sentences explaining a point brought up spontaneously during class periods. This technique is used by teachers to explain matters related to the target culture when they appear during the process of teaching the target language.

6) Other techniques of teaching culture are through situational learning, use of films, visiting cultural groups, or having native speakers pay regular visits to the classroom. It seems it is absolutely vital that pupils should have access to native speakers of the foreign language concerned.
The appropriate time to begin the teaching of culture is controversial. In the researcher's opinion, culture should be taught from the first day. Ladu (1974:130) states:

Acquainting the student with the culture of a foreign people should be done slowly and unceasingly. It should begin on the first day of the study of the foreign language and continue everyday thereafter as long as the student is in contact with the language.

Byram (1989:138) advocates the use of learners' mother tongue to make a comparison between the source and target cultures which can be combined with the "teaching of the foreign language as a subject and as the medium of experience of foreign cultural phenomena." This would involve, first, the development of an awareness of the nature of language and language learning. Second, the study of language would in turn be combined with a study of culture, both of these carried out with comparative techniques using the learners' native language. Thirdly, the direct experience of those aspects that are selected from the foreign culture are taught in the foreign language, and this would in turn contribute to the language learning process.

The researcher recommends that teachers use the pupils' native language in teaching 'cultural studies' at the initial stage of the learning process (the first six years of schooling). Moreover, if linguistics is ever taught, it is proposed that it be taught in Arabic at the intermediate stage (from the 7th year to the 10th year of schooling). By doing this, the barrier to understanding culture or linguistics in a foreign language is removed.
Since Cultural Awareness of mother tongue contributes to the teaching of English as a foreign language, we shall attempt to elucidate this notion and to show how it is implemented in classroom activities.

6.5.1 Language Awareness

The similarities in purpose between the ‘Cultural awareness’ (see Section 2.3.2) and ‘Language Awareness’ notions are summarized by Byram (1989:142) as follows:

Both are concerned with specific and general learning. Both are concerned with the relationship between language and culture.

Hawkins (1984) defines Language Awareness (LA) in terms of its objectives, thus offering a utilitarian definition. Awareness of language is intended to bridge the transition from primary to intermediate education work; to provide a meeting place and common vocabulary for different fields of language education (Arabic as a mother tongue, English as a foreign language); to prepare the way for child-care courses in the last two years of intermediate education; to facilitate discussion of linguistic diversity; to develop listening skills (as a prerequisite for efficient foreign language study; along with confidence in reading and motivation for writing).

We shall here adopt Donmall’s (1985:5) definition of Language Awareness: “Language Awareness is a person’s sensitivity to and conscious awareness of the nature of language and its role in human life.” The purpose of LA courses is to make pupils conscious of the role of language in their lives and in the lives of their own and other societies.
The NCLE Report sees LA programs developing such sensitivity and awareness within the following three parameters:

1) The cognitive parameter. The NCLE (ibid. 1985:7) definition of LA stresses the cognitive gains to be derived from such study: "...developing awareness of pattern, contrast, system, units, categories, rules of language in use and the ability to reflect upon them." This statement is a rejection of what we call the 'behaviour' view of language work in school, which assumes that language is something that one produces adequately well in response to social or emotional needs. In the LA definition, language in general and languages in particular are legitimate objects of study, as legitimate as other aspects of our physical or social environment that are studied in disciplines like physics, history, chemistry, biology, etc.

2) The affective parameter. A great deal of research has been conducted into the relations of various types of attitudes and motivation to second language achievement as shown in (see Section 2.6). The affective aspect of LA is specified in terms of "forming attitudes, awakening and developing attention, sensitivity, curiosity, interest and aesthetic response," (ibid. 1985:8).

3) The social parameter. In the words of the 1985 NCLE Report, this can be utilized "to foster better relations between all ethnic groups by arousing pupils' awareness of the origins and characteristics of their own language and dialect and their place in the wider maps of languages and dialects used in the world beyond" (Donmall 1985:8).

LA programs are seen as taking a variety of forms, and serving a variety of objectives: making explicit pupils' intuitive knowledge of their mother tongue; strengthening language skills and increasing the effectiveness of
communication in the mother tongue; illuminating linguistic diversity in the classroom; fostering better relations between ethnic groups in and beyond school, especially at the workplace; introducing pupils to the concepts and techniques of basic linguistics; and imparting an understanding of the value of language as part of human life. Furthermore, language awareness contributes to learners' gradual socialization in their mother culture and hence may indicate how a second socialization in the foreign culture might be undertaken.

LA focuses on making the learners aware of their mother tongue intuitions, and on increasing their explicit knowledge of what happens in English as a foreign language. This suggests the scope for a new type of contrastive analysis (CA): not the CA of the classical sort studied by linguists, but the CA undertaken by pupils as FL learners themselves, in order to gain linguistic awareness of the contrasts and similarities of the two languages.

Before learners acquire a foreign language awareness, they have to be fully aware of their mother tongue. We suggest pupils in all schools in Saudi Arabia should acquire a common grounding in the nature of their mother tongue, its various forms and structures, and the ways in which different language forms have been developed for different purposes, together with some knowledge of the linguistic landscape of the country. Sidwell (1984) claims that the inculcation of mother tongue awareness becomes significant because learners who have acquired cultural awareness of the mother tongue will be better equipped to learn a foreign language, and this is a suggestion we should be happy to endorse. A program for cultural awareness of the mother tongue can be carried out by broadening the existing Arabic curriculum and encouraging other subject teachers to be more aware of the role of language in learning. An important characteristic of LA is that
classroom activities should help to make the implicit explicit by helping the learners to become consciously aware of aspects of language that they already know. This activity helps learners to bring out into the open their experience and this helps them to put on the agenda any aspects that bother or interest them.

In summary, the development of Language Awareness teaching (Donmall 1985 and Hawkins 1984) has emphasized both the need to educate children in one of the basic features of being human and, secondly, in what is to be gained in the process of language learning by having a general understanding of the nature of language and positive attitudes towards language learning. The potential range of topics on which to construct a language awareness course is so large that selection has to be made both with a view to restricting the extent of a course and with regard to the learners’ ages and cognitive capacities. In general, courses have introduced pupils in the early intermediate years to topics in the sociology and psychology of language, with some philological and grammatical issues. Lessons on first language acquisition, on dialects and other language varieties, on the historical and contemporary relationship between different languages, or on social attitudes towards speech and writing, can all contribute to the two main purposes of educating about language and of preparing the ground for language learning.

6.5.2 Cultural Analysis

Hall (1959) published a book entitled The Silent Language which dealt with cultural analysis. The general framework presented by Hall consists of ‘ten separate kinds of human activity, labelled Primary Message System.’

1. interaction
2. association
3. subsistence
4. bisexuality
5. territoriality
6. temporality
7. learning
8. playing
9. defence
10. exploitation

Only the first of the above directly and more or less necessarily involves language, and together they make up a culture. Byram (1989:67) does not find the anthropological bias of Hall’s work surprising, because of the long history of association between linguistic analysis, language learning and anthropological field work. Anthropologists and sociologists meet the problem of learning as well as analysing another culture most forcibly in language. It is not surprising then that Keller (1983a) looks to anthropological models of culture as a basis for pedagogical models as does Lambert (1974).

Since ‘cultural studies’ depends on language learning, some forms of analysis may be more appropriate than others. An analysis of culture which views it as in some respects as a system of communication (Hall 1959; Guthrie and Hall 1981; Dressler, Reuter and Reuter 1980) is more comparable to the analysis of language itself than an analysis of, for instance, cultural artefacts. In analysing the conceptual framework of cultural studies, for example, Keller (1983a:201)) suggests that three different models of culture may be appropriate to different age groups of pupils learning a foreign language. The behaviourist model, firstly, analyses culture as patterns of behaviour acquired and transmitted through symbols, and is appropriate for the early stages of learning (cf Seelye 1976). Secondly, a functional analysis of the ‘interdependencies’ and causes of cultural development which goes beyond
surface phenomena would be more appropriate to the level of interest of older pupils. And, as a third and final stage, a Marxist model could be used to reveal conflicts of interest and resistance to existing power structures. However, Keller (1983b) points out that a behaviourist model is unsatisfactory because it deals with surface phenomena. In the course of this shift from behaviourism to functionalism and Marxism, pupils will move from the ‘knowing how’ to ‘knowing that’ which makes the learner conscious of the knowledge which the native has both consciously and unconsciously. But because Keller (1979) believes that cultural studies should have an emancipatory function, the knowledge that the learner acquires should also include a critical dimension, an understanding of underlying factors which go beyond the everyday knowledge of the native. Adopting a Marxist model, cultural acquisition involves cultural change. The idea of acquisition and change as a dialectic process in which the old experience and the new experience react to and respond with each other is not new to the literature in psychology, anthropology or education. However, the implications have not been widely applied to student responses to culture learning in foreign language. In this sense, change affects not only external institutions and behaviours, but also people’s minds. The result is a synthesized meaning, created by the learner, who merges past cultural experience with the new.

Andersen and Risager’s (1981:23) model for cultural analysis is one of the most rigorous models. It is derived from models for analyzing realistic prose, presumably in literary criticism. They see foreign language teaching as “a factor in the socialisation of the learner” and therefore require that textbooks give a true experience of the society they claim to represent. These two authors suggest that textbooks often give the impression of ideological neutrality - in both cultural and linguistic terms - but in fact any
selection of content or language variety carries ideological overtones. Andersen and Risager’s general criterion is then the concept of realism, although they do not adequately explain what a notoriously difficult term, literary criticism is. For Andersen and Risager’s (1981: 31) the social content has to be representative in such a way that it can be regarded as a sort of summary of that society. Of course, the selection is not independent of one’s own view of society, of the social theory adopted and of the categories used.

Andersen and Risager (1981) suggest three wide categories for implicit and explicit information about the foreign society:

1) the spheres of activity and consciousness of the persons (subjects of conversations, norms and values);

2) verbal and non-verbal interaction (nature of social relationships, sex and generation roles);

3) explicit information about the country or countries (historical, geographical, contemporary, social, etc.).

Andersen and Risager (1981: 32) find themselves confronting the didactic question of balance between a representative selection of people from society and a confusing number of persons. They propose:

   to select some families or groups living together representing different social groups or strata... in different situations, different relations and contacts with each other, and this will hopefully provide an adequate description of their total life situation.

Huhn (1978) establishes six criteria dealing largely with the treatment of context, although he claims to be dealing with content itself.
1) Factual accuracy and contemporaneity of information in cultural studies - an *a priori* point which raises immediately the question of keeping books up to date;

2) the avoidance, or at least relativization, of stereotypes - by making pupils conscious of them;

3) the presentation of a realistic picture, not one which implies the foreign society is problem-free (this is the point which Andersen and Risager have developed in detail);

4) freedom from, or at least the questioning of, ideological tendencies in the material - pupils should not be encouraged to accept the dominant image of society, whether foreign or their own, but rather to question it, partly through comparison;

5) the comparative dimension further requires that phenomena be presented in their structural, functional contexts rather than as isolated facts - a view shared by Andersen and Risager, and of significance for the view taken of the appropriate model of cultural analysis discussed by Keller (1983a) above;

6) the sixth and seventh criteria are concerned with the presentation of historical material: its relevance to understanding contemporary society should be explicit, and where presented through personalities it should be made clear that they are products of their age.

Huhn also raises the question of presentation, and the potential bias arising from fictional presentation of cultural background context, and from editing of authentic texts without indicating the points of excision. Also he draws conclusions from his criteria as to how the teacher might correct any failings in the material used.

Huhn (1978), as a result of his criteria for evaluating materials, suggests that cultural studies texts should be read critically, looking for ideological
and biased viewpoint, ‘relativising’ the text, rather than allowing it to be the sole source of information.

The researcher’s discussions of the definitions of culture ended with the idea that culture is, in part, a symbolic process, in which the acquirer creates meaning, and meaning cannot occur independently of one’s previous experience, which includes cultural experience. Meaning, then, hinges on a synthesis between the old and new (for more details, see Chapter 2).

The ‘symbols-and-meanings’ conception of culture introduces pupils to new meaning systems, and the associated symbols, to provide them with the opportunity to acquire new competences and to allow them to reflect upon their own culture and cultural competence. The view which is adopted in this study analyses culture in terms of the ‘symbols-and-meanings’ conception (Geertz 1975) to which institutions, artefacts, signs and signals would be considered subordinate, simply realisations of the patterns and meanings of culture.

There are two potential starting points for cultural analysis: behaviour - including in particular linguistic behaviour - and artefacts and symbols. Because language has a special relationship to common and inter-subjective meanings, it is likely to provide the best starting point. But because linguistic behaviour does not exist independently of other behaviour, analysis has to be of language in the context of other symbols. According to Geertz (1975:10), the purpose of analysis is to provide a reading of the behaviour and associated artefacts which includes a formulation of the meanings inherent in it. He describes it in a way which will appeal to foreign language teachers trained in literary scholarship:
(Learning) ethnography is like trying to read (in the sense of ‘construct a reading of’) a manuscript - foreign, faded, full of ellipses, incoherencies, suspicious emendations, and tendentious commentaries, but written not in conventional graphs of sound but in transient examples of shaped behaviour.

In the words of Byram (1989:86),

the reading will itself be expressed in language, an expression which should be explicit, ordered and clear, and thus will often be a contrast to the explicandum. To use language as the expression of analysis is to capitalise on its special relationship with cultural meanings...In short, individuals’ experience of cultural meanings is reflected in the semantic of their language. They negotiate and express those meanings above all in their common language.

The language of interpretation still functions with the same semantic fields, the same lexis and syntax. A reading and interpretation of behaviour and artefacts is in this case still within the same culture.

In practice there is no single authoritative view within anthropology of what is meant by culture. The view adopted here - and justified in detail in Chapters 2 and 6 is the ‘symbols-and-meanings’ conception of culture. This view clearly puts language as one the main carriers of meanings, and reinforces the notion that language teaching involves teaching culture. In this view, to teach culture is to teach the systems of meanings and the symbols, both linguistic and non-linguistic.

Despite a wide range of writings, ‘cultural studies’ lacks direction and fails to attract serious attention, perhaps because of the fear of losing identity, and perhaps for this reason in turn, it lacks status in the Arab World. Existing research is mainly exploratory and theoretical: it deals with concept
definition. The researcher is looking for a theoretical framework to give it direction. On the other hand, the literature reveals considerable knowledge and experience of teaching ‘cultural studies’ within the traditions of foreign language teaching.

6.6 The elements of ‘cultural studies’

The foregoing discussion sheds light on cultural studies and its significance in foreign language teaching. On the basis of the questionnaire given to Saudi scholars representing different departments at the College of Arts, King Saud University, the researcher will include only those elements that have received unanimous approval. These elements can be easily fitted into the existing English language curriculum, whether at schools or at universities. Since the existing English language curriculum is basically carried out through subject matter design, a plan for teaching cultural studies can be implemented through the use of such a curriculum design. A subject matter design calls for the organisation of the various types of knowledge desired into disciplines to be taught at Saudi institutions such as religion, history, and maths. This enables us to divide the major components of knowledge in the designed curriculum into these branches of knowledge and consequently makes it convenient for students to learn. This necessitates the inclusion of sufficient amounts of British cultural materials in the existing English Language Curriculum.

Since cross-cultural understanding and achieving social competencies are the major concerns in this plan for teaching British ‘cultural studies’, the selection of such a design can help the learner fully understand his society in relation to other societies and consequently help him/her adjust properly to
British society when he/she pursues his/her higher education in the English-speaking countries.

The educational roles of Saudi educators in carrying out this plan through the use of subject matter and specific competency designs include, but are not limited to, the following:

1) Providing sufficient amounts of British cultural knowledge in the existing Saudi English language curriculum;

2) Relating what the learner learns about British culture to Saudi culture;

3) Organising knowledge into reasonable sequences to facilitate learning;

4) Dividing the tasks involved in the performance of certain competencies into their constituent components in order to facilitate learning such competence;

5) Providing the learning activities which reflect real life settings as closely as possible in order to prepare learners to deal with real life situations.

The elements of ‘cultural studies’ that are to be taught at KSU are selected from Allen’s (1955) list; Brooks’ (1968) list of topics; Andersen and Risager’s list (1981); Huhn’s (1978) criteria; Reichmann’s (1970); Seelye’s (1976) and Byram’s (1989). Allen’s checklist has been used by its developer (Allen 1955, 1973) to depict American cultural material in story books and to teach English to Chinese students. Also, Gatbonton and Tucker (1971) used it to show how much American cultural information was found in story books used to teach English to Filipino students. In order to establish which elements would be considered appropriate, the researcher drew up a list based on these sources and presented it to ten Saudi scholars representing...
different departments at King Saud University. The questionnaire required an either ‘Yes’ or ‘No’ response: any item, therefore which was not approved by any member of the panel, was deleted because of the inherent characteristics of the society as discussed in Chapter 3 (see Appendix C).

6.6.1 **Approved cultural elements of the questionnaire**

I. General patterns in British cultural studies.

A. Developing maximum potentialities of the individual.

1. Seeking adventure
2. Taking the initiative
3. Competing with others
   a. Prizes awarded
   b. Importance of competition in schools and business world
4. Protecting individual rights through the government

B. Equalizing opportunities for all

1. Conforming with the group

II. Man and Nature

A. Food (The KSU scholars laid down this condition: we should not talk positively about pork).

1. Farming
2. Processing
3. Marketing
4. Eating
   a. How many meals
   b. At what time
   c. What is drunk
   d. The seating arrangement
   e. The method of serving dishes
   f. The general conversation held
   g. Practices with servants
   h. Practices without servants
   i. Spoken formulas at meals
   j. The use of eating utensils

249
B. Shelter

1. Dwellings
   a. Accommodation
   b. Number of rooms
   c. Plumbing and heating
   d. Furnishings for each

2. Non-residential buildings

C. Clothing

1. Men’s clothes
2. Women’s clothes
3. Casual and formal clothes
4. Urban and rural clothing

D. Transportation

1. Vehicles for transportation
   a. Cars and taxis
   b. Underground
   c. Trains
   d. Planes
   e. Coaches
2. Road signs
   a. Zebra-crossing
   b. Safety island
   c. Parking meters

E. Technology and Science

1. Use of mechanical inventions
2. Use of scientific processes
   a. Effect of modern science on daily living
   b. Effect of science on thought, conversation and reading matter

III. Man and family

A. Social structure

1. Family groups
   a. Family organisation
      i. Size and relationships
      ii. Marriage, divorce, remarriage

250
iii. Line of descent

b. Class levels
   i. Upper class
   ii. Middle class
   iii. Working class

c. Parents
   i. Husband-wife relationship
   ii. Parents-children relations

d. Children
   i. Relations to adulthood
   ii. Relation to other children
   iii. Formulas of address
   iv. Forms and spirit of play
   v. School experiences
   vi. Children's songs

e. Sex differences and relation
   i. Differences in childhood training
   ii. Areas of dominance of each sex

3. Social groups
   a. Race and nationality groups
      i. Social position of cultural groups
      ii. Intercultural relations
      iii. Differences in age
      iv. Degree of intimacy

b. Religion
   i. Marriage, burial
   ii. Holidays: social rhythm of work days and days off

c. Friendly exchange
   i. How friends meet and leave
   ii. Topics of talk
   iii. How strangers are introduced

B. Leisure time activities

1. Motor activities
   a. Enjoying activities
   b. Participating in sports
   c. Playing social games
   d. Sensory activities
i. Watching sports event
ii. Attending plays and cinema
iii. Attending opera and concerts
iv. Listening to the radio and T.V.

e. Intellectual activities
   i. Reading
   ii. Doing club work
   iii. Playing cards (as long as it does not involve gambling)

C. Language formalities and gestures
   1. Family and servant
   2. Casual meeting
   3. Informal parties
   4. Greetings and leave taking
   5. Shaking hands
      a. How often
      b. Who extends hand first

D. Health
   1. Casualties
      a. Special conditions of age
      b. cosmetics required
   2. Cleanliness
      a. Relations between plumbing and personal cleanliness
      b. Standard of public hygiene observed
      c. Medicine and physician
      d. Prevailing attitudes towards society

E. Political structure
   a. Responsibility for government
   b. Personal security
   c. Police

F. Educational system
   1. Primary schools
      a. Teachers (sex, age, training)
      b. Subjects studied
   2. Secondary schools
      a. Teachers
      b. Subjects studied
      c. Social life at school
   3. Higher education

252
a. College studies  
b. Campus life  

IV. Values in the culture  

A. Social value  
   1. Levelling and cooperation  

B. Emotional tone  
   1. Attitude towards showing emotions  
   2. Times of showing emotion  

C. Religious tone  
   1. Importance in daily life  

D. Ethical values  
   1. Ideas of right and wrong  
   2. Attitude towards obeying laws.  

E. Areas of taboo  
   1. Areas of silence  
   2. Attitude towards profanity  

F. Esthetic values  
   1. Public taste in art  
   2. Attitude towards artists  

6.6.2 RESULTS  

The items that had to be deleted were the following:  
(a) seeking social equality;  
(b) forcing economic equality;  
(c) using political equality  
(d) extra-marital relations  
(e) courtship and marriage  
(f) Protestants, Catholics, Jews
6.6.3 Conclusions

The responses from the Saudi scholars tell us that the proposed elements of 'cultural studies' are consistent with the Saudi educational system and the goals of their institutions. It also tells us that the scholars, based on their qualifications and their experiences as professors at KSU, agree that these elements are suitable for students' needs at this stage and can function well in introducing British 'cultural studies' to KSU.

The responses from the students who took the questionnaire tell us that they need to know these proposed cultural elements to understand British culture. The researcher cannot do anything about the deletion of those British cultural elements in the fields of music, religion, and politics although he acknowledges the roles of music, religion, democracy and the political system in British society. These topics are not taught at any stage of the Saudi educational system and if the researcher included them, the proposed
elements would be inconsistent with the educational policy of this country, and they would consequently be rejected by the authorities concerned.

The problem of teaching cultural studies does not only come from the students: it also comes from the teachers. Therefore, an extensive plan of training ought to be set up to train teachers and provide them with some knowledge of British culture. As seen in the proposed plan, this also includes some acknowledgment of the subcultures that exist within British society. The researcher believes that teachers should teach sub-cultural elements by drawing students' attention to some of the subcultural differences between the source and target cultures. This should be done in an attempt to prevent overgeneralization. Finally, the researcher does not claim that these elements are exhaustive, but they are at least representative. Thus, on the basis of the Saudi scholars as well as on that of the students' responses, the researcher believes that his elements of cultural studies for teaching British culture to KSU students will take place through the medium of a course that emphasizes humanity first and foremost, as shown in Section 6.4.
CHAPTER SEVEN

SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND SUGGESTED RESEARCH

7.1 Summary

The present study was conducted to examine the effects of culture and schemata on reading comprehension. The purpose of the study was three-fold: one was to investigate the attitudes of Saudi students with positive attitudes towards British culture. Such students performed significantly better in English comprehension than those with negative attitudes. A second purpose was to examine students with some background knowledge of Anglo-American culture, and these students in fact performed significantly better in discourse than those without such knowledge. The third purpose was, in the light of the experimental results, to incorporate ‘cultural studies’ into the foreign language teaching syllabus provided this remained consistent with the general policy of the Saudi Arabian Ministry of Education. Thus the researcher will give a brief summary of what has been achieved in this thesis.

Chapter One dealt with the following issues: background, statement of the problem, research hypothesis, purpose of the study, the need for the study, limitations of the study, and the plan of the research.

Chapter Two consisted of a review of related literature. The following issues were reviewed: definitions of culture, the importance of culture in lan-
guage learning, cultural factors that may affect language learning, attitude and motivation, communicative competence and cross-cultural awareness, critical review of Montreal research, interpretation of context of situation, Halliday’s views on culture and language, background knowledge, schema theory, mental models, models of reading, issues in text processing, and unresolved issues.

Chapter Three described Saudi Arabian cultural and social values and the ways these affect this research.

Chapter Four contained the general design and methodology of this study. This chapter described the procedures and instruments used in conducting the study together with a description of the modifications made throughout the process, and the rationale for choosing the reading texts.

Chapter Five contained the presentation and analysis of the data, including ANOVA, mean, mode and coefficient correlation statistical analysis, followed by the data interpretation and discussion.

Chapter Six introduced the plan for teaching British ‘cultural studies’ at King Saud University. This chapter described the major theoretical functions, goals of teaching English at Ministry of Education institutions and provided some rationale for teaching ‘cultural studies’, which may help Saudi pupils to acquire language awareness of the mother tongue.

In particular, this research focused on the following questions:

1) Do students with positive attitudes show similar or different performance on different types of reading texts?
2) What similarities or differences in performance are there between students who have background knowledge and positive attitudes towards British culture and those who do not?

3) Do students with positive attitudes and background knowledge perform similarly?

4) Do students with positive and negative attitudes towards British culture perform differently?

7.2 Interpretation of the findings

Several interesting results emerged, most of which support the findings of previous research on foreign language learning. The questions posed by the study will now be taken one at a time and briefly discussed in relation to the results obtained.

The first question focused on the relation of the scores obtained in the five texts by students with positive attitudes. The statistical testing of the six null hypotheses revealed that there was a significant difference in the scores obtained by those students. The correlation coefficient of such students shows that the degree of relationship is highly positive, which means that there is a tendency that students with such attitudes perform significantly better than those with negative attitudes. Similar findings were reported by Gardner (1960, 1977, 1979, 1980, 1985, 1988). Gardner points out that attitudes are a major determinant of foreign language acquisition, and that they can have profound influences on both individual students and the communities they come from.

The second question was related to the similarities and differences in performance between students who have background knowledge and positive
attitudes towards Anglo-American culture and those who do not. The results suggest that more similarities than differences were found to exist between such students because they are likely to read more about British culture than those who have negative attitudes. The researcher concludes that students with the appropriate schemata and positive attitudes perform significantly better than other students.

There is a wide range of factors that potentially influence language discourse. It is almost impossible to isolate the attitudinal variables from other variables (age, aptitude, motivation, intelligence, personality and cognitive style) which are involved. Such variables need more experimentation, and it is recommended that the role played by schemata undergoes further experimentation.

The students’ learning strategies, which were the focus of the third question, will now be considered. Throughout the course of this study, an assumption has been made that the learner is an active participant in the learning process and that his contribution to other learning processes is well-recognized. Research on cultural differences in learning styles indicates, for example, that students of this area respond to visual illusions differently from Western students (Glick 1975): that is, Saudi learners are generally ‘field-dependent’ learners. Those students with negative attitudes are mainly intolerant as Skelton (1991) suggests:

... others, more ‘closed-models’, more dogmatic, tend to neglect items that are contradictory or slightly incongruent with their existing system; they wish to see every proposition fit into an acceptable place in their cognitive organisation, and if it does not fit, it is rejected.
The results obtained seem to suggest that the majority of students answered the questions as the result of common learning processes. These strategies appeared to have been similarly employed by the randomly selected students. They tried to simplify and regularize the syntactic structures of their language. Thus the learner is testing new hypotheses and creating productive rules. This conclusion supports other related studies conducted with Arab students of EFL (Scott and Tucker 1974).

The final question of interest in this investigation was whether students with positive and negative attitudes towards British culture perform differently. Statistical analysis showed that students with positive attitudes performed significantly better than those with negative attitudes. This is because their background knowledge may be richer than those with negative attitudes.

A final remark is related to an English background questionnaire that was given to the students, prior to the conduct of the study. The students’ responses to the questionnaire reaffirmed the significance of two factors involved in foreign language learning, namely, the students’ motivation and their exposure to the use of the language outside the classroom. The questionnaire also revealed that the highest scores on the British background questionnaire were obtained by those students who (a) were highly motivated in learning English; (b) tried to study and/or used English outside of school, and (c) had a chance to mix with Anglo-American speakers. The Saudi students’ motivation towards English learning is beyond the scope of this study, but it is an interesting area for future research.
7.3 Conclusions

On the basis of the literature reviewed and the analysis of the data, and the above interpretations, the researcher concludes that:

1) Background knowledge relevant to reading comprehension can effectively be taught in the EFL classroom with improvement in reading comprehension.

2) Unlike Johnson’s (1981) findings with more advanced EFL subjects, this research shows that cultural background is as important in determining success with reading comprehension as is syntactic complexity.

3) KSU students produced more appropriate elaborations, and fewer incorrect distortions regarding Islamic and Saudi wedding texts than the foreign ones.

4) There is a great awareness among EFL teachers of the necessity to teach and evaluate language use, as opposed to emphasizing discrete surface linguistic features.

5) In order to understand a particular language being studied, one should know about the cultural setting where this language operates.

6) Saudi students lack the cultural knowledge needed to understand British culture properly and to adjust to the lifestyle of the British during their sojourn in the United Kingdom.
7) The materials used to teach English to Saudi students do not include a sufficient amount of British culture which can help Saudi students understand the lifestyle of the British.

8) On the basis of the responses collected from the ten Saudi scholars at King Saud University, the plan developed for teaching ‘cultural studies’ to Saudi students can function well in introducing British culture to Saudi educational institutions.

7.4 **Implications**

Given the limitations of the present investigation, the following are some of the implications that can be drawn from this study for foreign language learning and instruction.

1) A significant implication of this study is that a cross-sectional study without a third group as a reference point is liable to give inaccurate impressions about the effect of culture/schemata on the foreign language learners. Throughout this study some variables have continued to cause problems to students’ performance in reading comprehension. A worthwhile investigation could be the implementation of a longitudinal study or a cross-sectional study with more students and for longer periods of time. Such a study would hopefully give a more accurate picture of the effect of culture and schemata on the learner’s performance in reading comprehension.

2) The results of this study call into question the validity of some principles underlying English instruction in Saudi Arabian public schools and universities.
3) Another implication resulting from this study is related to the sensitivity of the topic, it requires the support of top officials to be able to conduct such research at longitudinal level.

4) Differences in students' approaches to and variation in English learning have been found to exist among the learners. Therefore, EFL teachers should accept and encourage a variety of learning styles, allowing for differences in individuals as shown earlier.

5) We do not believe it is an overstatement to say that this study suggests as have others before it (Carrel and Eisterhold 1983), that in the EFL reading classroom cultural content is of utmost importance, and that cultural content may be, and often must be explicitly taught. In addition to classroom activities, EFL students need to be exposed to other activities outside the classroom that may aid in the development of culturally appropriate content schemata. Our students already have rich and complex networks of schemata based on their own cultures and their own languages; what they need is help in developing appropriate related cultural schemata and in seeing the similarities and differences between existing and new schemata.

Stevens' (1982:328) observation about first-language reading teachers applies equally, if not more so, to ESL reading teachers: “A teacher of reading might thus be viewed as a teacher of relevant information as well as a teacher of reading skills.”

6) Finally, although this study has focused on the significance of cultural content schemata and their role in reading comprehension, the results and implications of this study are equally applicable to other less-culturally-laden materials. Content-schemata may be absent from within, as well as across, a
cultural group. Having appropriate background knowledge of a text is as important for an EFL reader dealing with scientific texts, news stories, and other texts as it is for culture-specific texts. The important role played by background knowledge of such subjects has in recent years been increasingly recognized in the area of teaching English for specific purposes (Alderson and Urquhart 1985).

If students are to develop proficiency in reading culturally unfamiliar material, the EFL teacher must provide the student with the appropriate cultural schemata he/she is lacking, and must also teach the student how to build bridges between existing knowledge and new knowledge.

With reference to the building of bridges between students' existing knowledge and new knowledge needed for text comprehension - a number of organized pre-reading approaches and methods have been proposed in the literature for facilitating reading through activating background knowledge (Carrell 1984abc, 1985, 1986).

It is possible to extract several, general implications for the foreign language profession in the development of criteria for the selection and preparation of teaching materials and for the development of curricula in the teaching and study of foreign languages:

1) Foreign language learners at the intermediate level of EFL who participated in this research test tended to understand the native text better than the foreign texts. This result implies that they may have had problems reading foreign texts for which they had no background knowledge.
2) The culturally determined background of the text, whether it is foreign or native to readers, has an effect on reading comprehension. It is important to make this fact a criterion in the selection of reading materials and in the evaluation of reading comprehension of foreign language learners.

3) The problems in reading comprehension of the EFL students at the intermediate level, as illustrated in the present research, demonstrate the need to facilitate the development of reading skills as a goal of the foreign language curriculum.

4) Saudi students attempt to provide schemata to make sense of the texts used. However, these efforts may fail if the student does not possess the right schemata necessary to understand a text. But Saudi students lack both the necessary language skills and the schemata. Therefore, they have a dual responsibility: (i) to improve syntactical structures; (ii) to improve their schemata to grasp the reading comprehension from the text.

5) Students may fail to perceive connections such as that ‘dating and courting that precede marriage’. The social-cultural meaning in this text relates to the culture-specific schema of the British way of life. This misunderstanding is due to differences in values and attitudes which are the main sources of problems in foreign language learning (Rivers 1968). Therefore, culture-specific values can be a significant factor in comprehension if the values expressed by the text are different from the values held by the student. Saudi students, for example, tend to have problems with texts that differ from their traditional and religious values.

6) The main objective of teaching EFL is to minimize reading difficulties and to maximize comprehension. This can be achieved by providing cul-
urally relevant information, depending upon the level, the age and motivation of students. I shall look now at a number of techniques that have been suggested, that are of varying degrees of usefulness. Carrell and Eisterhold (1983) for instance advocate the following:

(a) Another way to minimize interference from the text is to encourage ‘narrow’ reading, as suggested by Krashen (1981). Narrow reading refers to reading that is confined to a single topic or to the texts of a single author. Reading teachers usually provide short and varied selections which never allow students to adjust to an author’s style, to become familiar with the specialized vocabulary of the topic. The researcher agrees with this view, but the text has to be diversified when the purely text-centred objectives are accomplished.

(b) A third possibility for text facilitation is to develop materials along the lines of those proposed by Paulston and Bruder (1976). They suggest using texts with local settings and specialized low frequency vocabulary. But this is inconsistent with the whole research and its findings, that is, introducing cultural studies which are a pre-requisite to language learning success.

(c) Sustained Silent Reading (SSR) is an excellent activity for EFL readers. Through silent reading of texts, students become ‘self-directed agents’ seeking meaning. Students select their own reading texts with respect to content, level of difficulty, and length. Students tend to read texts that are relevant to their own experiences, that is, the appropriate background knowledge.
d) The language Experience Approach (LEA) is an excellent way to control vocabulary, structure, and content. The basic LEA technique uses the students’ ideas and their own words in the preparation of beginning reading material. However, this technique would be futile to propose if the result was texts based on students’ own words as they would necessarily reflect the students’ own culture.

Asking students to manipulate both the linguistic and cultural cues is too much. Providing background information and previewing content is particularly important for less proficient language students, as has already been remarked. These readers are more word-bound, and meaning tends to break down at the word level. Thus, less proficient language students tend to have vocabulary acquisition emphasized and, as such, are word-by-word processing exclusively in a bottom-up processing mode, while more proficient language readers tend to receive context previews because they no longer experience vocabulary and structure difficulties in reading. As a result these more proficient readers are encouraged to do more global, predictive processing in the top-down processing mode.

Slow readers need much more content preview than proficient readers do. This helps students to put more emphasis on vocabulary. Previewing can also include the presentation of specialized vocabulary and structures that the teacher predicts will cause difficulties. In the text on the ‘Tommy and the Indian Boy’ (Appendix B) Saudi students could not produce with the appropriate background information to understand the schemata in the foreign cultural text. Take for example, the extract: “So he went to the hole and looked down, and sure enough, there was Tommy, floating on the
water, bottom-side up. He'd fallen through that hole into the river and drowned”. Such statements were incomprehensible to many students because of the lack of schema and vocabulary necessary to know that the fish had died. These students have failed to construct meaning via the background knowledge and the cultural problems that students themselves bring to the text.

We must strive for an optimum balance between the background knowledge pre-supposed by the texts our students read and the background knowledge our students possess. Swafar (1981) points to the benefits of previewing techniques that allow students to formulate hypotheses about the text. By taking advantage of contextual clues, titles, headings, and pictures, students are encouraged to draw inferences prior to reading.

For the teaching of any kind of foreign language reading, there are two implications to be derived from this study: (i) Some time must be devoted in reading classes to such relatively ‘bottom-up’ concerns as the rapid and accurate identification of lexical and grammatical forms. Even students who have developed strong top-down skills in their native languages may not be able to transfer these ‘higher-level’ skills to a foreign language context until they have developed a stronger ‘bottom-up’ foundation of basic identification skills (Eskey and Garge 1988:227); (ii) on the other hand, some time must also be devoted to such ‘top-down’ concerns as reading for global meaning (as opposed to mere decoding), developing a willingness to take chances, and developing appropriate and adequate schemata for the proper interpretation of texts.
In short, for foreign language readers especially, both ‘top-down’ and ‘bottom-up’ skills and strategies must be developed conjointly, since both contribute directly to the successful comprehension of the text.

7.5 **Recommendations**

Future research and the applications of this research to EFL reading pedagogy must be sensitive to two issues raised. First, we need to clarify formal and content schema and to study them jointly and interactively; and, second, we need to be cautious about studying and interpreting the culture specificity of both formal and content schemata. As shown earlier, learning a foreign language does not lead to losing one’s identity. Therefore, there is no harm in teaching it. The Saudi Arabian Ministry of Education curriculum justifies the teaching of English so that Saudi students can spread Islam among English-speaking people. It also advocates the understanding of its culture for more or less the same purpose. Since teaching a foreign language involves the teaching of its culture, then it becomes imperative to do so.

The following recommendations are based on the findings of this study:

1) Students should be aware of similarities and dissimilarities between Saudi and British cultures.

2) ‘Cultural studies’ should be included in the materials used to teach English to Saudi students.

3) Not only should ‘cultural studies’ be taught to students, but it should also be taught to teachers first. This could be a part of either in-service or pre-service education.
4) Teachers of English at Saudi institutions should have access to cultural resources at libraries, the British Council, and the United States Information Service. This will enable teachers to collect the information needed to teach ‘cultural studies’.

5) KSU should consider increasing the periods allotted for teaching English from 3 hours to 6 hours to give instructors sufficient time to teach British culture.

7.6 Suggestions for future research

The results of this investigation are not conclusive and, therefore, more research is needed before any appropriate conclusions can be made. The possibilities of conducting future research are unlimited. The following are some of the topics that are worth pursuing.

1) The present study may be replicated or extended in different directions to include a large sample of subjects, representing different groups, and levels. This can be done by extending the present questionnaire to include more ‘cultural studies’ elements, and more culturally-orientated and foreign comprehension texts. It would also be interesting to include more advanced students who would have had exposure to British culture and, therefore, would give us the opportunity to see how serious their problems are, and how far the students’ openness to the foreign culture affects their performance in reading comprehension.

2) As we have seen through the course of the study, there were certain variables that came about as a result of the Saudi environment. The impact of teaching methods on students’ performance is a significant factor worthy
of investigation in future research. Additionally students’ attitudes could be modified by qualified teachers and with the help of the authorities concerned.

3) Interested researchers may investigate KSU students studying English Language and Literature. This study can confirm or refute the positive effects of literature on students’ attitudes. Similar studies could also be done to include subjects with diverse linguistic backgrounds, learning different languages.

4) The motivation of Saudi Arabian students towards English learning needs to be studied and recognized as an essential part of the learning process. While it is through sociolinguistics that we try to learn more about the significance of culture in language learning, it is through our look at the social and affective dimensions of language learning that we begin to appreciate students’ motivation and attitudes towards learning a foreign language. These could have a positive or negative impact on the learning process.

5) One area of research related to this study which needs further investigation is the correlation of attitudes towards Western culture with the students’ performance in reading comprehension. This is because attitudes towards learning English in this study are considered as one of the essential factors in motivation, not as a supportive factor to motivation.

Hopefully, from such and similar future research studies we may be able to get closer to an understanding of the factors and processes underlying second or foreign language learning.
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273


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APPENDIX A - QUESTIONNAIRE
A QUESTIONNAIRE ON THE EFFECTS OF CULTURE AND SCHEMATA ON READING COMPREHENSION

This questionnaire is designed to measure your attitudes towards learning English as part of the Anglo-American culture. The questionnaire consists of 25 statements based on Likert Scale. Please read each statement carefully and indicate your feelings about each statement as: Strongly Agree, Agree, Neutral, Disagree, and strongly Disagree. Please put an (X) mark in the box opposite the category that best describes your feelings. Your responses are important for research purposes which will be kept confidential.

Name:

Age:

Department:

Class:

Hometown:
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<th>No.</th>
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<td>1.</td>
<td>English is an important part of the university curriculum.</td>
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<td>2.</td>
<td>Every Saudi student should learn English.</td>
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<td>3.</td>
<td>The number of English courses offered should be increased.</td>
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<td>4.</td>
<td>I look forward to English classes.</td>
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<td>5.</td>
<td>If English were not a required course, I would take it any way.</td>
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<td>6.</td>
<td>I have difficulty learning English because I know little of its culture.</td>
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<td>7.</td>
<td>If English were not taught at college, I would go to England to study it.</td>
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<td>8.</td>
<td>English is an important course that teaches us new values.</td>
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<td>9.</td>
<td>The study of English Literature would be helpful to me in developing skills.</td>
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<td>10.</td>
<td>Generally speaking my attitudes towards English can best be described as positive.</td>
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<td>11.</td>
<td>Learning English is a source of prestige in Saudi Arabia.</td>
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<td>12.</td>
<td>Learning English language is very important for the socio-economic development of Saudi Arabia.</td>
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<td>13.</td>
<td>Learning English introduces me to a new interesting culture.</td>
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<td>14.</td>
<td>Learning English will preserve and enhance Saudi culture.</td>
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<td>15.</td>
<td>My motivation to learn English stems from a desire to interact with English-speaking people.</td>
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<td>16.</td>
<td>Adding 'cultural studies' to language learning would be helpful to me in understanding English.</td>
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<td>17.</td>
<td>English cannot be mastered without understanding its culture.</td>
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<td>18.</td>
<td>The amount of English culture material taught at college should be increased.</td>
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<td>19.</td>
<td>The more I learn of the English language, the more interested I become in its culture.</td>
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<td>20.</td>
<td>I will continue to learn English after I graduate in order to understand Western culture.</td>
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<td>21.</td>
<td>I desire to travel to England to observe the British way of life.</td>
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<td>22.</td>
<td>I believe that Anglo-American people are sincere, helpful and kind.</td>
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<td>23.</td>
<td>I want to learn English in order to become closer psychologically to British people.</td>
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<td>24.</td>
<td>My attitudes towards British people can best be described as positive.</td>
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<td>25.</td>
<td>If I were given the choice where to live, I would live in England.</td>
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In this question, we would like you to express your opinion with regard to the effect of learning English on your behaviour, and how your attitudes will be affected after mastering the language.

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<th>Positive points</th>
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2. ARABIC VERSION
استبيان عن تأثير التراث الأدب والحضاري على تعلم اللغة الإنجليزية

يهدف هذا الاستبيان قياس تأثير التراث الأدب والحضاري على إستعدادك لتعلم اللغة الإنجليزية ومدى تفضيلك لها. نظرًا لتمكنتك من تفهم عادات وتقاليدي الناطقين بها. ويتكون هذا الاستبيان من (60) عبارة تدور كلها حول تعلم اللغة الإنجليزية ويلي كل عبارة (5) خيارات يصف كل منها موقفًا معيّناً تجاه مضمون كل عبارة.

اقرأ كل عبارة قراءة جيدة ثم وضع موقفك من مضمونها وذلك بتحديد مدى موافقتك على مضمون كل عبارة. ضع عبارة (x) في المربع المقابل للمجواب المناسب الذي يعبر عن موقفك أو رأيك أصح تعبير.

ابحث في جوهر الأسئلة واحذر من الاجابة على اللفظ الجملة، فكل ما يقل عن هذا ينضم إليها أحد غير القائم على البحث.

أرجو الإجابة على جميع الأسئلة والاستفسار عن أي فهم تواجهه قبل أن تحدد الإجابة عليه وشكرًا.

1 - عمرك : ....... سنة

2 - الكلية : .......

3 - المستوى : .......

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<td>موافق</td>
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<td>موافق عامًا</td>
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<td>13</td>
<td>ينبع لنا تعلم اللغة الإنجليزية لتعريف على حضارة لها شأنها.</td>
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<td>14</td>
<td>يزيد تعلمنا للغة الإنجليزية من مقدرتنا على تنمية تراثنا الحضاري وأخلاق عليه.</td>
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<td>15</td>
<td>ينبع حافزي لتعلم اللغة الإنجليزية من رغبتي في التفاعل مع الشعوب التي تنتمي لها.</td>
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<td>16</td>
<td>إن إضافة مقرر في التراث الثقافي البريطاني يساعدنا في تعلم اللغة الإنجليزية.</td>
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<td>17</td>
<td>لا يمكن إنفاق اللغة الإنجليزية دون فهم حضارتها وثقافتها.</td>
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<td>18</td>
<td>أعتقد أن زيادة منهج التراث الحضاري والإبداع أساسي لتعلم اللغة الإنجليزية في الكلية.</td>
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Text One

Five Pillars of Islam

Read the following passage and answer the questions by drawing a circle round the letter beside the best answer.

The religion of Islam is supported by what are called the Five Pillars of Islam. Like the strong pillars which hold up great buildings and keep them from falling, the pillars of Islam provide the Islamic faith with a strength and firmness which cannot fail. The first pillar is the Declaration of Faith, stating that there is no deity but Allah and that Mohammed is his messenger. The second is Prayer. The third is Zakat, or Almsgiving. The fourth is Fasting. The fifth is Hājj, or Pilgrimage.

The first pillar demands that every Muslim should declare that there is only one God and that the prophet Mohammed is His messenger to all mankind. This is a declaration of his faith and of his willingness to serve and obey God.

The second pillar, Prayer, demands that each Muslim say his prayers five times a day - at sunset, night, dawn, noon and afternoon - whenever the muezzin calls to him from the minaret of the mosque. Men have to say the prayers in mosques, if it is possible for them to do so. For women, however, it is considered better to pray at home.

The third pillar, Almsgiving, demands that every Muslim give a fortieth of his savings each year to the poor, provided savings exceed fifty-six riyals.

The fourth pillar, Fasting, means that no-one should eat, drink or smoke from dawn to sunset during the month of Ramadan. Small children, sick people and travellers may be excused, but they are expected to fast when they can.

The final pillar is Pilgrimage. Every Muslim who is in good health and can afford to do so must travel to the Holy Kaaba at Mecca at least once in his or her life. For Muslims who live far from the Arabian Peninsula this may be a difficult rule to follow, but the hearts of the faithful are set on a visit to the Holy Places. These are the five great duties demanded by the Islamic faith.

1. The first pillar of Islam is . . . . .
   a. Prayer
   b. to be a Muslim
   c. to declare that Mohammed is his prophet
   d. faith declaration

2. The third pillar demands that every Muslim give . . . . , provided it exceeds fifty-six riyals.
   a. 40% of his savings each year to the poor
   b. 4.5% of his savings each year to the poor
   c. 2.5% of his savings each year to the poor
   d. 14% of his savings each year to the poor

3. Pilgrimage demands that every Muslim travel to the Holy Kaaba at Mecca . . . .
   a. Once a year if he/she can afford it
   b. once in his/her life if he/she can afford it
   c. at least once in his/her life if he/she can afford it
   d. whenever he/she can.

4. It is considered better for women to say their prayers . . . . .
   a. at home
   b. in the mosque
   c. alone
   d. with other women at the mosque.

5. The second Pillar is . . . . .
   a. Pilgrimage
   b. Prayer
   c. Almsgiving
   d. Declaration of faith

6. The fourth Pillar takes place . . . . .
   a. twice a year
   b. once a year
   c. three times a year
   d. once every two years.

7. The name of the fasting month is . . . . .
   a. Shaaban
   b. Ramadan
   c. Rajab
   d. Shawwal
8. People who may be excused from fasting are . . . . . .
   a. women
   b. old men
   c. small children
   d. students.

9. A pillar keeps a great building from . . . . .
   a. falling down
   b. standing
   c. holding up
   d. failing

10. Every Muslim who . . . . should make pilgrimage to Mecca at least once.
    a. desires
    b. has enough money
    c. is in bad health
    d. is healthy and has enough money.
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Read the following passage, then answer the questions below by drawing a circle round the letter you think is the best answer.

Young people celebrate their weddings during school holidays. Pleasure and happiness resound in every corner of the village and relatives and friends gather to celebrate the event and keep company with the newly-weds.

The problem of finding the right mate is obvious in Saudi Arabia because mixing is prohibited in all aspects of life. Therefore, the match-maker in Saudi culture is the groom’s mother. When a man decides he is ready to get married, the first person to know this is his mother. She begins her search by attending some of the many all female parties. If, after hearing some details from his mother, the groom decides that he has found what he is looking for, they visit the bride’s family.

It is part of the marriage custom that the family of the bridegroom pays a visit to the family of the bride to make acquaintance with her and verify her suitability for their son. Then discussion starts on the amount of dowry and a day is fixed for the engagement. Later the two families meet again to finalize the engagement procedures, during which meeting the bridegroom’s parents give gifts of fruits, sweets and pieces of gold. Locally, this is called ‘Fishra’.

Then preparations start for the wedding ceremony. A day is fixed for the wedding party. On that day relatives and friends from both sides attend the party during which sweets and soft drinks are served, perfumes sprinkled and incense burnt. When all this is over the men go about their business and the women start beating drums and throwing flowers or rice inside the hall as expressions of joy. The first night of the wedding is called ‘Tabaa’. On the second night the bridegroom takes what is called ‘Maqadi’ consisting of furniture, gold, clothing, etc., in a big car to the house of the bride. On the third day the bride and the groom are conducted into their new home after the wedding cake is cut. Thus the wedding lasts three nights full of joy and festivities when the whole village joins the celebrations with drum beatings, singing, dancing, spreading fragrance of sweet scent, scattering rice and burning incense.

1. The main figure who finds a suitable wife to be is
   a. the prospective bridegroom
   b. the bride’s mother
   c. the bridegroom’s father
   d. the bridegroom’s mother

2. After the matchmaker finds the right match,
   a. the groom contacts the bride
   b. the father visits the bride’s family
   c. the groom’s family visits the bride’s
   d. the bride invites the groom home.

3. One of the motives behind this visit is
   a. to check whether she is suitable or not
   b. to finalize engagement procedures
   c. to give presents to the family
   d. to discuss where they will live

4. Gifts of fruits, sweets and pieces of gold are offered to the bride....
   a. on their first visit
   b. as part of the dowry
   c. on later visits
   d. as a sign of good will

5. The favourite time for the wedding ceremony is
   a. during school holidays
   b. during summer
   c. during winter
   d. during Ramadan

6. Wedding festivities last .......
   a. three days
   b. two full nights
   c. two full days
   d. a full week

7. When men go to their work, women....
   a. give a sigh of relief
   b. throw flowers over the couple
   c. throw flowers over the bride
   d. dance around the burnt incense.

312
8. The bridegroom takes furniture and gold to the bride’s house . .
   a. during the engagement procedures
   b. during the engagement period
   c. on the second day of their engagement
   d. on the second night of their wedding party

9. The dowry is usually agreed upon . . . .
   a. before the wedding reception
   b. after the reception
   c. before the engagement party
   d. at the parties the mother attends

10. Finally, relatives conduct . . . .
    a. the bride into her new home
    b. the bride and groom into a hotel
    c. the bride and groom into their new home.
    d. the groom into the bride’s home
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314
Text Three

A Holiday at the Seaside

Read the following passage and answer the questions by drawing a circle around the letter beside the best answer:

‘Rosemary!’ called Mrs. Barker from the foot of the stairs. ‘Rosemary, when you’ve packed your suitcase, will you go and find the boys? They were in the garden climbing trees the last time I saw them’.

‘Shall I clean them up?’ asked Rosemary, knowing how dirty her small brothers could get after five minutes out-of-doors.

Her mother wasn’t listening. She was busy checking her list: lock windows ... turn off gas and electricity ... leave note for the newspaper boy ... give neighbours our address ... there was so much to do before going away on holiday!

Her husband was loading the car: suitcases, tennis racquets, golf clubs, fishing rods (toy ones), beach ball, picnic basket, folding chairs and table. A blanket for sitting on might come in useful, too.

‘You’d think we were going for months!’ he exclaimed as Rosemary appeared, dragging the two little boys behind her. Suddenly they had found their own garden interesting and didn’t want to leave home.

‘Why do we have to go?’ asked Peter and Paul, both at once.

Mr. Barker sometimes wondered that himself, but the family went to the seaside for two weeks every summer. The woman who owned the guest house would be very surprised if they didn’t come.

‘Two weeks of sitting in the sunshine, looking at the sea and doing nothing!’ sighed Mrs. Barker happily, as they set off in the car at last. ‘What if the sun doesn’t shine?’ asked Rosemary. ‘It isn’t shining now. In England you can never be sure of the weather’. ‘We’ll take walks or look around the shops’, said her mother.
'I hope there’s a girl my age at the guest house’, said Rosemary. ‘I hope she plays tennis ... and that the court won’t be too wet’.
‘When can we fly our kites?’ asked Paul. Can we fly them this afternoon? There’s plenty of wind’.

‘Just right for golf if the rain holds off’, said Mr. Barker.

The sun came out as they reached the top of a hill and caught their first glimpse of the sea. It was going to be a fine holiday after all!


1. Rosemary is the boys’ . . . .
   a. maid
   b. sister
   c. aunt
   d. mother

2. Mrs. Barker wasn’t listening to Rosemary because . . . . .
   a. she was having a bath
   b. she was watching television
   c. she was busy checking her list
   d. she was cleaning the house.

3. The Barkers were going to . . . . .
   a. the seaside
   b. a cottage
   c. read newspapers
   d. eat their lunch.

4. Peter and Paul didn’t want to go because . . . . .
   a. they were very tired
   b. they were very dirty
   c. they found their garden interesting
   d. their mother wasn’t going

5. Rosemary was interested in playing . . . . .
   a. golf
   b. tennis
   c. basketball
   d. chess

316
6. The sun . . . . when they set off in the car.
   a. was not shining
   b. was shining
   c. was very bright
   d. wasn’t shining because it was night.

7. It was just right for golf if the rain held off because . . . . .
   a. it was windy
   b. it wasn’t windy
   c. the they were not lean
   d. they were tired.

8. Rosemary had to drag Peter and Paul to the car because . . . . .
   a. they wanted to play at home
   b. they didn’t like seeing a doctor
   c. they weren’t clean
   d. they were tired.

9. Before the Barkers went away on holiday, they had to . . . . .
   a. lock windows and leave a note for the police
   b. lock doors and leave a note for the milkman
   c. give a note to the neighbours and lock windows
   d. check the shopping list.

10. They were going on holiday for . . . . .
    a. three weeks
    b. four weeks
    c. two days
    d. two weeks.
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Text Four

British Wedding

Read the following passage, then answer the questions below by drawing a circle round the letter you think is the best answer.

Young people would celebrate their weddings on bright, sunny days, usually in June. A good date is set to allow ample preparation for the wedding and honeymoon-time. It also enables relatives and friends to attend.

The match makers are usually the bride-to-be and groom-to-be. The dating and courtship among couples usually come before marriage. In this sense, the couple-to-be are the matchmakers.

The wedding begins with the entrance of the party, greeted by the priest or registrar, who is to register the marriage at the ceremony. The priest or registrar will first interview the couple in private in the Marriage Room to check the correctness of the particulars. Then the guests will be invited into the Marriage Room, followed by the registrar or priest who is to conduct the ceremony. The two persons who have been chosen to be the witnesses will be seated one on each side of the couple.

If the rings are to be given, they will be placed on a velvet cushion on the marriage table. The marriage ceremony then follows, during which each of the couple in turn will be asked to repeat after the registrar or priest, the bridegroom first, the following declaration: “I do solemnly declare that I know not of any impediment why I may not be joined in matrimony.” On completion of the ceremony the registrar will invite the couple to sign the marriage licence. After the ceremony, confetti or rice is thrown at the couple to wish them good luck.

The reception which follows allows each guest at the wedding to congratulate the bride and groom by a handshake, kiss, or hug. The wedding breakfast or wedding cake symbolically represents the first meal together of the couple as husband and wife. The party may be a gala affair with drinking and dancing until the early hours. The wedding day tends to be more the bride’s day than the groom’s.

(Based on District of Surrey South-Western, the Registrar Office Handbook, County of Surrey, as well as Encyclopaedia Britannica, INC, 1967, Volume 14)
1. The match-makers are usually the . . . . .
   a. bridegroom-to-be
   b. bride’s mother
   c. bridegroom’s mother
   d. prospective couple

2. People in England get married during . . . . .
   a. winter
   b. autumn
   c. June
   d. Christmas

3. Dating and courtship are means of checking whether the couple are a
   good match, and take place. . . . . .
   a. during engagement
   b. before marriage
   c. after marriage
   d. bright sunny days

4. After the matchmakers find the right match, . . . . .
   a. the bride contacts the groom
   b. the groom’s family visits the bride’s
   c. the couple usually begins courting
   d. they get married at once.

5. The couple who intends to get married should . . . . .
   a. have two witnesses
   b. pay the dowry right away
   c. have their parents with them
   d. be in love with each other

6. The registrar meets the couple in private . . . . .
   a. to check whether they love each other or not
   b. to check their identity again
   c. to check whether they can afford to go on honeymoon.
   d. to congratulate them

7. The couple are asked to confirm that . . . . .
   a. they are not married
   b. they will be obedient
   c. they will be loyal
   d. there is no barrier to their union

8. During the ceremony, rice/flowers is thrown . . . . .
a. at the priest
b. at the witnesses
c. at the mother-in-law
d. at the couple

9. The two witnesses sit . . . . .
   a. next to the mother-in-law
   b. next to the registrar
   c. on each side of the couple
   d. with the other guests

10. The reception party takes place . . . . .
    a. before the marriage ceremony
    b. after the marriage ceremony
    c. before the engagement
    d. after the engagement
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Text Five

Tommy and the Indian Boy

Read the following passage and answer the questions by drawing a circle around the letter beside the best answer:

Once there was an Indian who had a pet fish named Tommy, which he kept in a barrel. But the fish got pretty big and the Indian had to change the water very much to keep him alive. He was too lazy to do that, and he thought he would teach the fish to live out of water. So he did. He began by taking Tommy out of the barrel for a few minutes at a time, very often, and then he took him out oftener and kept him out longer, and after a time Tommy got so he could stay out a good while if he was in wet grass.

Then the Indian found he could leave him in the wet grass all night, and pretty soon that fish could live in the shade whether the grass was wet or not. By that time he had got pretty tame, too, and he used to follow the Indian around very much, and when the Indian went out to dig worms for him to eat, Tommy went along too and got some for himself. The Indian thought everything of that fish, and when Tommy got so that he didn’t need any water at all, but could go anywhere - down the dusty road and stay all day out in the hot sun - you never saw the Indian without his fish. Show people wanted to buy Tommy, but the Indian said he wouldn’t sell a fish like that for any money. You’d see him coming to town with Tommy following along the road behind, just like a dog, only of course he travelled very much like a snake, and almost as fast.

Well, it was pretty sad the way that Indian lost his fish, and it was curious, too. He started for town one day with Tommy coming along behind as usual. There was a bridge in the road and when the Indian came to it he saw there was a hole in it, but he went on over it without thinking. A little later he looked around for Tommy and Tommy wasn’t there. He went back and called, but he couldn’t see anything of his pet. Then he came to the bridge and saw the hole, and he thought right away that maybe his fish had got in there. So he went to the hole and looked down, and sure enough, there was
Tommy, floating on the water, bottom-side up. He’d fallen through that hole into the river and drowned.


1. Which statement about Tommy is true?
   a. At first he lived in water, but later he didn’t.
   b. He always lived in water.
   c. He never lived in water.
   d. At first he didn’t live in water, but in the end he did.

2. Tommy is the name of . . . . .
   a. a boy
   b. a girl
   c. a fish
   d. a dog

3. The Indian taught the fish to live out of water by . . . . . .
   a. giving it wet grass to eat
   b. giving it worms to eat
   c. keeping it out of water longer and longer
   d. changing the water in the barrel often.

4. The Indian was too lazy to . . . . . .
   a. get Tommy anything to eat
   b. change the water for Tommy
   c. teach the fish to live out of water
   d. look after the fish.

5. ‘pretty soon that fish could live in the shade whether the grass was wet or not’ means Tommy had to be in . . . . . .
   a. wet grass
   b. dry grass
   c. shady grass
   d. any place without grass

6. The Indian took Tommy to town . . . . .
   a. to sell him
   b. to see if he could live out of water
   c. to keep him alive
   d. as a pet.
7. Tommy was floating on the water, bottom-side up, because . . . .
   a. he was dead
   b. he was swimming
   c. he wanted to breathe
   d. he was not hungry

8. The Indian was never seen without . . . . .
   a. a dog
   b. an elephant
   c. Tommy
   d. a snake.

9. Tommy was ‘just like a dog’ because . . . . .
   a. he was very fast
   b. he ran like a dog
   c. he could dig worms for himself
   d. he followed the Indian like a pet.

10. The Indian lost his fish because . . . . .
    a. it couldn’t go in water anymore
    b. it couldn’t stay out of water anymore
    c. it fell bottom-side up
    d. the bridge was not wet.
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APPENDIX C

(A questionnaire on the elements of cultural studies)
In this list of ‘cultural studies’ elements which are proposed to be introduced into the EFL syllabus of this university, you are asked to indicate the extent to which you agree or disagree with each of the following statements by writing ‘Yes’ against each item or sub-item you agree with, and ‘No’ against each item or sub-item you disagree with. In fact, your opinion is of great importance, so that the plan of teaching culture can be consistent with the educational policy of your country.

Thank you for your cooperation.

I. General patterns in British cultural studies.

A. Developing maximum potentialities of the individual.
   1. Seeking adventure
   2. Taking the initiative
   3. Competing with others
      a. Prizes awarded
      b. Importance of competition in schools and business world
   4. Protecting individual rights through the government

B. Equalizing opportunities for all
   1. Seeking social equality
   2. Forcing economic equality
   3. Using political equality
   4. Conforming with the group

II. Man and Nature

A. Food
   1. Farming
   2. Processing
   3. Marketing
   4. Eating
      a. How many meals
      b. At what time
      c. What is drunk
      d. The seating arrangement
      e. The method of serving dishes
f. The general conversation held
  g. Practices with servants
  h. Practices without servants
  i. Spoken formulas at meals
  j. The use of eating utensils

B. Shelter

1. Dwellings
   a. Accommodation
   b. Number of rooms
   c. Plumbing and heating
   d. Furnishings for each

2. Non-residential buildings

C. Clothing

1. Men’s clothes
2. Women’s clothes
3. Casual and formal clothes
4. Urban and rural clothing

D. Transportation

1. Vehicles for transportation
   a. Cars and taxis
   b. Underground
   c. Trains
   d. Planes
   e. Coaches

2. Road signs
   a. Zebra-crossing
   b. Safety island
   c. Parking meters

E. Technology and Science

1. Use of mechanical inventions
2. Use of scientific processes
   a. Effect of modern science on daily living
   b. Effect of science on thought, conversation and reading matter

III. Man and Family

329
A. Social structure
1. Family groups
   a. Family organisation
      i. Size and relationships
      ii. Marriage, divorce, remarriage
      iii. Line of descent
   b. Class levels
      i. Upper class
      ii. Middle class
      iii. Working class
   c. Parents
      i. Husband-wife relationship
      ii. Extra-marital relation
      iii. Parents-children relations
   d. Children
      i. Relations to adulthood
      ii. Relation to other children
      iii. Formulas of address
      iv. Forms and spirit of play
      v. School experiences
      vi. Children’s songs
   e. Sex differences and relation
      i. Differences in childhood training
      ii. Courtship and marriage
      iii. Areas of dominance of each sex

3. Social groups
   a. Race and nationality groups
      i. Social position of cultural groups
      ii. Intercultural relations
      iii. Differences in age
      iv. Degree of intimacy
   b. Religion
      i. Protestants, Catholics, Jews
      ii. Sunday Services
      iii. Baptism, marriage, burial
      iv. Holidays: social rhythm of workdays and days off
c. Friendly exchange
   i. How friends meet and leave
   ii. Topics of talk
   iii. How strangers are introduced

B. Leisure time activities

1. Motor activities
   a. Enjoying activities
   b. Participating in sports
   c. Dancing and playing social games
   d. Sensory activities
      i. Watching sports event
      ii. Attending plays and cinema
      iii. Attending opera and concerts
      iv. Listening to the radio and T.V.
   c. Intellectual activities
      i. Reading
      ii. Doing club work
      iii. Playing cards (as long as it does not involve gambling)

C. Language formalities and gestures

1. Family and servants
2. Casual meeting
3. Informal parties
4. Greetings and leave taking
5. Shaking hands
   a. How often
   b. Who extends hand first

D. Health

1. Casualties
   a. Special conditions of age
   b. Make-up required

2. Cleanliness
   a. Relations between plumbing and personal cleanliness
   b. Standard of public hygiene observed
c. Medicine and physician
d. Prevailing attitudes towards society

E. Political structure

1. Political parties
   a. Conservative
   b. Labour

2. Democracy
   a. Responsibility for government
      i. Elections
      ii. Criticism
   b. Freedom and personal security
   c. Police

F. Educational system

1. Primary schools
   a. Teachers (sex, age, training)
   b. Boys and girls study together
   c. Subjects studied

2. Secondary schools
   a. Teachers
   b. Coeducation
   c. Subjects studied
   d. Social life at school

3. Higher education
   a. College studies
   b. Campus life

IV. Values in the culture

A. Social value
   1. Sanctity of the individual
   2. Leveling and cooperation

B. Emotional tone
   1. Attitude towards showing emotions
   2. Times of showing emotion

C. Religious tone
1. Importance in daily life

D. Ethical values

1. Ideas of right and wrong
2. Attitude towards obeying laws

E. Areas of taboo

1. Areas of silence
2. Attitude towards profanity

F. Esthetic values

1. Public taste in art
2. Attitudes towards artists
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*X = questionnaire score*  
*Y1SAW = Saudi Wedding*
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\[x = \text{questionnaire score} \quad \text{Y2 = British Holiday Comprehension Score}\]
GROUP ONE WITH POSITIVE ATTITUDES
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x = questionnaire score; BWY2 = British Wedding Comprehension Score
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INDIAN CULTURE - Text 5

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x = questionnaire score
Y3 = Indian culture comprehension score
GROUP ONE WITH NEGATIVE ATTITUDES

The Five Pillars of Islam - Text 1

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GROUP ONE WITH NEGATIVE ATTITUDES
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INDIAN CULTURE - Text 5

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X = questionnaire score  Y3 = Indian Culture comprehension score
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y1 = Islamic comprehension score
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\[ x = \text{questionnaire score} \quad y1\text{SAW} = \text{Saudi Wedding comprehension score} \]
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x = questionnaire score  y² = British Holiday comprehension score
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**Totals**: 1119 1180 84071 97400 88920

\( x = \) question score  \( y_{BWY2} = \) British Wedding Comprehension score
GROUP TWO (ENGLISH and TRANSLATION MAJORS)  
WITH POSITIVE ATTITUDES - Text 5

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Totals   1119 | 1220 | 84071 | 102800 | 91130

x = question score  
y3 = Indian culture score
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x = questionnaire score  
y1 = the Five Pillars of Islam
GROUP TWO (English and Translation Majors)  
WITH NEGATIVE ATTITUDES - Text 2

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x = questionnaire score  
y1SAW = Saudi wedding score
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x = questionnaire score  y2 = British Holiday comprehension score
GROUP TWO (ENGLISH and TRANSLATION MAJORS) WITH NEGATIVE ATTITUDES - Text 4

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x = questionnaire score
BWY2 = British Wedding score
### GROUP TWO (ENGLISH and TRANSLATION MAJORS) WITH NEGATIVE ATTITUDES - Text 5

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x = questionnaire score  
y₃ = Indian comprehension score