

The Role of Universal Grammar in Second Language: English Adjective Phrase by Saudi Learners

Shatha E. Alanazi

Department of English, College of Science and Humanities, Prince Sattam bin Abdulaziz University, Alkharj, Saudi Arabia

Haroon N. Alsager

Department of English, College of Science and Humanities, Prince Sattam bin Abdulaziz University, Alkharj, Saudi Arabia

Correspondence Author: h.alsager@psau.edu.sa

Received:01/23/2023

Accepted:04/29/2023

Published: 06/24/2023

Abstract

English is the primary second language learned in Saudi Arabia. Many Saudi students are learning English as a second language for several reasons. Still, almost all English second language learners in Saudi Arabia are willing to learn English proficiently as English natives. Chomsky's Universal Grammar is one of the primary theories that has discussed the idea of learning a second language. The primary purpose of this study is to develop an understanding of the role of Universal Grammar in second language acquisition by investigating how Saudi Learners of English use the English Adjective Phrase Structure. This research adopts the Full Transfer/Full Access Model as its model. This study used an online questionnaire method design and both quantitative and qualitative approaches to analyze data. This study assigned 118 participants from undergraduate students in Level Two and Level Five at English Language and Literature Department at Prince Sattam bin Abdul-Aziz University. The primary findings of this study indicate that native-like proficiency can be reached due to the fact there is full access to Universal Grammar when learning a second language. This study also found that Arabic as a first language plays a significant role in the beginning stages of learning English as a second language. Furthermore, the findings reveal that the effect of the first language on the second language can be overcome with more input the learner gets.

Keywords: Adjective phrase, Full Transfer/Full Access, Second Language Acquisition, Universal Grammar

Cite as: Alanazi, S. E., & Alsager, H.N. (2023). The Role of Universal Grammar in Second Language: English Adjective Phrase by Saudi Learners. *Arab World English Journal*, 14 (2) 90-110. DOI: <https://dx.doi.org/10.24093/awej/vol14no2.7>

Introduction

English is an international language that is learned by many non-natives. In Saudi Arabia, English is the most popular language taught in schools, universities, and institutes. It is essential to understand the process of learning English as a second language by Saudis. For teachers, understanding how a second language is learned helps them understand their students' abilities, time of learning and challenges students may face. Also, learners benefit from understanding the way they are learning because it helps them overcome their fear of failure, motivates them and answers the big question in their minds while learning: Will it be possible for me to learn English proficiently as a native since English is different from Arabic in many ways? To understand the process of learning a second language, two significant linguistic fields should be tackled: second language acquisition and syntax.

One of the primary syntactic theories that have addressed the notion of learning a second language is Chomsky's Universal Grammar. Universal Grammar is a modern theoretical concept that claims there is a systematic mechanism in all human brains that allows them to acquire the syntax of different languages (Chomsky, 1995). Chomsky has been developing this theory for ages. Minimalist Program is the latest version of Universal Grammar (UG) that has been developed to involve all languages. Furthermore, it should be pointed out that many researchers have come up with different models to explain the role of Chomsky's Universal Grammar on second language acquisition (Clahsen & Muysken, 1986; Meisel, 1997; Flynn & Martohardjono, 1994; Vainikka & Young-Scholten, 1994; Schwartz & Sprouse, 1996). Full Transfer/Full Access is one of these models that this research paper is concerned with (Schwartz & Sprouse, 1996). It applies to adult learners. It states that there is full access to UG and full transfer of the first language at the beginning stages of learning a second language.

This study mainly centers its focus on the acquisition of adjectives. This research paper mainly aims to answer the following questions: (1) To what extent does the UG operate in second language learning the same as it does in first language acquisition? (2) Is it possible for Saudi learners of English to acquire the accurate English Adjective Phrase Structure? What is the role of UG in this case? And what is the process of learning a second language?

The structure of the adjective phrase in Arabic is different from English. First of all, in terms of structure, English adjective phrases and Arabic adjective phrases vary. An adjective is a word that appears before a noun in English. In Arabic, on the contrary, the adjective comes after the noun. Moreover, an Arabic adjective needs an agreement with the noun in all circumstances of being definite or indefinite, singular, dual or plural, and gender as masculine or feminine. However, an English adjective does not require agreement of number or gender between an Adjective Phrase and the other components of a phrase.

The overall structure of the study takes the form of seven sections, including this introductory section. The second section begins by laying out the literature review of the research. It looks at different areas related to the research, including UG in Second Language Acquisition (L2) and Adjective Phrase Structure. The third section presents the research questions that led to this study. The fourth section is concerned with the methods used for this study. The fifth section presents the results of the research. The sixth section moves to present the findings and discussion. Finally, the conclusion gives a summary of this study and identifies different areas for further research.

Literature Review

Many studies have been conducted to investigate the relationship between UG and second language learning. Literature shows various perspectives and theories related to the role of UG in second language acquisition in terms of access and transfer. Those studies have focused on a variety of languages, such as English, German, Turkish and Chinese (Schwartz & Sprouse, 1996; White & Juffs, 1998; Han, 2020). Despite the many studies that have focused on the role of UG in the second language acquisition of different languages, up till now, far too little attention has been paid to Arabic native speakers in Saudi Arabia learning English. This paper addresses this gap in the literature by exploring the different theories of UG in second language acquisition. Furthermore, the paper will adopt the Full Transfer/Full Access model (FT/FA) as its model. The following review attempts to highlight such a gap with an intensive focus on the Full Transfer/Full Access (Schwartz & Sprouse, 1996) model as applicable to adult learners.

Universal Grammar in Second Language Learning

The process of learning a second language is distinct from that of learning one's first. Factors of differentiation have been explored in several studies. Hawkins (2001) mentioned three significant distinctions between learning a first language and learning a second language: (1) In SLA, another language is already present; (2) other components of the mind have already matured, whereas arguably, Foreign Language Acquisition and the development of other cognitive capacities go hand in hand; (3) input is usually encountered differently, and may involve writing as well as spoken language. First language acquisition, according to Yule (2020), is the process of learning a language in a specific language-using setting when the child interacts with language users and picks up the language spontaneously. On the other hand, Yule (2020) stated that a second language could be either acquired or learned. According to him, the second language is primarily learned in an institutional setting during the teenage or adult years. Furthermore, Yule (2020) reported some acquisition barriers, such as insufficient time, already having a language to communicate, being more self-conscious than children, and lacking empathy with a lot of things going on. Furthermore, Vroman (1989) listed ten fundamental barriers adults face when learning a second language, including lack of success, general failure, variation in success, course and strategy, variation in goals, correlation of age and proficiency, fossilization, the importance of instructions, the role of affective factors indeterminate intuitions and negative evidence.

In view of those many differences holding between first language acquisition and second language learning, the question arising could be formulated as such: To what extent does the UG operate in second language learning the same as it does in first language acquisition? This section reviews the data for applying the UG in L2 learning aiming to provide a clear answer to this question.

A considerable amount of literature has been published on the application of UG in second-language learning. Perspectives have varied, and many approaches/theories have been discussed in this area of study. White (2000) and Han (2020) provide an overview of the different approaches in terms of the different categories of UG access and the function of the initial state of learning L2. Each one of these approaches has its advantages and limitations. The following part discusses the four primary approaches of second language acquisition in detail: (1) Full Transfer/Partial Access, (2) No Transfer/Full Access, (3) Full Transfer/Full Access, and (4) Partial Transfer/Full Access.

First of all, the Full Transfer/Partial Access approach assumes that there is no role of the UG in L2 acquisition, and if there was access to the UG principles, it would only be via L1 (White, 2000). Meisel (1997) asserted that there is no direct or indirect access to UG for L2 learners, following Clahsen and Muysken (1986). As a result, the process of second language acquisition uses only general knowledge and abilities rather than UG (Han, 2020). However, it is impossible to state that there is no access to the UG by relying on Bley-Vorman's (1990) Fundamental Difference Hypothesis, which assumes that there are differences between L1 and L2 but with specific UG effects on both (White, 2000). Bley-Vorman (1990) and Tsimpli and Dimitrakopoulou (2007) Allothman and Alsager (2022) stated that L2 learners have indirect access to UG in which the L1 knowledge and the UG components that are already activated in the L1 play a significant role in the second language learning process. Also, researchers like Beck (1998) and Morales-Reyes and Gómez Soler (2016) support the idea of having partial access to UG in L2 in which there is access to some individual components such as the learners' L1 knowledge (Han, 2020). However, this paper argues that such an approach has failed to address the activeness of UG. It only shares the characteristic of full transfer, which is the constituent of the L1 grammar to the L2 initial state.

Second, for the No Transfer/Full Access, Flynn and Martohardjono (1994) state that L1 is not related to L2 at any stage and all properties of UG are available for L2 acquisition. Furthermore, supporters of this approach claim that L1 and L2 grammar are alike, and "there are no differences in developing interlanguage grammar attributable to the mother tongue of the learner" (White, 2000, p.136). In contrast with this approach, this paper attempts to show that transfer is essential in second language acquisition. Transfer between L1 and L2 is available when learning a second language, especially in the first stages of learning L2. For example, Amer (2012) asserted that Arabic learners of English face difficulties when using adjectives in constructing English sentences because of the linguistic differences between the adjective position and order in English and Arabic. As seen, this approach has failed to address the role of L1 grammar on the L2 initial state, but it agrees with the Full Transfer/Full Access in terms of the availability of UG properties.

Furthermore, Vainikka and Young-Scholten (1994) discussed the Partial Transfer/Full Access approach claiming that only lexical categories are transferred from L1 to L2 in the initial state of L2 and that functional categories are not transferred (White, 2000). As Clahsen and Felser (2006) also stated that more lexical and semantic methods are used by L2 learners than morpho-syntactic signals. The Partial Transfer/Full Access approach is based on the Shallow Structure Hypothesis which states that even though L2 learners follow a similar acquisition pattern to L1 speakers, they have "shallower" access to the target language (Han, 2020).

White and Genesee (1996) argued against this approach claiming that both lexical and functional categories are found in L2 initial state. Also, in their study, they state that older L2 learners can achieve native-like competence in L2 in which there are no significant differences between near-native learners and native speakers. Their argument is based on Full Transfer/Full Access model which is suggested by researchers such as Dekydtspotter et al. (2001), Herschensohn (2000), and Slabakova (2008) who argued that there is full and direct access to UG in L2 acquisition. Moreover, other researchers such as Bohnacker (2006) and Grüter and Conradie (2006) supported The Full Transfer Hypothesis which is "based on the premise that L2 takes all the L1 grammar, including the phonetic and phonological aspects, as the initial state" (Han, 2020).

White (2000) discussed Schwartz and Sprouse's (1996) Full Access/Full Transfer model, proposing that the entirety of the L1 grammar is the L2 initial state which means that the UG is used in both L1 and L2 but at different starting points. Moreover, FT/FA claims that grammar differences between L1 and L2 are restructured by the UG. Also, the endpoints of different learners will usually differ.

Schwartz and Sprouse (1996) are one of the primary figures who have discussed this model. They indicate that the process of restructuring some structures of L1 grammar into L2 requires some time. In addition, some learnability factors play a significant role in the L2 process. They assume that the phonetic matrices of lexical/morphological items will not be transferred. A case study by Schwartz and Sprouse (1996) was conducted on the development of German word order and nominative case by an adult native speaker of Turkish. The focus was on the finite verb position and the type of subject and the fronting of the non-subject constituent, demonstrating the differences between the two languages. The results show that the L1 grammar does not influence L2. FT/FA claims that full transfer refers to the process of having L1 grammar as a means of characterizing the L2 data at the starting point of learning a second language while full access refers to the application of UG on L2 input to restructure the grammar (Schwartz & Sprouse, 1996; White, 1989).

The primary purpose of the previous discussion is to explore the relationship between FT/FA and the adult setting of learning a second language. Previous studies have reported, based on the Critical Period Hypothesis (Lenneberg, 1967), that language is normally acquired during a critical period, beginning early in life and ending at puberty. Generally, it states that adults cannot acquire native-like proficiency in L2 after the critical period. (Borovsky, 2008; Flege, 2003; Huttenlocher, Vasilyeva, Cymerman, & Levine 2002; Iverson, Kuhl, Akahane-yamada, Diesch, Kettermann, & Siebert, 2003; Kharkhurin, 2008; Krashen, Long, & Scarcella 1979).

However, the Full Access/Full Transfer Model of Schwartz & Sprouse 1996 offered evidence that adult L2 learners could acquire native-like proficiency based on their study, conducted on a Turkish adult learning German (Schwartz & Sprouse, 1994). They shed light on the different aspects of the two languages, such as word order patterns and nominative cases. This study is limited since it focused on one adult learner claiming that the sample went through stages and reached a point of fossilization. A similar study in terms of two distinct languages (Chinese speakers learning English) conducted by White and Juffs (1998) claimed that there are differences between Chinese speakers and highly proficient L2 learners of English.

However, White and Genesee (1996) conducted a study on French adults learning English as a second language to investigate the availableness of the UG principles for them. When L2 learners perform as native speakers, they will be constrained by UG. The findings of their study show that L2 adult learners can achieve native-like competence in L2 in which there are no significant differences between near-native learners and native speakers. However, based on their study, it could not be stated that L2 learners will always achieve native-like competence in L2 because their study was conducted on French learners of English. English and French share many principles, such as Subjacency and ECP; therefore L1 could have influenced and led to native-like competence.

Furthermore, the Full Access/Full Transfer Model is supported by Aldwayan (2008) who performed a study on Arabic learners of English. Aldwayan (2008) offers important insights into the acquisition of wh-movement by Najdi learners of English. Full Transfer/Full Access theory was one of the theories Aldwayan tested using a grammaticality judgment task and a self-paced

reading task. The results of Aldwayan's study are predicted by the Full Transfer/Full Access theory, in which proficiency increases the ability of L2 learners to judge both types of test sentences. Also, L2 learners can acquire new features regardless of whether or not their presence is in the L1. In addition, our findings argue that although transfer can happen in the development stages, native-like performance can be achieved at the advanced proficiency level.

It should be pointed out that this paper adopts the Full Transfer/Full Access theory as its model. As discussed previously, Schwartz and Sprouse's (1996) Full Access/Full Transfer model addressed the process of learning a second language from the initial state of learning until the final stage. It also takes into account rationality by claiming that the activeness of UG starts partially until it has full access. Furthermore, it discusses the role of the first language on the second language, which is significant, especially in the context of adults since they will keep using their L1 while learning L2. Therefore, this paper will adopt Schwartz and Sprouse's (1996) Full Access/Full Transfer model to argue with or against the model.

As discussed earlier, the role of UG on adult L2 learners remains unclear. Most studies on the role of UG on adult learners have shown different results. This paper attempts to fill a gap in the literature on Arabic native speakers in Saudi Arabia learning English by investigating the function of UG in second language acquisition in the Adjective Phrase Structure.

Adjective Phrase Structure

The structure of an Adjective Phrase differs among different languages. For example, the Adjective Phrase Structure in English is different from it in Arabic (Alsager, 2017, 2020; Alsager, & Mahzari, 2021). Therefore, the following part mainly focuses on discussing the Adjective Phrase Structure in English and Arabic since this research paper aims to investigate the function of UG in second language acquisition in the Adjective Phrase Structure by Arabic native speakers in Saudi Arabia learning English.

In English, Carnie (2021) defines an adjective as a word that modifies a noun or noun phrase or describes its referent. Adjectives can appear between determiners such as the, a, an, these, and nouns (the *big* peanut). They also can follow the auxiliaries: am, is, are, was, were, be, been and being. Frequently, adjectives can be modified by the adverb 'very' (Carnie, 2021). Furthermore, Van Gelderen (2010) states that adjectives describe qualities typical of nouns such as "nationality/ethnicity (American, Navajo, Dutch, Iranian), size (big, large, thin), age (young, old), color (red, yellow, blue), material/personal description (wooden, human), or character trait (happy, fortunate, lovely, pleasant, obnoxious)" (p. 15).

Greenbaum (1990), discusses the main characteristics of adjectives. First of all, adjectives can occur in an attributive function in which they occur between a noun and its determiner, for example, 'an *ugly* painting'. The adjective in this case is considered to be the head of the noun phrase. Second, adjectives can occur in a predicative function in which they function as a subject complement as in 'The painting is *ugly*' or they can function as an object complement as in 'He thought the painting *ugly*'. Third, adjectives can be premodified by the intensifier very, for example, 'The exam was very *good*.'

Dahami and Saleh (2012) attempt to explain the main categories of adjectives such as "Adjectives of Numbers, Adjectives of Quality, Adjectives of Quantity, Distributive Adjectives, Demonstrative Adjectives, Interrogative Adjectives, Possessive Adjectives and Adjectives of Comparison" (p. 85). First of all, numeral adjectives are those adjectives that identify the number of people, animals, places or things, for example, an adjective in a sentence like 'Ali ate *three*

apples.’ Second, adjectives of quantity are the adjectives that tell the quantity without giving the exact number, for example, an adjective in a sentence like ‘Sameer ate *some* chocolate.’ Also, adjectives of quality are one of the kinds of adjectives that qualify a noun or its replacement – the pronoun, for example, an adjective in a sentence like ‘Sameer is an *honest* person.’ Distributive Adjectives like (each, either and neither) are adjectives when they qualify a noun instantly, for instance, in a sentence like ‘*Each* girl must take her turn.’ Furthermore, demonstrative adjectives are those adjectives that indicate nouns, for example, in a sentence like ‘*This* book is mine.’ Another kind the interrogative adjectives are those interrogatives that precede a noun, for example, in a question like ‘*Whose* son is that boy?’ Furthermore, there are possessive adjectives that show possession and ownership of something to someone, for instance, in a sentence like ‘We like your house.’ Finally, as mentioned in Greenbaum (1990) adjectives can be comparative and superlative forms either utilizing inflection such as adding -er (bigger, happier) or -adding -est (greatest, nicest) or by adding the premodifiers more (more expensive) and most (most beautiful).

An Adjective Phrase (Adj P) is one of the main components used to form a clause. Delahunty and Garvey (2010) explain an Adjective Phrase (AP) as a phrase containing an adjective in which it has the adjective as its head. Also, an adjective phrase can be associated with modifiers and complements as analyzed here: (Modifier) + Head + (Complement). The modifiers may be either intensifiers such as very and quiet, or degree adverbs such as particularly and extremely. The complements may be PPs, finite clauses, or infinitives. The kinds of adjectives that accept compliments are those that describe mental or emotional states, such as aware, terrified, sorry, disappointed, amazed, optimistic, or sad. In conclusion, the phrasal structure rule analyzes and AP as follows: AP → ({Int/AdvP}) A ({PP/S/Inf}) an adjective phrase consists of an optional intensifier or adverb phrase, an adjective, and an optional PP, S, or infinitival.

As mentioned in Van Gelderen (2010), an adjective phrase can be a daughter of a noun phrase and a verb phrase. Therefore, there is no necessary order for the adjectives; they can be incorporated by adjunction or by occupying special phrases. Here are some examples that can elaborate on the order of adjectives in the tree structure. The first shows that the adjective phrase is special while (2) is an adjunction, additional words which can be deleted.

- (1) She is smart.
- (2) The smart girl went to school early.

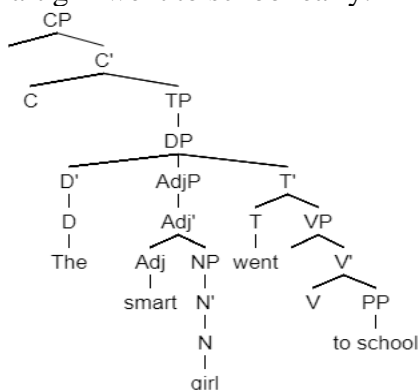
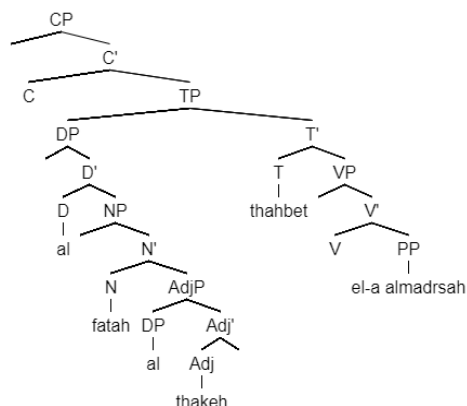


Figure 1. Syntactic tree analysis: The smart girl went to school.

The same sentence in Arabic will have the following tree structure.

- (1) a. ‘al-fatah al-thakeh thahbet el-a al-madrsah’
- b. The-girl the-smart went to the-school

c. “The smart girl went to school.”



(2) Figure 2. Syntactic tree analysis: ‘al-fatah al-thakeh thahbet el-a al-madrsah’

In Arabic, an adjective is called AL NA'AT or AL SEFAH. Unlike English, an Arabic adjective comes after a noun, for instance, in a sentence like (1). Also, Arabic adjectives agree with the noun in all cases of being definite or indefinite, singular, dual or plural, and gender as masculine or feminine. The adjective, in Arabic, is used to specify, clarify, praise, dispraise and confirm. There are two main kinds of adjectives in Arabic.

(3) a. gara-tu kitab-an jadedah.

b. read -I book-Acc New-Acc

c. “I read a new book.”

First of all, the real adjective is one of the kinds which is “a word that modifies a precedent noun and follows it in all the grammatical cases such as being definite or non-definite, singular or dual or plural, and in being masculine or feminine.”, for example, in sentences like (2) and ‘*najehat at-talibah almujtahedah.*’ There is an agreement in gender between the noun and adjective, masculine and feminine, respectively. In Arabic the same sentence can change to show agreement in cases of number also ‘*najaha at-tolab almujtahedon.*’ and ‘*najahat at-talabat almujtahedat*’ masculine plural and feminine plural, respectively (Dahami & Saleh, 2012).

(4) a. najaha at-talib al-mujtahd.

b. Succeeded The-student The-hardworking

c. “The hardworking student succeeded.”

The second kind of adjective in Arabic is the casual adjective used to describe something that refers to someone. As mentioned by Dahami and Saleh (2012), “It is an adjective to illustrate a noun connected with an inflected pronoun. It is called causal because of the last name after the adjective, which has a causal reason or relation with the first noun” (p. 102), for instance, in a sentence like (3).

(5) a. hatha rajul-un mahboob-un ibnhu

b. This man-Acc dear-Acc his son

c. “This man has a dear son.”

Furthermore, those two main types of adjectives in Arabic, real and casual, can have three forms in which they can appear as a single adjective, sentence adjective, or semi-sentence adjective. A singular adjective can be demonstrative, for example, in a sentence like ‘*isal hatha altalbou*’ Ask this student. An Arabic relative clause is a singular adjective that usually starts with

connecting 'HAMZAT WASL' for example in a sentence like '*Sahb alrefaq allathin tathq bihm*' Be friends with who you trust. Also, numbers are singular adjectives. For example, in a sentence like '*qaratou souhfan khamsah*' I read five newspapers. There are many examples of singular adjectives in Arabic such as '*with*', '*same*', '*all*', and '*any*', attributed adjectives and adjectives used for metaphors. The second form is a sentence adjective which is an affirmative sentence that takes place after a sheer indefinite, for example, in a sentence like '*raetou rajollan thaktuhou aliya*', I saw a man who was laughing loudly. Third, semi sentence adjective is an adjective that occurs after a sheer indefinite, for example, in a sentence like '*hatha faras ala farseh*'. This is a knight on his horse.

After shedding light on English and Arabic adjective phrases, there are main differences between an English adjective phrase and an Arabic adjective phrase that need to be outlined in terms of syntax and structure. First of all, an English adjective does not require the agreement of number or gender between an AP and the other components in a sentence. In contrast, an Arabic adjective requires agreement with the noun in all cases of being definite or indefinite, singular, dual or plural, and gender as masculine or feminine. Also, the English AP and the Arabic AP are different in terms of position. In English, an adjective precedes the noun or comes after the verb. On the contrary, in Arabic, the adjective comes after the noun.

As discussed previously, it is clear that Arabic and English have different Adjective Phrase Structures, which means that Saudi learners of English will usually face struggles learning the English Adjective Phrase Structure. Here's where the question arises: Is it possible for Saudi learners of English to acquire the accurate English Adjective Phrase Structure? What is the role of UG in this case? And what is the process of learning a second language?

This paper aims to explore the role of UG on second language acquisition by Saudi Learners of English in the Adjective Phrase Structure. The research questions that have guided this investigation is as follows: (1) Is the UG activated for second language acquisition in adults' brain? As Chomsky claims that UG is a computational device in the human brain that helps children acquire language naturally. Therefore, the study aims to check if the UG is activated for second-language adult learners. (2) If yes, what is the function of UG in second language acquisition in the Adjective Phrase Structure by Saudi learners of English? There have been many arguments on the function of UG in the second acquisition. Some researchers argue that there is no role of UG in L2, while others claim that there is partial access to UG in L2, and others argue that there is full access to the UG. Therefore, this study aims to discover such a function and whether the UG has full access to help L2 learners to reach native-like proficiency. (3) What is the role of the first language, Arabic, on the second language, English, in the acquisition of adjective phrase structure? Since Arabic and English are distinct languages in their grammar, the study investigates the role of the First Language (L1) grammar, Arabic, in learning English as a Second Language (L2). English adjective phrase structure is different from Arabic adjective phrase structure in terms of position and agreement cases.

At last, it can be said that these three questions aim to investigate many points related to second language acquisition. The study discusses the role of UG in processing a second language in an adult's brain while investigating the influence of L1 on L2 by shedding light on the acquisition of the structure of the adjective phrase in English and Arabic. To answer these questions, the study adopts the Full Transfer/Full Access model, which claims that there is full and direct access to UG in L2 acquisition and L2 takes all the L1 grammar as the initial state.

Method

This study aimed to see how Arabic adult students in Saudi Arabia use English Adjective Phrases while they are learning English as a second language, identify the role of L1, Arabic, when learning L2, English, and investigate the role of UG on Saudi learners of English, based on Chomsky's (1995) Minimalist Program (MP). MP assumes that there is a computational system in a human's language faculty to link sound and meaning.

To achieve the aim of this study, the researcher conducted this study based on the methods discussed in this section. This section starts with an overview of the participants that have volunteered to conduct this study. It then introduces a description of the procedures for collecting and analyzing the data.

Participants

The current study employed 118 participants from Level Two and Level Five undergraduate students at English Language and Literature Department at Prince Sattam bin Abdul-Aziz University. The undergraduate students of the English department were chosen for data collection because they have a strong desire to study English. Among these two groups, group one comprises 63 students from the second level and group two consists of 55 students from the 5th level. Level two students were considered relevant for the participants as one group because they were at the beginning process of learning English so the role of L1 on L2 acquisition in the beginning stages could be genuinely identified. At the same time, Level Five was chosen to identify the role of UG in second language acquisition and check if there is Full Access to L2 syntax. Each of the participants was asked to provide their background information including their age, gender, nationality, years of learning English and if they had taken any proficiency test. The age group to which all the participants belong ranges from 18-25 years. Regarding gender, they were classified into more female respondents 71 (60%) than male respondents 47 (40%). Among the females, 35 are students of Level two and 36 are students of Level five. Of the male students, 28 are students of Level Two and 19 students are Level Five. Regarding nationality, all participants were Saudis and Arabic is their native language. Most level two students were learning English for one to two years, while level five students were learning English for three to four years. Table one (below) shows the number of students aside from their years of learning/speaking English. Regarding, the level of proficiency tests that the students have taken only 11 students have taken different proficiency tests such as IELTS with medium scores.

Table1. *Years of learning/speaking English*

Years of learning/speaking English	Level 2	Level 5
Less than a year	11	2
1-2 years	29	7
3-4 years	10	36
More than four years	13	10
Total	63	55

Research Procedures

The data was collected by distributing an online questionnaire consisting of three written tasks to Level Two and Level Five students. The questionnaire was formulated and designed in a way that will help reveal the learner's ability to use English adjective phrases in sentences as naturally as they could. In collaboration with their instructors, the questionnaire was delivered through a link during their academic courses.

Participants were required to work on three different tasks to establish their use of an adjective phrase in English. The tasks that were designed to collect data include 1) a storytelling task, 2) a picture description task and 3) Word reorder task. At last, to achieve the purpose of the study, the data was analyzed by adopting a descriptive-analytical method. Both qualitative and quantitative analysis is performed on the data. Qualitative data, which were obtained from the storytelling task and the picture description task, are discussed to respond to the questions raised in this study. Data collected from the word reorder task is analyzed quantitatively to see the percentages of each one.

Results

This section attempts to present the results of the three tasks that the 118 students participated. First, the results of the story-telling task will be displayed in a table to illustrate what kind of adjective function the participants used and whether or not they were produced in grammatical sentences. Second, the results of the picture description task will be presented by descriptively analyzing them to show what sentences they used to describe the pictures. Finally, a chart will present an average of grammatically correct responses from the word reorder task by the two groups.

Story-Telling Task

The following Table two (below) analyzes the data of the story-telling task to illustrate which function of English adjective phrases the participants used and whether or not they were constructed in grammatical phrases. It should be pointed out that many sentences did not use any adjectives and grammatical mistakes related to other phrases were noticed. Therefore, the researcher analyzed only the sentences that fulfill the research's aim which are the ones that were constructed using adjectives. There are three common functions of adjectives used by the participants: (1) Attributive function, (2) Predicative function and (3) Comparative/ Superlative function. In an attributive function, adjectives occur between a noun and its determiner, while a predicative function is in a subject complement. Comparative and superlative adjectives are used to compare different subjects (Greenbaum, 1990).

Table 2. *Number of adjectives used in Story-telling task*

Syntactic function	Number of phrases had this function		Grammatical		Ungrammatical	
	Level 2	Level 5	Level 2	Level 5	Level 2	Level 5
Attributive function	29	84	29	80	0	4
Predicative function	26	89	26	86	0	3
Comparative/Superlative	2	5	2	3	0	2

From the above data, it is apparent that Level Five students used more sentences with adjective phrases than Level Two. It can be seen that 178 sentences were used by level five students and

only 57 sentences were constructed by Level two. Some examples that were written by Level five students can be seen in the following examples: 'I was very excited', 'I met two girls', 'I was nervous and excited at the same time.', 'I felt so lost on the first day.' and 'my classmates are good people'. Level two students generally relayed in a few short sentences to respond to this task. Some examples that were written include the following examples: 'It was good.' and 'I was very scared and nervous.' Both levels used a few comparative sentences which can be seen in the following examples: 'college is more different than school', 'The building was bigger than my high school.', 'a bit colder than yesterday, 'The first day was my happiest day ever.'

1) Picture description task

The responses to this task varied, therefore the following part reviews each picture and its response separately.

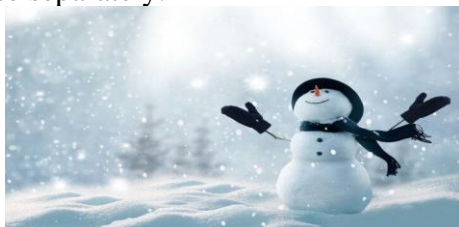


Figure 3. (Peakpx, n.d)

To describe the first picture, the participants used sentences like, 'The cold weather makes me feel frozen', 'The weather is cold.', 'The most beautiful season in the year is winter', 'There is a pretty snowman', 'This day seems colder than yesterday' and 'The snowflake looks fragile and soft'.



Figure4 (dreamstime, 2023)

For the second picture, sentences like, 'The mother is taller than the daughter', 'I see a mother and a child enjoying an outdoor activity', 'A loving mom and daughter feeling happy.', 'My mother is my role model', 'They are having a good time', and 'The love between a mother and daughter is true love.' were written by the participants.



Figure 5. (Stock, n.d.)

Moreover, sentences like, 'The food looks delicious', 'The food is tasty', 'I see healthy and unhealthy food', 'A table with so many different dishes' and 'Delicious food makes me feel happy.' were written to describe the third picture.



Figure 6 (Peakpx, n.d.)

Furthermore, the participants used sentences like, ‘The cottages are dark and small.’, ‘The sky is blue’, ‘The scenery is peaceful and breathtaking.’ and ‘The most beautiful place to relax is in nature’ describe the fourth picture.

In this task, a few grammatical mistakes were recorded in different areas, not including the adjective phrase structure. Also, some participants didn’t write full sentences so their responses were excluded. Generally, Level five students wrote more accurate and longer sentences than level two students. Both males and females of Level Two and Level Five used the language they were more familiar with.

2) Word reorder task

Finally, Figure one (below) shows the average of correct answers for Level Two (63 students) and Level Five (55 students) to all six questions: (1) girl / fresh / ate / the / apple / a. (2) was / exam / good / the. (3) bought / he / a / car / new. (4) I / read / book/a / short. (5) are / happy / they / a /family. (6) delicious / this / is /cake.

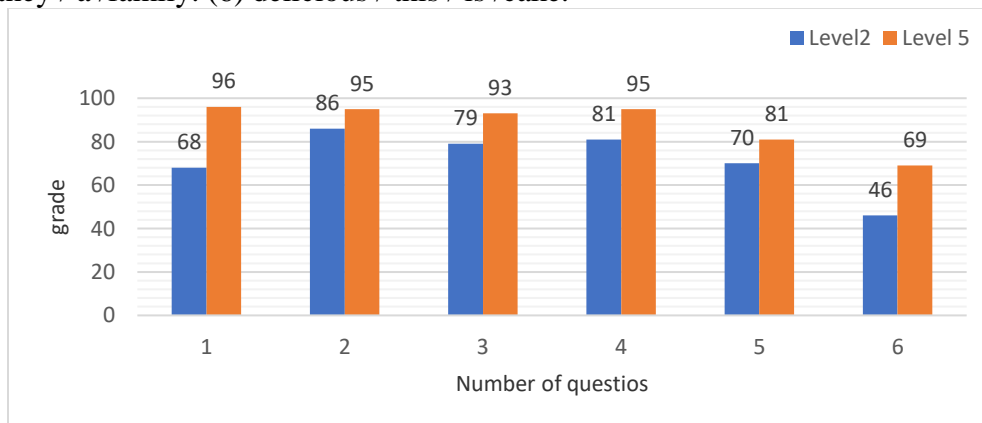


Figure 7. Correct answers for Level Two and Level Five to all the six questions

Figure one (above) shows a comparison of Level Two’s correct responses versus Level Five’s correct responses in the six questions represented in the Word-reorder task. It could be identified that Level 5’s correct responses are much higher than Level 2’s. There are 53 students of Level Five, approximately 96%, who have ordered the first sentence correctly. For the second question, 52, approximately 95% of Level Five students could order the sentence accurately. There are 51 students of Level Five, and approximately 93%, were able to order the third sentence accurately. For the fourth question, 52 participants, approximately 95% of students of Level 5 could order the sentence accurately. Questions five and six showed more mistakes by Level 5 students. Question five marked 81% correct responses and 69% only for the sixth question.

The above data observes that when it comes to Level Two, more mistakes are registered. There were 43 students of Level Two, approximately 68%, that answered the first question accurately. For question two, 54 students of Level Two (86%) were accurate. Furthermore, 79%

of Level Two responded accurately to the third question, 81% responses from Level Two students were accurate to the fourth question, 70% of Level Two students responded accurately to the fifth question and only 46% of students responded accurately to the sixth question. Level two mistakes commonly involved having the noun before the adjective such as 'A girl ate the apple fresh.', 'He bought a car new.', 'I read a book short.' and 'They are a family happy.' Other mistakes involved separating the adjective and noun with an article such as 'The girl ate fresh an apple.', 'I read short a book.' and 'he bought new a car.' Or even adding another article before the noun and adjective, for example, 'The girl ate a apple fresh.' Also, the students had trouble using the adjective 'this' before the noun 'cake' such as in 'This is cake delicious.'

Discussion

This section attempts to discuss and analyze the results presented in the previous section. This discussion and analysis are linked to the aims of this study which is understanding the function of UG in second language acquisition in the Adjective Phrase Structure by Saudi learners of English and investigating the role of L1 on L2 in the acquisition of adjective phrase. The results show that there is access to UG at different levels and L1 plays a major role in some cases in second language learning. It, therefore, argues in support of Schwartz and Sprouse's (1996) Full Access/Full Transfer model.

The results can fulfill the first purpose, the activeness of the UG, by showing that the UG is actually activated for second language learners. This is apparent from the ability of the participants, Level Two and Level Five, to develop L2, English, with its specific properties and distinguish it from their L1, Arabic. As seen in the results that the participants can use the English Adjective Phrase Structure almost always accurately. Therefore, this shows that the human brain has an innate mental grammar that helps humans to acquire a second language and it even helps the human distinguish between the properties of L1 and L2. If the UG was not activated the participants, Level 2 and Level 5 students, would not be able to respond to the three tasks. Moreover, it can be said that L2 learners have more access to UG as they learn more. Level Five students wrote more sentences than Level 2 students and with fewer mistakes which is because their level of proficiency is higher than Level 2 students. This reveals that L2 learners have full access to the UG as they are at the final stages of learning a language, therefore, L2 learners could reach native-like proficiency. Also, task three showed that Level 5 students did better in ordering the six sentences which is also due to their proficiency in language and the number of years they have been learning the language. It can be apparent that the UG is activated at the beginning process of learning a second language and continues to have access even at advanced stages. This is linked to the FA/FT model that claims that L2 learners can acquire the new L2 structures even if those structures are not similarly found in their L1.

Furthermore, the results can attain the second intended objective, the effective role of L1, Arabic, on L2, English. From task three, it was clear that Level Two students know the English grammatical order of a sentence that has an adjective phrase. On the other hand, Level two students ordered most of the sentences based on their L1 grammar which is having the noun before the adjective and using an article before an adjective and a noun. Therefore, this reveals that although the participants' accuracy improves with proficiency, they start at a lower level of accuracy when ordering English adjective phrases in a sentence. This means that L2 learning is influenced by the existing properties in L1 which then means that there is full transfer at the beginning stages of learning. Also, this is linked to the FA/FT model that claims that the more input the learners are

exposed to the more native-like performance they can achieve by overcoming the L1 transfer that occurred at the beginning of the process of learning.

To sum up, it was found that Saudi learners of English can perform grammatically well-formed adjective phrases in different functions. This provides support for UG that enables the learners to transfer from their L1 to L2 without having any clashes in the brain process at advanced levels. The results also provide evidence that there is direct access to UG in L2 acquisition even though they are adults and have passed the critical period. Most Level Two and Level Five students started learning English at an adult age, 18 and over and were able to acquire the accurate English adjective phrase structure. They started with some access to the UG as the results of Level 2 show and reached full access as the results of Level Five show. Adults who started learning English as a major are the study's participants. This shows that L2 learners can start learning a second language even if they are adults. The participants were able to acquire the accurate structure of English adjective phrases and effectively participate in different tasks in an even shorter time than expected. They were able to answer all the tasks within less than 15 minutes which means that their answers are spontaneous leading to more valid results. Therefore, the findings should make an important contribution to the Full Transfer/Full Access model (FT/FA) that is suggested by researchers such as Dekydtspotter et al., 2001, Herschensohn (2000), and Slabakova (2008). These findings confirm that Saudi learners of English acquire Adjective Phrase Structure accurately at advanced levels, even though the structure of the AdjP is different in their L1. Also, it can be said that adult L2 learners could acquire native-like proficiency.

Conclusion

To sum up, the current study investigated whether, and to what extent, the UG is involved in second language acquisition by shedding light on the syntactic structure of English adjective phrases acquired by Saudi learners of English. This study employed quantitative and qualitative research methods to recognize the role of UG that contributes to second language acquisition. Results indicated that English L2 learners in Saudi Arabia generally had full access to UG and full transfer of L1, Arabic, at the beginning stages of learning L2, English. The findings suggest that the more input L2 get, the higher chance they get to reach native-like proficiency. The findings from this study make several contributions to UG in second language acquisition literature and provide support for FA/FT model.

Further Recommendation

More information on the role of UG in L2 acquisition would help establish a greater degree of accuracy of the FA/FT model. Therefore, further research should focus on determining the role of UG in second language acquisition in other syntactic structures that have many differences between the two languages, Arabic and English, such as Wh-questions, verb phrases, agreement cases and gender differentiation. Also, it is recommended that this study should be repeated using a high number of participants from different universities in Saudi Arabia. It is also presented that this study used an online questionnaire as a method. Further research could also be conducted using semi-interviews where a group of researchers use different kinds of tasks to naturally determine the function of UG on L2 without directly explaining to the students that their use of language will be tested.

Acknowledgement

This study is supported via funding from Prince Sattam bin Abdulaziz University project number (PSAU/2023/R/1444).

About the Authors:

Dr. Haroon Alsager finished his PhD in linguistics from Arizona State University in 2017. His research interests include syntax, historical linguistics and computational linguistics. Currently, he is an associate professor in linguistics and applied linguistics at Prince Sattam Bin Abdulaziz University. ORCID: <https://orcid.org/0000-0003-3778-5801>

Shatha E. Alanazi has a Bachelor's degree in English language from Sattam bin Abdulaziz University and a Master's degree in linguistics from PSAU. Her research interests are syntax and language acquisition/learning.

References

- Aldwayan, S. N. (2008). *The acquisition and processing of wh-movement by Najdi learners of English*, (Unpublished Doctoral dissertation). University of Kansas, USA.
- Alothman, H. N., & Alsager, H. N. (2022) Acquisition of L2 English spatial deixes by Arabic-speaking children. *Front Psychol* (13). DOI: 10.3389/fpsyg.2022.997110
- Alsager H. (2017). *Phasehood of wh-questions in modern standard Arabic*, (Unpublished Doctoral dissertation). Arizona State University, USA.
- Alsager H. N. (2020). The syntax of yes/no questions in modern standard Arabic. *International Journal of English Linguistics*, 10(5), 179-189.
- Alsager H. N., Mahzari M. A. (2021). On the syntax of ?anna and ?an in modern standard Arabic: a phase-based approach. *WORD*, 67, 172–187.
- Amer, W. M. (2012). An investigation into the differences between English and Arabic position and order of adjectives: A contrastive study with pedagogical implications. *Albahr Al-Ahmer University Journal*, 5, 205-229.
- Beck, M. L. (Ed.). (1998). *Morphology and its interfaces in second language knowledge* (Vol. 19). John Benjamins Publishing.
- Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. *Psychological Review*, 75(2), 81-95.
- Bley-Vroman, R. (1990). The logical problem of foreign language learning. *Linguistic Analysis*, 20, 3–49.
- Bohnacker, U. (2006). When Swedes begin to learn German: From V2 to V2. *Second Language Research*, 22(4), 443–486.
- Borovsky, A. (2008). *Word learning in context: The role of lifetime language input and sentential context*. University of California, San Diego.
- Carnie, A. (2021). *Syntax: A generative introduction*. John Wiley & Sons.
- Chomsky, N. (1995). Language and nature. *Mind*, 104(413), 1-61.
- Clahsen, H., & Felser, C. (2006). Grammatical processing in language learners. *Applied psycholinguistics*, 27(1), 3-42.
- Clashen, H., & Muysken, P. (1986). The availability of Universal Grammar to adult and child learners: A study of the acquisition of German word order. *Second language research*, 2(2), 93-111.

- Dahami, H., & Saleh, Y. (2012). Adjectives and their difficulties in English and Arabic: A comparative study. *Sana'a University Journal of*, 9(1), 82-117.
- Dekydtspotter, L., Sprouse, R., & Swanson, K. (2001). Reflexes of mental architecture in second language acquisition: The interpretation of combien extractions in English-French interlanguage. *Language Acquisition*, 9, 175–227.
- Delahunty, G. P., & Garvey, J. J. (2010). *The English language: From sound to sense*. Parlor Press LLC.
- Flege, J. E. (2003). Assessing constraints on second-language segmental production and perception. *Phonetics and phonology in language comprehension and production: Differences and similarities*, 6, 319-355.
- Greenbaum, S. (1990). *A student's grammar of the English language*. Pearson Education India.
- Gruter, T., & Conradie, S. (2006). Investigating the L2 initial state" Additional evidence from the production. *Inquiries in Linguistic Development: In honor of Lydia White*, 89- 131.
- Han, W. (2020). *Universal Grammar and the Initial State of Second Language Learning: Evidence of Chinese Multidialectal Children's Acquisition of English at the Syntax-Semantics Interface*. Springer Nature.
- Hawkins, R. (2001). The theoretical significance of Universal Grammar in second language acquisition. *Second Language Research*, 17(4), 345-367.
- Herschensohn, J. R., & Herschensohn, J. (2000). *The second time around: Minimalism and L2 acquisition*. Benjamins Publication.
- Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive psychology*, 45(3), 337-374.
- Iverson, P. et al. (2003). A perceptual interference account of acquisition difficulties for non-native phonemes. *cognition*, 87(1), b47-b57.
- Kharkhurin, A. V. (2008). The effect of linguistic proficiency, age of second language acquisition, and length of exposure to a new cultural environment on bilinguals' divergent thinking. *Bilingualism: Language and Cognition*, 11(2), 225-243.
- Krashen, S. D., Long, M. A., & Scarcella, R. C. (1979). Age, rate and eventual attainment in second language acquisition. *TESOL Quarterly*, 573-582.
- Lenneberg, E. H. (1967). The biological foundations of language. *Hospital Practice*, 2(12), 59-67.
- Lightbown, P. M., & Spada, N. (2021). *How Languages Are Learned* (5th ed.). Oxford university press.
- [Let it snow]. Peakpx. <https://www.peakpx.com/en/hd-wallpaper-desktop-penlh>
- [Little House on the Prairie]. Peakpx. <https://www.peakpx.com/en/hd-wallpaper-desktop-fauda>
- Meisel, J. M. (1997). The acquisition of the syntax of negation in French and German: Contrasting first and second language development. *Second Language Research*, 13(3), 227–263.
- Morales-Reyes, A., & Gómez Soler, I. (2016). Transfer and semantic universals in the L2 acquisition of the English article system by child L2 learners. *Language Acquisition*, 23(1), 57–74.
- Schwartz, B. D., & Sprouse, R. A. (1996). L2 cognitive states and the full transfer/full access model. *Second language research*, 12(1), 40-72.
- Slabakova, R. (2008). Meaning in the second language. In *Meaning in the Second Language*. De Gruyter Mouton.

- Sunagatov, D. Mother and daughter in the park. Dreamstime. Mother and Daughter in Park Stock
<https://www.dreamstime.com/royalty-free-stock-photos-mother-daughter-park-image29875468>
- [Table full of food]. iStock by getty images.
<https://www.istockphoto.com/search/2/image?phrase=table+full+of+food>
- Tsimpli, I. M., & Dimitrakopoulou, M. (2007). The interpretability hypothesis: Evidence from wh-interrogatives in L2 acquisition. *Second Language Research*, 23, 215–242
- Vainikka, A., & Young-Scholten, M. (1994). Direct access to X'-theory: evidence from Korean and Turkish adults learning German. *Language acquisition studies in generative grammar*, 31(4), 71-89.
- Van Gelderen, E. (2010). *An introduction to the grammar of English* (Rev. Ed.). John Benjamins Publishing.
- Vroman, R. B. (1989). What is the logical problem of foreign language learning? In S. Gass & J. Schachter (ed.), *Linguistic and perspectives on second language Acquisition* (pp. 41-68). Cambridge University Press.
- White, L. (1998). Universal Grammar in second language acquisition: The nature of interlanguage representation. *Proceedings of GASLA IV*, 3-14.
- White, L. (2000). Second language acquisition: From initial to final state. *Second language acquisition and linguistic theory*, 130-155.
- White, L., & Genesee, F. (1996). How native is near-native? The issue of ultimate attainment in adult second language acquisition. *Second language research*, 12(3), 233-265.
- White, L., & Juffs, A. (1998). Constraints on wh-movement in two different contexts of nonnative language acquisition: Competence and processing. *The generative study of second language acquisition*, 111-129.
- Yule, G. (2020). *The study of language*. Cambridge University Press.

Appendices

Appendix A

A Questionnaire to The Acquisition of English Adjective Phrase Structure by Saudi L2 Learners

Purpose of the research:

The study attempts to investigate the function of UG in second language acquisition in the Adjective Phrase Structure by Arabic native speakers in Saudi Arabia learning English. This study will benefit to understand the role of UG in second language acquisition in the Adjective Phrase Structure on Arabic native speakers in Saudi Arabia learning English. Furthermore, the study investigates the role of L1 grammar on L2.

The questionnaire consists of background information followed by three tasks.

Thank you for taking the time to complete this questionnaire. Ms. Shatha Alanazi is conducting this project for her MA degree. In case you have any quires, please feel free to contact

us on sh4alanazi@gmail.com

By signing this form, you are giving your consent to participate in this study

- Agree
- Disagree

Age

.....

Nationality

.....

Gender:

- Male
- Female

Years of learning/speaking English

- Less than a year
- 1-2 years
- 3-4 years
- More than four years

What is your grade in TOFEL / IELTS / STEP? (If you have write the name of the test and the grade) (If you don't have any just put 0 please)

.....

Task 1

Please don't spend more than 10 minutes answering this task. Also, use adjectives for your description.

How was your first day at university? Write a short story describing your feelings, the building or your new classmates. Please, write it in one short paragraph.

.....
.....
.....

Task 2

Please don't spend more than 10 minutes answering this task.

Please, describe what you can see in these pictures using adjectives in full sentences. Please, write at least ONE full sentence. How do you feel? or What can you see?



1-
.....
.....



2-
.....
.....



3-
.....
.....



4-
.....
.....

Task 3

Please don't spend more than 5 minutes answering this task.

Please, reorder these words to put them in a grammatical sentence.

1- girl / fresh / ate / the / apple / a

.....

2- was / exam / good / the

.....

3- bought / he / a / car / new

.....

4- I / read / book / a / short

.....

5- are / happy / they / a /family

.....

6- delicious / this / is /cake

.....

You are done!

Thank you. Your participation is highly appreciated.