

**People's Democratic Republic of Algeria**  
**Ministry of Higher Education and Scientific Research**  
**University "Des Frères Mentouri", Constantine**  
**Faculty of Letters and Languages**  
**Department of Letters and English**

# **Teaching Simple and Complex Grammar Rules through Explicit Instruction:**

**The Case-study of First Year Economics Students at the  
University of Oum El Bouaghi**

**Thesis submitted to the Department of Letters and English Language in Partial Fulfillment of  
the Requirements for the Doctorate ès-Sciences Degree in Applied Linguistics**

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**2015**

## DEDICATION

This thesis is dedicated, first and foremost, to my parents who have given me the opportunity of education from the best institutions and offered me bounteous support throughout my life. It is their unconditional love that motivates me to aspire to higher levels.

I also dedicate this thesis to my brothers and sisters Rachid, Mohamed Salah, Nabila, Leila, Amina, Nadia and their respective families; to my husband Riad; and to all my best friends Abla Mecif, Assia Abdellaoui, Sarah, Yamina Chiha, Soraya Mezhoud, Abla Amireche, Hafida Khaldi who have always stood by me, helped me with their continuous encouragement and believed that I could do it. Had it not been all their prayers and benedictions, were it not their sincere love and help, I would never have completed this thesis. I will always appreciate all you have done.

## **ACKNOWLEDGEMENTS**

It is with immense gratitude that I acknowledge the support and help of my supervisor, Professor Farida Abderrahim, who has the attitude and substance of a spiritual guide: she continually conveyed the spirit of respect with regard to teaching. Without her guidance and persistent encouragement, this thesis would not have been possible.

I wish to thank the board of examiners, namely Pr. Moumène Ahmed, Pr. Hamada Hacène, Pr. Belouahem Riad, Pr. Hamlaoui Naima, and Dr. Merrouche Sarah for having accepted to examine my work.

I would also like to acknowledge and thank the Department of Economics, University of Oum El Bouaghi for allowing me to conduct my research experiment and providing me with all the assistance I have requested. Special thanks go to my sister Mina for her precious constant help in typing the thesis, and to Mr. Messai Hamza for his generous cooperation during the experiment.

I am and will always be deeply grateful to all my teachers for the knowledge they imparted me patiently and generously throughout the years.

Thank You All

## ABSTRACT

While there is generally great interest in how languages are learned in the second/foreign language classroom, the question arises as to what type of grammar instruction is most effective and in learning which type of grammatical rules. This study examines the effect of explicit instruction on learning two types of grammar rules: simple and complex rules. While the target simple rule underlies the optional inversion of subject and verb following fronting of adverb of place (for example, 'In the supermarket works Anna /Anna works'), the two target complex rules underlie the formation of pseudo-cleft sentences headed by 'where' and 'what' (for example, 'Where the dog is is in the doghouse not in the kitchen', and 'What Anna does is write letters not read books'). This research work follows an experimental design including experimental and control groups. Subjects in both conditions were evaluated on their level of learning the grammar structure in question, using identical assessment measures, namely a pre-test and a post-test. Difference in the instructional condition depended on the presence or absence of explicit grammatical information about the target rules. The results indicate that subjects in the explicit grammar condition outperformed the subjects in the implicit condition in both the simple and complex rules. Although the experimental group subjects' achievement in the simple rule was not found to be statistically significant, it suggests that explicit instruction has a more positive effect on learners in learning foreign language grammar rules than does the implicit instructional method. These results support previous findings that explicit instruction leads to gains in learning second/foreign language grammatical items. The findings seem to imply that knowing more information about grammar can provide a fertile ground for learners of English as a Foreign Language to enhance their level of accuracy.

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## **List of Abbreviations**

AGL: Artificial Grammar Learning

CLT: Communicative Language Teaching

EFL: English as a Foreign Language

ESL: English as a Second Language

ESP: English for Specific Purposes

FFI: Form Focused Instruction

FL: Foreign Language

GJT: Grammaticality Judgment Test

ICA: Immediate Constituent Analysis

L1: First Language

SL: Second Language

SLA: Second Language Acquisition

SV: Subject-Verb

TGG: Transformational Generative Grammar

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## **INTRODUCTION**

- 1. Statement of the Problem**
- 2. Aims of the Study**
- 3. Hypotheses**
- 4. Means of Research**
- 5. Structure of the Thesis**

# INTRODUCTION

## 1. Statement of the Problem

One of the most persistent questions in second/foreign language acquisition research and pedagogy concerns the impact that explicit instruction of grammar may have on acquiring a second/foreign language. A number of second/foreign language acquisition researchers have argued that directing the learners' attention and presenting them information about the rules governing the target language structures (explicit instruction) can be beneficial to second/foreign language learning. For explicit instruction, learning the form is the primary focus of all the tasks. In explicit instruction, a selected form is taught, either by the presentation of the rules and then the giving of examples (deductive reasoning) or by giving examples and then eliciting the rules (inductive reasoning) from the learners. Learners usually practise the form in language tasks. Some cognitive psychologists have explained the effectiveness of explicit instruction by claiming that conscious awareness of the form of input at the level of noticing is a necessary condition for second/foreign language development to occur. In contrast, Krashen (1979, 1981, 1982, 1985, 1994) argues that two processes operate in second/foreign language development: a conscious process based on rule application (explicit instruction) which results in a learned system (explicit language knowledge) and an unconscious process which results in an acquired system (implicit language knowledge). The way in which implicit knowledge is built up most effectively is still an issue of considerable disagreement.

A considerable number of studies were conducted to gain insight into the effect of explicit instruction. Although, much evidence for the facilitative effect of explicit instruction on second/foreign language learning has been found, little is known yet concerning the question of under which specific learning circumstances and for exactly which aspects of grammar explicit instruction can be most facilitative for second/foreign language learning. Many second/foreign language researchers have argued that the following variables could



possibly influence the effect of explicit instruction: the target structure linguistic domain, its degree of semantic redundancy, its reliability, its scope, the frequency with which it is manifested in the input, the task modality, the type of instruction, individual learner's characteristics, and the complexity of the target language rules.

As regards the complexity issue, many second/foreign language researchers have taken a straightforward position by assuming that complex rules can be acquired only via activating implicit processes. For instance, Krashen (1982, 1993) claims that the development of the learned language system is restricted to a relatively small number of simple rules. Claims similar to those of Krashen have been made by Reber (1989, 1993). Like Krashen, Reber argues that what can be learned by unconscious learning process (implicit learning) exceeds what can be learned by explicit conscious processes, and that complex rules can only be learned implicitly: conscious explicit instruction is only effective where the rules are simple and the structural pattern they describe is easy to be noticed by the learner. DeKeyser (1995), Robinson (1995a, 1996b), Andrews (2007) and Spada and Tomita (2010) examined the differential effects of explicit instruction on the learning of simple and complex rules. The results showed that implicit learners did not outperform other learners on complex rules (as was claimed by Krashen and Reber), but the instructed learners outperformed all other learners in learning simple rules. By complex rules, Robinson (1996) refers to those rules that are not easy to be noticed in the input (low degree of perceptual salience), have a large size of context of application, have a low degree of semantic opacity and require a great amount of attention and processing effort so as to remember and learn them. Therefore, the simple rules are, according to him, those with perceptually salient features, which are applied to small contexts and which involve transparent meaning-to-form relationships.

Due to the controversy of this issue, it is necessary to conduct further studies in order to make some contributions to a better understanding of the possible effect of explicit instruction on the learning of simple and complex rules.

## **2. Aims of the Study**

Theories on the role of explicit instruction and on the role of consciousness in second/foreign language acquisition predict a facilitative effect in the acquisition of a second/foreign language. This study aims at investigating the effect of explicit instruction on the learning of English simple and complex grammar rules and hence providing insights about how grammatical rules should be presented to learners so as to optimize their learning in second/foreign language classroom.

## **3. Hypotheses**

On the basis of our observation and the aims of our study, we seek to investigate the following hypotheses.

**Hypothesis 1: We hypothesize that explanation and practice of simple and complex grammatical rules underlying the sentences making up the test (explicit instruction) will produce better results than exposure to the sentences without explanation of the rules (implicit instruction).**

This hypothesis is based on claims made by the proponents of the Interface Position who state that providing explanation and practice of the target language rules will improve learners' understanding and noticing, and hence will facilitate rules processing in language and eventually their (rules) acquisition.

**Hypothesis 2: We also hypothesize that the teaching of complex grammar rules will be more effective through explicit instruction than implicit instruction.**

This hypothesis is motivated by the fact that explicit instruction may save learners considerable time and effort in discovering and processing the complex grammar rules intricacies.

**Hypothesis 3: Furthermore, we hypothesize that explicit teaching of complex grammar rules will be more effective than explicit teaching of simple grammar rules.**

This hypothesis is motivated by the fact that normally simple grammatical rules regulating language structures may be clear enough in the input to be noticed and processed by second/foreign language learners spontaneously without explicit instruction.

#### **4. Means of Research**

This research follows an experimental design: pre-test, instruction phase, and post-test to be administered to an experimental group. To collect data for the study, five steps were followed namely selecting the rules to be presented to learners by means of a questionnaire administered to teachers, piloting the study, pretesting, training the subject during an instruction phase, then post-testing. The results are compared with those of a control group. The items to be included in the pre-test and post-test were identified in a pilot study conducted on a group of first year students from the Department of Economics, University of Oum El Bouaghi.

In this study, a sample of fifty nine (59) subjects were selected from undergraduate first year students at the Department of Economics, University of Oum El Bouaghi. After completing a pre-test, subjects were randomly assigned to one of the two conditions. Difference in conditions is related to the presence or absence of information about the grammatical rules. Subjects in the two conditions went through an instruction phase. The instruction phase tasks consist of the same language elements (English for Specific Purposes texts and reading-comprehension exercises) for both conditions. Subjects in the explicit condition were given additional lessons including target rules presentation, explanation and practice. After going through a training phase, subjects in both conditions were post-tested by considering the same items of the pre-test. Learners' performance on the two tests was analysed, compared and discussed.

## **5. Structure of the Thesis**

This research work is developed in five chapters. Knowing that the concept of grammar and grammar teaching enjoy considerable attention in any linguistic theory, and that in the history of language teaching, the role of grammar has been addressed by several linguistic theories and methodologies, a chapter (Chapter One) has been devoted to the different aspects related to grammar and to the role it plays within dominant teaching methodologies.

Over the last fifty years, grammar teaching in the second/foreign language classroom has been an important and controversial issue. Grammar has been attributed different roles in the language classroom, reaching little consensus, not only about the particular forms to be taught, but even about when or how to teach. Chapter Two, thus, dealt with the debate about which approach is more effective in promoting grammar learning and puts a particular focus on the merits and the effects of the explicit approach to grammar instruction on second/foreign language acquisition development.

Many studies have tried to answer the question ‘Does grammar instruction make a difference?’, and have proven that explicit instruction is more beneficial for second/foreign language development. Recent studies attempt to find out on which type of grammatical rules explicit instruction is more effective. Some researchers claim that the more complex the rules of grammar are, the more difficult it is for second/foreign language to learn. Seeing the disparities in the definition of complex rules, Chapter Three was devoted to considering how complexity is defined and how the complexity of rules is determined, with an utmost concern being the relationship of explicit grammar instruction to complex rules learning.

Given that little consensus is reached concerning the effectiveness of explicit instruction to complex rules learning, the researcher felt necessary to supplement empirical evidence of the effect of teaching grammar explicitly from a study using a natural language and using an experimental design. Hence, in Chapter Four, the researcher explained in detail the data collection and analysis procedures, displayed the results, and finally analyzed and discussed them.

As the way grammar is regarded has a direct and decisive influence on the elaboration of pedagogical grammars, learning processes and many other areas involved in language teaching, the last chapter (Chapter Five) of this research work attempts to supply teachers with suggestive insights about the instructional techniques together with the factors that influence choice of a specific grammar activity that could constitute a possible basis for decisions about grammar teaching in specific contexts.

# **Chapter One**

## **Theories and Place of Grammar within Language Teaching Approaches/Methods**

### **Introduction**

#### **1.1 What is Grammar?**

#### **1.2 Linguistic and Pedagogic Grammar**

##### **1.2.1 Prescriptive Grammar**

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##### **1.3.2 The Structural Model of Grammar**

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##### **1.4.5 The Cognitive Methods**

##### **1.4.6 The Total Physical Response Method**

##### **1.4.7 The Silent Way**

##### **1.4.8 The Community Language Learning/Counseling Learning**

**1.4.9 Suggestopedia**

**1.4.10 The Natural Approach**

**1.4.11 The Monitor Model**

**Conclusion**

## **Introduction**

In linguistics, grammar is often considered as one of the three components of language; phonology and semantics being the other ones. Throughout time, there have been many attempts to define grammar. Therefore, it is useful to consider the different conceptions of grammar and to explore from an historical perspective the different models of grammar that have arisen and the several language teaching methods they generated. In the final section of this chapter, the place of grammar within dominant language teaching methods will be considered.

### **1.1 What is Grammar?**

In most dictionaries and linguistic glossaries, grammar has always been defined as ‘Study or science of rules for forming words and combining them into sentences or person’s knowledge and use of a language (Oxford Advanced Learner’s Encyclopedic Dictionary: 1993) or as ‘The principles or science of correct use of language dealing with phonology (the science of sounds), etymology (the grammar of words), accents (the science of inflections) or a system of principles and rules of speaking and writing a language (Concise Oxford Dictionary: 2011). In linguistics, grammar was traditionally seen as a collection of prescriptive rules and concepts about the structure of the language; its main objective was perpetuating a model of what is considered as correct language. Structuralists, however, view grammar as the study of how sentences are structured. For transformational linguists, grammar is a set of rules that generate an infinite number of sentences through operations known as transformations, and as such enable speakers and listeners to understand and produce utterances they never heard before. According to Chomsky (1965:24),

A grammar can be regarded as a theory of a language; it is descriptively

adequate to the extent that it correctly describes the intrinsic competence

of the idealized native speaker.



While several models of grammar do exist, most linguists are in agreement that a grammar of a language is little more than a system of rules or conventions for relating sounds or symbols to meaning. It is only by abiding by such a system that speakers of a given speech community can communicate and it is only by mastering this system that a learner of a foreign language can effectively operate in it. Why, therefore, does it continue to be a source of controversy in foreign language circles? In her book ‘Teaching Foreign Language Skills’, Rivers (1968) argued that:

As soon as the fundamental role of grammar is raised in modern language teaching circles, the discussion becomes animated even heated, and before the discussion is finished, some of the participants are likely to have taken up rigid and uncompromising positions.

The answer to the question ‘Why does grammar continue to be at the heart of linguistic debates till nowadays?’ likely revolves around three related issues. The first is that while a grammar may seek to describe a mechanism by which a given community relates sound and meaning, there exist actually many models that can illustrate this and it can be difficult to determine which is the most appropriate for a given pedagogic situation. The second is that, even if it is accepted that grammar is important for language learning, differences exist over the most effective way to teach it, i.e., for adapting it to the pedagogic context. Thirdly, even more controversial is the point whether such teaching should be explicit or implicit.

## 1.2 Linguistic Grammar and Pedagogic Grammar

In order to avoid confusion about how the term 'grammar' operates in linguistics, many linguists distinguished a linguistic grammar from a pedagogical grammar. For them a linguistic grammar is a scientific theory or a theoretical account of the essential components of any human language. This type of grammar considers language as an abstract system and seeks to provide explanation about how language operates. Universal Grammar (Chomsky, 1986) and Lexical Functional Grammar (Bresnan, 1982) are examples of linguistic grammar.

By contrast, a pedagogic grammar provides regular constructions, lists of most recurrent exceptions to these constructions, and descriptive comments and explanations about the language forms and their meanings. This type of grammar is designed to provide information which is relevant for teaching and learning, for material design, and for syllabus and curriculum development. The term pedagogical grammar usually denotes the types of grammatical analysis and instruction designed for the needs of second/foreign language (SL/FL) students.

For Chomsky (1965:46) a linguistic grammar should not be confused with a pedagogic grammar since if the latter is a means for generating linguistic competence, linguistic grammar attempts to find out and describe how this process is possible:

A grammar describes and attempts to account for the ability of the speaker  
to understand an arbitrary sentence of his language to produce appropriate  
sentences on given occasions. If a pedagogic grammar, it attempts to provide  
a student with this ability, if a linguistic grammar, it aims to discover  
and exhibit the mechanisms that make this achievement possible.

One of the central tasks of these grammars is to formulate rules. While linguistic rules, which are developed according to different theories of language, consider mainly the form whereby knowledge of language is represented in the human's mind, pedagogical rules are presented as mere simplified versions of linguistic rules. Pedagogic rules do not present an exhaustive theoretical explanation of the rules of language. Pedagogic grammar is related to numerous conceptions of grammar which can help understand its role, namely grammar as description, grammar as prescription, and grammar as an internalized system.

### **1.2.1 Prescriptive Grammar**

Whenever we think of grammar, it suggests dos and don'ts: 'Make sure that your verb agrees with its subject', 'Use the definite article with superlatives' ....etc. These and other rules codify many of the distinctions between standard and nonstandard varieties of a language, and such rules often influence people in choosing between 'good' and 'bad' grammatical forms. Much of the time, though not always, decisions about what is good and bad are essentially arbitrary and do not often reflect any crucial principle of language or thought. Yet even though many rules are arbitrary and liable to change, prescriptivism merits a more serious consideration. Unquestionably, prescriptive statements have often shown biased and 'Amateurish' views of language.

Nevertheless, prescription makes possible the standardization of language, which makes communication easier between different dialect regions. Having a language codified simplifies both the teaching and learning of SL/FLs. If there were no limits to the variations, the speech or writing of learners would inevitably diverge from the target language. Limiting the divergence through prescription, according to Odlin (1993), can help to make ways of speaking and writing mutually intelligible when learners modify their language toward one standard or at least a narrower range of standards.

### **1.2.2 Descriptive Grammar**

Descriptive grammars provide a much more detailed look at languages than most prescriptive grammars do. For linguists, a descriptive grammar of a language consists of

accounts of not only syntax and morphology but also phonetics, phonology as well as semantics and lexis. Even when they restrict their descriptions to morphology and syntax, descriptive grammarians consider many structures that prescriptive grammarians either ignore or briefly discuss. Descriptive grammars may also provide diachronic analysis of languages.

For SL/FL teacher, the boundary between prescription and description is not always as straightforward as it seems for teachers working with native speakers of a language. For instance, textbooks and reference grammars for English as a Second/Foreign Language (ESL/EFL) students discuss many types of grammatical features and the example they provide would often seem self-evident to native speakers. For example, native speakers have few problems in choosing the verb tense in an adverbial clause such as:

- Before John finishes work, he will give us a call.

In contrast, ESL/ EFL textbook writers commonly inform students that the present, not the future, tense should be used in such adverbial clauses. Such descriptive information functions as a prescription to avoid a deviation from the norm like:

- Before john will finish work, he will give us a call.

### **1.2.3 Grammar as an Internalized System**

While descriptive grammars provide information about the wide range of structures in a language, they say little or nothing about the mind which is the source of grammatical patterning. What linguists find interesting about the relation between language and mind is not always the same as what psychologists find interesting. To a certain extent, the difference in interest is rooted in the frequently cited distinction of Chomsky ‘competence’ (the person’s knowledge of his language) and ‘performance’ (the actual use of language in concrete situations). While psychologists tend to be more concerned by the performance mechanisms in speech production and comprehension, linguists tend to focus on the abstract

knowledge that makes production and comprehension possible. The competence that speakers have is evident in the grammatical patterning of any language even though much of it is not easily accessible to consciousness. For instance, in their everyday conversations, speakers demonstrate that they unconsciously make grammatical distinctions, but few could characterize the distinctions. This competence is viewed as an internalized system, that is, mental structures that guide everyday linguistic behavior.

In studies of Second Language Acquisition (SLA), Selinker's (1972) term 'Interlanguage' is frequently used to describe the developing competence of learners. Although interlanguage remains controversial in many ways, there is plenty of evidence that it is systematic. Without some notions of competence, linguistics would find it difficult to account for the systematicity of grammatical knowledge.

Each of the three conceptions of grammar namely grammar as description, grammar as prescription, and grammar as an internalized system has implications for language teaching and none of them alone covers the concerns of users of pedagogical grammars. Teaching grammar for SL/FL learners involves prescription, and description. Any teacher who is concerned with how learners succeed in learning any grammar will automatically be curious about the psychological mechanisms that underlie interlanguage competence and performance.

### **1.3 Models of Grammar**

It is worth noting that an overview of language teaching reveals a tremendous divergence in methods that is mainly caused by the various developments in linguistics that eventually brought about several models of grammar.

#### **1.3.1 Traditional Model of Grammar**

The concept of traditional grammar is based on the teaching of Latin which began in the Roman schools of rhetorics and which remained unchanged under the tutelage of the church to the Middle Ages. At that time, it was reported that Latin was largely learnt through immersion and boys were expected to speak it at all times, even at recreation, on pain of fines or punishment. However, through time, what had started out as a descriptive grammar to help the acquisition of Latin turned into a prescriptive grammar, i.e. into a body of rules and conventions for the study of a dead language as Latin was relegated to a language spoken mainly in masses in Roman Catholic Church. During the 18<sup>th</sup> and 19<sup>th</sup> centuries, language teaching was purely grammar teaching in which the study of the classics (mainly Latin/Greek) was justified as a mental discipline; i.e. a training of the mind based on the view that Latinate grammar encodes rules of logic.

Over time, as Latin vernaculars began to be taught in grammar school from the Renaissance onwards, it was inevitable that these languages should be approached through the same prescriptive Latin grammar. This tradition was perpetuated into the 1950's through the European university public examination system.

Eight parts of speech have been identified by traditional grammarians as namely noun, pronoun, adjective, adverb, verb, preposition, conjunction and interjections. They described the patterns for word inflection and the syntactic rules by which words are combined into sentences. The switch from a descriptive grammar to prescriptive resulted in the fact that grammatical rules were prescribed about how people ought to speak or write.

The problem with traditional grammar does not lie in the fact that it was highly prescriptive in character only but that it was not accurate as far as some modern European languages are concerned. Nonetheless, the contribution of traditional grammar to language teaching should not be underestimated since this type of grammar provides teachers with simple rules to teach the language. For this reason, traditional grammar remains influential in the teaching of languages in many countries.

### 1.3.2 The Structural Model of Grammar

The weaknesses of traditional grammar began to be perceived, at the beginning of the twentieth century, and many of the premises upon which it was based were questioned. The central thrust of such criticism emerged from figures such as Boas, Sapir and Worth in the USA during the 1950's whose study of Amerindian languages convinced them that it was impossible to describe quite diverse languages in terms of a common grammar. The assumption that each language has its own grammar (i.e. a set of rules relating form to meaning which is unique to that particular language) meant that the key task of linguistics was increasingly seen as describing these language-specific rules.

The emphasis therefore shifted from prescribing what people should say or write to describing the patterns to be found in their speech and writing. Such a model made no judgments about what was right or correct English expressions. The newer structural grammars that emerged during this period were refreshingly free from the constraints of the earlier Latin-based models. They were also much richer and more complex in that the emphasis placed upon the speech patterns of the living language enabled the concept of grammar to include not only morphology but also phonology, intonation and syntax.

The impact of structural grammars on foreign language teaching is well known through the audio-lingual revolution of the 1960's. The fact that such grammar favoured speech over writing and that it sought to **describe** the living language rather than **prescribe** how it should be spoken based written models. Moreover, Immediate Constituent Analysis (ICA) seemed to lend itself to exercises in the classroom which were well suited to developing an oral command of the language. These included the substitution and

transformational exercises (drills) which were the cornerstone of the audio-lingual method. Most audio-lingual courses were based upon drills of this kind whereby, through a process of memorizing set phrases and gradually extending them through substitution and transformation, the pattern was supposedly internalized.

While structural grammars represented, in many ways, a step forward over the traditional ones, they were, however, limited in nature as Chomsky was soon to point out. These weaknesses were not only at the theoretical level. They were also reflected in the problems posed at pedagogical level. The aim of such grammars may have been to describe the living languages, but, as Chomsky claimed to prove, the description had numerous shortcomings. In the first place, it simply could not account for a key feature of language use i.e. its creativity. As Chomsky argued, the central point about people's use of language is that they are capable of 'generating' sentences which they have never heard before. The fact that structural grammars were satisfied with classifying what was said rather than describing the rules for the generation of language meant that there had to be an inherent weakness. This weakness was then highlighted in the audio-lingual approach to foreign language teaching where, as pointed out by Rivers, the emphasis was on the drilling of previously known patterns rather than on giving pupils the opportunity to internalize those rules which would allow them to produce their own utterances. According to Chomsky, structural grammars were unable to account for the relationship between sentences which appeared similar at a superficial level but which, at a deeper level (i.e. at the level of deep structure) had different grammatical form. To illustrate his point, he uses the well-known example of: a) 'John is easy to please', and b) 'John is eager to please'. While ICA would treat both as similar utterances, Chomsky would argue that everyone would be aware that John is the object of the first sentence whereas he changes to the subject of the second sentence.

Another criticism to structural grammars is that they tended to minimize the question of meaning. Basing themselves within the behaviourist tradition, linguists argued that it was impossible to define the full meaning of any utterance without having a scientifically accurate knowledge of everything in the speaker's world. Since this would not be possible, Bloomfield argued that the question of relating form to meaning would have to remain the weak point in language study.



### 1.3.3 The Generative Model of Grammar

Chomsky's critique of structural grammars was to have a profound effect upon the study of linguistics. What was important about it was that it tended to shift the emphasis away from describing the patterns of individual languages to a higher and more abstract level. Any grammar that sought to accurately describe the rules need, in Chomsky's view, to contain three factors: Firstly, it has to explain and describe the speaker/hearer's ability to distinguish between grammatical and non-grammatical utterances. Chomsky then went on to argue that the fact that humans are aware of these distortions means that a system of rules that relates sound and meaning in a particular way has been internalized. Secondly, it has to describe the speaker/hearer's capacity to apply these rules to lexical items to produce a virtually infinite range of utterances i.e. what he calls their language 'creativity'. Thirdly, it had to include the speaker/hearer's intuitive knowledge of the inter-relation between sentences generated, i.e. those two previously mentioned sentences namely 'John is eager to please/John is easy to please' as they encode different base structures.

It was Chomsky's belief that a grammar which seeks formally to define the above well-known example will describe the speaker/hearer's linguistic competence rather than his/her performance. It was his opinion that all human beings have such a competence so that this grammar will not be so much a grammar of a particular language but rather a universal grammar; i.e. a grammar which describes everything which is common to all language. This is not to suggest that Chomsky does not accept that there are differences between languages but that these differences are at the surface level and that there must exist certain base structures common to all languages which reflect common human competence. Chomsky's model of a generative grammar seeks to include common base structure rules as well as a set of transformational rules which, in a language such as English for example, will allow these base structures to be converted to surface structure rules. This same model of a generative grammar has had a less direct influence on modern language teaching. Chomsky himself argued that his model had limited application to a teaching context, but the views underpinning it have been of long-term appeal in two contradictory ways. For some, the fact that there is a common base structure underpinning all languages, with different surface structures for each individual language, has led to a renewed interest in the use of the mother tongue in foreign language lessons-particularly in such activities as translation. After all, if all pupils start with common

base structures, then the only problem in learning a foreign language is to practice the transformation rules by which they convert into the surface structure of the target language. This can often lead to explicit grammar teaching. For others, it has led to an opposite direction. They suggested that if all pupils are equipped with a universal grammar against which they process incoming data, the task tends rather to be one of exposing them to natural chunks of the language and allowing their internalized universal grammar to get to work. This is, indeed, the highly inductive approach advocated by such figures as Reibel or Newmark and which is prevalent today with the idea that pupils can pick up (i.e. internalize) the rule structure simply by being exposed to authentic material.

While Chomsky's model has had a long-lasting influence on foreign language teaching, it has been seen increasingly to be inadequate in a number of ways. Many linguists have questioned the concept of a universal grammar and others, such as Widdowson (1990), have asked whether our use of language is generative or rather adaptive in nature. The most important of such criticisms has stemmed from other linguists such as Dell Hymes (1972) who have questioned whether it is possible to define competence in purely grammatical terms. As he proposes, what we know about language is not simply the rules, but also the ability to use the grammatical rules. Hymes insistence on the notion of communicative competence is not just a critique of Chomsky, but also of the whole linguistic tradition which seeks to define language independently of social and psychological factors.

#### **1.3.4 The Communicative Model of Grammar**

The communicative model of grammar is based on the communicative approach to the teaching of second/foreign languages. Established by Wilkins and Widdowson, it emerged in the late 1970's as a reaction against the structural movement. According to Widdowson (1990), focusing on the communicative aspect of language does not imply that grammar should be discarded. He (1991:98) states that 'A communicative approach, properly conceived, does not involve the rejection of grammar. On the contrary, it involves recognition of its central mediating role in the use and learning of language'. However, for him, learning grammar does not entail learning the intricacies of the device without knowing how to put it into use, but to know how grammar functions in accordance with words and contexts for the completion of meaning.

Swan (1990) identified these aspects as being the major characteristics of this model of grammar:

- Form and meaning of language items are used simultaneously. In other words, grammatical forms are taught not for their own sake but as a means of carrying out communicative acts. For Wilkins, focus should not be on grammatical forms, or on abstract descriptions or definitions. Instead, it should be on the language notions underlying these grammatical forms which are taught implicitly through manipulation of notions by functions. For the proponents of the communicative approach, the main objective is to help the learner build up a linguistic competence through use (implicitly) and not through knowledge of linguistic rules (explicitly).
  
- Errors in grammar could be eradicated gradually through the negotiation of meaning that takes place when the language is used.
  
- The various notions - that may belong to a single grammatical form- are introduced separately and in different situations in order to highlight their meaning and use. Thus, items which are semantically linked are taught together, even if they are structurally different.
  
- Learners are encouraged to identify by themselves forms as they are working out communicative tasks.

Despite all its merits, the communicative approach disregarded many teaching/learning aspects due to its concept of grammar. After reviewing Wilkins' 'Notional Syllabuses', Brumfit (1978: 175) asserted that the teaching of grammar cannot be replaced by the teaching of functions and notions. He holds that:

The point about the grammatical system is that a limited and describable number of rules enable the learner to generate an enormous range of utterances which are usable, in combination with paralinguistic and semiotic systems, to express any function. To ask learners to learn a list instead of a system goes against everything we know about learning theory.

Many learners found communicative grammar somehow hard to grasp as pointed by Swan (1990:87): ‘Unfortunately, grammar has not become any easier to learn since the communicative revolution.’ He claims that if we try to teach certain linguistic features to elementary learners, we are likely to face problems right from the beginning because if linguistic and language functions are taught together, it might be confusing for learners; they may overgeneralize or draw wrong conclusions for they may think that any linguistic form can express only one function. On the other hand, if the functional meaning is emphasized, learners will not be given enough linguistic knowledge to carry out communicative tasks efficiently. Moreover, the rules are sometimes complex and cannot be grasped easily just by citing them in a function-notion focused lesson which introduces different structural aspects at the same time.

Swan (1990) concluded that this type of grammar is not clearly defined, nor is it succinctly systematized because grammatical forms are taught implicitly; they are embedded in passages expressing communicative functions. Swan (1990:88) remarks that:

...language is not only a set of formal systems, but it is a set of systems, and it is perverse not to focus on questions of form when this is desirable.

Some points of grammar are difficult to learn, and need to be studied

in isolation before students can do interesting things with them.

It is no use making meaning tidy if grammar then becomes so untidy  
that it cannot be learnt properly.

It is worth noting that if we consider many ESL/EFL contexts, we find that the communicative approach to grammar instruction does not result, as prophesized, in basic linguistic accuracy even after many years. Although advocates of this approach (Krashen, 1982, 1991; Krashen and Terrell, 1983) claim that unconscious acquisition is better than and preferable to conscious learning, that only what has been acquired unconsciously is available for normal language use, what has been acquired unconsciously is only available as monitor for output and only under certain conditions (Krashen's Monitor Hypothesis 1982), and that the only important requirement for effective SL/FL development is to provide learners with comprehensible input (Krashen, 1991); advocates of explicit grammar instruction claim that there is no proof that unconscious acquisition is superior to conscious learning in a classroom situation (rather the reverse has been proved), and that when applied to older learners, an unconscious learning process undervalues the learners' cognitive maturity which is considered as great and facilitative to language learning. For them, output is monitored one way or another, most if not all the time before, after, and while we produce it. Cognitivists contend that monitoring is a frequent SL/FL learner strategy across all language skills. In addition, according to Swan (1990) if comprehensible input alone were crucial in the classroom, learners, after over thirteen years of such input, would be competent and accurate speakers of the SL/FL, but it seems that they are not. For him, what is important is to provide learners with systematic, step-by-step instruction that will manage output.

According to proponents of explicit grammar teaching, communicativists dismissed the observations of teachers whose daily experience shows them that this approach to grammar teaching does not yield great results. Very few teachers reacted to this. Hammerly (1991:12) remarks:

With a few laudable exceptions, our profession

is silently watching the parade go by, for only a few  
are in a position to be able to say, with frankness  
and courage, that the emperor has no clothes.

## **1.4 Place of Grammar in the Language Teaching Approaches/Methods**

SL/FL pedagogy has undergone frequent changes throughout the 20<sup>th</sup> century. Many of the changes have been motivated by developments in related fields such as psychology. The purpose of this section, therefore, is to trace the evolution of popular SL/FL methods while drawing attention to the place of grammar within them. Gascoigne (2002) claims that the roots of the present debate about grammar can be traced not only to psychology, but to the methodological past of language teaching as well. She presented the most famous teaching methods we will report on with a particular focus on the treatment of grammar.

### **1.4.1 The Grammar-Translation Method**

In fact the dominant method of SL/FL instruction from the late 18<sup>th</sup> century to the early 20<sup>th</sup> century, the Grammar - Translation Method, viewed grammar as the only means of language study and at times the only pedagogical objective to attain.

One of the basic objectives of the Grammar Translation Method to language teaching was the development of the learner's mind through an emphasis on and a manipulation of grammatical rules (Gascoigne, 2002). In this method, the development of the mind as well as translation skills was accomplished through a deductive form of teaching moving from the statement of the rule to the example. In the classroom, the learner was the passive recipient of rules and engaged in practice activities and translation exercises requiring the application of explicit grammar rules. Listening activities took the form of dictation and speaking was accomplished by having students read a passage aloud. In other words, genuine communication skills were ignored.

### **1.4.2 The Direct Method**

The Direct Method changed the dominant role of explicit and deductive grammar as defined by the grammar translation approach. Advocates of the direct method believed that SL/FL learning should proceed in the same natural context as first language learning. The direct method emphasized speaking before reading and viewed SL as the medium as well as the object of instruction.

In fact one of the most radical changes brought about by the direct method was the role of grammar in the classroom. Grammar in the direct method was not taught in an explicit and deductive manner, as in the grammar translation class, but was acquired through practice. In the direct method, learners were encouraged to create their own structural generalizations from what they have been learning through inductive activities. In addition, grammar instruction in this method was kept at a functional level and was confined to areas that were continually used in speech. If grammar was taught, it was done in the target language while using SL/FL words.

### **1.4.3 The Reading Method**

The Reading Method that appeared in the 1930's has as ultimate objectives the development of the ability to read a foreign language with moderate ease and enjoyment for recreate and vocational purposes.

Contrary to the grammar translation method, learners were trained to extract meaning from texts, not to translate. The role of grammar and explicit rules in the reading method lay somewhere between the above-cited two methods in the sense that grammar instruction was not totally discarded from the classroom, but was limited to some grammatical patterns practice necessary for reading comprehension. Moreover, learners were asked to recognize grammatical rules and forms only, not to reproduce them.

After World War II, many linguists and teachers began to realize that many learners were not able to communicate in a foreign language even after years of study. This realization helped promote a renewed interest in the study of languages with a special emphasis on oral skills, and helped create a climate conducive to the development of the audio lingual method that was believed to be the one true way.

#### **1.4.4 The Audio-Lingual Method**

The Audio-lingual Method was given many names namely: the Aural-oral, New Key, Functional Skills, or Scientific Method. In 1960, it was renamed the Audio-lingual method. The audio-lingual approach was influenced by both structural linguistics and behavioural psychology (Gascoigne, 2002). Skinner viewed language learning as any skill learning: a stimulus-response activity. This behaviourist view of language learning corresponded with structural linguists' beliefs at the time. For instance, according to Bloomfield, language learning should involve the over-learning of structural forms rather than superficial exposure to written grammar exercises. According to Gascoigne (2002), with the help of Bloomfield, structural and behaviourist language learning theory soon evolved into practice in the army intensive language courses. This method, which was first taught at the army schools, began to infiltrate other academic programs during the 1960's. Audio-lingual instruction was essentially made up of three components:

- Presentation of a dialogue
- Repetition of a dialogue
- Subsequent drills by students.

Despite the fact that this method is said to be linguistic, grammatical explanation is rarely provided (Richards and Rogers, 2001). Structures were taught through the practice of sound, order or form. Learners were to create their own grammatical rules through analogy through substitution drills, like singular plural transformations, tense transformation, translation drills.



### 1.4.5 The Cognitive Methods

The Cognitive Methods were in fact the most important reactions against the audio-lingual approach. They were derived in part from Chomsky's rejection of structural language descriptions. These methods allowed for a conscious focus on grammar and more importantly acknowledged the role of abstract mental processes in learning rather than viewing learning as habit formation (Gascoigne, 2002).

These methods are the result of both cognitive psychology and TGG. By cognitive methods we mean 'Cognitive Code' and 'Cognitive Anti-method'. These methods do not view language as a set of habits but as a conscious creative activity. The major procedures of classroom instruction are based on the principles that follow:

- Build on what the learner already knows.
- Allow the learner to create meaning.
- Avoid rote learning

Proponents of the Cognitive Code Method believed that the primary goal was to promote the creative and meaningful use of language as well as a conscious knowledge of grammar. However, proponents of the cognitive Anti- method claim that linguistic analysis is not important for language learning, and grammatical rules and explanations are not useful in the classroom (Gascoigne, 2002).

It seems that both the Audio-lingual Method and the Cognitive methods seek to teach learners how to handle language unconsciously, but they disagree on the type and amount of grammar to be discussed in the classroom.

#### **1.4.6 The Total Physical Response Method**

The Total Physical Response Method was inspired and shaped by a belief in how children acquire their first language. Proponents of this method claim that children acquire a SL/FL when caretakers speak to them in the SL/FL while giving them a series of commands. These latters guide the child through activities such as bathing, dressing, playing, drawing...etc. These physical commands activities are claimed to have dramatic gain in language comprehension for both children and adult learners (Gascoigne, 2002). The major objectives of this method are:

- Comprehension of spoken language must be developed before the learner engages in speaking.
- Comprehension and retention is best achieved through the movement of learners' bodies in response to commands.
- Learners should not be forced to speak before they are ready.

But a question rose in many teachers' mind, 'what role does grammar instruction play in the Total Physical Response classroom?' Proponents of this method state that most of the SL/FL grammatical structures would be learnt through the physical commands given by the instruction. Technically, only few minutes could be devoted to some explicit grammar explanations at the end of class and only at learner's request. For the proponents of the TPR approach, grammar instruction is not necessary.

#### **1.4.7 The Silent Way**

This Silent Method was first presented by Catego in 1976. In this method, the teacher is silent and plays a passive role in order to evaluate the learner's abilities. In this method, there are two important elements: Two color-coded 'Fidel' charts containing spellings for syllables in first and second language, and a set of colored 'Cuisenaire' rods. Any new word or grammatical structure is presented by manipulating the rods. In other words, grammar is presented and taught in classroom, but there is no explicit information about grammatical rules, no memorization or translation (Gascoigne, 2002).

#### **1.4.8 Community Language Learning/Counseling Learning**

Community Language Learning/ Counseling Learning was introduced by Curran in 1976. It is characterized by five stages. According to Curran (1976), at first, the learners begin interacting with one another in the native language and the teacher (or counselor) translates all the utterances into SL. Then, throughout the next three stages, the learners progressively speak in the target language and reduce their dependence upon the counselor. In the final stage, the teacher will intervene only to add some idiomatic expressions and more formal constructions. As might be noticed, grammar instruction plays no role in this method. However, Curran (1976) claimed that all learners' conversations should be tape-recorded, then learners can re-examine their exchanges with some attention put on grammar.

#### **1.4.9 Suggestopedia**

Suggestopedia was proposed by Lozanov in 1978. The most important fact about Suggestopedia is the presentation of massive material containing hundreds of words as well as grammar of considerable complexity through readings against a background of classical music. The music is intended to relax the learner and facilitate acquisition (Gascoigne, 2002). As in many other methods, grammar presentation in Suggestopedia is minimal: short grammatical explanations are given only when requested by the learners or when the teacher feels it necessary. These explanations are given in the first language.

#### **1.4.10 The Natural Approach**

The Natural Approach developed by Terrell (1977) is entirely based on Krashen's Monitor Model. As a result, its principles are completely consistent with Krashen's five hypotheses of the Monitor Model. For example, the organization of the classroom is based on the acquisition-learning Hypothesis and as such, most of the classroom time is spent on activities which foster acquisition and learning exercises always play a secondary role. Moreover, according to the Natural Approach, the teacher does not correct learners' errors so as to create a low-anxiety learning environment (The Affective-Filter Hypothesis) and to allow the natural order of acquisition to take its course (The Natural Order Hypothesis).

Exposing learners to large amounts of comprehensible input reflects in fact the Krashen's Input Hypothesis. In the Natural Approach, grammar has a limited function in the classroom because both Krashen and Terrell stress the definite superiority of acquisition over learning. Terrell (1977) suggests that all grammatical explanation and practice activities should be done outside of class so that more time can be spent on communication and exposure to comprehensible input that will evidently yield more language acquisition. The reason for such avoidance of monitor use is that there will be no enough time to comprehend what is heard, to think of an appropriate answer, to generate the response and to self-correct under the constraints of the conversation exchange.

#### **1.4.11 The Monitor Model**

The Monitor Model proposed by Krashen is considered as one of the most controversial language learning theories of the 1980s. This model is essentially composed of five hypotheses namely the Acquisition-Learning Hypothesis, the Natural Order Hypothesis, the Monitor Hypothesis, the Input Hypothesis and the Affective Filter Hypothesis.

The Acquisition-Learning Hypothesis claims that people have two ways of becoming competent in SL/FL: through acquisition, that is, by subconsciously using language for communication, or through learning which implies a conscious knowledge of grammatical structures and the ability to verbalize and apply explicit language rules.

The Natural Order Hypothesis states that grammatical structures are acquired in a specific and predictable order. Burt & Dulay and Krashen conducted studies to find out if there was a natural order of acquisition for children and adults acquiring a second language. They concluded that most children and adults follow a similar sequence in their acquisition of grammatical morphemes. For example, they discovered that most learners acquire the –ing form (e.g., walking) before the regular past form –ed (e.g., walked).

In the Monitor Hypothesis, Krashen (1982) states that learning, or the conscious knowledge and manipulation of grammatical rules, acts as a monitor or editor. This monitor

can only be evoked when certain conditions are met, namely enough time to access grammar rules, focus on form rather than on content and knowing the rule in question. In answer to the question: ‘Under what circumstances, if any, should formal instruction take place?’, Krashen (1992 :409) claimed that grammar instruction has an effect, but fragile and peripheral, commenting:

I have argued that conscious knowledge of grammar is available only as a monitor, or editor, and that there are three necessary conditions for monitor use: performers need to know the rule, have enough time to apply the rule, and need to be focused on form.

Krashen stated that even if these conditions are met, there could result increased accuracy but at the expense of decreased communicative ability: ‘When these conditions are met, application of grammar rules can indeed result in increased accuracy, but the performer pays a price in decreased information conveyed and a slower, more hesitant speech style.’ According to him, these are not the only problems resulting from grammar instruction: the speaker could edit his next sentence while the listener is talking, which could create a correct but inappropriate speech. In addition to that, Krashen (1992:410) holds that if the rules to be practiced are complex, grammar instruction would eventually result in decreased grammatical ability:

There are other risks, such as editing one’s next sentence while the other person is talking, which result in grammatically improved but sometimes inappropriate speech, and where rules are complex, diminished instead of increased accuracy.

For him, the use of grammatical knowledge is at its optimum when application of conscious rules does not interfere with communication.

The Input Hypothesis states that in order for learners to move to higher stages of acquisition, they need to be exposed to enough comprehensible input that is enriched with structures slightly beyond their current level of competence (i+1).

The Affective Filter Hypothesis states that acquisition can only occur when the performer has low anxiety, self-confidence and is motivated. According to Krashen, an obstacle can manifest itself during language acquisition; that is, a 'screen' that is influenced by emotional variables that can prevent learning. This hypothetical filter does not affect acquisition directly but rather prevents input from being comprehended. For Krashen, the affective filter can be prompted by many different variables including anxiety, self-confidence, motivation and stress.

The methods of 1970's were replaced with concepts like the 'Communicative Competence' or 'Proficiency' that have helped reshape language instruction without occupying the formal position of a methodology. The most influential concept has been the notion of communicative competence that supplanted gradually traditional concepts of teaching methods and influenced SL/FL theory and instruction in the 1980's and 1990's.

## **Conclusion**

The description of dominant methods and the discussion of the role of grammar in these methods demonstrate that grammar has generated a long debate among researchers and practitioners. Although both the terminology and the techniques may vary from year to year and from researcher to another, the debate remains the same. At its heart and at its extreme, the implicit/explicit controversy can be formulated as following: Does grammar instruction help SL/FL learners gain competence and proficiency in the target language? What

type of grammar instruction (if any) is best? At what point should grammar instruction come into play? Should grammar occupy a position subordinate to, equal to, or superior to, that of meaning?

# **Chapter Two**

## **Characteristics and Importance of Explicit Grammar Instruction**

### **Introduction**

#### **2.1 Importance of Teaching Grammar**

#### **2.2 Defining Explicit Grammar Instruction**

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## **Introduction**

Much of SL/FL research concerning grammar has produced conflicting results supporting either an explicit or an implicit approach to grammar instruction. Some researchers advocate formal and systematic attention to isolated linguistic features, using various combinations of grammatical rule statements, first and SL/FL constraints, drills, error correction, memorization and translation. Others reject such techniques in favour of target language experiences like those encountered by young children acquiring their mother tongue.

### **2.1 Importance of Teaching Grammar**

Questions about the role of grammar instruction in SL/FL learning still plague the linguists' and practitioners' attention alike. Some learners, especially those who start learning as young children, acquire high levels of SL/FL without explicit instruction. However, it is rare for second or foreign language classes to reach such high levels even if they have opportunity to learn the language naturally. Hammerley (1991), Kowal and Swain (1997) note that many learners in Canadian immersion programs (i.e. programs in which the target language serves as the medium of instruction for teaching subject content) achieve high levels of discourse and strategic competence but frequently fail to acquire even basic grammatical distinctions such as *passé composé* and *imparfait* in French. They indicate that even after years of exposure to French, these learners often fail to proceed beyond the second level on the normal tests scale for language proficiency. Ellis (2002b) claimed that there are many possible reasons for such failure, among which: age, communicative sufficiency, limited opportunities for output and lack of negative feedback.

It was observed that once learners have passed a critical period (about 15 years), the acquisition of grammatical competence is no longer possible. It should be noted however that if this is the reason for learners' failure, pedagogically not much can be done to alleviate this problem, as teachers are powerless to alter the age of their learners. In addition, there is growing doubt concerning the critical-period hypothesis where grammar is concerned as there

is a great number of learners who, given sufficient time and motivation are successful in acquiring SL/FL norms even if they start learning it after the age of 15. It was noted that learners may satisfy their communicative needs (achieving communicative sufficiency) with acquiring target language norms (Kowal and Swain, 1997). Many researchers demonstrated that the linguistic environment to which learners are exposed may indeed be very poor in quite significant ways either in the classroom or outside. Thus the linguistic environment provides very limited opportunities for output. White (1987) suggested that some grammatical structures cannot be acquired just from positive input (comprehensible input), which is the only available input in naturalistic environment.

Many researchers suggest that if these were the reasons of language learning failure and if we focus the learners' attention on grammatical forms and the meanings they realize through some kind of grammar teaching, this would serve as one of the most obvious ways in which learners can obtain enough input as well as the negative feedback needed to acquire complex structures.

Another reason for teaching grammar is that many learners expect it. Adult learners typically view grammar as the central component of language and are likely to make tremendous efforts to understand the grammatical features they notice. Ellis (2002b) noted that an analysis of the diaries written by some learners of German in a foreign language course at a university of London showed the intensive depth of the learners' concern to make sense of the grammar of German. He stated that their diaries were full of references to grammar. He noted also that for these learners 'grammar' consisted of explicit rules that they could understand. Similarly, Zimmermann (1984) who investigated teachers' practices in teaching grammar found out that 80% of the teachers considered in the study adopted a systematic presentation of grammar and that 60% of the total teaching time was devoted to grammar. It was noted that though the objectives and goals of language teaching have become more communicatively oriented, many teachers still believe in the value of grammar instruction. They consider many issues like 'Acquisition versus Learning' as debates among theoreticians.

Given that the possible reasons for learners' failing to achieve SL/FL norms and that quite a great number of learners will orientate strongly to studying grammar, it is obviously important to define first what is meant by explicit grammar instruction, to consider linguists' positions vis-à-vis explicit grammar instruction, then to establish whether explicit grammar instruction option is actually effective.

## **2.2 Defining Explicit Grammar Instruction**

According to Ellis (1994a), grammar instruction is explicit or implicit when learners do or do not receive information concerning rules underlying the input, respectively. For DeKeyser (1995), explicit grammar instruction takes place if rule explanation forms part of the instruction (deductive) or if learners are asked to attend to particular forms and try to find the rules themselves from an array of data illustrating the rule (inductive). In their meta-analysis, Norris and Ortega (2000, p.437) hold that: '... when neither rule presentation, nor directions to attend to particular forms were part of a treatment, that treatment was considered implicit.' In other words, rule presentation and focusing attention on specific target language features are two key characteristics of explicit instruction.

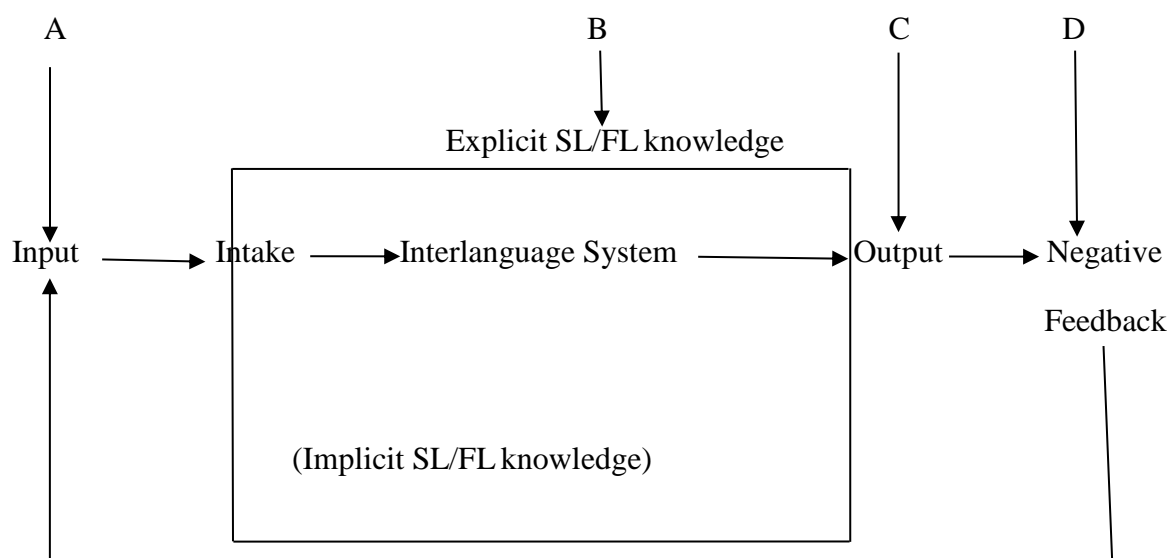
In order to gain a better understanding of explicit grammar instruction, it is important to consider how it differs from implicit grammar instruction. While explicit instruction involves the development of metalinguistic awareness of the rule, implicit instruction is directed at helping learners to infer rules without awareness and there is no intention to develop any understanding of what is being learnt. Housen and Pierrard (2006) claim that the key difference between explicit and implicit instruction lies in whether the instruction directs or attracts attention to form. According to them, explicit instruction directs learners not only to attend to grammatical forms but also to develop conscious mental representations of them. Hence, learners know what they are supposed to be learning. Conversely, implicit instruction aims to attract learners' attention to examples of linguistic forms as they occur in input but does not seek to develop any awareness or understanding of the rules that describe these forms. Housen and Pierrard (2006) proposed a number of characteristics that differentiate explicit and implicit instruction as in Table 2.1.

Implicit Instruction	Explicit Instruction
<ul style="list-style-type: none"> <li>- Attracts attention to target form</li> <li>- Is delivered spontaneously (in a communicative-oriented activity)</li> <li>- Is unobtrusive (minimal interruption of communication of meaning)</li> <li>- Presents target forms in context</li> <li>- Makes no use of metalanguage</li> <li>- Encourages free use of the target form</li> </ul>	<ul style="list-style-type: none"> <li>- Directs attention to target form</li> <li>- Is predetermined and planned(as the main focus of a teaching activity)</li> <li>- Is obtrusive (there is interruption of communication of meaning)</li> <li>- Presents target forms in isolation</li> <li>- Uses metalinguistic terms (rule explanation)</li> <li>- Involves controlled practice of target form</li> </ul>

**Table 2.1: Implicit and Explicit Forms of Form-Focused Instruction (Housen and Pierrard, 2006)**

### 2.3 Options in Explicit Grammar Instruction

Trying to find an answer to the question ‘What kind of instruction works best?’, Ellis (1998) has distinguished between options in grammar instruction depending on where focus intervenes in the interlanguage development. These are pictured in figure 2.1.



**Figure 2.1: A Computational Model of Second Language Acquisition (Ellis, 1998: 43)**

In the case of Point A, instruction is directed at input and thus it will be referred to as 'Structured Input'. Point B involves 'Explicit Instruction', Point C corresponds to 'Production Practice' and Point D consists of 'Negative Feedback'.

In the Structured Input Option, learners are asked to process input that has been specially elaborated to induce comprehension of the target structure. Learners are required to listen to or read texts and to develop their understanding of them by carrying out a command, drawing a picture, ticking a box or indicating agreement or disagreement. Learners are not asked to produce the target structure: their response could be non-verbal or minimally verbal. For example:

Do you agree or disagree with these statements?

1. Quiet people are boring.
2. I am bored when someone tells me a joke.
3. People who gossip a lot are very irritating.
4. It is interesting to talk about yourself.
5. I am interested in people who always talk about themselves.

The task objective consists of helping learners distinguish between pairs of present-past participles used as adjectives. The learners have to simply indicate whether they agree or disagree with a series of statements. This type of instruction is backed by a psycholinguistic rationale that contends that acquisition occurs when learners attend to the new structure in input rather than when they try to produce it.

According to Ellis (1998), the Explicit Instruction Option has one major objective: to attempt developing learners' explicit understanding of SL/FL rules and thereby to help them learn about a linguistic feature. The principal choice regarding explicit instruction is whether to teach explicit rule directly (Deductive Explicit Instruction) or to develop activities that enable learners to discover the rules for themselves (Inductive Explicit Instruction). Deductive explicit instruction takes the form of oral or written explanation of grammatical rules. These explanations can either be presented in isolation or accompanied by exercises in which learners attempt to apply the rule explained. The deductive approach is also known as 'Rule-driven Learning'. Swan (1990 cited in Thornbury, 1999: 32) outlines guidelines for presenting the rules:

- The rules should be true.
- The rules should show clearly what limits are on the use of a given form.
- The rules need to be clear.
- The rules ought to be simple.

In inductive explicit instruction, learners complete tasks in which they consider information explaining the use of a specific grammatical rule. In this regard, learners are involved in consciousness-raising tasks which enable them see the pattern of a structure so that learners can formulate rules from such patterns (Ellis, 1998; 2006). The following patterns illustrate cases where at least one rule could be derived:

- He travelled *in* January.
- She started schooling *in* April.
- He met them *in* November.
- My birthday comes up *in* March.

Either the teacher or the students may formulate a rule from these as follows: Months of the year are usually introduced by the use of the preposition *in*, or use *in* to introduce months of the year. The inductive approach is also called ‘Rule-discovery Learning’. The inductive approach leaves an almost unforgettable experience with learners who take in their own learning by formulating usable rules for the construction of standard sentences.

Production Practice Option leads learners to practice producing a specific target feature. There are several ways for eliciting production of the target language form ranging from strictly guided text-practice exercises to free text-creation activities in which learners are directed into producing their own sentences using the target structure (Ellis, 1998).

In Negative Feedback Option, learners are informed when they have failed to produce a structure correctly. According to Ellis (1998), its major objective is to make learners notice the gap between their own incorrect production and grammatically correct structures. Negative feedbacks can take the form of:

- (a) Explicit correction, in which the teacher provides the correct form;
- (b) Clarification requests, in which the teacher indicates an utterances that has not been understood;
- (c) Metalinguistic feedback, in which the teacher uses technical terms to refer to an error;
- (d) Elicitation, in which the teacher tries to elicit the correct form from the learner; and
- (e) Repetition, in which the teacher simply indicates that an error has been made by repeating all or part of an learner’s utterance like in :

‘I am born on 1944.’, ‘on 1944.’, ‘in 1944.’

## 2.4 Types of Explicit Grammar Instruction

Ellis (2008) distinguished four types of explicit grammar instruction by making reference to two dimensions of explicit instruction namely the deductive/inductive dimension (cited before) and the proactive/reactive dimension. Proactive explicit instruction involves planned interventions designed to prevent error from occurring, and is based on a structural syllabus that presents the series of grammatical features and the sequence in which they should be taught. Reactive explicit instruction involves responding explicitly to errors made by learners, and can occur in lessons or tasks designed to elicit the use of specific features in a communication context. Four types of explicit instruction result from the two above-cited dimensions as shown in Table 2.2.

	<b>Deductive</b>	<b>Inductive</b>
<b>Proactive</b>	-Metalinguistic Explanation	-Consciousness-raising tasks
<b>Reactive</b>	-Explicit correction Metalinguistic feedback	-Repetition ; correction Recasts

**Table 2.2: Types of Explicit Instruction (from Ellis, 2008).**

Ellis (2008) concluded that many teachers will notice that sometimes a single lesson may combine the four types of explicit instruction. For instance, a metalinguistic explanation of a rule (a proactive-deductive explicit instruction) is often followed by practice exercises (proactive-inductive explicit instruction). If learners make errors, an explicit correction (reactive-deductive explicit instruction) and/or corrective recasts (inductive-reactive explicit instruction) will be provided.

It is well known that explicit instruction has two major aims: to develop learners' explicit knowledge of grammatical structures or to develop their implicit knowledge by



enabling them to use target language grammatical features accurately in fluent communicative language use. An understanding of the differences between these two types of knowledge and the role they play in SL/FL learning is, therefore, fundamental for the subsequent sections.

## **2.5 Distinctions between Explicit and Implicit Knowledge and their Role in Second/Foreign Language Learning**

To understand the major aims of explicit instruction, it is important to look at the types of knowledge which are said to inform the processes of language learning; some scholars have deemed it necessary to separate linguistic knowledge into two separate strands: implicit and explicit knowledge (Bialystok, 1979; Krashen, 1980; R. Ellis, 1994, 2005).

### **2.5.1 Distinctions between Explicit and Implicit Knowledge**

Ellis (2005a) presented seven (07) ways in which implicit and explicit knowledge of language can be distinguished: awareness, type of knowledge, systematicity and certainty of SL/FL knowledge, accessibility of knowledge, task demands, self-report and learnability.

Developmental psychologists, like Karmiloff-Smith (1979), suggest that children first display epilinguistic behaviour and only later (5 years old or later) manifest metalinguistic behaviour. Both types of behaviour involve awareness but of different kinds. Epilinguistic behavior arises when a child can demonstrate intuitive awareness of implicit grammatical rules (e.g., gender concord). Karmiloff-Smith (1979) claims that as children develop their implicit knowledge becomes increasingly analyzed which allows for its explicit representation. Bialystok (1991) suggested that SL/FL acquisition is a similar process and that teaching learners explicit rules would only prove effective if the learners are ready to incorporate them into their emerging representational structure.

Anderson (1983) distinguished between declarative and procedural knowledge, suggesting that knowledge is gradually restructured from one form to another. Declarative knowledge is explicit, encyclopedic in nature and factual in the sense it contains facts as the number of angles in a triangle. Declarative knowledge of language involves both knowledge of abstract rules (eg: rules about how to order adjectives) and knowledge of fragments and exemplars. Procedural knowledge is highly automated. This type of knowledge results when the learner gains greater control over fragments and exemplars and also restructures declarative knowledge of rules into if-then productions of increasing delicacy. This dimension of implicit versus the explicit distinction corresponds to what Bialystok (1991) called 'Control'.

As concerns systematicity and certainty of SL/FL knowledge, SLA researchers claimed that learners' interlanguages (implicit knowledge) are highly systematic (Tarone, 1988). Although there is some disagreement as to whether interlanguage grammars contain some linguistic forms that are in free variation, there is general agreement that grammars are largely systematic; they contain categorical rules or variable rules, not necessarily those found in the SL/FL variety, though. Explicit knowledge, in contrast is often imprecise, inaccurate and inconsistent (Sorace, 1985). Learners frequently cannot have a clear understanding about how specific rules work. Ellis (2005a) claims that though these two types knowledge involve some degree of non systematicity and uncertainty, implicit knowledge is more structured than explicit knowledge and consequently is used with greater certainty as to its correctness.

As far as accessibility of knowledge is concerned, Ellis (2005a) holds that implicit knowledge involves automatic processing whereas explicit knowledge entails controlled processing. Some researchers claim that it is possible for explicit knowledge to be accessed more or less quickly. DeKeyser (2003) suggested that explicit knowledge can be fully automatized and thereby become functionally equivalent to implicit knowledge. In contrast, Hulstijn (2002) suggested that practice will only speed up the performance of some rules to some extent and there remains a fundamental difference between automated explicit knowledge and implicit knowledge in terms of their accessibility.

Bialystok (1982) provided evidence that the use of the two types of knowledge varies according to the specific tasks learners are asked to perform. She distinguished task demands in terms of analysis and control. Tasks can require knowledge that is + Analyzed/+automatic, + analyzed/- automatic, - analyzed/-automatic, - analyzed/+automatic. She showed that if we ask a learner to write a letter, he will tap into +analyzed – automatic knowledge but if this learner engages in a conversation he will tap into + analyzed/+automatic knowledge. Ellis (2005a) claims that explicit knowledge manifests itself in the private speech that learners use to deal with a communicative problem. For instance, when asked to perform a think-aloud task, learners typically resort to declarative information to assist them.

By self-report, Ellis means that explicit knowledge is potentially verbalizable, although it exists in the minds of the learners independently of whether they can verbalize it. Implicit knowledge, however, is not verbalizable. Actually, any attempt to verbalize it will entail forming an explicit representation first.

As concerns the last distinction namely learnability, like Bialystok (1994) Ellis (2005a) claimed that explicit knowledge is learnable at any age, whereas implicit knowledge is not and that there are age-related limitations on SL/FL learners' ability to learn implicit knowledge. For instance Russian learners of English, whose mother language lacks a morphological marker of key grammatical functions like articles, will find these difficult to acquire as implicit knowledge past a certain sensitive age although they may develop explicit knowledge of them. Krashen (1982) as well argued that most learners are capable of learning only simple rules.

So, in brief, according to Ellis (2005a), explicit knowledge is conscious, declarative, accessible only to controlled processing, verbalisable, learnable and typically employed when learners experience some kind of linguistic problem. In contrast, implicit knowledge is unconscious, procedural, accessible for automatic processing, not verbalisable and typically

employed in fluent communication. The seven characteristics distinguishing explicit from implicit knowledge are summed up in Table 2.3.

<b>Characteristics</b>	<b>Implicit knowledge</b>	<b>Explicit knowledge</b>
- Awareness	- Intuitive awareness of linguistic norms	- Conscious awareness of linguistic norms
- Type of knowledge	- Procedural knowledge of rules and fragments	- Declarative knowledge of grammatical rules and fragment
- Systematicity	- Variable by systematic	- Anomalous and Inconsistent
- Accessibility	- By means of automatic processing	- By means of controlled Processing
- Use of SL/FL knowledge	- Access to knowledge during fluent performance	- Access to knowledge during planning difficulty
- Self-report	- Non-verbalizable	- Verbalizable
-Learnability	- Not learnable: age-related limitations on SL/FL learners	- At any age

**Table 2.3: Key characteristics of implicit and explicit knowledge (Ellis, 2005a)**

### **2.5.2 Evidence for the Role of Explicit and Implicit Knowledge in Second/Foreign Language Learning**

Several studies since the early 1980's or so have investigated in some detail the role that implicit and explicit knowledge play in language use. An early example is Bialystok (1979). This often-quoted study involving 317 students of French as a SL/FL showed that SL learners at various levels of proficiency were equally good at making grammaticality judgment under time pressure (maximum three seconds allowed) and under more relaxed conditions. Only when they had to make more detailed judgments about what part of the sentence was problematic or what rule was violated did time pressure make a difference.

Bialystok inferred from these data that learners make their grammaticality judgment on the basis of implicit knowledge, and only switch to the use of explicit knowledge when more fine-grained decisions are required. Time pressure, makes the use of explicit knowledge harder, but does not exclude it completely. This is especially important as the learners in this study were relatively advanced, and as the mistakes in the incorrect sentences were rather elementary. It remains to be seen to what extent the results would generalize to more challenging grammaticality judgments or to situations with more extreme time pressure.

Also well-known is Green and Hecht's (1992) large-scale study of the role that rules played in grammaticality judgments and sentence corrections made by 300 German students of English as a SL/FL at various stages of learning and in various school systems. The researchers found a rather low correlation between rule knowledge and ability to correct. De Keyser (1997) holds that some of their figures, however, are open to reinterpretation. For instance, they show that in 43 percent of cases students could make a correction without knowing the relevant rules, but the researchers do not point out that students could often guess corrections (elements to be corrected were underlined, and many rules were dichotomous). On the other hand, at least some of their figures do suggest a rather strong correlation between rule knowledge and ability to correct. Where students knew the correct rules, they could correct the sentence 97 percent of the time, where they knew an "incorrect" (potentially just incomplete or very clumsily formulate the rule), they could correct 70 percent of the time, and where they knew no rule they corrected 55 percent of the time. Most importantly, however, this study may be an instance of differential sensitivity of the testing to implicit and explicit knowledge. Implicit knowledge is overestimated because guessing corrections is very easy for many items, while explicit knowledge is underestimated because learners find it hard or impossible to formulate, even when it does help them in deciding between competing forms.

Han and Ellis (1998) used a very different methodology to get at the same question. They factor-analyzed a series of tests (oral production, grammaticality judgment, metalinguistic knowledge, TOEFL), and found two factors that could be interpreted as implicit and explicit. Their results are hard to interpret too, however, because, as they make clear themselves, none of the tests is a pure measure of either implicit or explicit knowledge.

Moreover, its results are of doubtful generalizability, because only one structure was at issue (verb complements), and this happens to be a case where it is very hard to formulate a rule, which puts explicit knowledge at a clear disadvantage.

More positive evidence for the role of explicit knowledge comes from Hulstijn and Hulstijn (1984), who found that learners of Dutch as a SL/FL performed significantly better on word order rules in a story retelling task when they had explicit knowledge of these rules than when they did not. These results obtained for all the combinations of the experimental variable (+/- focus on grammar X +/- time pressure).

There is some disagreement between SLA researchers as to whether these two types of knowledge are distinct and separate or whether there are degrees of explicitness and implicitness. Some argue that there is some possibility that providing learners with explicit knowledge will create a foundation for the development of implicit knowledge. Others believe that explicit and implicit knowledge are entirely separate in that they involve different learning processes. The third group of researchers claims that explicit knowledge does not convert into implicit knowledge but that it can function as a facilitator of implicit knowledge. In brief, these are the positions taken by researchers as regards how explicit knowledge provided by explicit instruction can affect acquisition. These views are presented in detail in the next section.

### **2.6.1 Linguists' Accounts of the Role of Explicit Grammar Instruction**

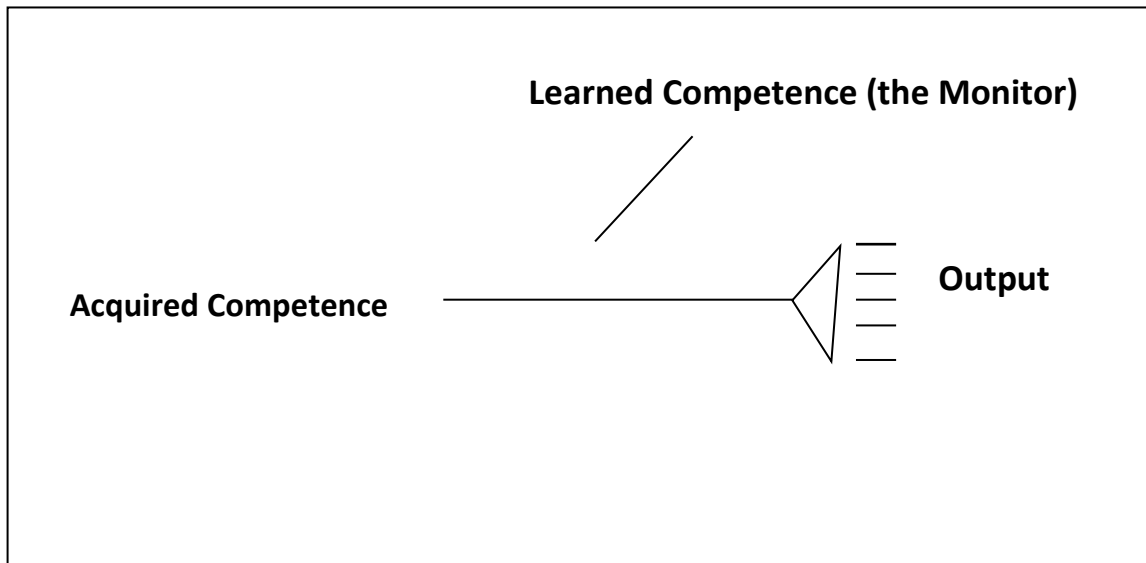
Many SLA researchers now largely agree that grammar instruction has positive effects on SL/FL acquisition in the sense that it promotes more rapid SL/FL acquisition and contributes to higher levels of target language attainment. So, how does explicit grammar instruction affect SL/FL acquisition? Actually, there are many theories that account for the role of explicit grammar instruction in promoting SL/FL acquisition. These theories are broadly divided into three positions: the Non-Interface Position, the Interface Position and the Variability (weak-interface) Position.

## 2.6.2 The Non-Interface position

The non-interface position regards grammar instruction as having little effect on SL/FL acquisition. This position has been advanced by Krashen who thinks that grammar teaching of any kind is of limited value because it can only contribute to 'learning' and never to 'acquisition'.

Krashen (1982, 1992) posits that learners have two distinct and independent ways of developing competence in a SL/FL: The first way is 'Acquisition'. His Monitor Model claims that the acquired knowledge is the product of the process of acquisition by which learners develop their linguistic competence, which consists of subconscious knowledge of the SL/FL grammar similar to the knowledge native speakers possess of their first language. On the other hand, the learned knowledge is the product of learning whereby learners develop their metalingual knowledge of a language through formal instruction, in particular classroom instruction: Krashen (1992) equates learning to grammar and rules. According to him, learning refers to the conscious knowledge of a SL, knowing the rules, being aware of them, and being able to talk about them. Moreover, for Krashen, acquisition and learning coexist in the human's mind. The first process is the utterances' initiator, is responsible for fluency and is resorted to by speakers when engaging in real-time communication while learning has only one function: Monitor or Editor (Figure 2). Krashen (1982:16) holds that:

Conscious learning is available only as Monitor, which can alter the output of the acquired system before and after the utterance is actually spoken or written. It is the acquired system which initiates normal, fluent speech and utterances



**Figure 2.2: Acquisition and Learning in L2 Production (Krashen, 1982).**

Krashen (1980, 1981, 1982) claims that the only way in which a learner acquires a language is through understanding input. In other words, acquisition requires interaction in the target language -natural communication- in which speakers are concentrated not in the form of their utterances, but in the communicative act and where there is enough comprehensible input. He insists that, comprehensible input is the necessary condition for acquisition. According to the Input Hypothesis, a learner's current stage of interlanguage development (i) shifts to the next stage of interlanguage development (i+1) through the learner comprehending language which contains structures (lexical, syntactic, morphological.. etc) a little bit beyond the current knowledge. On the other hand, learning is the product of formal instruction where the learners' attention is focused on the formal aspects of SL/FL . Krashen (1985) argues that methods that rely on providing learners with comprehensible input are clearly superior to grammar-based and drill-based methods. In Krashen's view, it is necessary for the learner to comprehend the input in order for the input to become intake. The distinction between input and intake was first made by Corder (1967). He says that: '...input is "what goes in" not "what is available for going in" and we may reasonably suppose that it is the learner who controls this input ...'



Furthermore, Krashen (1993) claims that acquisition and learning are stored and operated separately. He insists that learned knowledge cannot be converted into acquired knowledge. He holds that teaching the formal properties of a SL/FL does not affect the natural order of acquisition because the learning it produces is unable to alter the natural sequence of development. Any rate advantages claimed for the classroom, according to him, are due to the kind of input provided in classroom, i.e. comprehensible input, being better for acquisition, especially for beginners, than the untuned mix of comprehensible and incomprehensible input available through natural exposure (street learning) alone. In other words, being ideal ‘intake environments’, classrooms promote fast improvement while natural settings afford only exposure environments for many learners.

However, in a weaker form of the non-interface position, the possibility of implicit knowledge transforming into explicit is recognized through the process of conscious reflection on and analysis of output generated by means of implicit knowledge (Bialystok, 1994).

### **2.6.3 The Interface Position**

A second explanation of how grammar affects SLA is known as the Interface Position. Adherents to the interface position claim that there is a ‘cross-over’ of some kind between the two processes ‘acquisition’ and ‘learning’ or the two forms of knowledge (explicit and implicit). They claim that not only can explicit knowledge be derived from implicit knowledge but also that explicit knowledge can be converted into implicit knowledge through practice, that is, learners can first learn a rule as a declarative fact and then, by practice, can convert it into an implicit representation, although this need not entail the loss of the original explicit representation. They posit a process whereby forms are initially learned with some kind of awareness of learning and then transformed for example, from learning to acquisition (Stevick, 1980), from explicit to implicit (Bialystok, 1979), or from controlled processing and short-term memory to automatic and long-term memory (Mc Laughlin, 1987).

The interface position was first formally advanced by Sharwood-Smith (1981) and has subsequently been promoted by De Keyser (1998). Differences exist, however, regarding the nature of the practice that is required to affect the transformation from explicit to implicit. Some researchers claim that this transformation is achieved via use, some others by practice, routinization, consciousness-raising or some combinations.

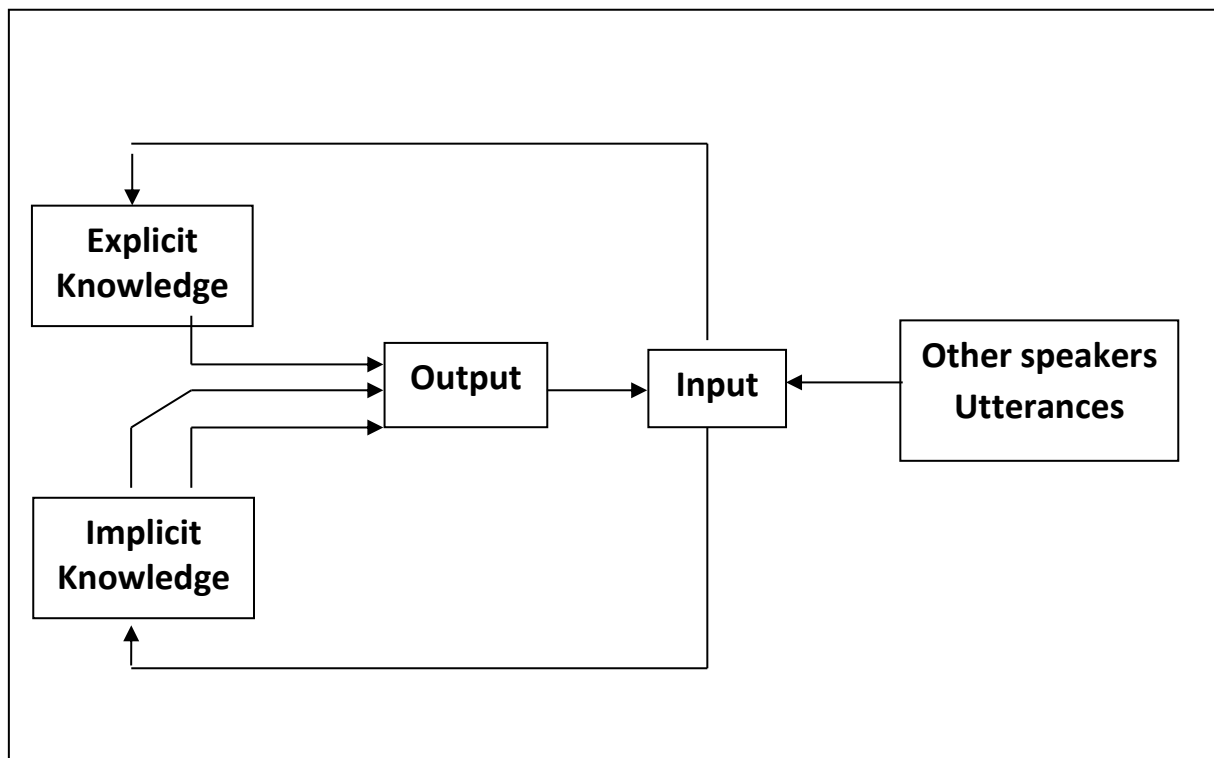
To explain how a SL/FL is acquired, Bialystok (1979) proposed a model of SLA in which she showed that explicit knowledge interacts with implicit. According to her, practice is the mechanism whereby explicit knowledge becomes implicit. The latter can be made up by two ways: Unconscious acquisition or through the automatization of explicit knowledge by practice.

A year after, Stevick (1980) developed another model of SLA labeled 'the Levertov Machine'. In this model, learning may relate to secondary memory which is capable of storing material for more than two (02) minutes, but from which the held-material is gradually lost unless it is used from time to time. On the other hand, acquisition relates to the tertiary memory which contains material that is never lost, even if it is not used. According to Stevick, the acquired knowledge can make use of material that has been recently memorized and is part of secondary memory. When this happens, there is a possibility that this material is transferred to tertiary memory, i.e., learning becomes acquisition. In short, this model allows knowledge flowing from learning to acquisition, and from acquisition to learning.

Sharwood-Smith's model of SLA (1981) proposes that grammar instruction provides a range of procedures whereby consciousness-raising can take place and the resulting explicit knowledge is practiced until it becomes automatic. By consciousness-raising, Sharwood-Smith means a deliberate focus on the formal properties of language in order to facilitate the development of SL/FL knowledge. Sharwood-Smith (1981: 165) states that:

Whatever views of the understanding processes in SL/FL learning are concerned, it is quite clear and uncontroversial is attained by practice. In the course of actually performing in the target language, the learner gains the necessary control over its structures such that s/he can use them quickly without reflection.

To explain how explicit knowledge converts into implicit knowledge, Sharwood-Smith posits that if the performance that is based completely or partly on the explicit knowledge often provides feedback into implicit knowledge through practice, explicit knowledge can become part of implicit knowledge. According to Sharwood-Smith (1981:166), the learner may produce an SL/FL output in 3 ways: Using only explicit knowledge, using implicit knowledge, or using both implicit and explicit knowledge. The learner's utterances constitute also part of the input. The other part of this input is composed by other speaker's utterances. The input provided information which can lead the learner to alter the content and organization either of this explicit or implicit knowledge or both by the 'Restructuring' mechanism (Figure 2.3).



**Figure 2.3: Linguistic Input & Output: Three Potential Sources of Feedback (Sharwood-Smith, 1981)**

It is worth noting that many proponents of the interface position like Krashen distinguish between two types of knowledge which they call ‘implicit’ and ‘explicit’, but unlike Krashen they suggest that there is an interface between the explicit and implicit knowledge and that formal practicing, which involves either conscious study of the SL/FL or attempts to automatize already learnt explicit knowledge, enables explicit knowledge to become implicit via automatization, while explicit knowledge is derived from implicit through inferencing (Bialystok 1982).

To explain the role of practice in SLA, Ellis (1994a) states that automatization by means of practicing controlled processes, i.e., by making an increasing number of information chunks available for automatic processing, results in quantitative changes in interlanguage. Mc Laughlin (1990b) holds that although automatic processing does not allow for qualitative changes in interlanguage, increased practice leads to qualitative changes through ‘restructuring’. According to Mc Laughlin (1990b), the concept of restructuring can be traced in the psychological literature to the developmental psychologist Piaget. In piagetian

structuralism approach, restructuring is characterized by discontinuous or qualitative change as the child moves from stage to stage in linguistic development.

Lightbown (1985) mentions that the process of SL/FL acquisition is not linear, but characterized by backsliding and loss of forms that were apparently mastered. According to Mc Laughlin (1990b: 121), 'Lightbown attributes the decline in performance to a process whereby learners have mastered some forms and then encounter new ones that cause a restructuring of the whole system'. Mc Laughlin presents development of English irregular past forms learning as an example of syntactic restructuring. The example, characterized as a U-shaped developmental curve, shows the process in which the initial appearance of correct irregular forms, such as: came, went, bought that have become automatic, are replaced by rule-governed but deviant past forms such as comed, goed, bringed based on qualitative representational changes (restructuring) before the correct forms appear.

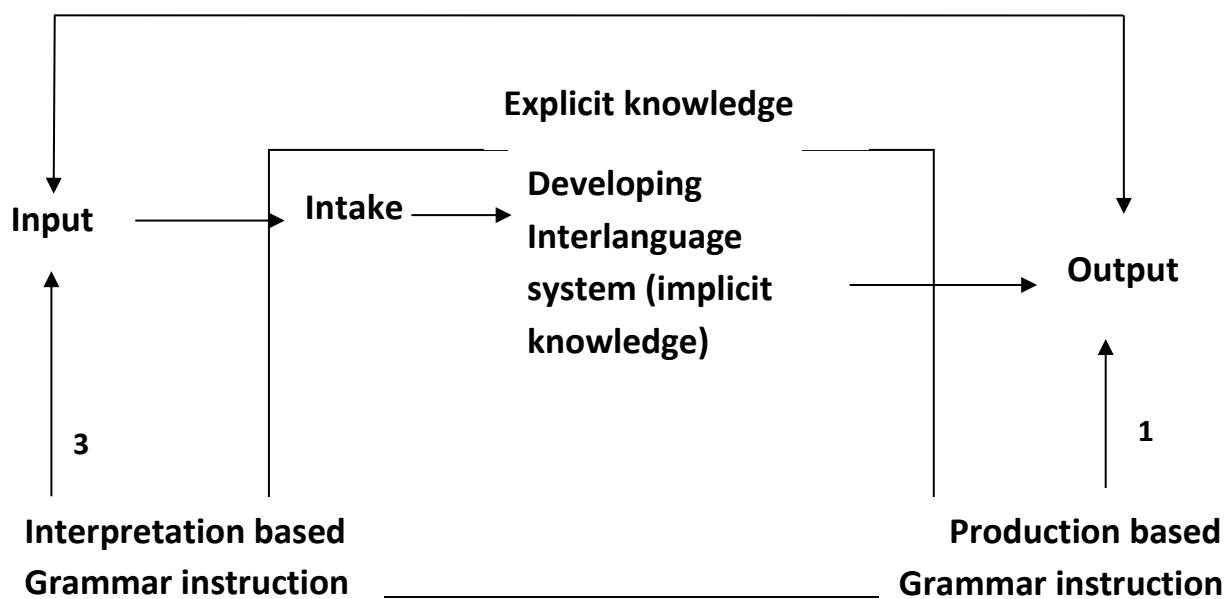
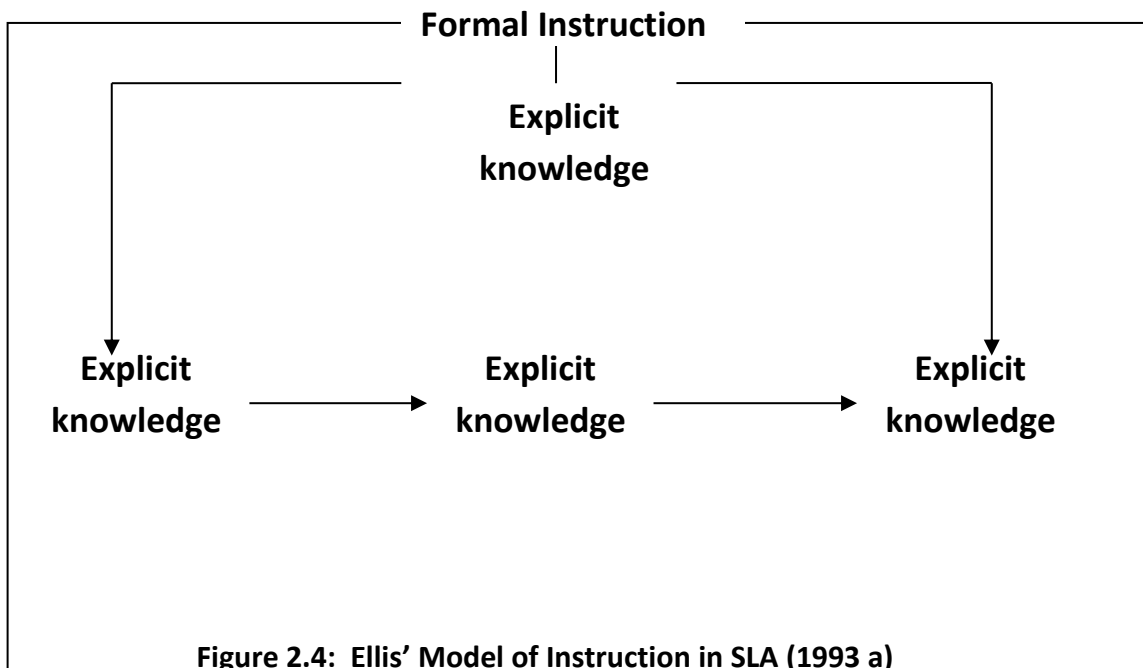
Bringing the focus back to whether Mc Laughlin's discussion of restructuring is regarded as an equivalent concept with conversion from 'learnt' knowledge into 'acquired' knowledge, Ellis (1994) mentions that restructuring cannot be easily equated with the conversion. Nevertheless, he regards Mc Laughlin's controlled/automatic distinction as standing in the interface position, defining the interface position as such one where there is conversion from conscious, controlled knowledge into automatic knowledge through practice with conscious rules.

A similar proposal is made by Anderson's Adaptive Control of Thought (ACT) (Anderson 1976; 1980; 1983). In this model, Anderson makes the distinction between declarative knowledge (knowledge about something) and procedural knowledge (knowledge of how to do something) in the context of SL/FL acquisition as well as other cognitive skills, and notes that declarative knowledge for SLA principally of the formal rules of language. He argues that declarative knowledge can become proceduralised through practice. He describes

three stages of skill acquisition: the cognitive, associative and autonomous stages. Of this three-stage theory of learning, controlled and automatic processing are an important aspect. Controlled and automatic processings are reflected in cognitive and autonomous stage of learning. At the cognitive stage, the acquired knowledge is typically declarative and can be described verbally by the learner. This knowledge is then fine-tuned over time. The result of this process is a drop-off in reaction time and error-rate as this knowledge is processed automatically. According to Ellis (1994: 654), ‘Sharwood-Smith (1981) builds on the work of Bialystok (1978, 1979) ... and develops his full interface model’.

#### **2.6.4 The Weak Interface Position**

The weak interface position exists in many versions, all of which acknowledge the possibility of explicit knowledge becoming implicit but posit some conditions on when or how this can take place. One version posits that explicit knowledge can convert into implicit knowledge through practice only if the learner is developmentally ready to acquire the linguistic form. Studies (for example, Ellis 1984, 1989, 1993b; Felix 1981; Pienemann 1984, 1989) designed to seek whether learners can learn the structures they are taught, show that learners are often unable to internalize new structural knowledge in a manner that enables them to use it productively in communication unless they are ready to do so. Ellis (1993 a, b) proposed two models of SL/FL acquisition (see Figure 2.4 and 2.5). Van Patten (1987) suggests, according to his studies, that instructional sequence and presentation are not a good predictor of accuracy or emergence of forms in spontaneous conversational speech.



On the other hand, if learners are ready to acquire a grammatical feature as implicit knowledge (i.e., ready to use it productively in communication), grammar instruction directed

at a grammatical feature is successful. Consequently, Ellis (1995) proposes models of SLA that incorporate a weak interface version (Figure 2.6). This model shows that implicit knowledge can be internalized in two ways. The main way is by deriving intake from input. A secondary way is from the explicit knowledge that is learned via formal instruction. This way is considered secondary for two reasons. First, it agrees with Krashen (1982) who claims that the amount of new grammatical knowledge derived is limited because only a small portion of the total grammatical properties of language can be consciously learned (Figure 2.7). Krashen (1982:97) holds that: ‘The rules that we can learn and carry around in our heads for use as a monitor are not those that are the earliest acquired, nor are they those that are important for communication.’ Second, explicit knowledge can convert into implicit knowledge only if learners are developmentally ready. Ellis argues that learners cannot acquire structures they are not ready for, no matter how much they practice because they have a built-in syllabus (Corder, 1967) which regulates when is possible for them to acquire each grammatical feature.

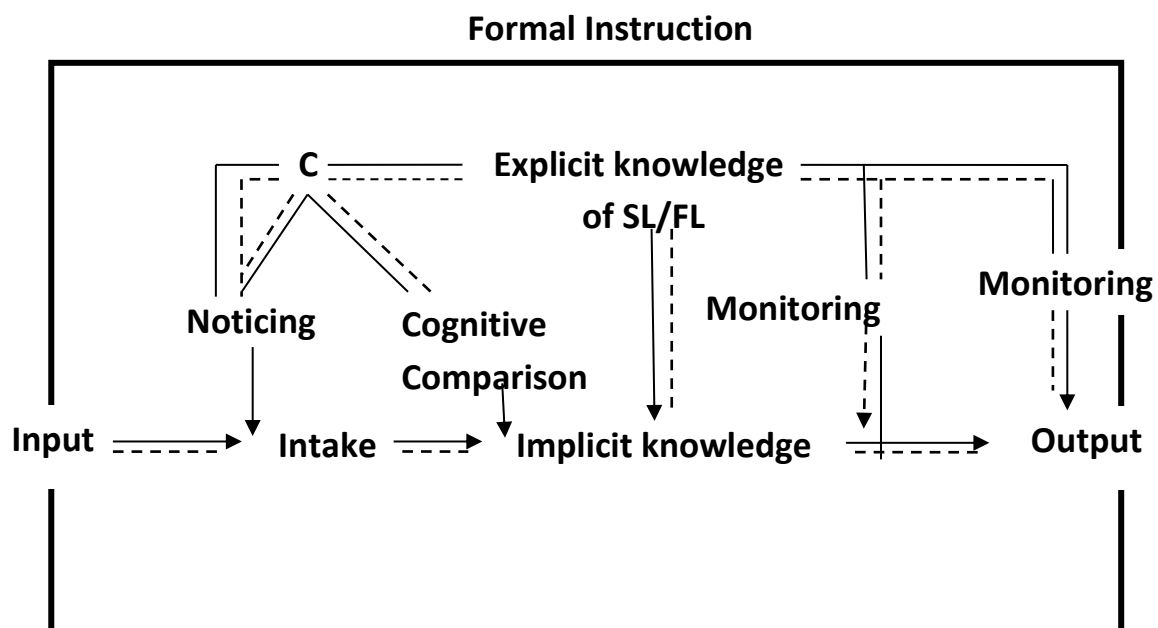
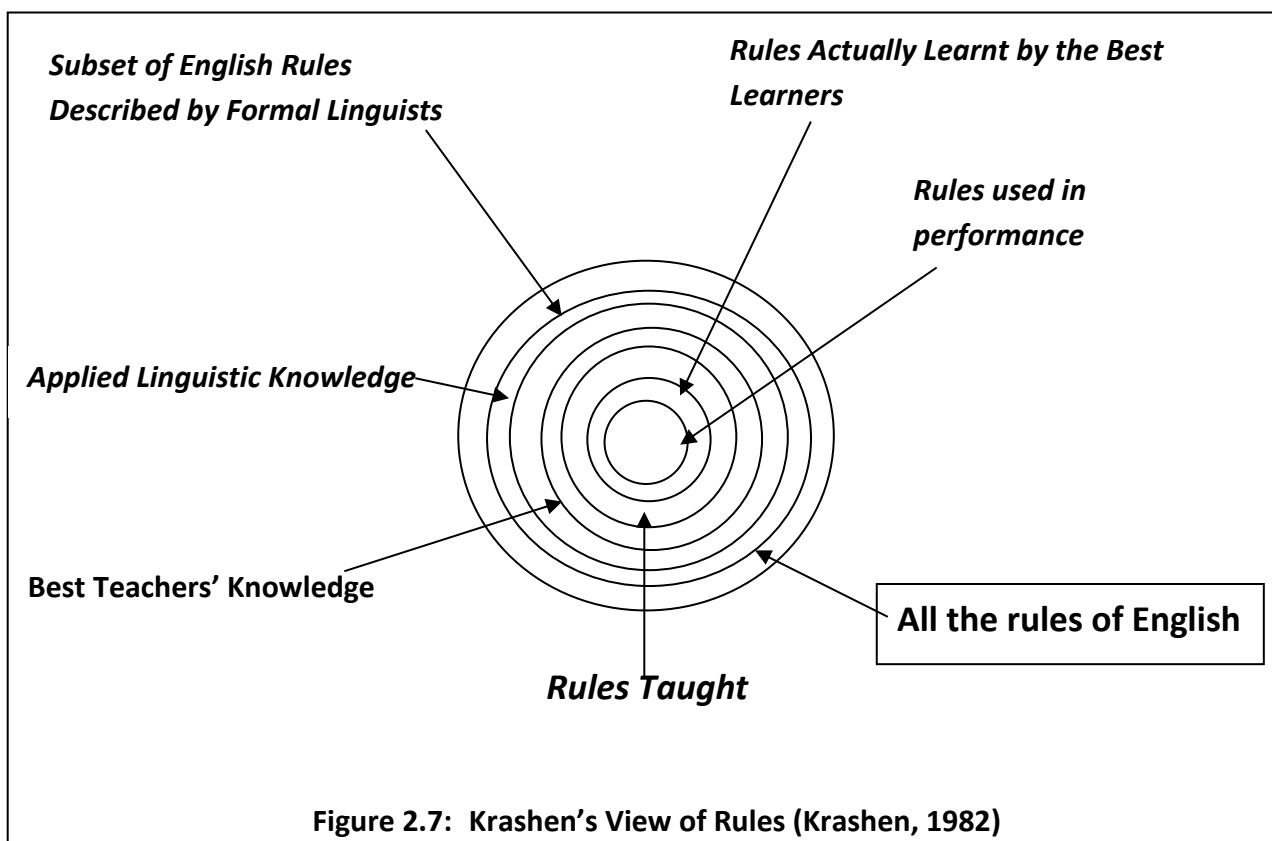


Figure 2.6: A Model of Second Language Acquisition Incorporating a Weak Interface position (Ellis, 1995)





Another version holds that explicit knowledge contributes indirectly to the acquisition of implicit knowledge by promoting some of the processes believed to be responsible. Seliger (1979) argues that the conscious rules learnt by learners are anomalous because different learners end up with different representation of the rules they have been taught. According to him, rules serve as acquisition facilitators and as mnemonics for retrieving features of internal rules. The process by which knowledge is internalized is different from that used for learning it. He believes that the knowledge of a pedagogical rule may make its internalization easier and may facilitate the use of features when called up in communication. N. Ellis (1994) suggested that declarative rules can have top-down influence on perception, in particular by making relevant features salient and thus enabling learners to notice them and to notice the gap between the input and their existing linguistic competence.

Another version of the weak interface position posits that different performance tasks are likely to induce SL/FL learners to draw differently on their implicit and explicit knowledge. Bialystok (1982) found that formal writing tasks for example, are likely to induce learners to draw more extensively on their analyzed knowledge of an SL/FL than tasks calling for unplanned, oral communication. There is nowadays a large body of research that has investigated the effects of explicit grammar instruction on SL/FL acquisition. This research is reviewed in the next section.

## **2.7 Evidence for the Effectiveness of Explicit Grammar Instruction**

Evidence for the effectiveness of explicit instruction on SL/FL acquisition has been investigated by many researchers recently. The question of whether SL/FL instruction makes a difference was first formulated by Long (1983) who attempted an answer to this question by reviewing the handful of empirical studies which tested Krashen's influential claim of a learning/acquisition distinction at that time (Table 2.4). In these early studies, only global comparisons were made for instance between the SL/FL proficiency of subjects who either had or had not attended SL/FL classes. The findings indicated that, for those for whom the classroom is the only opportunity for exposure to SL/FL input, instruction is beneficial. Actually, in these studies, various amounts of instruction were added on to a fixed amount of exposure and positive outcomes were interpreted to mean either that more instruction is beneficial or that more instruction simply serves as more SL/FL exposure (Table 2.5).

Study	Type of classroom	Subjects	Proficiency level	Data	Resultants
Carroll 1967	Foreign language Learning in united States (exposure abroad)	Adults-first language English	All proficiency levels	Integrative test	Both instruction and exposure help, but exposure helps most.
Chihara and oller 1978	EFL in Japan	Adults-first language Japanese	All proficiency levels	1. Discrete point test 2. Integrative test	Instruction helps, but exposure does not.
Krashen, Seliger and Hartnett 1974	ESL/ EFL in united states	Adults- mixed first language	All proficiency levels	Discrete point test	Instruction helps, but exposure does not.
Briere 1978	Spanish as a SL/FL in Mexico	Children-local India Language is first language	Beginners	Discrete point test	Both instruction and exposure help, but instruction helps most.
Krashen and Seliger 1976	ESL/ EFL in united states	Adults- mixed first language	Intermediate and advanced	Integrative test	Instruction helps, but exposure does not.
Krashen et al.1978	ESL/ EFL in united states	Adults- mixed first language	All proficiency levels	1.Discrete point test 2.Integrative test	Both instruction and exposure help, but instruction helps most
Hale and Budar 1970	ESL/ EFL in united states	adolescents- mixed first language	All proficiency levels	1.Discrete point test 2.Integrative test	Exposure helps but instruction does not-results doubtful, however.
Fathman 1976	ESL/ EFL in united states	children- mixed first language	All proficiency levels	Integrative test	Both instruction and exposure help, but instruction helps most
Upshur 1968	ESL/ EFL in united states	Adults- mixed first language	Intermediate and advanced	Discrete point test	Instruction does not help.
Mason 1971	ESL/ EFL in united states	Adults- mixed first language	Intermediate and advanced	1.Discrete point test 2.Integrative test	Instruction does not help.
Fathman 1975	ESL/ EFL in united states	children- mixed first language	All proficiency levels	Integrative test	Instruction does not help.

**Table 2.4: Empirical studies of the effects of formal instruction on language proficiency (based on Long, 1988**

TYPE OF COMPARISON	FINDINGS	INTERPRETATION
1. The relative utility of equal amounts of instruction and exposure	Four studies showed no differences	Instruction beneficial for those for whom classroom is the only opportunity for exposure
2. the relative utility of varying amounts of instruction and exposure when the sum total of both is equal	Two studies with ambiguous findings	None possible
3. varying amounts of instruction when the amount of exposure is held constant	Two studies showed that more instruction led to more SLA	Either more instruction is beneficial, or more instruction merely serves as more exposure
4. varying amounts of exposure when the amount of <i>inst</i> is held constant	Three studies showed variable results. One study was matched to the type of study in type.	Taken together, the results of studies of types 3 and 4 support the benefits of
5. Independent effects of varying amounts of both instruction and exposure total of both also varies	Of four studies of this type, all showed a benefit for instruction, and three showed a benefit for exposure.  The strength of the relationship was greater for instruction than for exposure	Taken together, the results of studies of types 4 and 5 support the benefits of instruction

**Table 2.5: The Advantage for Instruction over Exposure (principal findings of Long’s review, 1983).**

While Long (1983) concluded that explicit instruction does make a difference, Doughty (2003) commented that his work was more valuable for having identified a number of weaknesses in the then-prevailing research methodology and for having inspired the ensuing line of empirical research on the effects of instruction.

Some years later, Long (1988) reconsidered the question of whether instruction makes a difference, but this time on the now-well-known domains of SLA namely SLA processes, SLA route, SLA rate and level of ultimate SL/FL attainment (Table 2.6).

<b>Domain of SLA</b>	<b>Findings</b>	<b>Interpretation</b>
SLA processes	Both similarities and differences exist in naturalistic and classroom SLA	These must be understood to enhance SLA
SLA route	Routes of development have been identified for negation, question, and word order. Instruction on non-contiguous stages.	Where development hinges upon processing constraints, stages cannot be skipped, even with instruction.  L <sub>2</sub> learners must be psycho-linguistically ready for instruction.
SLA rate	At least four studies show a rate advantage for instructed learners	Taken together, with the SLA route findings, appropriately timed instruction can speed SLA
Level of ultimate SL/FL attainment	Instructed learners advance further down markedness hierarchies than untutored subjects.	Instruction may be necessary to bring SL/FL learning closer to native like competence (for instance through provision of enhanced input or feedback)

**Table 2.6: Effects of Instruction within Domains of SLA (categories from Long, 1988)**

## **2.8 The Influence of Explicit Grammar Instruction on Second/Foreign Language Acquisition Domains**

The influence of explicit grammar instruction on language acquisition has been considered in many studies, namely its effects on the processes of acquisition, the route, the rate and the level of ultimate achievement.

### 2.8.1 Processes of Acquisition

SLA processes include, for instance, transfer, generalization, elaboration, stabilization, destabilization, noticing, omission, over-suppliance...etc. The general findings were that the processes observed differ according to instructed or untutored condition. For instance, although morphemes emerge in roughly the same order for both conditions, naturalistic learners tend to omit obligatory morphemes at lower proficiency levels, whereas classroom learners tend to oversupply them, presumably as a consequence of instruction (Table 2.7).

<b>Morpheme order obtained in monitor free condition</b>	<b>Morpheme order obtained in monitored condition</b>
<ul style="list-style-type: none"> <li>- Ing</li> <li>- Copular</li> <li>- Article</li> <li>- Auxiliary</li> <li>- Short plural</li> <li>- Regular past</li> <li>- Third person singular</li> <li>- Irregular past</li> <li>- Long plural</li> <li>- Possessive</li> </ul>	<ul style="list-style-type: none"> <li>- Copular</li> <li>- Auxiliary</li> <li>- Third person singular</li> <li>- Ing</li> <li>- Regular past</li> <li>- Irregular past</li> <li>- Article</li> <li>- Long plural</li> <li>- Short plural</li> <li>- Possessive</li> </ul>

**Table 2.7: Morpheme order obtained in monitor free and monitored condition (Krashen, 1982)**

### 2.8.2 Route and Rate of Acquisition

Ellis (1985) reviewed a number of morpheme studies investigating the effects of grammar instruction on the route of SLA, in which fixed series of stages (developmental sequences) have been identified in the acquisition of negation, interrogatives, relativization and word order (Table 2.8). Krashen's Natural Order Hypothesis claims that the acquisition of grammatical structures proceeds in a particular order; acquirers of a

Type	Study	Type of classroom	Subjects	Proficiency level	Data	Resultants
Morpheme	Fathman (1975)	ESL United States	260 children aged 6-15 yrs-mixed First language Backgrounds	Elementary and intermediate	Oral production test	Morpheme orders of pupils receiving instruction significantly correlated with those pupils not receiving instruction
Morpheme	Perkins and Larsen-Freeman-1975	ESL United States	12 university Students-recent Arrivals-first Language Spanish	intermediate	1. Translation test 2. Spontaneous speech on picture task	Morpheme orders before and after instruction differed on (1)but not on(2)
Morpheme	Turner (1978)	ESL United States	3 Student of English As a second language	Elementary	1.sample of spontaneous speech 2.diagnostic grammar test	Order of instruction different to morpheme order instruction . Speech but related to test data.
Morpheme	Lightbown et al. - 1980	ESL Canada	175 Grade 6,7 and 8 Students-firsts language French	Mixed ability Level-primarily intermediate	1. Grammatical judgment test 2. Spontaneous speech on picture task	Short-term gains observed on (1). Different order on(2) from natural order, but not if verb and noun morpheme are considered separately.
Morpheme	Lightbown (1983)	ESL Canada	75 Grade 6 students (36 of whom studied in Grades 7 and 8 also )	Mainly lower intermediate	Spontaneous speech on picture task	Differences from natural order for a number of morphemes (e.g. 'ing') but disruption only temporary.
Morpheme	Fathman (1978)	EFL Germany	Adolescents receiving grammar lessons, drills, and controlled dialogues	Mixed ability level	Oral production test	Difficulty order' of morphemes significantly correlated with order evident in speech of adolescent ESL learners (not receiving instruction) in United States.
Morpheme	Makino(1979)	EFL Japan	777 Adolescents and children receiving formal classroom instruction	Mixed ability level	Written short-answer test	No significant difference between morpheme order of subjects and the natural order reported by Krashen (1977).
Morpheme	sajavaara(1981)	EFL Finland	Adolescents receiving formal classroom instruction	?	Spontaneous elicitation measure	Natural morpheme order disturbed-in particular, articles ranked lower.
Morpheme	Pica (1983)	EFL Mexico	6 Adult native Spanish speakers (18-50 years)receiving grammar instruction and communicative language practice	Mixed ability level	Hour-long audio taped conversations with researcher	Morpheme orders correlated significantly with (1)that of naturalistic group. (2) that of mixed group, and (3) Krashen's natural order.
Longitudinal	Felix (1981)	EFL Germany	34 children aged 10 to 11 years-first language German	Beginners	Classroom speech audio-recorded	Learners (1)selected any structure randomly from repertoire of (2) produce litterances following same rules as naturalistic SLA
Longitudinal	Ellis (1984)	ESL Britain	34 children aged 10 to 11 years-first language Punjabi and Portuguese	Beginners	Communicative classroom speech i.e. where focus was on meaning.	Overall developmental route the same as in naturalistic SLA. Minor differences in order as a result of distorted input.
Longitudinal	Schumann (1978)	ESL United States	1 adult-first language Spanish	Fossilized in Early stages	1. Elicitation test 2. Naturally occurring speech	Substantial improvement in overall correctness of negative utterances on (1), but none on (2)

**Table 2.8: Empirical studies of the effects of instruction on the route of SLA (based on Ellis 1985)**

given language tend to acquire certain morphemes and grammatical structures early, and others late. Willing to put grammar in its place, Krashen(1982) argues that grammar instruction changes or disturbs the natural order of acquisition.

One of the morpheme studies was the one conducted by Dulay and Burt (1973) who began their investigation with the question: ‘Is there a common sequence with which children acquiring English as a SL/FL learn certain structures?’(Dulay and Burt 1973:252). They predicted that if a common sequence were found for SL/FL children, it would be different from the L<sub>1</sub> (first language) order since the older SL/FL learners need not struggle with the same kinds of semantic notions already acquired in earlier childhood. Dulay and Burt found that although there were differences in how accurately the structures were used by each group of children, the overall rank order of the structures was similar across the groups, and as the authors had predicted, that order differed from the L<sub>1</sub> order of acquisition. These findings were confirmed by their next study and many others.

In a meta-analysis attempting to explain the natural order of SL/FL morphemes acquisition, Goldschneider and De Keyser (2005) found that a considerable portion of the order of acquisition of some morphemes by ESL/ EFL learners can be predicted by the combination of perceptual salience, semantic complexity, morpho-phonological regularity, syntactic category and frequency. In their investigation, the authors criticized previous research on the effect of instruction on the order of SL/FL acquisition that did not attempt to resolve the question saved on the effect of instruction on the order of SL/FL acquisition that did not attempt to resolve the question: why do ESL/ EFL learners of different ages, with different types of exposure to English and different L1s appear to acquire certain grammatical features in very nearly the same order? Goldschneider and De Keyser commented that even Krashen, who used the natural order as one of the underpinnings for his Monitor Model (Krashen, 1977), did not try to account for why the order occurs in that way.



The studies reviewed by Long (1988) proved also that grammar instruction affects the rate of SL/FL acquisition by speeding it up and fostering it more than naturalistic conditions. However, as stated by Lightbown (1983), what is learned quickly is forgotten equally fast. This may depend upon the mode of learning that is started by the SL/FL instruction.

### **2.8.3 Level of Ultimate Attainment**

The studies (reviewed by Long) indicated that perhaps due to different types of input to which naturalistic and instructed learners are exposed, instructed learners make more progress toward the target language. For instance, when learners are provided with input that includes marked examples of systems (where markedness refers to infrequency), they are able to acquire both the marked and unmarked aspects of the system. Uninstructed learners, who may never gain access to marked input, tend to acquire only the unmarked elements in the system.

By the 1990's, the evidence in the four domains of SLA formed the basis of an assumption that SL/FL grammar instruction is effective. Research interest then shifted to question the type of instruction that is most facilitative of SLA. Like early investigations of the benefits of instruction versus exposure in SLA, comparisons of the relative effectiveness of types of grammar instruction were too global. In these studies, two methods of instruction were compared, and findings were the same: no difference. Doughty (2003) explained that this was because the variable of instructional method is actually a composite and cannot be isolated: even if a method has overall description, any particular implementation by a teacher is subject to several variations. Besides, many teaching practices may be components in several methods, and in fact it may be these specific teaching procedures that are responsible for the observed effects.

Another problem concerning these comparisons that were too general (comparisons of input, exposure, instructional conditions) was that when interpreting research finding, it was not possible to find out or isolate a link between learning outcomes and instructional

treatments. To remedy this, Doughty (1991) proposed crucial elements of experimental design that needed to be taken into account in any further experiment, which are:

- A specific learning target must be identified (an SL/FL feature targeted).
- The instructional treatment must be psycholinguistically appropriate.
- The use of a control group so that specific gains in the SL/FL could be evaluated with respect to the target of instruction.
- Instructional treatments should be documented in some fashion (through video or audio recording or computer-assisted) so that at the end of the investigation the treatment could be examined in conjunction with the findings.

Respecting these guidelines was not a simple matter. By the 1980's, researchers argued that to conduct experiments on SLA issues was nearly impossible in normal classrooms and recommended that the investigations should be carried out under laboratory conditions. This suggestion raised the issue of ecological validity since normal SL/FL instruction takes place in classroom.

The most recent review of empirical studies that attempts to determine the overall effectiveness of grammar instruction as well as the relative effectiveness of types of instruction is a statistical meta-analysis of the literature published between 1980 and 1998 by Norris and Ortega (2000). A meta-analysis is most frequently performed in fields of medical and educational research. In these fields, meta-analysis usually refers to the synthesizing of results from some number of studies such that pooled results are reported quantitatively, but without posing any new research question. In other words, a meta-analysis refers to the process of extracting and pooling data from several studies and then using these data for testing a new research question. This type of research integration, in fact, is an alternative to

the traditional method of systematic review (Long's works 1983, 1988) in which an overview narrative summarizes a selection of studies one by one. In Norris and Ortega meta-analysis, the authors identified 250 potentially relevant studies from the published applied SLA literature. Their investigation paid special attention to the components of instructed SLA research methodology, particularly operationalization of instructional treatments, consideration of appropriate research design and comparison of instructional treatment types, influence of measures and duration and durability of instructional treatments. Only 77 studies of the initial 250 studies survived the first screening. To be included in the final phase of the meta-analysis, the 77 studies underwent another screening depending on whether the experiments are quasi-experimental or experimental in design, the independent variable clearly isolated and formulated and the SL/FL features be targeted. Of 77 studies, only 45 were retained. In this meta-analysis, Norris and Ortega sorted out the operational definitions for coding type of instruction variable, which is summed up in Table 2.9. Table 2.10 lists the 20 pedagogical procedures employed alone or in combination in the instructional treatments of the studies analysed, and groups them according to implicit/explicit approach, and type of attention. The major findings of this meta-analysis are displayed in Table 2.11. Once again, as had been already found out in Long's reviews (1983, 1988), the answer to the question 'Does grammar instruction make a difference?' is affirmative and more than that; the difference is substantial.

With regard to differences among instructional types, the clearest and the most trustworthy finding according to Norris and Ortega is an advantage for explicit over implicit types of SL/FL instruction. In addition, combining the type of instruction with the degree of attention to form in the pedagogical procedures employed, the findings are that explicit focus on form (large effect) > explicit focus on forms (large effect) > implicit focus on form (medium effect) > implicit focus on forms (small effect). Norris and Ortega (2000, 2001) interpret the results of their meta-analysis as such 'L<sub>2</sub> instruction can be characterized as effective in its own right, at least as operationalized and measured within the domain. (2000 : 480).

Instructional type	Operationalisation as derived from study descriptions
Explicit	+Rule explanation (deductive/metalinguistic), or +direction to attend to forms and arrive at rules(explicit induction)
Implicit	- Rule explanation, and - Direction to attend to forms
Focus on meaning	Exposure to SL/FL targets or experience with SL/FL tasks, but no attempts to effect shifts of learner attention
Focus on form	Integration of forms and meaning, any of: a. Designing tasks that promote engagement with meaning prior to form. b. Seeking task essentialness/naturalness of SL/FL forms c. Ensuring unobtrusiveness d. Documenting SL/FL mental processes (e.g. ’noticing’ ) e. Selecting target forms by analysis of learner needs f. Considering <b>IL</b> constraints
Focus on form	None of (a)-(d) above apply, and learner attention was nevertheless focused in some particular way on the particular structure targeted for learning

**Table 2.9: Operationalizing the construct of SL/FL instruction (adapted from Norris and Ortega, 2000)**

<b>Focus on form</b>	<b>Focus on forms</b>
<p>Implicit(30% of the instructional types) :  18% of the instructional types:  Form-experimental (anagram)  Input enhancement  Input flood  Recasts  Other implicit</p>	<p>11% of the instructional types:  Corrective models  Pre-emptive modeling  Traditional implicit</p>
<p>Implicit(70% of the instructional types) :  26% of the instructional types:  Compound focus on form (enhancement+  feedback)  Consciousness-raising  Processing instruction  Meta logistical</p>	<p>45% of the instructional types:  Rule-oriented forms-focused  Garden path  Input practice  Meta-linguistic feedback  Output practice  Traditional explicit (e.g. rule explanation).</p>

**Table 2.10: Distribution of Pedagogical Procedures in the Type of Instruction Studies (adapted from Norris and Ortega, 2000)**

<b>Type of treatment</b>	<b>Findings</b>	<b>Interpretation</b>
Control/comparison groups	18% gain	Any of practice effect, effect of exposure, maturation
All instructional types (vs.all comparison groups)	49 studies examined (98 treatments) Large effect size, but only 70% include a comparison group (e.g,exposure or control)	As operationalized thus far in the domain,L <sub>2</sub> instruction is effective (Norris and Ortega, 2000)
All explicit All implicit All focus form All focus forms Implicit focus on form Explicit focus forms Implicit focus on forms Explicit focus on forms	Large effect size Medium effect size Large effect size Large effect size Medium effect size Large effect size small effect size Large effect size	Explicit >implicit  (FonF> FonF) 1. FonF explicit 2. FonF explicit 3. FonF implicit 4. FonF implicit

**Table 2.11: Type of instruction effects (results of Norris and Ortega’s 2000 meta-analysis)**

## **Conclusion**

Many studies have tried to answer the question ‘Does grammar instruction make a difference?’, and have proven that grammar instruction helps learners of a SL/FL gain competence and proficiency in the target language and that explicit grammar instruction is more effective than implicit instruction. What researchers have found is that the difference between the two types of instruction is substantial. This study tries to make a step further in SL/FL research and attempts to find out on which type of grammatical rules explicit grammar instruction is more effective. To do so, it is necessary first to sort out grammar rules and then consider what type of grammar instruction is best.

# **Chapter Three**

## **Complexity of Grammar Rules**

### **Introduction**

#### **3.1 Definition of Rules**

#### **3.2 Complexity**

##### **3.2.1 Definition of Complexity**

##### **3.2.2 Complexity of Grammar Rules**

##### **3.2.3 Types of Grammar Rules Complexity**

#### **3.3 Criteria of Complex Grammar Rules**

#### **3.4 Learning Complex Grammar Rules**

##### **3.4.1 Reber (1989, 1993)**

##### **3.4.2 Krashen (1982, 1985, 1994)**

##### **3.4.3 Ellis.R (2002b)**

##### **3.4.4 Ellis.N (1993)**

##### **3.4.5 De Keyser (1995)**

##### **3.4.6 Robinson (1995a, 1996b)**

##### **3.4.7 Andrews (2007)**

##### **3.4.8 Spada and Tomita (2010)**

### **Conclusion**



## **Introduction**

Many researchers assume that the inherent complexity of grammatical rules is the source of difficulty and use these two terms (complexity and difficulty) interchangeably (for example; Hultijn, 1995). In other words, the more complex the rules of a grammar form are, the more difficult it is for SL/FL learners to learn. Although this assumption seems reasonable, there is no agreed upon standard for measuring the complexity of rules. There are disparities in the definitions of complex rules with respect to what is meant by 'rules', how complexity is defined and how the complexity of rules is determined. Therefore, in this chapter we will deal with the three previous concerns with an utmost concern being the relationship of complex rules to learning.

### **3.1 Definition of Rules**

One of the central tasks of pedagogical grammar is the formulation of rules, in the broad sense of the statement of language regularities. In talking about rules, we focus on what is standardly seen as distinguishing the information in grammars from that in dictionaries; more basically, we assume that the establishment of rules, of whatever kind, epitomizes the function of a grammar, and therefore of that aspect of language teaching that concentrates on grammar.

Generally, linguists and SLA researchers frequently invoke the notion of rules to mean language regularities or to describe what is learned during the process of instructed or naturalistic SL/FL acquisition, in other words to describe the form in which knowledge of language is represented in the learner's mind. Westney (1994) defined a language rule as being a language observed regularity with predictive value. By this definition, he actually

posits two requirements: The first being “observed regularity” and the second “with predictive value”. The first requirement is claimed to correspond to publicly available facts that are thus descriptive. This may refer to generally accepted wisdom, whether codified in grammar or claimed by native speakers, but in principle it should be capable of confirmation from a particular corpus, or a teacher’s or learner’s own observations. By ‘with predictive value’ Westney (1994) means that the statement about the language must have a predictive power. According to Westney, this power is typically expressed in statements to the effect that x being an instance of y will have a specific form, pronunciation, interpretation z. Moreover, according to him, a rule is said to be significant if the information it embodies has general applicability in the grammar.

Such a definition, in fact, implies that there are types of rules. Braidı (1999) held that within the study of SL/FL acquisition of grammar, four (04) types of grammar rules can be distinguished: the linguist’s rules, the native speaker’s rules, the learner’s interlanguage competence rules and the pedagogic rules. The linguists’ rules are considered as the constraints and the principles that linguists purpose as a description of native-speakers’ competence. According to Seliger (1979), these rules are written with the goal of adequately and scientifically describing some linguistic phenomenon in order to try to represent in a formal way the knowledge that exists in the human mind which allows speakers to produce and comprehend that linguistic phenomenon. The linguists’ rules should not be confused with the actual rules that constitute the native-speaker’s competence. Although linguists cannot specify the actual forms of the rules in a native speaker’s competence they can see the results of these rules as demonstrated by a native-speaker’s judgments of which sentences belong to the language (grammatical sentences) and which sentences do not (ungrammatical sentences). In fact, these rules form part of the native speaker’s mental representation of the language. The learner’s interlanguage competence rules are the ones that the learner actively constructs during SL/FL acquisition process. These rules’ form, like native-speaker’s competence rules, can only be inferred based on the SL/FL learner’s rules performance on production tasks like free conversations, grammaticality judgment or discrete-point tests. It should be noted that the native-speaker’s competence rules and the learner’s interlanguage competence rules both exemplify a speaker’s mental representation of his/her linguistic competence. The pedagogic

rules, however, are formulated by linguists, applied linguists, textbook writers or teachers and are explicitly taught in instructed SL/FL acquisition like the rule for marking English plural nouns. These rules are incorporated into the SL/FL in some way, either only as learned linguistic knowledge or eventually as part of the learner's constructed interlanguage competence. Seliger (1979) claims that the ultimate goal of these rules is causing a learner to produce a language form, that is, getting a learner to perform consistently, with regard to some aspect of language behavior. He adds saying that these rules try to instill in a learner the knowledge that native-speakers unconsciously have in their mind. It is worth noting that the rules formulated within a linguistic theory (the linguists' grammar rules) are just a hypothetical model of what a native-speaker knows about the native language. Linguistic theories differ with respect not only to the formulations but also to the nature of the rules and cognitive mechanisms they propose.

Robinson (1996a) states that the need to posit rules of the symbol-processing type traditionally invoked by linguists as part of language representation is questioned by many philosophers of language and mind and by production systems and connectionist models of cognition. Pedagogic rules, in contrast, are traditionally presented as simplified versions of such linguists' grammar rules which necessarily fall short of exhaustive treatment and avoid the abstract theoretical characterization typical of linguists' rules. Robinson (1996a: 24) concludes saying that: 'Given their limited scope and level of detail, how is it possible for pedagogic rules to be used to develop SL/FL competence?'

According to Robinson (1996a), claims regarding the effectiveness of pedagogic rules can be grouped under the Non-Isomorphy Position, the Attention Focusing Position and the Conscious Understanding Position. As far as the Non-Isomorphy Position is concerned, researchers believe that implicit knowledge and explicit knowledge of rules are different in kind and non-interfaced (Bialystok 1978, 1988; Krashen 1979, 1982, 1985, 1994). Bialystok distinguishes between 'analyzed' knowledge and 'articulated' knowledge. According to her, language development is the accumulation of unanalyzed knowledge of language. This

accumulation takes place independently of awareness of the structure of the knowledge, though an increase in the amount of knowledge is accompanied by an increase in the extent of its analysis. She (Bialystok, 1988: 33) claims that:

.....analysed knowledge ..... is represented as a proposition in which the formal structure and the relationship to meaning are apparent. Non-analyzed knowledge is assigned a mental representation in which the underlying formal constituents are not necessarily identifiable ..... In these terms, analyzed knowledge can be described as access to the propositional structure of non-analyzed knowledge.

However, it is worth noting that for Bialystok the process of analysis takes place below the level of awareness and is hence different in kind from articulated knowledge. She claims (1988: 40) 'Thus it is erroneous to equate analyzed knowledge with articulated knowledge or knowledge of rules' Consequently, we understand that for her it is not possible for pedagogic rule-based tasks to contribute to the development of implicit system. Krashen (1985) also argues that pedagogic rules cannot be used to initiate language development. He claims that explicitly learned grammar rules only make sense when focus is on form, there is enough time for monitoring, the rules are easy and the affective level is low. Pedagogic rules are just useful for monitoring/ editing. Prabhu (1987: 78) claims that a learner can develop satisfaction arising from a rule focused-activity only when:

...one has already developed an internal system capable of yielding samples which confirm to the rule. When that is not the case, rules are just so much complex information.

Like Bialystok (1988), Prabhu claims that explicit rules make sense only after the implicitly learned system (analyzed knowledge) has reached a particular point of development.

Concerning the Attention Focusing Position, Seliger (1979) claims that explicit pedagogic rules do have a positive function in language learning ‘...as they most likely serve as a mechanism to facilitate the learner’s focusing on those criterial attributes of the real language concept that must be induced.’ (1979: 368). In other words, pedagogic rules make the learner’s inductive hypothesis testing process more efficient. He states that pedagogic rules ‘... are useful in language teaching in order to get learners to do things with language in an efficient manner, to focus on those aspects of the language phenomenon that must be acquired and to avoid inefficient testing of hypothesis.’ (1979: 360). Seliger (1979), as Green and Hecht (1992), has shown that learners can perform form-focused activities requiring article production or error correction without being able to state the underlying rule which suggests that conscious knowledge of such rules is disjoint with the knowledge drawn on in performing tasks. According to Seliger, pedagogic rules are neither isomorphic with the representation of language knowledge in the learner’s internally developing system nor devices drawn on while monitoring production, i.e., not used deductively to control output. Seliger (1979: 360) held that:

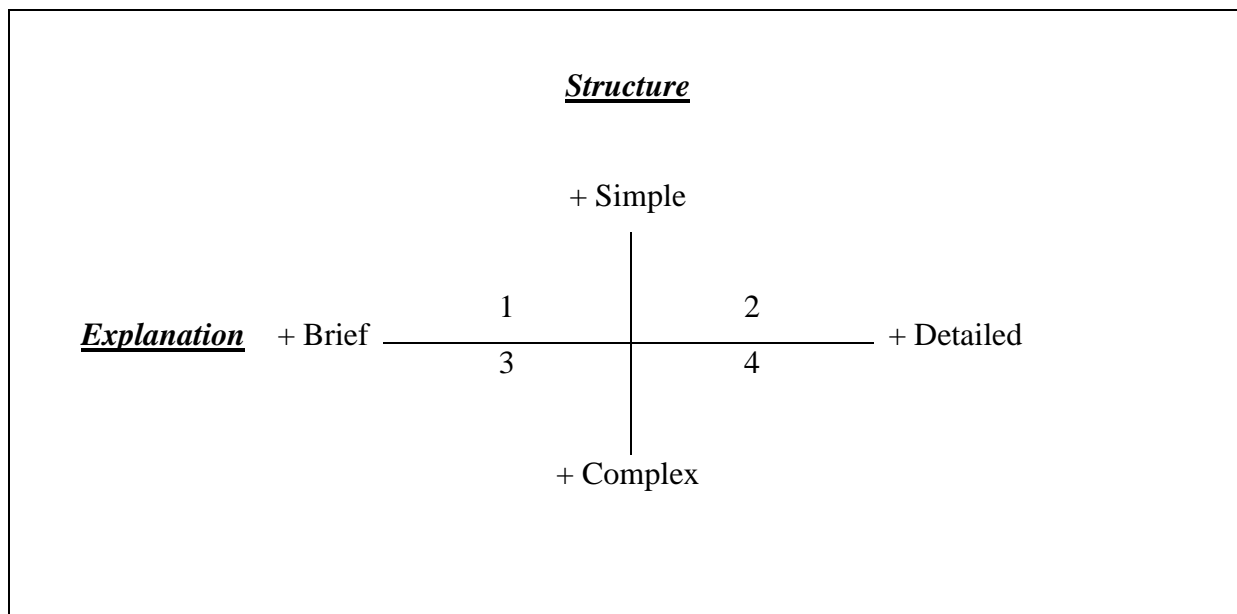
... it will be suggested that pedagogic rules do have a role in language teaching and learning not as language production devices or monitors but as cognitive focusing devices to facilitate acquisition and as mnemonic tags to facilitate retrieval under certain conditions.

To proponents of the Conscious Understanding Position, the previous positions regarding the use of pedagogic rules conflict with Schmidt’s account of his own learning of Portuguese (Schmidt and Frota, 1986). Seliger (1979), Bialystok (1988) and Prabhu (1987) consider awareness at the level of understanding (which could be possible by exposure to

pedagogic rules) as irrelevant to SL/FL development. In contrast, Schmidt reports his own experience that his improvement in performing Portuguese was due to understanding the rules and that this understanding was sometimes accompanied by recollection of an explicitly taught rule. It should be noted that while Seliger denies the potential contribution to SL/FL development that understanding a pedagogic rule can make, he does consider that such a rule is facilitative since it focuses the learner's attention on aspects of the language to be learned, leading to 'noticing' to occur. Schmidt (1990) remarks that those studies evidencing the effectiveness of providing learners with pedagogic rules are inconclusive about whether such effects are caused by an improvement in learner's understanding resulting from instruction, or caused by increased salience of forms leading to awareness at the level of noticing. Consequently, we can consider that there are two ways in which explicitly presented pedagogic rules lead to language learning, related to developing awareness of the language system at the level of understanding. According to Robinson (1996a), attending to the rule may simply cause learners to notice the structures which it is explaining, or lead to an understanding of the structural regularities upon which it is based. From this, it is obvious that complexity is to affect noticing and rule understanding in the same way; that is, simply noticing the structures presented is unlikely to be facilitative of learning if the structures are too complex and the features of the structure that the rule regulates are not obvious. Consequently, as claimed by Robinson (1996a), the more complex is the explanation of a rule, the less likely it may lead to understanding. Hence, the effective pedagogic rules are those in which the level of detail of the explanation matches the extent of the covariance of the structure regulated by the rule. In other words, the complexity of the rule must match the complexity of the accompanying explanation. This is best illustrated by Figure 3.8.

According to Robinson (1996a), the effective pedagogic rules would occupy quadrants 1 and 4 because they correspond to simple rules with a brief explanation and complex rules with detailed explanation, respectively. The less effective pedagogic rules would occupy quadrants 2 and 3. These correspond to simple rules explained in a complicated, overly detailed way (quadrant 2) and complex rules explained in a brief oversimplified form (quadrant 3). These two components of pedagogic rules must be well matched if the possibility of noticing and understanding are to be maximized for the learner. In brief, the

likelihood of spontaneous noticing and processing will depend on, among other things, the complexity of the target rule and its explanation.



**Figure 3.8: Elements of Pedagogic Rules (from Robinson, 1996a)**

### 3.2 Complexity

It is well-known in SL/FL research that there are many factors that may affect the learning of language rules, among which their complexity. In this section, complexity will be defined and its different types will be explained so as to understand complex grammar rules.

#### 3.2.1 Definition of Complexity

For many philosophers, what is obvious as far as complexity is concerned, is that it is the inverse of simplicity, the latter being a matter of economy and the former of profusion. He (Rescher, 1998:1) claims that ‘Simplicity represents economy and orderliness in a thing’s make-up or operations; complexity its elaborateness as reflected in the intricacy or even actual disharmony.’

A few studies to date have tried to empirically or theoretically define the concept of complexity. Actually, some researchers in diverse fields have tried to define and quantify complexity and then try to make their definition fit into individual paradigms such ‘Chaos Theory’, ‘Catastrophe Theory’, ‘Information Theory’ ... etc ( Horgan, 1995; Rescher, 1998; Alhaddeff-Jones, 2008). For them, complexity is a matter of the number and the variety of an item’s constituent elements and of the elaborateness of their interrelational structure, be it organizational or operational.

According to many researchers and science philosophers, complexity is determined by the extent to which chance, randomness and lack of regularity in general is absent, and that complexity is itself a markedly complex idea. According to Reed and Johnson (1998), complexity is the number of discrete elements that need to be taken into account in sequence learning experiments or other target location prediction tasks. For Hawkins (2004), complexity is a function of the amount of structure that is related to the terminal elements or words of a sentence. According to him, more structure means that more linguistic properties have to be processed in addition to recognizing or producing the words themselves. Therefore, complexity increases with the number of linguistic forms and the number of conventionally associated (syntactic and semantic) properties that are assigned to them when constructing syntactic and semantic representation for sentences. He holds that: ‘.... It (complexity) increases with more forms, and more conventionally associated properties. It also increases with larger formal domains for the assignment of these properties’, (Hawkins, 2004:9). For Rescher (1998), complexity has a great effect on learners’ comprehension. He (Rescher, 1998: 1) states that ‘As an item’s complexity increases, so do the cognitive requisites for its adequate comprehension, although, of course, cognitive ineptitude and mismanagement can manage to complicate even simple issues.’

### **3.2.2 Complexity of Grammar Rules**

SLA literature also reveals various approaches to defining the complexity of rules. Some researchers (Hulstijn & De Graaff, 1994; Robinson, 1996a) distinguish complexity of rules from complexity of rules explanation. That is, linguistic rule complexity is the inherent



complexity of the linguistic rules themselves, whereas pedagogical rule complexity is the complexity involved in explaining how a linguistic rule works (Housen, et al. 2005; Robinson, 1996a).

With regard to the complexity of SL/FL rules, Hulstijn and De Graaff (1994) defined it as ‘the number (and/or the type) of criteria to be applied in order to arrive at the correct form’. Following this definition, De Graaff (1997), in a study that investigated the effect of explicit instruction on SL/FL learning, operationalizes complexity as the total number of formal and functional grammatical criteria involved in the process of noticing, comprehending, or producing a given form. Basically, the fewer required criteria, the less complex the form is. In a recent meta-analysis examining the effects of implicit and explicit instruction on the acquisition of simple and complex structure, Spada and Tomita (2010) also used the Hulstijn and De Graaff’s (1994) definition of complexity. Using their criteria, the authors characterized “wh-questions as object of a preposition” more complex than the simple past tense because the former requires seven transformations while the latter requires only one.

Housen et al. (2005) defined pedagogical complexity in a similar way, that is, in terms of “the number of steps the learner has to follow to arrive at the production of the intended linguistic structure, and the number of options and alternatives available at each step”. In line with this definition, the researchers suggest that pedagogical rules for the formation of a target structure can be more or less complex depending on the elaboration with which the target structure is formulated. For example, the pedagogical rules for the formulation of the French present conditional can be as simple as “add the appropriate endings of the *imparfait* to the stem of the *future simple* form of the verb”. The pedagogical rules in question can be complex if detailed information such as how to choose appropriate endings of the *imparfait* is provided. Housen et al. (2005) investigated the effects of explicit instruction on SL/FL learning in relation to the issue of complexity. In their study, complexity is defined in terms of *functional markedness*, a concept advanced by Givon (1991, 1995). Givon’s model of

functional markedness comprises three major components: structural complexity, frequency and distribution, and psycho-cognitive complexity. According to Givon's model, one grammar form is considered to be more structurally complex than another if (1) producing the form requires more transformations of its underlying base form, (2) the form is not as frequently available to learners, (3) the use of the form is more strictly constrained by its syntactic and/or semantic context, and/or (4) acquisition of the form involves higher-level cognitive ability. Following Givon's criteria, Housen et al. concluded for the purpose of their study that the French passive voice is more complex than French sentence negation. Recognizing the absence of agreed-upon objective criteria for determining the complexity of rules, Robinson (1996) used teachers' judgments to establish rule complexity. Similarly, Van Baalen (1983, cited in De Graaff (1997)) used SL/FL textbooks and teachers' judgments to determine the complexity of rules.

To make the complexity issue even more complex, even when researchers use the same definition, they do not apply them in the same way. For instance, while Krashen (1983) and Ellis (1990) seem to have similar definitions of 'formal complexity', Krashen classifies English third person simple present *-s* as formally simple because of the straightforwardness in term of describing its formulation, while Ellis considers it to be formally complex because of the distance between the verb stem and the noun phrase with which it agrees.

### **3.2.3 Types of Grammar Rules Complexity**

It should be obvious from the previous discussion that various approaches have been employed to determine the complexity of rules. In SL/FL research, many types of complexity have been considered among which formal, functional, complexity of form, of meaning and of form-meaning relationship.

Linguistic rule complexity can be categorized into functional and formal complexity (Krashen, 1982; DeKeyser, 1998; Doughty & Williams, 1998a). Simply put, functional complexity concerns form-function mappings, whereas formal complexity concerns the (morpho) syntactic constitution of a form. For instance, the use of English articles is functionally complex because this form has multiple functions whereas English present tense is formally simple because it is indicated by simply adding either  $\emptyset$  or the morpheme  $-s$  to a verb's base form. Krashen (1982: 97-98) distinguishes between formal and functional dimensions of complexity in distinguishing 'easy' from 'hard' rules, stating that:

The rules that we can learn and carry around in our heads for use as a monitor are not those that are the earliest acquired, nor are they those that are important for communication. Rather, they are the simple rules, rules that are easiest to describe and remember.

For him, wh-question formation, requiring extensive permutations of word order is a functionally complex rule, in contrast to the suppliance of the morpheme for 3<sup>rd</sup> person singular agreement, which is claimed to be formally simple. The use of plurals is functionally simple, whereas choice between the definite and indefinite article is functionally complex. Ellis (1990) makes essentially the same distinction between structures that lead to explicit instruction and those that are not: structures that can be good candidates for explicit instruction are those that are formally simple and are transparent with regard to the form-function relationship the grammatical rule regulates. Ellis suggests that plural 's' and the copula 'be' are examples of formally simple and functionally transparent structures. Ellis notes, in contrast to Krashen who claims that explicit instruction can only be helpful in the case of easy rules because only those are explicitly teachable and learnable, that formally complex structures can be explicitly taught if the learner is developmentally ready. Furthermore, Ellis (1994b) speculated that explicit instruction directed at too complex a structure is likely to lead only to improved accuracy in planned language use. In a more recent study, Ellis (2006b) found out that the complexity of grammar rules varies according to whether one is considering explicit or implicit instruction of the structures. Up to him,

structures that are complex in terms of implicit instruction may be easy to learn in terms of explicit instruction, and vice versa.

In his study investigating the question ‘what makes learning SL/FL grammar difficult?’, DeKeyser (2005) claims that at least three factors are involved in determining grammatical difficulty namely complexity of form, complexity of meaning, and complexity of form-meaning relationship. He defines Complexity of Form as the number of choices involved in picking all the right morphemes and allomorphs to express these meanings and putting them in the right place. DeKeyser claims that the meaning of a form can constitute a source of difficulty also because of novelty, abstractness, or a combination of both and thereby constitute complexity of meaning. He holds that articles, classifiers, grammatical gender, and verbs aspect are hard to acquire for learners who do not have them in their L<sub>1</sub> or who use a different system. According to DeKeyser, these elements are resistant to instructional treatments. The cause for that is that they all express highly abstract notions that are extremely hard to infer, implicitly or explicitly, from the input. Where the semantic system of the L<sub>1</sub> is different from that of the SL/FL, as is often the case of aspect, or where equivalent notions are not expressed in L<sub>1</sub> except through discourse patterns as is the case for English articles for native speakers of most Slavic languages, Chinese, Japanese or Korean, the learning problem is serious and long-lasting. DeKeyser (2005) assumes that acquiring the form-meaning mapping can be difficult if the link between form and meaning is not transparent; i.e, the form-meaning relationship is complex. Such lack of transparency can be due to redundancy and opacity. Redundancy means that the form at issue is not semantically necessary because its meaning is also expressed by at least another element of the sentence; for example, a verb ending can be redundant because the subject is explicit, whether it be a full noun phrase or pronoun which makes person and number information redundant. Opacity occurs when a morpheme has different allomorphs and at the same time it is homophonous with other grammatical morphemes. Thus, the correlation between form and meaning becomes very difficult: different forms stand for the same meaning and the same form stands for different meanings. This is the case for *-s* in English, which can be 3<sup>rd</sup> person singular marker, the plural of nouns, or its genitive and in each case it has the same 3 allomorphs.

### 3.3 Criteria of Complex Grammar Rules

Drawing on the work of several SLA researchers, the following criteria are proposed as factors of what likely makes a grammatical rule complex or simple namely perceptual salience, lexical vs. abstract rules, context size, degree of semantic opacity, and information processing load.

Ellis (2006b) and DeKeyser (2000, 2005) claim that some grammatical features are inherently more salient than others. By salience they mean easy to notice in input. In a study of the acquisition of wh-questions formation rules, Bardovi-Harlig (1987) cites perceptual salience as the criterion distinguishing preposition pied-piping in wh-questions like ‘To whom did John give the book?’ from wh-question involving preposition stranding like in ‘Who did John give the book to?’. By salience Bardovi-Harlig seems to mean frequency in the input. She claims that it is this criterion which accounts for the fact that preposition stranding was acquired before pied-piping. According to her, the relationship between the wh-word and the preposition which is crucial to understanding this form of wh-questions is visually and acoustically (perceptually) more salient in preposition stranding than in pied-piping. She explained this by stating that in pied-piping structures the wh-word is less salient by virtue of being sentence-internal and is therefore less easily noticed in input, whereas the wh-word is more salient in preposition stranding by virtue of appearing at the beginning and at the end of the structures, thus more easily noticed and acquired before pied-piping structures.

In a study aimed at identifying the extent to which manipulating time allowed and level of learners in an SL/FL grammaticality judgment test elicits implicit or explicit knowledge of the rules, Bialystok (1979) found that adjective errors were easier to detect than pronoun errors which in turn were easier than verb errors. She explained this by stating that this relates to the complexity of the rules with which the errors were associated. She holds that rules related to single lexical items, like ‘Colour adjectives always come before nouns’,

are the easiest and those abstract rules related to general structures like ‘To form the passé-composé, use the correct form of avoir/être plus the past participle of the verb’ are likely to be complex.

In a similar study to that of Bialystok (1979), Green and Hecht (1992) required learners to both identify errors in sentences by making corrections and to state the rule which was broken. They declare that the easy rules are those that refer to easily recognized categories, could be applied mechanically (rules of thumb) and are not dependent on large contexts. The best candidates for the easy rule category are, according to them, rules regulating the articles, rules concerning the use of who/which, and some cases of some/any. Green and Hecht claim that these rules were the most consistently correctly articulated by learners. Those which were rarely identified or articulated, they termed ‘hard rules’, involved permutations and additions/deletions that were applied over larger structural contexts. This category includes, according to Green & Hecht (1992: 180):

... those (rules) that involve aspect, such as the use of the continuous form or the perfect tense.... These are semantic distinctions that express a speaker’s perspective on a situation... they do not allow of simple exhaustive descriptions and they are not always governed by features of the immediate linguistic context.

Robinson (1996a) proposes another criterion for distinguishing a complex rule as being general information processing load. For him, this is a determinant factor of rule complexity. He claims that the information processing load associated with attending to structural features of the rules is less than the processing demands created by the description of the structure in pedagogic terms (rule explanation). Robinson adds that the degree of

perceptual salience, size of context of rule application and the degree of semantic opacity have all been claimed to affect the complexity of a rule, and all affect, as well, the amount of attention and processing effort spent in learning and remembering a rule. Thus, the simple rules are, according to him, those with perceptually salient features, which are applied to small contexts, which involve transparent meaning-to-form relationships and which require thus less attention and processing effort.

However, given the lack of any clear agreement among SLA researchers about determining the complex pedagogic rules, many researchers used the expert judgment of experienced SL/FL teachers to identify the rules by seeking to establish consensus about rule complexity based on the individual criteria underlying their shared expertise.

### **3.4 Learning Complex Grammar Rules**

A number of experimental studies in SL/FL research have been motivated by claims in cognitive psychology and SLA regarding the role of attention and explicit instruction in learning complex features. Some showed that complex language elements could be learnt implicitly only (Reber, 1989, 1993; Krashen, 1982,1985, 1994; R.Ellis, 2002b). Others, however, support the claim that explicit instruction is effective even with complex structures (N.Ellis, 1993; DeKeyser, 1995; Robinson 1995a, 1996b; Andrews 2007; Spada and Tomita 2010).

#### **3.4.1 Reber (1989, 1993)**

For Reber, the pioneer of implicit learning research, the central issue was lack of consciousness of the structure being learned. Reber (1967: 93) defined implicit learning as:

... a primitive process of apprehending structure by

attending to frequency cues as opposed to a more explicit process whereby various mnemonics, heuristics and strategies are engaged to induce a representational system.

Early empirical research on implicit learning has shown that subjects can learn to use complex knowledge to perform on a variety of tasks without being aware of the exact nature of that knowledge. The first experiment on Artificial Grammar Learning (AGL) conducted by Reber (1967) did not draw much attention, but subsequent experiments ( Reber, 1969; Reber et al, 1980) and the controversy they generated ( Dulany et al, 1984; Reber et al,1991) led to the production of artificial grammar studies of ever increasing complexity and sophistication. During these experiments, learners are exposed to a set of letter strings generated by a set of rules in the form of a finite-state grammar. Subjects never get to see the rules, and are generally not aware of the rules after being exposed to a set of exemplar strings; yet, they perform above chance when they are asked to classify new strings into those that conform to the structure of the exemplars and those that do not. Reber (1989, 1992, 1993) claims that if the stimulus domain is not complex, and the rules underlying it are simple, implicit processes will not be displayed. Yet, when the domain is complex, implicit learning is to be displayed. Therefore, explicit effort to learn complex rules will not be successful. According to him, implicit learning is superior to explicit learning following instructions to search consciously for rules. Reber (1989: 220) states:

A rich and complex stimulus domain is a prerequisite for the occurrence of implicit learning. If the system in use is too simple, or if the code can be broken by conscious effort, then one will not see implicit processes.



### **3.4.2 Krashen (1982, 1985, 1993)**

Like Reber, Krashen (1982, 1985, 1993) asserts that only simple rules are consciously learnable; hard rules must be acquired through implicit learning that develops the acquired system. He holds that ‘... only ‘easy rules’ are learnable’ (1982:98).

In all the experiments led on implicit learning, subjects learn to use complex knowledge without being aware of its underlying structure. Among the first to challenge Reber’s claims of implicit learning of abstract rules were Dulany et al. (1984). These researchers actually quoted Reber to show that subjects in AGL experiments were of some knowledge: during retrospection, these subjects mentioned first and last letters, bigrams, and occasional trigram as important in their decision-making. Dulany et al. argued that what allow subjects to make grammaticality judgments were conscious rules within informal grammars rather than unconscious representations of a formal grammar. In other words, subjects had not induced the grammar underlying the strings in Reber’s experiments, but had explicitly remembered fragments of strings which gave them enough information to perform well on the tests. Many other studies have presented similar findings (Perruchet and Pacteau, 1990, 1991; St John and Schanks, 1997). What should be implied from this is that there is very little evidence of learning without awareness and that it is advisable to focus on the differential effects of implicit and explicit orientations on learning rather than on attempts to demonstrate that learning is implicit in an absolute sense. To the question ‘How much can be learnt implicitly?’, De Keyser (2003) holds that AGL experiments typically show a very limited amount of learning. He claims that ‘It is doubtful, however, that even this amount of knowledge is completely implicit ..., let alone that it was acquired completely implicitly’.

### **3.4.3 Ellis,R (2002b)**

Ellis, R. (2002b), in a review of the research, examined the extent to which form-focused instruction (FFI) contributes to the acquisition of SL/FL implicit knowledge. He reviewed eleven (11) studies that have examined the effect of FFI on learners’ free production. Ellis found that the analysis of these studies showed that the key factors are the nature of the target structure (simple/complex) and the length of treatment. FFI, according to him, seems to have a better chance of success if it is directed at simple morphological

features (like verb forms, articles or formulaic items) than at more complex syntactic structures involving permutations of word order (like passives). Ellis explains this by claiming that FFI succeeds for simple morphological features because it makes such forms salient to the learners and as such can be easily processed. FFI is less successful in the case of complex structures because they require more processing operations that can only be mastered sequentially over a long period of time. However, Ellis (2002b) found that in the studies of Mackay (1999), Mackey & Philip (1997) and Muranoi (2000) even limited instruction appears to be successful for some complex target structures. Ellis (2002b) posits that a possible explanation for these successes may lie in the fact that the target structures are readily available to learners in their regular non-instructional input; i.e. salient.

However there are studies that do support the conclusion that explicit instruction leads to significantly greater short-term learning than does implicit learning for simple SL/FL rules, with no advantage for implicit learners over instructed learners for complex rules (De Keyser, 1995; Robinson, 1995a, 1996b; Andrews, 2007). Another study (N. Ellis, 1993) demonstrates a short-term advantage for learners receiving instruction in complex rules, together with structured exposure to examples. Spada and Tomita (2010), drawing on a large body of research, asserted that explicit instruction leads to better learning of both simple and complex features than implicit instruction.

#### **3.4.4 Ellis, N (1993)**

Ellis, N (1993) studied the learning of rules of Welsh morphology by native speakers of English under three conditions. A *random group* was exposed to a randomly ordered series of instances during training (Ellis's operationalization of an implicit learning condition). A *grammar group* was taught the rules to a criterion of success before those instances seen by the random group were presented. A *structured group* was taught a blend of rules and examples organized to make the structural alterations described by the rules salient, before being exposed to the same instances as the random and grammar groups. The training task performed in each condition required subjects to learn the English translation equivalents of Welsh phrases containing examples of "soft mutation", in which certain word- initial

consonants change (e.g., from *c* to *g*, and from *p* to *b*) in specific contexts, such as following the personal pronoun for *his*, and in more general contexts where the change is triggered, for example, by the occurrence of feminine singular nouns following certain article forms. The rule system describing soft mutation is, therefore, a highly complex one. Despite extensive amounts of training (a total of 71,000 trials), Ellis research failed to demonstrate implicit learning by the random group, which performed poorly on well-formedness tests and demonstrated little explicit knowledge of the rules in post-experimental debriefing sessions. The group instructed in the rules alone demonstrated explicit knowledge of the rules but was unable to transfer this to successful performance on the well-formedness test. Subjects in the structured group performed best on the well-formedness test and also demonstrated explicit knowledge of the rules.

Ellis's study demonstrates the insufficiency of what Sharwood-Smith (1993) terms elaborate kinds of input enhancement, such as explicit rule statement, at least in the area of complex rules. The findings of successful performance by subjects in the structured exposure conditions, who received both the rule and a less elaborate type of input enhancement, imply that the latter was responsible for the superior performance of this group. Ellis claims that both kinds of input enhancement in this condition established knowledge bases that were mutually influential, and that this synergy of rule knowledge and knowledge gained from structures exposure to examples contributed to successful performance.

This is not a necessary conclusion, however. The results could have been due to structured exposure alone, in the sense of carefully sequenced presentation of examples. Unfortunately, no laboratory studies to date have isolated the effects of structured exposure on SLA from the effects of explicit rule statement or visual input enhancement.

### 3.4.5 DeKeyser (1995)

DeKeyser (1995) examined the interaction between rule complexity and learning condition, using two dialects of an artificial language, Implexan, as the stimulus domain. Implexan is an agglutinative SVO language, marked for number and case on nouns, and for number and gender on verbs. Some of the agreement rules for the use of morphemes denoting case, number, and gender are categorical; for example, in one dialect, plural marking on nouns is always *-on*. Some Implexan rules, on the other hand, are prototypical in the sense that, for example, there is a choice between two possible morphemes for plural agreement on verbs, *-at* or *-it*, and the choice of the correct allomorph is probabilistically determined by features of the verb stem. If the stem is the prototype containing *-ust* as the last three letters, the plural morpheme is always *-at*. However, if the stem differs in one letter from the prototype, for example, *-usk*, there is only an 80% chance that the plural morpheme will be *-at*, and a 20% chance that it will be *-it*. If the stem differs by two letters from the prototype, for example, *-ufg*, there is only a 60% chance that the correct morpheme will be *-at*, and so on. Prototypical rules are therefore harder complex than categorical rules, in the sense that they are probabilistic, and impossible to reduce to economical rule statements that apply without exception to the morphological forms concerned. In twenty learning sessions of 25 minutes each, subjects assigned to two conditions studied pairs of sentences and picture and were subsequently asked, at the end of the training session, to identify whether certain sentences accurately described various pictures. Subjects in the implicit-inductive (I-I) condition received no instruction on rules of morphology and simply viewed the sentence-picture pairs, whereas subjects in the explicit-deductive (E-D) condition were additionally instructed in the rules for 5-minute periods before the start of the second, third, and eleventh training sessions. Following training, subjects performed a production task during which they wrote sentences describing pictures they had previously seen, as well as new pictures. Analyzing these data, De Keyser found that E-D and I-I subjects performed at similar high levels of accuracy on the categorical rule (90% and 89%, respectively) in supplying the morphemes in sentences for previously viewed pictures. However, E-D subjects were significantly more accurate than I-I learners (57% and 33%, respectively) in generalizing instruction on categorical rules to the production of novel sentences describing new pictures, suggesting that any implicit learning that had been occurring on categorical rules was more item-dependent and memory-based than the explicit leaning following rule presentation. In contrast, there was no difference between the conditions in production of prototypically

determined morphemes on sentences describing old and new pictures, although the implicit learners appeared to be more sensitive to the probabilistic nature of these rules.

DeKeyser's results, therefore, partially confirm Reber's and Krashen's claims about the interaction of stimulus complexity and learning condition: Explicit learning was better for the simple categorical rules. However, in contrast to Reber and Krashen, implicit learning was not superior to explicit learning on the complex prototypical rules.

#### **3.4.6 Robinson (1995a, 1996b)**

Similar results to those of DeKeyser were obtained by Robinson (1995a, 1996b) with respect to the interaction of attention to form and the complexity of pedagogical rules of English. Robinson matched conditions motivated by Reber's research (an implicit condition, in which learners were instructed to find rules regulating the sentences) with conditions motivated by Krashen's distinction between acquisition and learning (an incidental condition, in which learners were instructed to read sentence for meaning, and an instructed condition, in which learners were taught the rules and were instructed to apply them to sentences) in order to examine the comparability of learning in the unconscious implicit and incidental conditions, and in the conscious instructed and rule-search conditions. The simple and complex pedagogical rules that formed the basis of the sentences viewed by learners in each condition were identified empirically by asking experienced ESL/ EFL teachers to rate the complexity of various pedagogical rule formats and, separately, to rate the complexity of structures described by those rules. These ratings clearly identified two rules, previously established to be unfamiliar to the target group of subjects for the study: a simple rule describing the constraints on subjects-verb inversion following fronting of adverbials of time versus location ("Into the house John ran-ran John"/"On Tuesday Mary arrived - \*arrived Mary"), and a complex rule describing how to form pseudo-clefts of location ("Where Mary works is in Chicago, not in New York" / "Where the books are is on the table, not in the bag"). The subjects, 104 predominantly Japanese learners of ESL/ EFL, viewed sentences

generated by the rules in each condition. Based on Reber's and Krashen's claims a) that a conscious focus on grammatical rules will produce inferior learning relative to learning in implicit condition, b) that instruction can sometimes affect learning negatively in that it imposes the formalization of a rule that will not correspond to the implicit system of the existing knowledge, c) that even in the implicit condition subjects will become aware of rules if they are salient and this salience will be induced by the simplicity of the rule, and d) that instructed learners will forget or imperfectly recollect complex rules in comparison to simple rules, Robinson hypothesized that the implicit condition will be clearly superior to the explicit condition in performance on complex rules, and that performance on simple rules will be superior to performance on complex rules under all conditions.

Results showed significantly more accurate performance on a grammaticality judgment test of new sentences generated by the rules for subjects in the instructed condition. There was a significant difference between the more accurate instructed learners versus all others on the simple rule, and a significant difference between the more accurate instructed learners and rule-search learners on the complex rule. There were no significant differences between instructed and implicit or incidental learners on the complex rule. Instructed learners performed most poorly on ungrammatical examples of complex rule sentences, tending, wrongly, to accept them as grammatical. This overgeneralization of instruction is likely to be attributable to the fact that training in all conditions took place via positive evidence of grammatical examples. The learning that took place in the implicit and incidental conditions, though reaching lower overall levels of accuracy, resulted in more accurate performance on hard rule ungrammatical sentence types. In short, the results showed that the implicit condition does not perform significantly better than the explicit condition. Implicit learners do not outperform other learners on complex rules, but instructed learners outperform all others in learning complex and simple rules showing a significant difference in speed and accuracy. The results showed also that responses to simple rule sentences are faster than responses to complex rule sentences for subjects in implicit and explicit conditions, but were significantly more accurate for explicit condition subjects than for the subjects in the other condition.

Robinson concludes that the results do not support Reber's and Krashen's claims that rules regulating complex stimulus domains are most effectively learned under unconscious conditions. He concludes also that in fact these results are in line with the findings of DeKeyser (1995), N.Ellis (1993) and with those of a previous study by Reber et al (1980) that explicit instruction accompanied by exposure to relevant examples has advantages over the implicit condition.

#### **3.4.7 Andrews (2007)**

Andrews studied the effects of implicit and explicit instruction on simple and complex grammatical structures for adult English Language learners. The results showed that teaching made a difference as both treatment groups learnt both the complex and simple forms after implicit and explicit instruction respectively. "For the simple rule, there was no significant difference between an explicit, teacher directed-instructional approach and an implicit, grammar-discovery approach" (Andrews 2007). However, for the complex rule, the explicit treatment groups showed significantly higher learning. It was suggested that teachers could spend the limited grammar-teaching time on complex structures and allowed the students to induct the simple rules themselves. Andrews (2007) remarked that this study brought to light that in an academic purpose class, especially for adult learners who can tap into L1 linguistic knowledge and cognitively process new SL/FL (L2) forms during a presentation, an explicit approach can be considered especially for complex structures.

#### **3.4.8 Spada and Tomita (2010)**

Spada and Tomita (2010) conducted a meta-analysis to investigate the effects of explicit and implicit instruction on the acquisition of simple and complex grammatical features in English. The target features in the 41 studies contributing to the meta-analysis were categorized as simple or complex on the basis of Hulstijn and de Graaff's definition of complexity. The instructional treatments were classified as explicit or implicit following Norris and Ortega (2000). The results indicate larger effect sizes for explicit over implicit

instruction for simple and complex features. Spada and Tomita concluded that explicit instruction leads to better learning of both simple and complex features than implicit instruction, and that whereas explicit instruction was found to be superior in contributing to learners' explicit knowledge of complex and simple forms, it contributes to their ability to use these features in unanalyzed and spontaneous ways. For them, this advantage is long termed.

## **Conclusion**

The above-cited studies show that one of the factors that appear to influence the relative effects of explicit and implicit instruction is the complexity of the target structure and that the target grammatical structure is an important variable that influences whether explicit instruction is effective.

Knowing that much of the debate about the effectiveness of explicit grammar instruction has revolved around the question of whether to teach grammar rules and which type of rules, it is particularly necessary to supplement experimental demonstrations of the effectiveness of instruction in pedagogic rules (simple and complex) with evidence from studies using natural languages and using an experimental design.



# **Chapter Four**

## **An Experimental Study on Learning Simple and Complex Rules through Explicit Instruction**

### **Introduction**

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##### **4.2.5 Interpretation of the Results**

### **Conclusion**

## **Introduction**

Over the past three decades, many researchers concluded that explicit instruction is beneficial to SL/FL Learners. However, some of them cautioned that there has been insufficient research to warrant firm conclusions in many areas examined so far. They claim that the existing body of research on the effects of explicit instruction suggests but does not provide robust support to the fact that instruction positively affects the acquisition of complex rules seeing its scarcity. Several important insights, gained through examining previous empirical studies attempting to document the possible effects of explicit instruction on the acquisition of complex rules, guided the methodology of the study to be reported here.

The investigation followed an experimental design that included a pilot study, control and experimental groups and the use of a pre-test and a post-test designed to answer these questions:

- Do presentation, explanation and practice of grammar rules produce better results than exposure to sentences illustrating those rules?
- Does explicit condition subjects' performance on the study of complex rules outperform implicit condition subjects' performance?
- Are explicit condition learners' scores better in the case of complex rules than in the case of simple rules?

## **4.1 The Pilot Study**

It is well known in research methodology that an effective research experiment requires careful planning and a pilot study will often be a part of this procedure. A pilot study is a small experiment elaborated to test the materials to be used in the study and to gather information prior to the main experiment so as to improve its quality and efficiency, in general.

### **4.1.1 Description of the Pilot Study**

At the onset of the experiment, the study was piloted at the Department of Economics, during the first two weeks of October, 2013. The researcher wanted to pilot the study with a considerable number of students, but this was impossible seeing the noticeable absence of students during the first weeks of each academic year. As a result, only 9 first-year students were available during these first weeks in the group of students that was attributed to me at the beginning of the year. These students are assumed to be comparable to the main study subjects in terms of age, language knowledge and proficiency and length of period for the study of English since they study like them in the first year and at the same department. It is clear that though their number is small they could be representative of the subjects who would eventually take part in the main study.

These nine (9) students attended two one-hour and a half sessions. In the first session, we administered the Grammatically Judgment Test (GJT) during the first forty minutes. The time was totally sufficient for the learners to answer the test. We asked them to underline each word they found difficult or unclear and not to take into account what could be believed to be a spelling or punctuation error. The GJT was the one used for the selection of the unfamiliar sentences. To the sentences that are presented in Table 4.12 (p. 98), were added 13 other sentences, mainly ungrammatical or used as distractors (see Appendix I).

After completing the GJT, learners were orally asked for feedback in order to identify the problems they might have found while completing the test. Their answers made the researcher aware of some problems, mainly comprehension of some words. The difficult underlined words were:

- ‘Chess’ and ‘Sanders’ in Sentence 1
- ‘Jogs’ ==> Sentence 2
- ‘angered’ ==> Sentence 8
- ‘narrated’ ==> Sentence 9
- ‘barked’ ==> Sentence 13
- ‘shelf’ ==> Sentence 20
- ‘handful of peanuts’ ==> Sentence 25

The difficult expressions were re-worded in the main study GJT as such:

- ‘Chess’, ‘Sanders’ ==> ‘piano’, ‘Beckham’.
- ‘Jogs’ ==> ‘eats’.
- ‘angered’ ==> ‘shocked’.
- ‘narrated the event’ ==> ‘told the story’.
- ‘barked’ ==> ‘played’.
- ‘shelf’ ==> ‘table’.
- ‘handful of peanuts’ ==> ‘chocolate’.

After considering their responses, it was clear for the researcher that pseudo-cleft sentences were among the most unfamiliar structures for learners. So, before the second session, rules governing the formation of pseudo-cleft constructions headed by ‘what’ and ‘where’ were written and exercises were elaborated and typed. In the second session, the researcher, namely the teacher, gained additional benefits for the main study that could be summed up as such:

- Know how to present the rules: steps to be followed to make the explanation easy and clear.
- Check Elements to be included in the explanation and in the exercises.
- Detect gaps: In the exercises, the teacher has not given examples focusing on subject-verb inversion which makes the formed sentence ungrammatical (examples of negative evidence). Items were thus added to fill that gap.

After re-wording and correcting the mistake that occurred in the initial version of the GJT, it was thought that this second version will be the one used for pre-testing and post-testing the subjects of the study.

#### **4.1.2 Selection of the Rules**

Although in section 3.3 of the third chapter some criteria for the identification of complex rules are considered, it was clear that they could not be sufficient for the selection of the rules to be presented to learners in this study because as stated by Robinson (1996), unfamiliarity must be taken into account as well otherwise data would be contaminated by previous knowledge. He claims (1996 : 38) that ‘Unfamiliarity was necessary in order to control for prior learning of rules, which could have invalidated claims for learning based on the treatments.’ In other words, if a rule is identified as complex according to the above-cited criteria, like the definite article ‘the’ which is a well-known complex structure for all intermediate learners, the claims for eventual learning of that structure due to explicit teaching could be invalidated because the language feature is familiar to the learners. To test rule familiarity, a grammaticality judgment test (GJT) was given to a group of 9 learners who were asked to circle ‘Grammatical’ ‘Ungrammatical’ or ‘Not Sure’ (Appendix I). These students belonged to a group of students other than the subjects of the study who participated only in the pilot study. These subjects were asked to focus on whether a sentence is correct or incorrect grammatically and not to take into consideration punctuation, spelling or capitalization errors. The majority of the items in that test are rarely covered in EFL textbooks and lessons. Table 12 displays most items of the test with the grammatical feature they

exemplify. Many items, mostly ungrammatical, were added as distractors so as to avoid running the risk of alerting the learners to detect the rules.

<i>Item</i>	<i>The grammatical feature it exemplifies</i>
1. Alice's chess playing amused Peter. 8. John's heating him shocked me. 32. Anna's leaving the party is on Wednesday	Subject gerundivization
6. Where the cheese is is in the bag not in the basket. 10. Where the boy played was in his room. 30. where Peter stayed was in his shop.	Pseudo-cleft construction headed by 'where'
3. Who did she send letters to? 9. To whom does he tell the story? 18. Who did you suggest I talk to? 22. Who is Anna happy to see?	Question formation with preposition stranding and pied-piping.
4. That there website gives a lot of information. 11. This here dictionary explains many things. 29. That supermarket there offers plenty of discounts.	Pre-and post-subject use of emphatic 'there'
2. In the morning, he eats. 5. Into the house, John ran. 14. In the garden, plays the dog.	Place and time adverbial fronting and subject verb inversion possibility.
12. What Peter does is write letters not invitation. 23. What Peter reads is newspapers not books. 34. What Anna did was read a book.	Pseudo-cleft construction Readed by 'what'
13. I saw the dog that barked. 26. I saw the dog that you fed. 31. I saw the dog you fed.	Optionality of relative pronoun within a relative clause.

**Table 4.12: Major Rule Familiarity Sentences and the Grammatical Features They Exemplify.**

### 4.1.3 Results of the Pilot Study

The percentage of ‘grammatical’, ‘ungrammatical’ and ‘not sure’ responses to the sentences of the GJT (without distractors) is given in Table 4.13.

<i>Sentence No.</i>	<i>% of ‘Grammatical’ Responses</i>	<i>% of ‘Ungrammatical’ Responses</i>	<i>% of ‘Not-Sure’ Responses</i>
1.	22.22	55.55	22.22
8.	0	77.77	22.22
32.	22.22	55.55	22.22
6.	0	88.88	11.11
10.	11.11	77.77	11.11
30.	11.11	66.66	22.22
9.	44.44	22.22	33.33
3.	55.55	44.44	0
18.	77.77	22.22	0
22.	77.77	22.22	0
4.	22.22	55.55	22.22
11.	0	77.77	22.22
29.	33.33	11.11	44.44
2.	66.66	33.33	0
5.	33.33	44.44	22.22
14.	22.22	66.66	11.11
12.	11.11	88.88	0
23.	33.33	44.44	22.22
34.	11.11	77.77	11.11
13.	66.66	33.33	0
26.	55.55	22.22	22.22
31.	66.66	22.22	11.11

**Table 4.13: Percentages of Grammatical, Ungrammatical and Not Sure Responses to the Sentences of GJT of Rule Familiarity.**

The sentences 6 and 12 received the highest percentage (88.88%) of incorrect answers. Sentence 8, 10, 11 and 34 received (77.77%) and immediately followed by sentences 14 and 30 with (66.66 %). It was evident from these results that these sentences exemplify rules that are unfamiliar to the learners. The rules are mainly related to pseudo-cleft constructions, subject gerundivization, pre-and post-subject use of emphatic 'There' and rules related to subject-verb inversion with place adverbial fronting. As a result, these rules were selected as the basic rules of the present study. These rules are given in Appendix II. These rules seem to show not only unfamiliarity, but some degrees of complexity as well since they involve some focus constructions and some complex permutations of word order that are in most cases unusual and rarely dealt with by SL/FL teachers/ textbooks.

Nevertheless, knowing that these rules display some degrees of complexity, and knowing that there is no consensus over the criteria to apply in distinguishing between simple and complex rule, the expert judgment of experienced EFL teachers was resorted to, as in Robinson (1996), in order to identify the simple and complex rules from the above-cited list of rules. To do so, the researcher wrote the rules, and then presented them to a group of teachers of EFL (only 11 teachers answered) to be classified for complexity (simple or complex). The rules were randomly ordered. They were introduced with a short background questionnaire to profile the teachers. Details about this background questionnaire are shown in Table 4.14.



<i>Teacher</i>	<i>Length of EFL Experience (in years)</i>	<i>Qualification</i>
1.	30	Magister in Linguistics
2.	19	Ph.D in Linguistics
3.	15	Ph.D in EFL, Applied
4.	15	Linguistics
5.	14	Magister in Linguistics
6.	11	Magister in Linguistics
7.	10	Magister in Linguistics
8.	10	Magister in Linguistics
9.	10	Magister in Linguistics
10.	9	Magister in Linguistics
11.	7	Magister in Linguistics
		Magister in Linguistics

**Table 4.14: Information about the Teachers Who Classified the Rules of the Present Study.**

It is clear from this table that the rules were classified by experienced EFL teachers since the mean length of EFL experience is 13.63 years.

In the last page of the rule classification-sheet given to teachers, the researcher asked the teachers to order the presented rules in terms of complexity; i.e. shifting from the simplest rule to the most complex. The teachers' classification and ordering is displayed in Table 4.15.

<i>Rule</i>	<i>% Simple</i>	<i>% Complex</i>	<i>% the most simple</i>	<i>% the most complex</i>
1. Place & Time adverbial fronting and the possibility of subject-verb inversion	90.90	09.09	63.63	0
2. Subject Gerundivisation	63.63	36.36	09.09	09.09
3. Pseudo-cleft construction headed by 'when'	36.36	63.63	0	36.36
4. Pseudo-cleft Construction headed by 'what'	36.35	63.63	0	36.36
5. Question formation with preposition stranding and pied-piping	54.54	45.45	0	18.18
6. Pre-and Post-subject use of Emphatic 'There'	90.90	09.09	18.18	0

**Table 4.15: EFL Teachers' Classification of the Unfamiliar Rules of the Study**

Believing that teachers' long EFL experience vested them with a high discerning language judgment, Table 4.15 reveals that the teachers identified rules related to pseudo-cleft constructions headed by 'what' and 'where' to be the most complex rules for SL/FL learners (72.72%), and the rule related to place & time adverbial fronting with possibility of subject verb inversion as being the simplest rule (63.63%). Despite the fact that even the rule related to pre-and post-subject use of the emphatic 'There' was sorted out by the majority of teachers (90.90%) as being simple, it was considered as the simplest by only 2 teachers (18.18%).

According to the criteria cited in section 3.3 ( Criteria of Complex Grammar Rules) of the third chapter (p.81), the rule related to question formation with preposition stranding and pied-piping was already proved to be complex by Bordovi-Harling (1987), but only two (02) teachers (18.18%) sorted it out to be the most complex one. This could be explained by the

fact that for the Algerian teachers, this rule is much more familiar to them than pseudo-cleft constructions. According to Celce-Murcia and Larsen-Freeman (1983, cited in Robinson 1996), pseudo-cleft constructions characterize mostly spoken rather than written language, ‘which may explain in part why they have often been ignored in ESL/ EFL Texts’ (1983:408). The rules used in this study were adopted from Robinson’s study (1996). The simple rule describes the fact that subject-verb (SV) inversion is allowed in sentences where adverbial of place are fronting, that is ‘On the bed John slept / slept John’. Adverbial conditioning constraints on SV inversion similar to those described in the simple rule of the study have been observed in languages other than English (Robinson, 1996). What makes them simple is the possibility to reduce them in rules of thumb: if adverbial of place fronting, SV inversion is possible; if adverbial of time fronting, SV inversion is not possible. The complex rules of the study (complex rule1 and complex rule2) describe how to form pseudo-clefts headed by ‘what’ and ‘where’, that are ‘Where Anna works is at the hospital not the supermarket’ and ‘What Anna reads is a book not a newspaper’. According to Robinson (1996), pseudo-clefts occur much less commonly in other languages and may be specific to written rather than spoken English, and the extensive additions and deletions necessary to form pseudo-clefts would add to the complexity of explaining and describing them to the SL/FL learners.

In answer to the researcher’s question on why they selected a rule to be the most complex, most teachers answered that it was due to:

- Number of constraints on the rule.
- Number of conditions.
- Length of rule explanation.
- Unfamiliarity with the use of two successive finite verbs in the same clause that could seem confusing to learners.
- Introducing a sentence with a wh-word and not considering it as a question is somewhat uncommon for SL/FL learners.

After this selection, it was decided that the GJT used for identifying the unfamiliar structures in the pilot study would also be used as the pre-test and post-test of rule knowledge for the present study.

## **4.2 The Main Study**

### **4.2.1 The Sample**

The subjects of the study were initially 112 Algerian first year university EFL learners studying general Economics at the University of Oum El Bouaghi. They were randomly assigned to three groups by the administrative staff of the department of Economics, Faculty of Economics, Commerce and Management Sciences. In this department, English is taught as a subject. Each of the three groups consists of approximately 37 students. I have chosen to conduct the experiment on first year students so as to ensure that they freshly completed five years, at least, of English grammar being taught implicitly according to the Communicative Language Teaching (CLT).

The introductory section of the GJT, aimed at profiling the participants, showed that their average age is around twenty (exactly 20.16). They have all stated to have learnt Arabic, French and English. In addition, all of them claim not having been presented rules on the English language grammar before and that they studied English for at least 6 years, in general. Since the study was conducted during a 90 minute-weekly class over a two-month period, subjects' absences were unavoidable.

It was stated at the beginning that the subjects of the study were initially 112 students but this number got reduced to 59 due to exclusions caused by subjects' absence in treatment sessions or testing sessions. For instance, the experimental groups were initially composed of 75 students: group1 included 37, and group2 of 37 students. 18 students of group1 were

excluded for absence during most sessions, plus 3 students who participated in the experiment but whose answers were finally ignored, for the students were absent either in the post-test session or in the session when was presented the second rule. Students who were absent in the session when was presented the first rule were taken into account if present in the second rule session because in that session the students were again presented the first rule then the second one with additional exercises.

Subjects were randomly assigned to one treatment group, but the selection of the students to be included in the study was not totally random. The investigator chose students from a department other than the English department so as to isolate the effects of the independent variable of this study which is the explicit teaching of simple and complex rules. If not isolated, the final results could be eventually contaminated by the potential effects or interaction with other variables. In other words, if the study was carried out in the English department while teaching grammar module, the final results obtained after the treatment period may be caused by the influence of the input provided in linguistics, oral expression or other sessions. As a consequence, the results of the study will be invalidated by such contamination and hence invalidate claims about the eventual learning of complex rules under explicit grammar instruction condition. Miller (1975: 12) holds that:

Such questions of layout should not be decided arbitrarily. The idea of experimental design is to ensure that the data emerging at the end of the experiment are relevant to the predications being tested and not contaminated by outside factors.

Many researchers assert that homogeneity among subjects' proficiency level is an imperative prerequisite for participants' selection in any empirical study. Homogeneity warrants validity of results since it guarantees that any likely obtained difference is due to the handling of the independent variable and not due to differences in the learners' abilities or

inattention at the selection stage. However, knowing that none of the hypotheses of this study is motivated by claims about specific differences in proficiency levels, the investigator made no particular test to measure subjects' proficiency level homogeneity.

#### **4.2.2 The Test**

During the last decades, many researchers, especially in experimental studies, collected data by asking learners to make metalinguistic judgments in order to investigate the acquisition of specific grammatical features. Such a strategy has become popular. The research instrument used in this study was a grammaticality judgment test. A grammatical judgment involves the learner to decide whether a sentence is grammatically well-formed or deviant either by discriminating between grammatical and ungrammatical sentences, locating the error, correcting the error or providing a grammatical description of the error. Ellis (1991) compared GJT to other tasks and found that:

- Data obtained from GJT are easier to collect than oral production data since these latter have to be collected from individual learners.
- Though written production tasks are better than GJ Tests, these latter are more accessible to some data that are known to occur rarely, never or totally avoided by learners.
- GJ Tests enable researchers to investigate the learners' linguistic competence.

Indeed, many researchers claim that GJ Tests provide one of the best ways of studying the mental structures and processes that make learning possible. According to DeKeyser (1995), grammaticality reflects the learners' sensitivity to underlying language structure. Ellis (1991: 181) concluded that even if learners may use a variety of test-performing strategies such as guessing, losing patience if test too long, avoiding responding to some items, what is

empirically proved is that ‘..... learners rely primarily on implicit knowledge when judging sentences .... . This lends support to the claims of researchers that grammaticality judgment tasks can be used to investigate competence.’ In other words, according to Ellis (1991), grammaticality judgment tests are good candidates for testing in SLA research. In brief, this is why this type of tests has been chosen as the tool of research for the present study. The GJT of this study has many purposes:

- To identify the unfamiliar structures that could be used as a basis for the selection of the pedagogic rules of the study.
- To investigate the learners’ linguistic knowledge relying on their grammatical metalinguistic judgment not on their feelings.
- To assess any eventual improvement by comparing pre-test to post-test responses.

For more accuracy in results, a part of the GJT was selected and considered for particular analysis. This part is composed of the 15 sentences presented in Table 4.16. These 15 sentences are examples representing the targeted rules of this study. Of the 15 sentences, 9 are grammatical and 6 are ungrammatical (Table 4.16).

<i>Original Order in the GJT</i>	<i>The Sentence</i>
<u>2.</u>	- In the morning, he eats.
<u>5.</u>	- Into the house, John ran.
<u>6.</u>	- Where the cheese is is in the bag not in the basket.
<u>10.</u>	- Where the boy played was in his room.
<u>12.</u>	- What Peter does is write letters not invitations.
<u>14.</u>	- In the garden, plays the dog.
<u>15.</u>	- * On Wednesday, works Peter.
<u>17.</u>	- * Where the cat was is in the house not in the garden.
<u>19.</u>	- * Where lived Peter is near the Mississippi River.
<u>23.</u>	- What Peter reads is newspaper not books.
<u>25.</u>	- * What eats Susan is chocolate.
<u>27.</u>	- * Stayed Anna in the library.
<u>30.</u>	- Where John stayed was in his shop.
<u>34.</u>	- What Anna did was read a book.
<u>36.</u>	- * What John writes was a text not a telex.

**Table 4.16: Sentences from the GJT Exemplifying the Target Rules. (\*=ungrammatical sentence)**

Using the same test for many purposes was done for fear of invalidating claims on learning complex rules through explicit instruction. In other words, it was believed that more extensive testing of their knowledge of the target rules would draw the subjects' attention at the pre-test stage to the structures to be learnt during the instruction phase. This was avoided because it would have threatened the validity of the study. The implicit condition requires that



subjects should not be aware of / looking for grammatical rules in the training sessions. Wishing that the other distractor sentences in the GJT would divert participants' attention from the study structures, an additional production, oral or discrete-point test was not welcomed.

Test reliability is an essential characteristic of a good test because if a test does not measure reliably, the one could not count on the scores resulting from that test. Technically, reliability shows the extent to which test scores are free from errors of measurement. To find the reliability of tests, usually researchers resort to the use of the Spearman-Brown Prophecy Formula especially after modification of the test length, namely its items number. However, after piloting our test, we did not need to use that formula since we did not add or retrieve elements from the original test.

The GJT has a multiple-choice format. It was chosen instead of the more common binary-choice GJT that allows for only two responses, namely 'grammatical' and 'ungrammatical', because it was believed that a multiple choice format would lower the number of random responses. In other words, if given a multiple choice format, the subject would opt for 'not sure' option if s/he does not know the answer. However, if given a binary choice, and not knowing the answer, the subject would either give no answer or select one option randomly. Such a random selection would affect negatively the claims made on the effects of any treatment.

In the first session of the experiment, subjects were pre-tested: they were presented the GJT composed of 36 sentences: 23 sentences are the ones presented in Table 4.12, and 13 sentences that contain some distractors and some examples related to the identified rules but

mostly ungrammatical. Subjects in both conditions (explicit and implicit) were asked to circle either 'grammatical', 'ungrammatical' or 'not sure' on each sentence presented in the test. The subjects of the two groups were pre-tested each in his due session. Although they have no time constraints, subjects took no more than 60 minutes to complete the test. During the test session, it was seen that some subjects tried to copy their classmates' answers. To avoid such strategy, learners were told that the test was intended to evaluate their level so as to help the teacher elaborate the appropriate lessons for them. Subjects' attendance was recorded. For fear of alerting the subjects to notice the targeted structures at the start of the experiment, if given many tests in the pre-test, the GJT was used solely but with two-fold objectives that were:

- Identification of the unfamiliar structures to be used in the study.
- Evaluation of the subjects' Knowledge of the targeted rules at the beginning and at the end of the experiment.

To achieve the second purpose, the GJT included 15 items illustrating the target rules: 5 sentences exemplifying each target grammatical rule.

Post-testing took place immediately after the last session of the instruction phase. The investigator followed the same procedure as in the pre-test. In other words, subjects were administered the same Grammaticality Judgment test used in the pre-test with the same instructions. It was the same for both conditions. Subjects' attendance was recorded.

### **4.2.3 Instruction**

After the pre-test was administered, classes were randomly assigned to one of two instructional treatments: explicit instruction (experimental group), implicit instruction (the control group). Subjects in both conditions were presented the same English for Specific

Purposes (ESP) material during the instruction phase. Subjects in the explicit instruction treatment received instruction about the targeted rules during their normal class time. For the experimental groups, explicit instruction consisted of two sessions (session N°4 and session N°6) with no homework.

Knowing that it would be difficult to control for instructor bias in such experimental studies, it was decided that the control group would be taught by an ESP teacher other than the researcher. The experimental groups were undertaken by the researcher. At the time of the experiment, the ESP teacher was an experienced teaching assistant having taught English at the Economics department for more than 7 years. At the beginning of the experiment, he had no knowledge at all of the rules or the targeted grammatical features. After a coordination session, he handed me on the usual ESP texts and specific terminology to be taught in the first months of the first semester, in addition to grammar lessons on the use of the English articles. After discussion, I persuaded him to leave the grammar lessons for the second semester. Then, we elaborated the weekly program for all the groups. The ESP instructor was present during the pre-test and post-test sessions. For all three groups, experimentation and testing took place in the subjects' regular classrooms during their regular class hours. The ESP texts and exercises are all presented in Appendix IV. Note that a record of attendance was kept during instruction phase for all subjects.

After completing the pre-test, subjects in the control group were presented texts, activities and exercises that deal mainly with economic concepts and terminology. For the implicit learning condition in this study, the primary focus of the activities is on understanding the meaning of the texts, not on rules or structure formation. During the instruction phase, many sentences and examples related to the targeted rules are present in the activities. The researcher used the Input Flood technique (presenting learners with input which is saturated with the targeted language form). It was believed that as discussed earlier in Chapter Two, the abundance of examples in texts and activities would hopefully cause the subjects in the

implicit condition to process the underlying form while interacting with the input as proposed by Krashen (1985). Consequently, almost all activities performed during the instruction phase were designed so as to make subjects in both conditions employ the form to accomplish a communicative task, as could be seen in the activities presented to the learners in this study (see Appendix III).

During the instruction phase, subjects in the experimental groups were presented the same texts and activities as for the control group. However during two sessions, not successive, these subjects were presented and explained the selected rules of the study together with a series of exercises about each target rule. The lessons, as described by Ellis (2008), were explicit and proactive-deductive. During these two sessions, the subjects' attention was directed to the rules to be studied. These rules were first presented in isolation, then with the help of examples they were reproduced step by step. In these two sessions, the teacher's major objective was to enable the subjects develop understanding of the targeted rule. In most cases, the mother tongue was resorted to so as to save time, and to facilitate comprehension. The teacher used the board for explaining the different aspects, constraints and conditions of the rules. After the explanation, the teacher handed out a series of typed exercises to be done in class. The exercises consist of guided production tasks or Grammaticality Judgment exercises designed purposefully to train them on the use of the type of tests. All the rules explanations and exercises are presented in Appendix IV.

#### **4.2.4 Results and their Analysis**

In this section, results will be displayed and analyzed. Their presentation and analysis would be performed so as to consider each of the study hypotheses namely participants receiving explicit instruction will perform better on tests measuring proficiency in the simple and complex rules than those not receiving explicit instruction; explicit instruction will be more effective than implicit instruction in the case of learning complex rules; and explicit

instruction will be more effective in the case of the complex rules learning than in the case of simple rules.

As concerns the data analysis procedures, the researcher scored and analyzed the study data using two parametric statistical tests namely paired-samples T-tests or the one-way Analysis Of Variance (ANOVA). In order to obtain quantitative data needed for the analysis, 15 items illustrating the study target rules were selected, making of the rest of sentences a set of distractors. This set of sentences comprises the following sentences as ordered in the GJT: item no. 2, 5, 6, 10, 12, 14, 15, 17, 19, 23, 25, 27, 30, 34 and 36. Table 16 (p.108) displays them all. By scoring this part of the GJT out of thirty (30), two points (2) were assigned for each correct judgment: if participants' answers were incorrect, missing or 'not sure', they got 0.

One of the reasons that researchers need to identify the type of experimental design of their study is that they need to use the right tests for the right design. There are many types of statistical tests that are applied to analyze research data in applied linguistics. In this study, the investigator has chosen the paired samples t-test and the one-way ANOVA. The paired t-test is used when you have a paired design: in our study the experimental and the control group. When comparing two samples, it is important to know whether or not the samples are paired. In this study, pairing was possible since the subjects in both conditions were asked to write their name on the top of the first page. With paired samples, it is possible to take each measurement in one sample and pair it sensibly with one measurement in the other sample. In some books, this test is referred to as the repeated measure t-test because measurements are taken from the same group twice (repeated measures). The paired t-test is used when we have only one group of participants and we collect data from them on two occasions or under two different conditions (e.g., Explicit Instruction, Implicit instruction). A typical example, according to Tavakoli (2013), is a comparison of pretest and post-test scores obtained from one group of subjects. A paired samples t-test can also be used when we measure the same person in terms of his/her response to two different items. In brief, a paired t-test looks at the difference between paired values in two samples, takes into account the variation of values within each sample, and produces a single number known as a *t-value*. So, a paired sample t-

test measures how different two samples are (the t-value) and tells you how likely it is that such a difference would appear in two samples from the same population (the p-value). For Tavakoli (2013), the t-value is an indication of the probability that both populations from which we selected our samples have the same mean and that differences in our sample means are due to random fluctuation. As the t-value gets smaller (approaches zero) the probability that the population means are the same gets larger. As the t-value gets larger (in either the positive or negative direction +/-) the probability that the population means are the same gets smaller. In other words, if the difference between the means is large in comparison to the standard deviation of the difference between the means, then the t-value is large: The larger the t-value the smaller the probability that the means of the two populations are the same. It does not matter if the t-value is negative or positive: one should use the absolute value (disregard the sign) when interpreting the t-value. To feel comfortable in our decision that the means are *not* the same, we will compare the calculated t-value to its corresponding critical t-value. If our computed t-value is the same as or smaller than the critical t-value, we accept the null hypothesis (in our study, the null hypothesis is: there will be no difference in learning after treatment) and conclude that the populations have the same mean. If our t-value is larger, we can accept the alternative hypothesis (difference in scores is due to treatment). Generally, software packages can perform the calculations to produce t-values. In this study, the software package was the Microsoft Office Excel 2010.

The one-way ANOVA is another parametric test used to compare the means of two or more groups to see if the group means are significantly different from each other. A one-way ANOVA examines whether the differences between mean scores of two or more groups are so great that we could not just ascribe the differences to chance fluctuations in scores. It involves the consideration of the dependent and the independent variables. Usually, the one-way ANOVA is used to test whether differences exist between three or more means; however, it can be applied to situations in which there are just two means to be compared. In this case, the researcher can either use the one-way ANOVA or the Independent Samples T-test. The results will be almost identical except that the F value produced by the one-way ANOVA will be more informative in that it is the ratio of the between-groups variance to the within-groups variance. After being computed, this ratio will be checked for significance: a large F ratio

indicates that there is more variability between the groups than there is within each group. This value is said to be significant if there is at least a significant difference among the group means. This significance, however, could not be clear using the t-test. In this study, the investigator used for performing the ANOVA the same software package applied for performing the paired-samples t-test, namely the Microsoft Office Excel 2010.

Because of the small number of subjects, the statistical results obtained from this study have to be considered as tendencies that need further verification. All subjects' total scores on both pre-test and post-test measures, together with their scores on the target simple rule and complex rules are displayed in Table 4.17 and Table 4.18.

Before conducting any comparison, we should first check whether the structures identified by subjects' responses in the pre-test as being unfamiliar correspond to those evidenced by the pilot study. It is obvious that before starting any analysis in this study, it is necessary to check correspondence between subjects' responses in the pilot study and pre-test. At the start, it was assumed that the subjects who participated in the pilot study were representative of the main study subjects since having similar age and length of exposure to English. Their responses to the GJT were believed to be informative of the eventual unfamiliar rules of the study. However, this remains an assumption that needs to be confirmed by further analysis. Table 4.19 displays percentages of 'grammatical', 'ungrammatical' and 'not sure' responses to the GJT sentences during the pilot study and the pre-test.

<b>CONTROL GROUP</b>							
<b>Pre-test scores</b>				<b>Post-test scores</b>			
<b>S.R</b>	<b>C.R1</b>	<b>C.R2</b>	<b>T.S</b>	<b>S.R</b>	<b>C.R1</b>	<b>C.R2</b>	<b>T.S</b>
2	0	4	<b>6</b>	6	6	4	<b>16</b>
6	0	0	<b>6</b>	6	6	2	<b>14</b>
4	0	6	<b>10</b>	8	8	6	<b>22</b>
4	0	0	<b>4</b>	4	6	8	<b>18</b>
8	0	0	<b>8</b>	10	4	4	<b>18</b>
6	4	4	<b>14</b>	4	6	4	<b>14</b>
0	0	4	<b>4</b>	6	4	6	<b>16</b>
2	4	4	<b>10</b>	8	2	8	<b>18</b>
6	4	4	<b>14</b>	8	8	0	<b>16</b>
0	0	4	<b>4</b>	8	8	6	<b>22</b>
0	6	0	<b>6</b>	8	6	4	<b>18</b>
8	4	4	<b>16</b>	8	4	4	<b>16</b>
8	4	4	<b>16</b>	6	6	6	<b>18</b>
6	0	6	<b>12</b>	4	4	6	<b>14</b>
4	0	0	<b>4</b>	6	0	2	<b>8</b>
2	0	6	<b>8</b>	4	2	4	<b>10</b>
2	0	4	<b>6</b>	6	4	4	<b>14</b>
2	0	4	<b>6</b>	2	4	4	<b>10</b>
6	10	0	<b>16</b>	2	6	2	<b>10</b>
8	6	4	<b>18</b>	6	2	4	<b>12</b>
4	0	0	<b>4</b>	2	2	0	<b>4</b>
2	10	0	<b>12</b>	6	2	4	<b>12</b>
4	0	2	<b>6</b>	6	0	4	<b>10</b>

S.R: Simple Rule, C.R1: Complex Rule1, C.R2: Complex Rule 2, T.S: Total Score

**Table 4.17: The Control Group Subjects' Scores in the Pre-test and The Post-test**



EXPERIMENTAL GROUP							
Pre-test scores				Post-test scores			
S.R	C.R1	C.R2	T.S	S.R	C.R1	C.R2	T.S
2	6	0	8	8	4	8	20
10	0	0	10	8	10	6	24
4	4	0	8	6	4	8	18
10	4	10	24	6	10	8	24
6	0	4	10	2	8	10	20
4	0	4	8	4	6	2	12
8	4	6	18	10	10	8	28
4	4	0	8	6	8	6	20
4	0	4	8	6	10	6	22
10	0	4	14	10	8	6	24
6	0	4	10	10	10	10	30
6	0	0	6	0	6	4	10
6	4	4	14	0	0	8	8
4	0	4	8	10	10	4	24
4	0	0	4	2	0	6	8
6	0	4	10	8	8	10	26
6	4	4	14	6	10	6	22
4	0	0	4	10	10	10	30
4	4	10	18	4	4	2	10
4	6	6	16	10	8	10	28
6	4	0	10	4	6	4	14
2	4	0	6	10	10	6	26
2	4	0	6	2	2	6	10
2	0	0	2	4	8	8	20
4	0	0	4	6	6	8	20
2	0	0	2	10	8	8	26
2	4	6	12	4	4	4	12
2	0	0	2	8	6	8	22
6	0	0	6	0	6	0	6
6	0	0	6	4	6	4	14
0	0	0	0	4	10	6	20
8	0	4	12	4	6	4	14
8	4	4	16	10	8	8	26
8	4	4	16	8	10	10	28
6	0	4	10	2	10	6	18
6	0	0	6	10	8	10	28

S.R: Simple Rule C.R1: Complex Rule1 C.R2: Complex Rule 2 T.S: Total Score

**Table 4.18: The Experimental Group Subjects' Scores in the Pre-test and the Post-test**

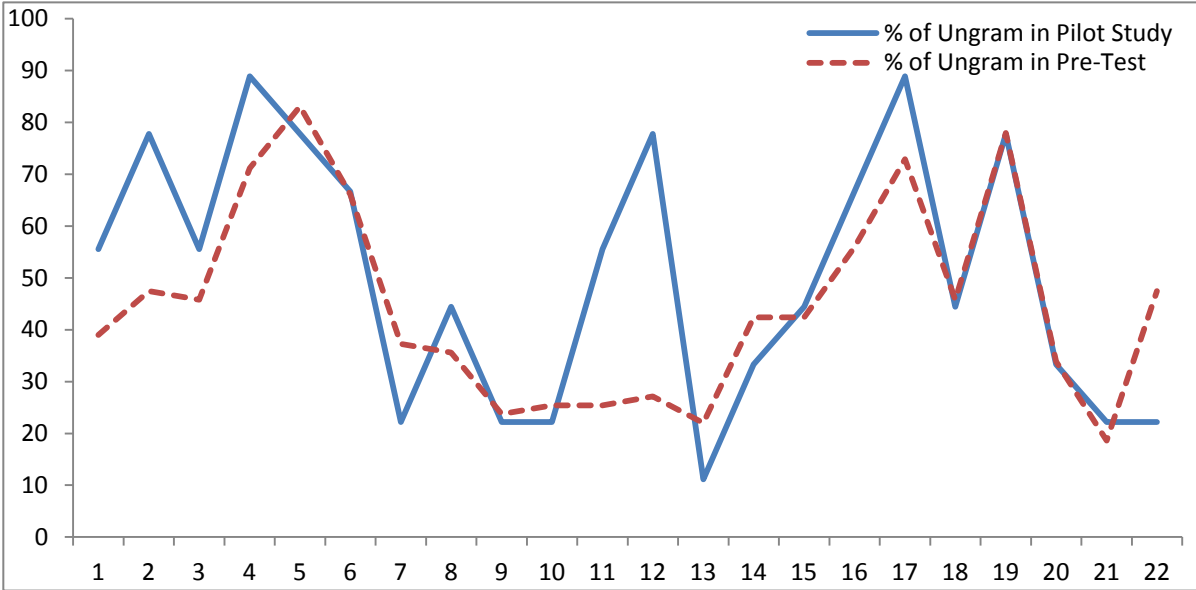
<i>Sentence No.</i>	<i>% of 'Gramamatical'</i>		<i>% of 'Ungrammatical'</i>		<i>% of 'Not Sure'</i>	
	<i>Pilot study</i>	<i>Pre-test</i>	<i>Pilot study</i>	<i>Pre-test</i>	<i>Pilot study</i>	<i>Pre-test</i>
1.	22.22	40.67	55.55	38.98	22.22	20.33
8.	0	20.33	77.77	47.45	22.22	32.20
32.	22.22	28.81	55.55	45.76	22.22	25.42
6.	0.	10.16	<b>88.88</b>	<b>71.19</b>	11.11	18.64
10.	11.11	11.84	<b>77.77</b>	<b>83.05</b>	11.11	05.08
30.	11.11	16.94	<b>66.66</b>	<b>66.10</b>	22.22	16.94
9.	44.44	22.03	22.22	37.28	33.33	40.67
3.	55.55	52.54	44.44	35.59	0	11.86
18.	77.77	42.37	22.22	23.72	0	35.59
22.	77.77	50.84	22.22	25.42	0	22.03
4.	22.22	57.62	55.55	25.42	22.22	16.94
11.	0	49.15	77.77	27.11	22.22	23.72
29.	33.33	50.84	11.11	22.03	44.44	27.11
2.	66.66	44.06	33.33	42.37	0	13.55
5.	33.33	42.37	44.44	42.37	22.22	15.25
14.	22.22	30.50	66.66	55.93	11.11	13.55
12.	11.11	16.94	<b>88.88</b>	<b>72.88</b>	0	10.16
23.	33.33	32.20	<b>44.44</b>	<b>45.76</b>	22.22	22.03
34.	11.11	13.55	<b>77.77</b>	<b>77.96</b>	11.11	<b>08.47</b>
13.	66.66	38.98	33.33	33.89	0	27.11
26.	55.55	55.93	22.22	18.64	22.22	25.42
31.	66.66	25.42	22.22	47.45	11.11	25.42

**Table 4.19: Comparisons between Pilot Study and Pre-test Responses Percentages**

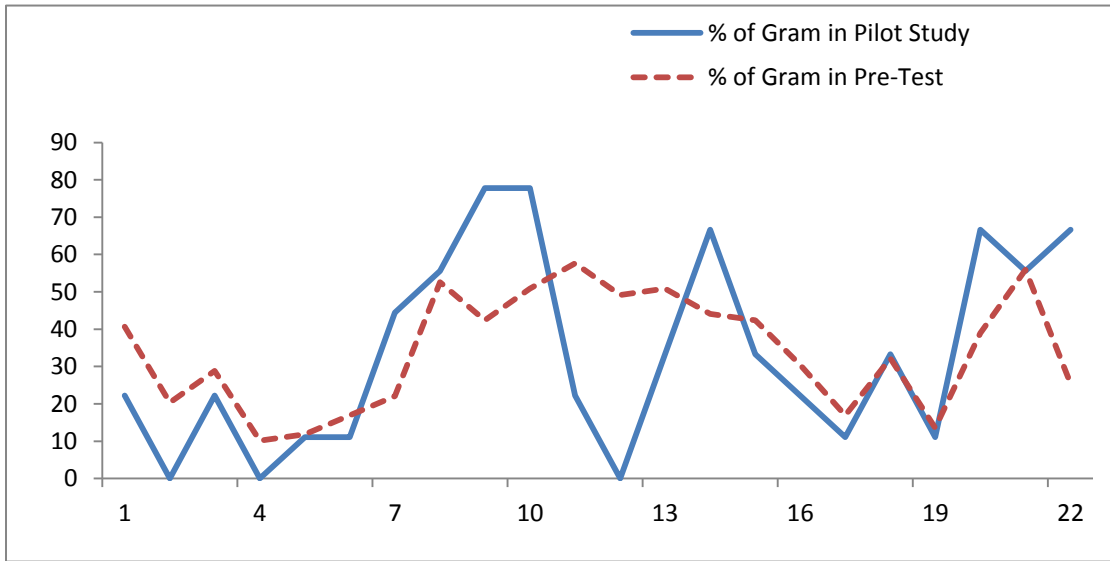
After comparing the pilot study subjects' responses to those responses of the pre-test, the researcher found that in general almost similar percentages were recorded in the pre-test: pseudo-cleft structures illustrated by sentences 6, 10, 30, 12, 23, 34 (6, 10, 30: examples of pseudo-cleft structures headed by 'where'; 12, 23, 34 examples of pseudo-cleft structures headed by 'what') were the most unfamiliar to subjects of the pilot study as well as subjects of

the main study since receiving the highest percentage of incorrect judgment as highlighted in Table 4.19 and displayed by Graph 4.1, 4.2 and 4.3. This evidence confirms that these structures and their related rules are unfamiliar to the participants of the experiment and that the pilot study subjects are comparable to the main study participants.

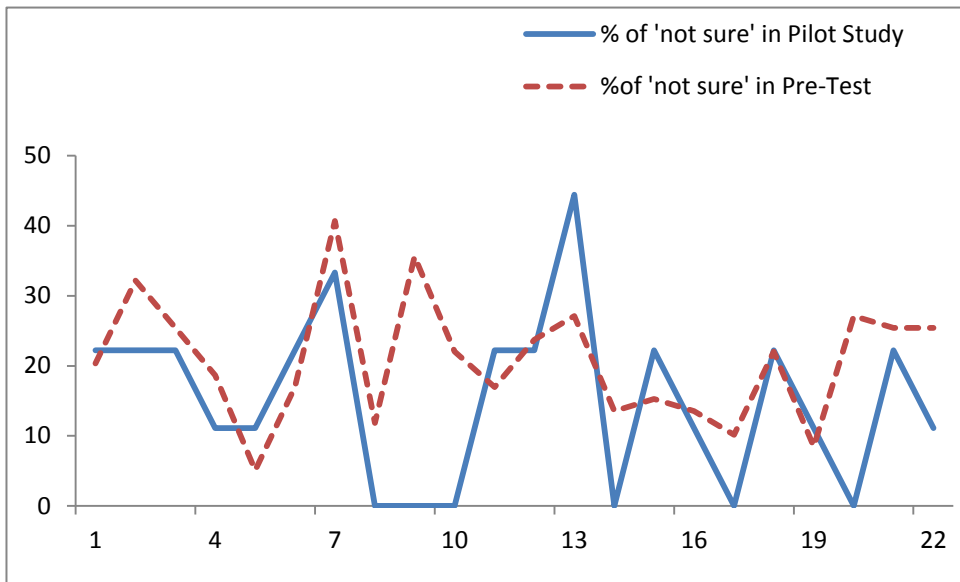
What could be noticed from Table 4.17 is that the pre-test responses on ‘Not Sure’ option were higher than the pilot study responses due to the fact that the researcher constantly reminded the subjects that if not sure about the grammaticality or ungrammaticality of a sentence, they should choose ‘Not Sure’ option: a thing that was not given much consideration during the pilot study.



**Graph 4.1: Percentages of 'Ungrammatical' Responses in the Pilot Study and The Pre-test**



**Graph 4.2: Percentages of 'Grammatical' Responses in Pilot Study and Pre-test**



**Graph 4.3: Percentage of 'Not Sure' Responses in Pilot Study and Pre-test**

Since this section describes the analyses performed to address the three hypotheses stated earlier at the beginning of this chapter, the presentation of the results will be organized accordingly. The findings to the research questions mentioned earlier are reported in the following sub-sections.

#### **4.2.4.1 Subjects' Pre-instructional Knowledge**

It was believed that before considering and analyzing any data, it was necessary first to check that all subjects in both conditions have equivalent knowledge before the treatments. To do that, a one-way ANOVA was performed on all subjects' total scores on the pre-test. This one-way ANOVA was used to test whether differences exist between the control group and the experimental group knowledge at the start of the experiment.

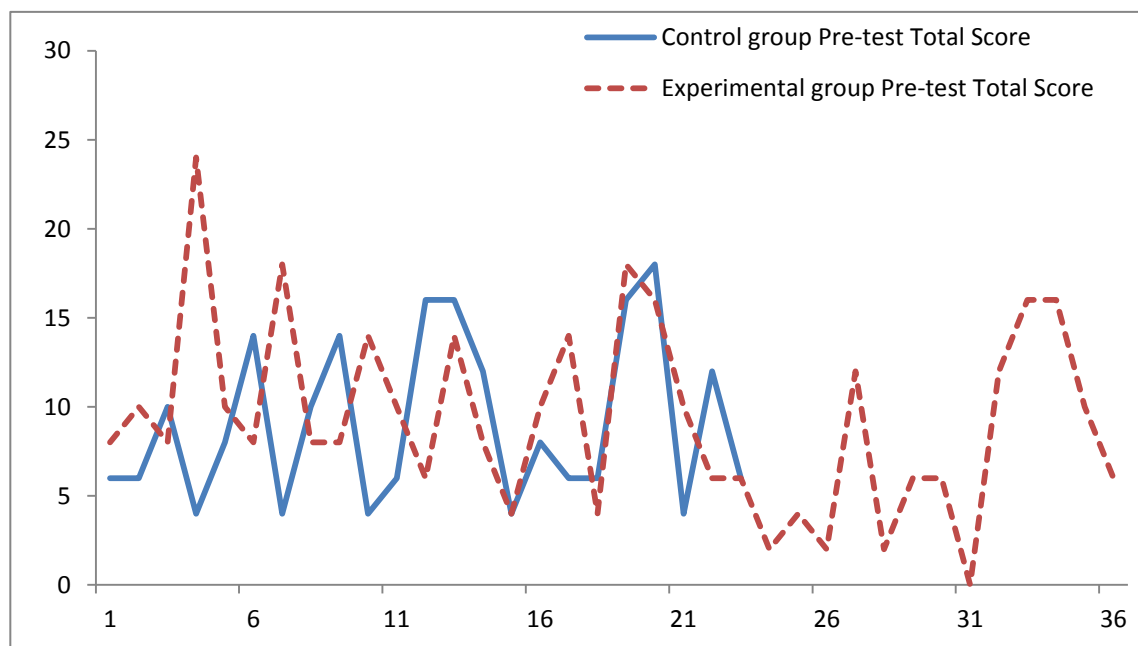
As stated in Tavakoli (2013), a large F ratio indicates that there is variability between groups. But as shown in the detailed summary of the one-way ANOVA (Table 4.20) conducted on the control group and the experimental group general scores in the pre-test,  $f^{(58)} = 0.02$  is by far lower than the critical value of  $f = 7.10$  which is used as a reference value. Moreover, if we consider the groups' means, we see that there is very little difference (Control group Mean = 9.13, Experimental group Mean = 9.33). This implies that there is almost no variance between the groups in both conditions at the beginning of the experiment. This is also clearly displayed by Graph 4.4 that shows that both groups' graph-lines nearly pattern together. Thus, we may assume that any improvement or gains on the post-test measure are due to treatment, and not due to differential previous knowledge of learners.

### Detailed Summary of the One-way ANOVA

Groups	No.		Mean	Variance
	Subjects	Sum		
Control group	23	210	9,13043478	21,7549407
Experimental group	36	336	9,333333333	28,3428571

Variations sources	SS	df	MS	F	P value	F critical
Between groups	0,57775	1	0,57774503	<b>0,02239309</b>	0,88157	<b>7,101534687</b>
Within groups	1470,61	57	25,8001526			
Total	1471,19	58				

**Table 4.20: Subjects' Knowledge at the Start of the Experiment**



**Graph 4.4: Subjects Knowledge at the Start of the Experiment**

#### **4.2.4.2 Learners' Knowledge after Treatment**

To consider hypothesis 1 that states that subjects receiving explicit instruction about the target rules will perform better than subjects who received implicit instruction, a one-way ANOVA and 2 paired samples T-test were performed. First, comparisons between subjects' performance on pre-test and post-test measures were made to check whether the implicit and explicit group could be considered similar. After that, a general comparison between control group and experimental group performance on the post-test was done so as to see whether there is an effect of difference in instruction on learning rules.

In order to consider the effect of treatment, two paired-samples t-tests were used on pre-and post-test scores of each group. Note that pre-and post-test scores are a pair of scores given to the same participant. To see whether there is difference between group performances due to treatment, a one-way ANOVA was performed on both groups' post-test scores.

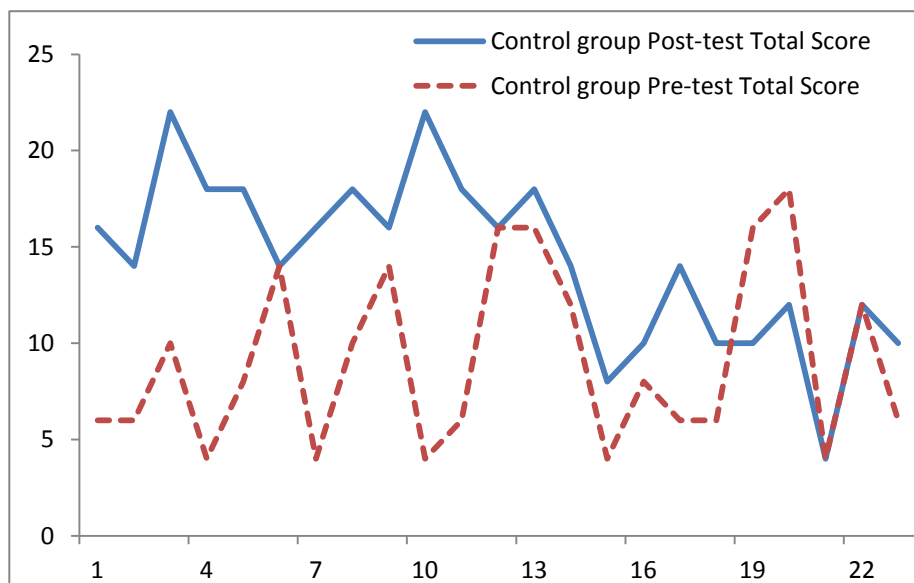
#### **4.2.4.3. Control Group Post-test vs. Pre-test Performance**

A paired samples t-test was conducted to compare the effect of implicit instruction in pre-and post-test. The results are given in the paired samples t-test summary (Table 4.21). There was a difference in the subjects' scores: in pre-test (Mean of Scores = 9.13) and post-test (Mean of Scores = 14.34),  $t(22) = 4.01$ ,  $p = 0,0002 < 0.01$ . Since p value is very low, we must reject the idea that the difference in scores before and after the instruction phase is due to chance. In addition, the computed t is greater than t critical value (both numbers are bolded in the paired samples t-test summary,  $t = 4.016 > 2.508$ ). In other words, this indicates that learners in the implicit condition benefited from the type of instruction and improved their performance on the study rules. Graph 4.5 depicts this as well. But the question remains: on which rule has such improvement occurred?

*Summary of the Paired samples T-test*

	<i>Post-test Scores</i>	<i>Pre-test Scores</i>
Mean	14,3478261	9,13043478
Variance	19,5098814	21,7549407
Observations	23	23
Pearson correlation	0,05947506	
Hypoth. MD	0	
<i>Df</i>	22	
<b><i>T Stat.</i></b>	<b>4,01626023</b>	
P(T<=t) unilatéral	0,00028985	
<b><i>Critical value</i></b>	<b>2,50832455</b>	
P(T<=t) bilatéral	0,0005797	
Critical value	2,81875606	

**Table 4.21: Control Group Post-test Scores Vs. Pre-test Scores**



**Graph 4.5: Control group Post-test Scores Vs. Pre-test Scores**



#### 4.2.4.4 Experimental Group Post-test vs. Pre-test Performance

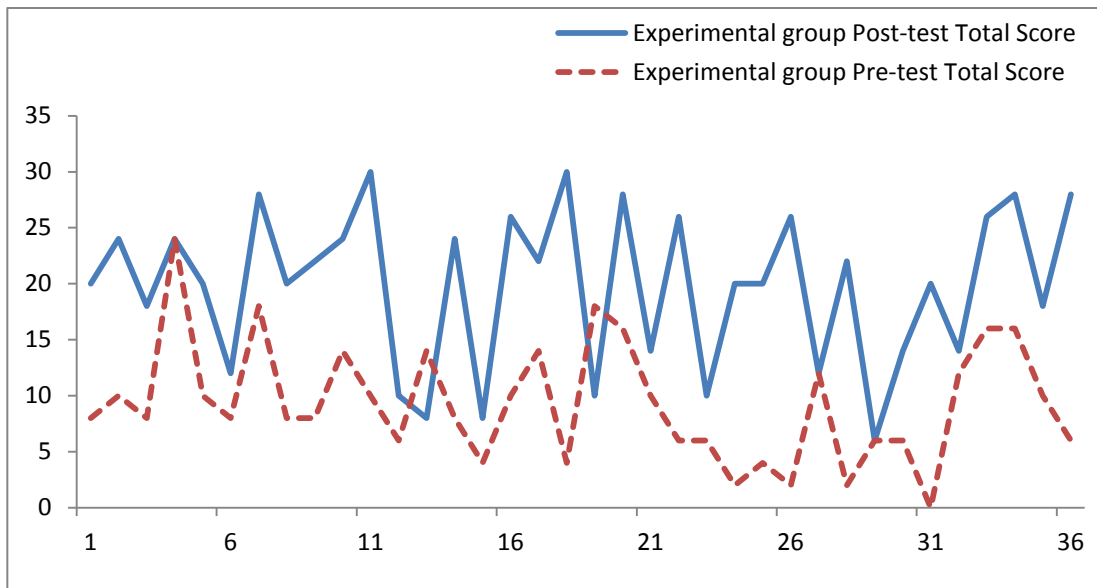
To evaluate the effect of explicit instruction on subjects' performance in pre-and post-test measures, a comparison between scores was made using a paired samples t-test. Its results are given in Table 4.22. These results show that there is a significant difference in subjects' scores: in pre-test (Mean = 9.33) and in post-test (Mean = 19.77);  $t(35) = 7.65$ ,  $p=2.77 > 0.01$ . The detailed summary of this test shows that the calculated  $t$  (T stat.) is more than thrice the  $t$ -critical value  $t = 7.65 > 2.43$  (both numbers are bolded). This indicates that the difference between performance in pre- and post-test is significantly great. Graph 4.6 joined to Table 4.22 shows clearly that the graph-lines are not overlapping all the time and are clearly distinct, which in fact proves visually how different was the learners' performance between pre- and post-test measures.

After this comparison, it becomes clear that both groups improved performance after the instruction phase. What remains to be considered is whether the two groups improved similarly. To check that, a further comparison needs to be performed between the control group and the experimental group post-test performance.

#### Summary of the Paired Samples T-test

	<i>Post-test Scores</i>	<i>Pre-test Scores</i>
Mean	19,7777778	9,333333333
Variance	48,6349206	28,34285714
Observations	36	36
Pearson correlation	0,13441448	
Hypoth. MD	0	
<i>Df</i>	35	
<b><i>T Stat.</i></b>	<b>7,65613323</b>	
P(T<=t) unilatéral	2,7747E-09	
<b><i>Critical value</i></b>	<b>2,43772255</b>	
P(T<=t) bilatéral	5,5494E-09	
Critical value	2,72380559	

**Table 4.22: Experimental group Post-test Scores Vs. Pre-test Scores**



**Graph 4.6: Experimental group Performance in Pre-test Vs. Post-test**

#### 4.2.4.5 Control Group vs. Experimental Group Post-test Performance

Unlike the previous comparisons in which paired data of the same subject are considered, this comparison concerns data from different subjects after a treatment. The best statistical candidate for such comparison according to Tavakoli (2013) is the one-way ANOVA. Thus, this ANOVA was conducted to compare the control group performance to the experimental group performance on the post-test; i.e., after treatment. The results are displayed in Table 4.23. The results indicate that the computed F ratio ( $f(58) = 11.066$ ) is greater to its reference f-critical = 7.10, with  $p = 0.002 < 0.01$ .

The one-way ANOVA indicates that even though both groups improved after treatment, as evidenced by the two previous comparisons, the experimental group performance shows a greater improvement. This is clearly exhibited by Graph 4.7, joined to the ANOVA Table 4.23, that indicates that both graph-lines are separate and that control group graph-line remains most of the time below the experimental group graph-line.

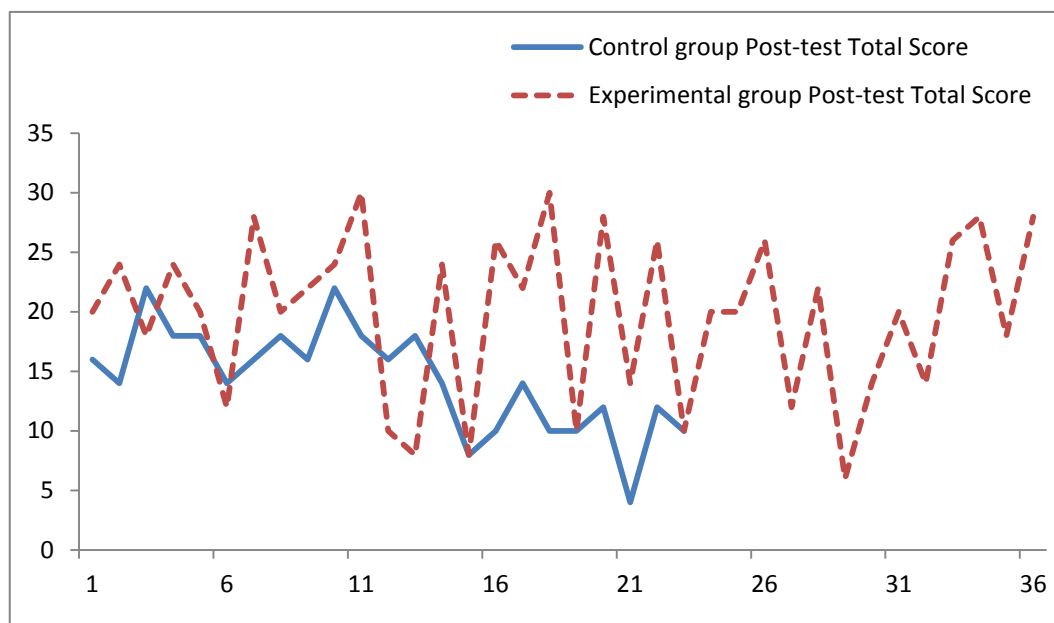
### Detailed Summary of the One-way ANOVA

Groups	No.		Mean	Variance
	Subjects	Sum		
Control group	23	330	14,3478261	19,51
Experimental group	36	712	19,7777778	48,635

### ANOVA

Variations sources	SS	df	MS	F	P value	F critical
Between groups	413,780725	1	413,780725	11,066	0,002	<b>7,10153469</b>
Within groups	2131,43961	57	37,3936774			
Total	2545,22034	58				

**Table 4.23: Control group Vs. Experimental group Post-test Scores**



**Graph 4.7: Control group Vs. Experimental group Post-test Scores**

In brief, the analysis showed significant main effects for instruction. However, it was surprising to discover that control group learners improved performance on the target rules as

well. To see in which rule that improvement occurred, three paired samples T-tests were performed comparing control group subjects' performance on the simple rule, complex rule1 and complex rule2 in pre-and post-test measures. The results of the analyses are given in Table 4.24, Table 4.25, and Table 4.26.

The results indicate that despite the fact that the mean values differ from pre-and post-test performance for each type or rule, the computed T value is not greatly significant for any rule. For example, the implicit learners' performance on complex rule 1 shows a difference in means from pre- to post-test measure (pre-test measure: Mean = 2.26; Post-test measure: Mean = 4.34). Yet, if we compare the calculated T value to its reference T critical we find no great variation:  $t(22) = 2.51$ ,  $p = 0.009 < 0.01$ , and T-critical value = 2.50. Conversely, on Complex rule2 and on the simple rule, implicit learners showed a slight variation. For simple rule performance, the calculated t was slightly less than tabulated t ( $t(22) = -2.45 < t = 2.50$ ). As concerns the second complex rule, performance slightly improved in the post test ( $t(22) = -2.72 > t \text{ critical} = 2.50$ ). If we compare the implicit learners' performance on rules, we notice that their performance on complex rules improved after treatment. Conversely, their performance on simple rule does not seem improved.

#### **Summary of the Paired Samples T-test**

	<i>Post-test scores</i>	<i>Pre-test Scores</i>
Mean	5,82608696	4,08695652
Variance	4,69565217	7,08300395
Observations	23	23
Pearson corrélation	0,03426832	
Hypoth. MD	0	
Df	22	
T stat.	<b>2,47206616</b>	
P(T<=t) unilatéral	0,01082277	
T critical value	<b>2,50832455</b>	
P(T<=t) bilatéral	0,02164554	
Valeur critique de t (bilatéral)	2,81875606	

**Table 4.24: Comparison between Control group Pre-test and Post-test Performance on Simple Rule**

**Summary of the Paired Samples T-test**

	<i>Post-test Scores</i>	<i>Pre-test Scores</i>
Mean	4,34782609	2,26086957
Variance	5,6916996	10,6561265
Observations	23	23
Pearson correlation	0,03451181	
Hypoth.MD	0	
Df	22	
T stat.	<b>2,51714124</b>	
P(T<=t) unilatéral	0,00980894	
T critical value	<b>2,50832455</b>	
P(T<=t) bilatéral	0,01961788	
Valeur critique de t (bilatéral)	2,81875606	

**Table 4.25: Comparison between Control group Pre-test and Post-test Performance on Complex Rule2****Summary of the Paired Samples T-test**

	<i>Post-test Scores</i>	<i>Pre-test Scores</i>
Mean	4,17391304	2,782608696
Variance	4,33201581	4,996047431
Observations	23	23
Pearson correlation	0,36023594	
Hypoth. MD	0	
Df	22	
T stat.	<b>2,72942035</b>	
P(T<=t) unilatéral	0,00612078	
T critical value	<b>2,50832455</b>	
P(T<=t) bilatéral	0,01224157	
Valeur critique de t (bilatéral)	2,81875606	

**Table 4.26: Comparison between Control group Pre-test and Post-test Performance on Complex Rule2**

The hypothesis that predicted that participants receiving explicit instruction perform better on tests measuring proficiency in the study selected rules than those not receiving instruction is supported by the data: the experimental group subjects improved greatly their ability in identifying grammatical and ungrammatical items representing the study simple and complex rules.

#### **4.2.4.6 The Effect of Explicit and Implicit Instruction on Learning Complex Rules**

To consider Hypothesis 2 that states that explicit instruction will be more effective than implicit instruction in the case of learning complex rules, two one-way ANOVAs were performed since we compare both conditions subjects' performance on two complex rules. Complex rule1 refers to the rule related to the formation of pseudo-cleft constructions headed by 'where' (where Anna is is at home). Complex Rule2 governs the formation of pseudo-cleft structures headed by 'what' (what Anna needs is a computer). The results of the ANOVA performed on subjects' scores on Complex Rule 1 and Complex Rule 2 are given in Table 4.27 and Table 4.28, respectively. Both tables show that the experimental group learners outperform the control group subjects: Their performance reaches a significant level  $f(58)=14.58$ ,  $p=0.0002 < 0.01$ , and  $f(58)=15.57$ ,  $p=0.0002 < 0.01$  on complex rule 1 and complex rule 2, respectively.

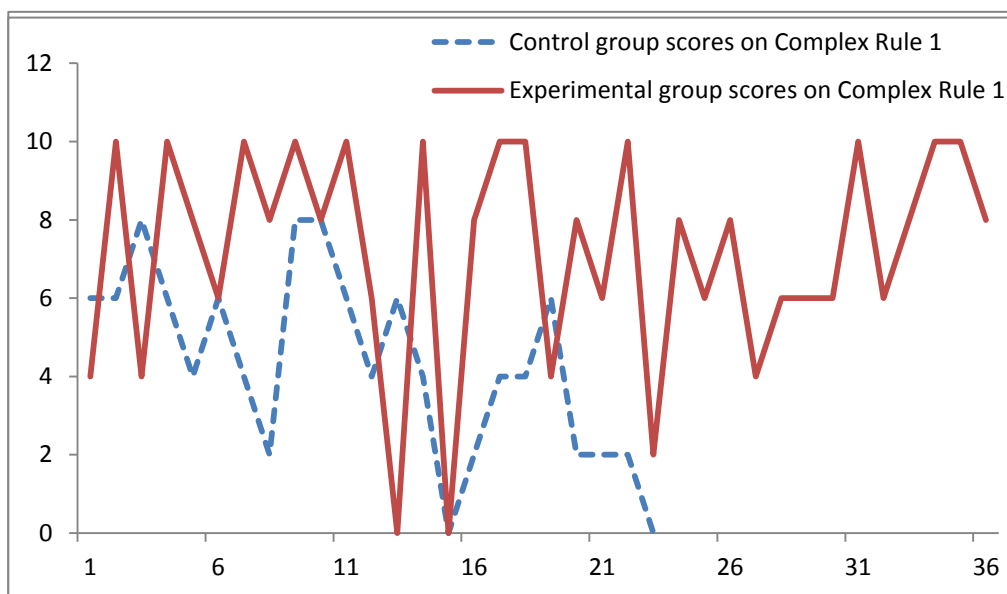
The one-way ANOVAs performed on both complex rules show that the computed F ratio ( $f(58)=14.58$ ,  $f(58)=15.57$ ) is twice greater than its reference tabulated value ( $f_{critical}=7.10$ ) which indicates that the difference between the experimental group and the control group is highly significant. This idea is visually clear in the two graphs joined to the Table 4.27 and 4.28, namely Graph 4.8, and Graph 4.9.

**Detailed Summary of the One-way ANOVA**

<i>Groups</i>	<i>No. Subjects</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>
Cont.group	23	100	4,34782609	5,6916996
Exper.group	36	258	7,16666667	8,08571429

<i>Variations sources</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P value</i>	<i>F critical</i>
Between groups	111,5	1	111,511422	<b>15,5705053</b>	0,00022	<b>7,101535</b>
Within groups	408,2	57	7,16170862			
Total	519,7	58				

**Table 4.27: The Effect of Explicit and Implicit Condition on Learning Complex Rule1**



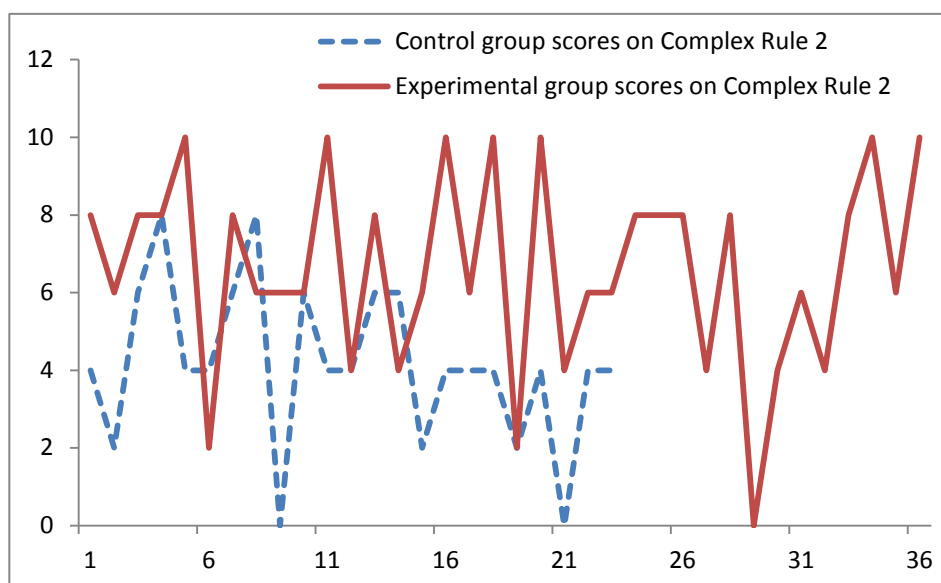
**Graph 4.8: Comparing the Effect of Explicit and Implicit Condition on Learning Complex Rule1**

### Detailed Summary of the One-way ANOVA

Groups	No. Subjects	Sum	Mean	Variance
Cont. Group	23	96	4,1739	4,332
Experim. Group	36	238	6,6111	6,587

Variations sources	SS	df	MS	F	P value	F critical
Between groups	83,3604	1	83,36	<b>14,58</b>	0,0003	<b>7,102</b>
Within groups	325,86	57	5,7168			
Total	409,22	58				

**Table 4.28: Comparing the Effect of Explicit and Implicit Condition on Complex Rule2 Learning**



**Graph 4.9: Comparing the Effect of Explicit and Implicit Condition on Learning Complex Rule2**

These results show that subjects in the experimental group became more accurate in identifying grammatical and ungrammatical sentences representing Complex rule 1 and Complex Rules 2 than subjects in the implicit condition. Results in the previous section show



that even implicit learners improved their performance on Complex Rules though their improvement was not as significant as the explicit learners'. The hypothesis that explicit instruction would cause learners in the experimental group to outperform control group learners on Complex Rules is supported by the results of this analysis. These latter show significant main effects for explicit instruction on learning Complex Rules.

#### 4.2.4.7 Comparison of Groups' Performance on Simple Rule with that on Complex Rules

To consider hypothesis 3 that predicts that explicit instruction will be more effective in the case of Complex Rule learning than Simple Rule learning, four paired Samples T-test were performed on post-test scores of both groups. The results are given in Table 4.29, Table 4.30, Table 4.31 and Table 4.32. In each paired samples T-test, we could not notice a significant difference between the computed t-value and its reference value, the t-critical value. This implies that in both conditions, learners' performance on Simple Rule was not that different to their performance on Complex Rules.

##### **Summary of the Paired Samples T-test**

	<i>Simple R. Scores</i>	<i>Complex R.1 Scores</i>
Mean	5,82608696	4,34782609
Variance	4,69565217	5,6916996
Observations	23	23
Pearson correlation	0,18808131	
Hypoth. MD	0	
Df	22	
T stat.	<b>2,43991465</b>	
P(T<=t) unilatéral	0,01160458	
T critical value	<b>2,50832455</b>	
P(T<=t) bilatéral	0,02320917	
Valeur critique de t (bilatéral)	2,81875606	

**Table 4.29: Control group Performance on Simple Rule Vs. Complex Rule1**

**Summary of the Paired Samples T-test**

	<i>Simple R. Scores</i>	<i>Complex R.2 Scores</i>
Mean	5,82608696	4,17391304
Variance	4,69565217	4,33201581
Observations	23	23
Pearson correlation	0,20857558	
Hypoth. MD	0	
Df	22	
T stat.	<b>2,96401725</b>	
P(T<=t) unilatéral	0,00358356	
T critical value	<b>2,50832455</b>	
P(T<=t) bilatéral	0,00716713	
Valeur critique de t (bilatéral)	2,81875606	

**Table 4.30: Control group Performance on Simple Rule Vs. Complex Rule2****Summary of the Paired Samples T-test**

	<i>C.R 1 scores</i>	<i>S.R scores</i>
Mean	7,16666667	6
Variance	8,08571429	10,9714286
Observations	36	36
Pearson correlation	0,55816036	
Hypoth. MD	0	
Df	35	
T stat.	<b>2,39495009</b>	
P(T<=t) unilatéral	0,01105447	
T critical value	<b>2,43772255</b>	
P(T<=t) bilatéral	0,02210895	
Valeur critique de t (bilatéral)	2,72380559	

**Table 4.31: Experimental group Performance on Simple Rule Vs. Complex Rule1**

### Summary of the Paired Samples T-test

	<i>C.R 2</i>	<i>S.R scores</i>
Mean	6,61111111	6
Variance	6,58730159	10,9714286
Observations	36	36
Pearson correlation	0,51084622	
Hypoth. MD	0	
Df	35	
T stat.	<b>1,23093693</b>	
P(T<=t) unilatéral	0,11327728	
T critical value	<b>2,43772255</b>	
P(T<=t) bilatéral	0,22655457	
Valeur critique de t (bilatéral)	2,72380559	

**Table 4.32: Experimental group Performance on Simple Rule Vs. Complex Rule2**

Previous analyses in this chapter have proved that implicit learners' performance on rules has not changed significantly before and after treatment. Conversely, these analyses evidenced significant effects of instruction on explicit condition learners as shown in Table 4.31 and Table 4.32. Results in the paired samples t-tests conducted in this sub-section indicate that each group's performance on simple rule is not significantly higher than their performance on complex rules. So, within groups there was no significant difference in performance on simple or complex rules in post-test measure. However, it is worth noting that learners in both conditions performed better on the simple rule than on the complex rules in the pre-test measure. This implies that after treatment, their performance on the complex rules reached the level of performance on the simple rule.

To see whether that similarity in performance holds true if comparisons were carried out between groups, an additional one-way ANOVA was performed. The results are given in Table 4.33. As concerns the simple rule, the ANOVA result is  $F(58)=0.049$ ,  $p=0.82 > 0.01$ . If

compared to the critical F value ( $F_{critical} = 7.10$ ), we see that the computed F is very small. This indicates that though there is difference in Groups' mean scores (5.82 and 6), this difference is not significant, i.e., subjects in both conditions perform similarly on the target simple rule at the post-test. Concerning the complex rules, learners' performance varies in accordance to condition. In other words, learners in the explicit condition highly outperform learners in the implicit condition on complex rules. The ANOVAs results which have previously been considered in Table 4.27 and Table 4.28 (pp. 130, 131) show that significance clearly. Briefly, as far as the complex rule1 is concerned, the test result  $F(58) = 15.57$ ,  $p = 0.0002 < 0.01$  is twice higher than the tabulated  $F = 7.10$ . Moreover, the same significant difference is observed concerning performance on complex rule2:  $F(58) = 14.58$ ,  $p = 0.0003 < 0.01$  is again twice greater than the F critical value ( $F_{critical} = 7.10$ ).

#### **Detailed Summary of the One-way ANOVA**

<i>Groups</i>	<i>No.subjects</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>
Control group	23	134	5,82609	4,6956522
Experimental group	36	216	6	10,971429

<i>Variations sources</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P value</i>	<i>F critical</i>
Between groups	0,4245	1	0,42447	<b>0,0496498</b>	0,8245	<b>7,101535</b>
Within groups	487,3	57	8,5492			
Total	487,73	58				

**Table 4.33: Comparing the Effect of Explicit and Implicit Instruction on Learning the Target Simple Rule**

The hypothesis predicting the effect of explicit instruction to be greater on learning complex rules than on learning simple rules is supported by the results. Learners in the explicit condition greatly outscored learners in the implicit condition as far as the complex rules are concerned, but scored nearly similarly on the target simple rule. This proves that the effect of explicit instruction on complex as opposed to simple rules was confirmed.

#### **4.2.5 Interpretation of the Results**

Results of the present study make evident three major findings. First, a strong positive effect of explicit instruction was demonstrated for the experimental group subjects who have undergone exposure to sentences as well as explanations of the rules they illustrate plus practice. The explicit condition learners showed a significant improvement in performance. Actually, these results are in line with the findings reported by many SLA researchers like Alanen (1995), Doughty (1991, 2001, 2004), DeKeyser (1995, 1997), De Graaff (1997), N. Ellis (1993), R. Ellis (2010), Robinson (1995a, 1995b, 1996a, 1996b, 1997), Rosa and O'Neill (1999), Gass and Selinker (2008), Norris and Orthegea (2000), and Spada and Tomita (2010). Furthermore, my modest contribution in my Magister work (Belkacem Bouricha, 1999) has shown similar results as those reported here.

One possible explanation for the positive effect of explicit instruction, as stated by the above-cited researchers, is that explicit information about the rules could have focused learners' attention on the formal properties of the target language features, hence leading them notice any eventual sentence illustrating the rules in input. Many cognitivists claim that focal attention and noticing are greatly effective for learning (Carr and Curran 1994; Anderson 1992; Schmidt 1990, 1995, 2001; Knowlton and Squire 1994). They held that focused attention and noticing is required for structural learning to occur. Baars (1988, 1997) even went further by holding an orthodox position in psychology, claiming that there is little, if any learning, without attention. According to him, unattended stimuli stand in short-term memory for only a few seconds at best, and attention is the necessary and sufficient condition for long-term memory storage to occur.

In SLA as well, the claim has often been made that attention and noticing are necessary for input to become available for further mental processing (Schmidt, 1995). Schmidt holds that preparatory attention and directing attention greatly improve encoding. In

other words, if teachers focus learners' attention on the formal features of the language, it would largely improve their understanding, noticing in input and even eventual use. For Schmidt, SL/FL learning is largely a side-effect of attended processing of explicit information about language structures. Proponents of the Interface Position claim that explicit instruction provides learners with explicit information about the structures of the language. Those rules are not seen as having only a monitoring function as claimed by Krashen (1993), but as having a facilitating effect of internalizing the grammatical system of the language. This corresponds with Green and Hecht (1992: 178) who state that:

... Classroom learners with learned rules under their belt and confronted by a grammar test – a classic Krashen Monitor situation - operated to a large extent by feel. That is to say, they corrected largely by implicit rules, which very possibly had been facilitated by explicit rules.

In short, the positive effect observed for explicit instruction could be due to the fact that explicit instruction facilitates language processing and consequently fosters conversion of the explicit knowledge to implicit automatic knowledge.

The second finding was that neither explicit nor implicit instructional treatment was effective with respect to gains on learning the simple rule: Experimental group Gain Mean= 0.95 and Control group Gain Mean= 1.74. The results, which are summed up in Table 4.34 and Table 4.35, showed that both groups have almost equal mean scores on the simple rule since the computed f ratio ( $F(58) = 0.049$ ,  $p = 0.82 > 0.01$ ) was greatly smaller than tabulated  $F = 7.10$ . Considering these data, we could conclude that these results do not support Krashen's (1992) and Reber's (1993) claims that only simple rules are consciously learnable.

	<i>Experimental Group</i>		<i>Control Group</i>	
Type of Rule	Pre-test	Post-test	Pre-test	Post-test
Simple Rule	5.05	6	4.08	5.82
Complex Rule1	1.77	7.16	2.26	4.34
Complex Rule2	2.5	6.61	2.78	4.17

**Table 4.34: Summary of Subjects' Mean Scores on Simple and Complex Rules**

Comparison	Simple Rule	Complex Rule1	Complex Rule2
Post-test Experimental Group Vs. Control Group Scores	F(58)=0.049, F critical=7.10	F(58)=15.57, F critical=7.10	F(58)=14.58, F critical=7.10
Pre-test Control Group Scores Vs. Post-test Control Group Scores	T(22)= -2.45, T critical= 2.50	T(22)= -2.51, T critical= 2.50	T(22)= -2.72, T critical= 2.50
Pre-test Experimental Group Scores Vs. Post-test Experimental Group Scores	T(35)= -1.43, T critical= 2.43	T(35)= -8.27, T critical= 2.43	T(35)= -6.35, T critical= 2.43

**Table 4.35: Summary of Comparisons of Subjects' Performance on Rules**

Believing that if providing learners with enough comprehensible input as claimed by Krashen (1982), mastery of language features is guaranteed; all ESP texts and reading comprehension activities were abundantly supplied with sentences exemplifying the target rules. These sentences were most of the time employed to answer the exercises questions. Such redundancy was believed to be a potential source of benefit to both groups of learners. According to Fotos (2002), the success of implicit instruction depends on abundant

communicative activities. In fact, the researcher used the extreme implicit instructional technique of focusing learners' attention to the formal features of the language known as 'the Input Flood'. However, as concerns the simple rule, such abundance of sentences illustrating the target rules was not beneficial though it was expected that simple grammatical rules regulating language structures may be clear enough in the input to be noticed and processed spontaneously without explicit instruction. Had this implicit instructional technique been effective, we should have observed implicit learners' performance improve after the instruction phase. It appears, then, that the implicit condition did not make a difference probably because the learners did not notice the sentences illustrating the target rules that were embedded in ESP texts and exercises. It is undeniable that the implicit learners' Mean Gain score on the target simple rule (Post-test Mean score - Pre-test Mean score = Mean Gain score:  $5.82 - 4.08 = 1.74$ ) is greater than the explicit learners' ( $6 - 5.05 = 0.95$ ), but it was not as significant as expected and evidenced by the statistical tests. Moreover, the slight difference observed between the control and experimental group learners' Mean scores (5.82 and 6, respectively), as could be seen in Table 4.34 and 4.35, could be explained by the fact that all sentences that were presented to the implicit learners in the ESP texts and exercises were all grammatical. Therefore, these learners were provided with examples of learning from positive evidence without the benefit of negative evidence that would have been beneficial in identifying ungrammatical sentences illustrating the target rules.

It was surprising to find that the learners who had been presented explicit information about the target language structures did not improve their performance on the target simple rule after instruction. Knowing that these learners were provided with examples of learning from positive and negative evidence (unlike the instructed group in Robinson, 1996), plus explanations and information about the rules constraints; it was expected that their performance on the simple rules, which are known to be salient and easily processed, would be largely significant. This totally contradicts Krashen's and Reber's claims that predict simple rules to be the only candidates for explicit instruction. One possible explanation could be that knowing the constraints on the simple and complex rules, explicit learners were more concerned by scanning sentences illustrating complex rules which are believed more challenging than focusing on sentences representing the target simple rule in which the scan is



not demanding or effortful. Indeed, after the post-test, the researcher asked personally a learner whose performance on the simple rule sentences was poorer than on the complex rules. The learner said that she concentrated on the complex sentences since difficult to identify as correct or incorrect, and that she answered automatically on the simple sentences thinking they do not need much attention. This implies that if the simple rule was tested separately from the complex rules, other results could possibly be found. Another possible explanation to subjects' performance on the simple rule was that this is the best level they could achieve, bearing in mind that the study subjects are majoring in Economics not English language studies.

The third finding is that as regards the differential effect of explicit instruction on the learning of complex rules as opposed to simple rules, strong evidence could be reported. The evidence of performance on complex rules does not support Krashen's and Reber's claims that implicit learning will be superior to explicit learning when the stimulus domain is complex. Yet, these results are in line with similar findings reported in Hulstijn and De Graaff (1994), DeKeyser (1995), Doughty (1991), Robinson (1996a, 1996b), Andrews (2007), Gass and Selinker (2008), Spada and Tomita (2010) and Reed and Johnson (1998). For instance in Reed and Johnson's study (1998), findings show that rules of different complexity exhibit different learning rates under explicit but not implicit condition. In the present study, subjects in the explicit condition performed more accurately and outscored implicit learners on the complex rules. Such a considerably satisfying performance could be explained as such: providing learners with explicit knowledge about language rules would eventually enable them make correct grammatical judgments. According to Robinson (1996a), to judge a sentence as grammatical or ungrammatical, the learner must scan the sentence so as to find evidence confirming or disconfirming sentences grammaticality. For instance, as concerns the simple rule, the learner can easily get evidence confirming ungrammaticality by two checks: if subject-verb inversion occurs, check whether the adverbial of place fronts the sentence, and if there is no adverb of place fronting the sentence, the sentence is ungrammatical. As regards the complex rule, however, the task is harder for the learner: s/he has to check all possible violations to the rule constraints so as to reach correct judgment of sentence grammaticality. According to Robinson, the search for evidence is more effortful in the complex rule

sentences as opposed to simple rules. These checks could be performed by explicit learners who were presented examples of both simple and complex rules in profusion, in addition to explicit information, positive and negative evidence of the grammatical sentences in lessons and exercises. Scanning complex sentences would be effortful but possible for explicit learners. Yet, such a scan for evidence confirming or disconfirming sentence grammaticality could not be effective for implicit learners owing to the absence of information about the rule constraints whose violation makes the sentence ungrammatical. According to the Computational Model of SL/FL acquisition, this information would have enriched the database of the learners' rule-based knowledge, and hence could be retrieved at need. In this case, access to the rule-based knowledge is ineffective for the implicit learners. Moreover, by considering implicit learners' results at the post-test, we notice that their performance improved as concerns the complex rules, but not as significantly as the explicit learners'.

A possible explanation is that the implicit learners may have somehow learned the complex rules merely by interacting with the structures provided in ESP texts and activities and by such they have unconsciously analyzed the material while processing it for meaning. According to the Interaction Hypothesis (Long, 1996), if learners are provided with sufficient opportunities to interact with the language, they can somehow assimilate and correctly form the structures without explicit instruction of the rules. This finding is in line with N. Ellis (1993) results who concluded that there can be implicit learning even with random exposure.

It is worth noting that although explicit learners' performance on the target simple rule did not improve significantly after the instruction phase, their performance on the target complex rules improved and reached their simple rule performance level. This performance could possibly be explained as such: after treatment, instructed learners performed on complex rules as if these rules have become simple. As a result, one could deduce that explicit instruction causes easiness, that is to say, it simplifies complex structures.

In brief, these findings contradict researchers' claims that explicit instruction is not effective and that only simple rules are learnable, but are in line with findings reported by many SLA researchers like Hulstijn and De Graaff (1994: 103) who concluded that: 'Explicit instruction has more effect in the case of complex rules than in the case of simple rules.'

## **Conclusion**

The findings of the present study confirm claims about the effectiveness of explicit instruction on learning complex rules. The experimental group learners' performance on complex rules improved greatly on the post-test measure. The importance of drawing learners' attention to the target rules was demonstrated. The explicit learners outperformed the implicit learners. This advantage is attributed to the explicit instruction treatment that brought the rules underlying the presented sentences into prominence, and thus eased their noticing. It was concluded that explaining rules, practicing them and providing positive and negative evidence of what is possible in language is effective because it fosters language processing. Implicit and explicit instruction is shown to have little effect on learning simple rules. Groups in both conditions performed almost similarly on the target simple rule. Results on the post-test measure demonstrate that. This finding disconfirmed the researcher's expectation that sentences illustrating simple rules may be clear enough in input and could eventually be spontaneously processed without explicit instruction.

However, these findings reject some researchers' claims that only simple rules are learnable through explicit instruction and that only implicit condition could lead to mastery of complex rules. Findings of the present study evidence that explicit instruction has a strong effect on learning complex rules, and by this contradict researchers' claims that implicit instruction is superior to explicit instruction where the stimulus domain is complex. As illustrated by the results, explicit learners greatly outscored implicit learners in identifying grammatical and ungrammatical sentences representing the complex rules. This advantage

was attributed to explicit information about the language forms that avoided learners ineffective hypothesis testing and thus made their grammaticality judgment less effortful and effective. The research questions considered in this study could be of importance to SL/FL research if the findings could be of benefit to SL/FL pedagogy.

# **Chapter Five**

## **Pedagogical Implications**

### **Introduction**

#### **5.1 How Best Focus Learners' Attention to Form: Instructional Activities**

##### **5.1.1 Consciousness-raising Tasks**

##### **5.1.2 Input Processing**

##### **5.1.3 The Garden Path**

#### **5.2 Ways for the Presentation of the Teaching Material**

#### **5.3 Some Considerations about Teaching Simple and Complex Grammar**

### **Rules**

### **Conclusion**

## **Introduction**

Over the last fifty years, grammar teaching in the SL/FL classroom has been an important and controversial issue. In the history of language teaching, the role of grammar has been addressed by several linguistic theories and methodologies. The way grammar is regarded has a direct and decisive influence on the elaboration of pedagogical grammars, learning processes and many other areas involved in language teaching. Countless empirical and theoretical studies, among which is the present study, considered grammar teaching and revealed that explicit teaching of grammar is beneficial to SL/FL acquisition. The main advantage was attributed to the effect of focusing learners' attention on the target language features. The question that arises at this point is how to make learners focus their attention on the complex language forms pedagogically.

### **5.1 How Best Focus Learners' Attention on Form: Instructional Activities**

Considering research related to how best focus learners' attention to grammatical forms, it was found that it could be accomplished in several ways. For instance, teachers could design a task to encourage learners to notice forms in the input (e.g., prepositions such as *in*, *on*, *under*), or they could teach these forms explicitly and provide opportunities for meaningful practice. Generally, the teacher is the one who draws learners' attention to specific language forms, but it could happen that learners initiate discussion on grammatical features through questions and requests for explanation.

As evidenced by the findings of the present study, explicit instruction is more effective than implicit instruction. It was found as well that explicit instruction is significantly effective for complex rules. This implies that syllabus designers and teachers should consider including explicit instructional techniques for focusing learners' attention on complex grammatical forms in classroom. There are several strategies for focusing learners' attention to form in instruction. They generally range within the implicit-explicit continuum. Our concern as far as the present research work findings are considered is the explicit techniques. The most important explicit instructional activities are consciousness-raising tasks, input processing and the garden path technique.

### **5.1.1 Consciousness-Raising Tasks**

Generally, during the consciousness-raising tasks, learners are encouraged to determine grammar rules from evidence presented. The term consciousness-raising, as used by Rutherford and Sharwood Smith (1985), refers to the deliberate attempt to draw the learners' attention particularly to the formal properties of the target language.

Rutherford (1987) explains that the matter of raising the learners' grammatical consciousness is multifaceted and can be divided into activities that ask the learner for a judgment and those that propose a task to be performed or a problem to be solved. Consciousness-raising tasks aim at noticing the gap between a learner's interlanguage system and the native speaker's norms of the target language. Learners are able to hypothesize about how language works and structure their interlanguage system. Further exposure leads successively to further noticing and restructuring. In the process of self-discovery, learners bring to the task different prior knowledge and overgeneralized rules from their previous

learning. Consciousness raising tasks involve active manipulation of the language under focus and provide good conditions for noticing and sustained emphasis on re-noticing (Schmidt, 1990, 1995, Doughty & Williams, 1998; Spada, 1997; Swain, 1993; among others). These mental processes of *noticing*, *structuring* and *restructuring* allow learners to organize language flexibly, combining elements from grammar and lexis productively.

Teachers should aim at designing and implementing tasks in the classroom which encourage learners to focus on form and language use, to give them flexibility to solve any problem they might encounter and to raise their awareness of processes of language use. A consciousness-raising task can be used deductively or inductively: inductive tasks provide students with several sentences which contain a certain linguistic item in order to search for the rules themselves from the given data; conversely, deductive tasks provide students with explicit grammatical explanation and rules in advance.

➤ **Deductive Task for the Comparatives**

- ❖ Grammar explanation (Rule): If an adjective word has 3 syllables, add the word “more” to the word.
- ❖ Examples
  - She is beautifuler than me. (Incorrect)
  - She is more beautiful than me. (Correct)
- ❖ Now write one sentence of your own, using this rule

➤ **Inductive Task for Comparatives**

- ❖ Examples



- She is more beautiful than me.
- This book is more important than that book.
- He is more generous than her.

❖ Now find the rule of comparatives:

.....

.....

.....

❖ Add the word \_\_\_\_\_ to an adjective word having 3 syllables.

### 5.1.2 Input Processing

Van Patten’s input processing attempts to explain how learners get ‘form’ from input and how they parse sentences during the act of comprehension while their primary attention is on meaning” (Van Patten, 2002: 757). Input processing tasks, which are more explicit techniques than consciousness-raising tasks, aim at improving learners’ intake (the input learners actually comprehend) in terms of form, function, and meaning. In a practical example of this teaching technique, the teacher would use examples to explain a target grammar form and require the learners to analyze the sentences by focusing on the target form and the meanings it realizes (Nassaji and Fotos, 2010). For instance, if the target form is past tense, the teacher should explain specific rules about the past tense and read several sentences containing both target and non-target forms to learners (positive and negative evidence). Finally, the teacher would ask learners to decide whether the sentences indicate an action that was done before or now. By doing so, the teacher could check students’ understanding of the target form and occurrence of form-meaning mapping.

*Now/ Before*

1. The teacher corrected the essays. \_\_\_\_ \_\_\_\_
2. The man cleaned the table. \_\_\_\_ \_\_\_\_
3. I wake up at 5 in the morning. \_\_\_\_ \_\_\_\_
4. The train leaves the station at 8 am. \_\_\_\_ \_\_\_\_
5. The writer finished writing the book. \_\_\_\_ \_\_\_\_
6. The trees go green in Spring. \_\_\_\_ \_\_\_\_

### **5.1.3 The Garden path**

Garden path, the most explicit technique, refers to a process in which a teacher encourages learners to make overgeneralizations concerning a grammatical rule in order for the learners to notice the form more effectively. That is to say, when a teacher plans to teach a certain target form, the teacher only briefly explains the major rules of the form instead of its exceptions. Then, the teacher corrects students' errors, providing the rule of the exceptions when students' overgeneralizations actually occur. Doughty and Williams (1998) assert that leading learners to make grammatical overgeneralizations and correcting their errors subsequently has a more positive effect on the learner's memorization of a form than traditional grammar instruction.

Example of Garden Path adjectives

❖ **Path:**

- Cute - the cutest
- Close – the closest
- Grand - the grandest

### ❖ Exception

- Beautiful - the \**beautifulest*

Nation & Newton (2008: 140) give the following example of a typical garden path technique:

Teacher: Here is a sentence using these words: *think* and *problem*.

*I thought about the problem.*

Now you make one using these words: *talk* and *problem*.

Learner: We talked about the problem.

Teacher: Good. *Argue* and *result*.

Learner: We argued about the result.

Teacher: Good. *Discuss* and *advantages*.

Learner: We discussed about the advantages.

Teacher: No. With *discuss* we do not use *about*.

In the example above, the student is corrected and thereby is made aware of the exception to the grammatical rule. Celce-Murcia (2007) suggests that, instead of creating grammar correction exercises using decontextualized sentences from learners' writing, teachers should create short texts that include common error types made by students in their writing. Students can work together to edit the more authentic texts, which helps them learn to correct their own work more successfully. Although much SL/FL acquisition research has centered on awareness-raising and noticing activities like those described above, there are grammar production activities that aim at drawing learners' attention to form as well.

## **5.2 Ways for the Presentation of the Teaching Material**

The present research work suggests that noticing the language feature in input is pre-requisite for learning to happen. Therefore, it is suggested that the grammar teaching material should be composed of a series of units, each targeting a grammatical complex feature, as carried out in the present experiment. Any of these units will be presented in five stages which are mainly comprehending, noticing, understanding the grammatical form, checking and trying.

During the comprehending stage, learners read/listen to a text abundantly supplied with examples representing the target structure. At this stage, learners are asked to pay attention to the meaning of the text. In the noticing stage, learners read/listen again to the text and are required to complete an exercise. This fill-in the gaps exercise will make learners to notice the structure since they will have sometimes to read/listen many times to the text to obtain the missing information. Actually, this activity aims at making learners identify incidentally the structure in input. In the understanding the grammatical form stage, learners are helped to understand the target structure, thus the rule underlying it. During this stage, learners will perform a task that helps them analyze data and develop explicit knowledge of the grammatical element under study. In the fourth stage, learners are presented activities whereby learners' final rule could be checked for accuracy by referring to the provided key-answer handed-out by the teacher. In fact, these checking activities are grammaticality judgment tasks, in which learners are given a written text/series of sentences containing errors and are required to identify the error and to correct it. In the last stage, learners are given the occasion to try their understanding of the targeted structure in a production exercise. In fact,

this activity aims more at consolidating learners' knowledge of the structure than at practicing it.

In practical terms, teachers are advised to begin with activities that require learners to process input, since input forms the building blocks of the developing interlanguage system. Once learners have noticed the form in input, it is recommended that teachers provide activities, namely grammaticality judgment tasks that help learners notice how their possible production may differ from the target and by this guiding them to notice the gap.

To prevent likely outcomes of learners' developmental unreadiness, it is suggested that a gradual mastery by means of a cyclical re-presentation of the target grammatical features is known to be helpful (Ellis, 1993). By gradual mastery, it is meant that the teacher guides the learner through this series of stages involving receiving knowledge, fixing it in memory and developing the ability of using it as a skill by checks and trials. Doubting the effectiveness of a single treatment of grammatical information, teachers are advised to direct learners' attention at the same item on several occasions and in different combinations (cyclical re-presentation) so as to ensure an eventual mastery of those language features. It is believed that fostering a gradual mastery of the target structures does not demand a particular attention to learners' developmental level since the grammatical items are re-presented cyclically. Therefore, what has not been acquired because of developmental unreadiness could possibly be acquired later on since it could be presented again in several occasions.

### **5.3 Some Considerations about Teaching Simple and Complex Language Features**

According to some researchers, integrating form within communicative activities is more suitable for complex language features that are by their nature too complex to be successfully taught in isolated explicit instruction and therefore difficult to be learnt through the traditional explanation plus practice method (Krashen, 1985; Hulstijn, 1995; Spada and Lightbown, 2008). However, the present study as well as many of the studies reviewed by Spada and Tomita (2010) found that learners benefit more from explicit instruction especially concerning complex forms. Andrews (2007) suggests that only complex structures should be focused on in isolation; simple structures could easily be learnt through and integrated in communicative activities.

Concerning what should be taught first: the simple or complex rules? It is believed that both time and learning context are important determining factors. If class time is limited but input is sufficiently effective and comprehensible, learners could be left to discover simple rules by themselves. However, complex rules should be devoted time and concentration to guide learners to their acquisition. In other words, self-discovery of rules could be possible in contexts providing rich and abundant opportunities for noticing to occur, which is the case of SL situations. Conversely, foreign language situations are well-known as input-poor environments. Knowing this, it would be preferable to guide learners in learning rules including those that are straightforward for them to discover on their own in input. Therefore, context is as important as time in deciding which of the rules should be taught explicitly and in which order. Doughty and Williams (1998: 225-226) claim that ‘In foreign language classrooms, however, it may be more effective to assist learners even in figuring out rules they might discover on their own, given time and input.’ Seeing that the Algerian school

presents a case of FL context, it is preferable then to focus learners' attention on grammatical features that are known to be either complex or simple.

## **Conclusion**

Teaching grammar is not everything in SL/FL pedagogy. However, grammar is an important part of language, and is arguably more important for SL/FL learners than for first language users. Teaching grammar explicitly leads to learning, and even to unconscious knowledge of grammar features. Planning to teach grammar makes sense. The wisdom of the community of teachers has kept explicit grammar teaching alive through the tides of methodological fashion. When this happens, it usually means that there is some point to the practice. However, it is important to question practice and to look for evidence. In this study, I have attempted to consider evidence that researchers have collected to support explicit grammar teaching. I must confess that research has not produced a consensus on the best way to teach grammatical features and more particularly simple and complex grammatical rules; yet, research supplied teachers with many interesting and suggestive insights. The instructional techniques stated in this chapter together with the considerations about teaching simple and complex rules could constitute a possible basis for decisions about grammar teaching in specific contexts. Essentially, the decision as to the best way to teach grammar has to be taken by the practitioner within a specific situation, informed by research and by his or her own professional experience and judgment. One goal of SLA is to explain the external and internal factors that account for why learners acquire a SL/FL in the way they do, and many studies have been conducted for that sake. In light of this study, I suggest that if the class is for academic purposes, teachers and syllabus designers might seriously consider an explicit approach especially for complex structures. For the teachers who are presenting

complex concepts and also feeling the need to maximize learning, explicit instruction for complex rules is an option to be seriously considered.



## CONCLUSION

There is a considerable debate in second language acquisition and pedagogy about the relative merits of explicit grammar instruction. Some researchers claim that learning metalinguistic information and pedagogical rules is not an effective way to acquire a second/foreign language and could actually interfere with the natural second/foreign language developmental process (Krashen, 1981, 1982; Krashen & Terrell, 1983; Reber, 1993), that some language features especially complex ones are acquired without conscious awareness from the learner or any intervention from the teacher, and that only simple language structures are learnable. Others, however, have advanced counter-arguments to the Non-Interface Position, stating that explicit instruction is beneficial and its effectiveness is mainly due to focusing learners' attention on form. The benefits of focusing learners' attention on form have been shown by several studies, as reported earlier in the literature review (for example, Alanen, 1995; de Graaf, 1997; DeKeyser, 1995, 1998; Doughty, 1991; N. Ellis, 1993; Lightbown, 1991, 1998; Lightbown & Spada, 1990; Nagata, 1993; Robinson, 1996, 1997; Spada & Lightbown, 1993; Swain, 1985; Williams & Evans, 1998).

Furthermore, the effectiveness of explicit instruction has been clearly shown in two meta-analysis studies (Norris and Ortega, 2000; Spada and Tomita, 2010), which synthesized data from 49 and 30 published articles, respectively. Norris and Ortega's (2000) secondary analyses of primary investigations in Second Language Acquisition concluded that explicit

types of instruction produce more substantial effects than implicit/incidental instruction, and that the effectiveness of explicit instruction is durable over time. More recently, Spada and Tomita (2010) reported that explicit instruction is more effective for both simple and complex forms, and that it positively contributes to learners' use as well as controlled knowledge of complex and simple forms. Many of these studies showed that language rules of different degrees of complexity show dramatically different learning rates under explicit but not implicit conditions

For further evidence, the present study was conducted for investigating the effects of grammar instruction on learning simple and complex rules. In other words, this research work aims at investigating which of the two types of grammar instruction, namely explicit or implicit, is amenable to learning simple or complex grammar rules. Knowing that such theoretical considerations have influence on decisions concerning grammar learning and teaching, this work aims at providing the Algerian teachers and syllabus designers with some insights about how best teach grammar in a second/foreign language context. The study followed an experimental design that included a pilot study, a control and an experimental group, and the use of a pre- and a post-test after an instruction phase. This study was carried out to answer these questions: Do learners receiving explicit instruction outperform learners who do not receive explicit instruction?, does explicit condition subjects' performance on the study of complex rules outperform implicit condition subjects' performance? and are explicit condition learners' scores better in the case of complex rules than in the case of simple rules? The results show significant positive effect for Explicit Instruction, that subjects in the experimental group become more accurate in identifying grammatical and ungrammatical sentences representing complex rules than subjects in the implicit condition and that the effect of explicit and implicit instruction is not significant in learning simple rules. The findings of

the present study confirm claims about the effectiveness of explicit instruction on learning complex rules. The experimental group learners' performance on complex rules improved greatly on the post-test measure. The importance of drawing learners' attention to the target rules was demonstrated. The explicit learners outperformed the implicit learners on both simple and complex rules. This advantage is attributed to the explicit instruction treatment that brought the rules underlying the presented sentences into prominence, and thus eased their noticing. It was concluded that explaining rules, practicing them and providing positive and negative evidence of what is possible in language is effective because it fosters language processing. It was implied that explicit grammar instruction undoubtedly deserves more attention in language teaching-learning situations. Such findings seem to imply that knowing more techniques of grammar can provide a fertile ground for learners of English as a Foreign Language to enhance their level of accuracy. In addition, it is important to raise English as a Foreign Language teachers' awareness of the existence of techniques of grammar and of the benefits of grammar instruction. However, it is necessary for EFL teachers to develop their own knowledge of grammar to help their instruction become more authentic. Moreover, in terms of teaching methodology, the results of the present study suggest that there is a possible role for planned presentation of grammatical rules in the second/foreign language curriculum. This does not imply that a structural syllabus need be brought back to the second/foreign language pedagogy scene. On the contrary, it implies that explicit rule presentation mixed with activities aimed at drawing learners' attention to the formal features of the second/foreign language, and backed by the provision of sufficient opportunities for the use of the structures under study is likely to yield learning of the second/foreign language complex rules.

Nevertheless, the limitations of the present study need to be considered. First, the lack of a significant difference between the treatments for the simple rule requires additional studies. The results may have been influenced by limitations in the study. Order of presentation might have been a limiting factor: the simple rule was taught at the beginning of the study, followed by the presentation of the complex rule. Because of this, the simple rule was not attributed separate attention it needed. I suggest (as Andrews, 2007) that the simple rule should be presented and tested separately from the complex rule. It is well-known in second/foreign language research that the success of implicit instruction depends on abundant communicative opportunities in class and much exposure outside of class (Fotos, 2002). This exposure helps maintain awareness of the target form. One might conclude that implicit instruction would be more successful in the English as a Second Language classroom than in the English as a Foreign Language classroom. Being an input-poor environment, the Algerian classes of English could have possibly restricted the effects of comprehensible input: This is another limitation. Another important additional consideration related to explicit and implicit knowledge and which needs more analysis is whether the explicit knowledge of grammar rules has really been integrated into the learners' interlanguage, being converted by noticing and practice. Even though the results did seem to demonstrate learning of rules, the question remains: has explicit knowledge really become implicit? This research study did not plan the inclusion of a delayed post-test which could have been insightful as concerns this issue. Therefore, owing to this limitation, future studies should seriously consider including delayed post-tests as well as designing writing samples to be used as the measure of learning not just correct items on a grammar test, even if known for its effectiveness, because writing often provides the language learner with time to perfect productive expressions and to demonstrate critical thinking abilities as well.

A lot has been said about the advantages of explicit grammatical instruction but how to implement this grammar teaching approach practically in the classroom, and more particularly in the Algerian curriculum, may not have been a popular topic. Some practitioners declare that the teaching of grammar in the absence of well-founded guidelines is like a landscape without bearings. Future research, thus, need consider these limitations; future studies correcting for these limitations may help define with firmness the contributions of explicit instruction to second/foreign language development and define the guidelines for the implementation of grammar teaching within the present Algerian English syllabus.

## Bibliography

Alanen, R. (1995). Input enhancement and rule presentation in second/foreign language acquisition. In R. Schmidt (Ed.), *Attention & awareness in foreign language learning* (pp. 259–302). Manoa, HI: Second/foreign language Teaching & Curriculum Center

Alhadeff-Jones, M. (2008). Three generations of complexity theories: Nuances and ambiguities. *Educational Philosophy and Theory*, 40 (1), 66-82

Anderson, J. R. (1976). *Language, memory, and thought*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Anderson, J. R. (1980). *Cognitive psychology and its implications*. San Francisco: Freeman.

Anderson, J. R. (1983). *The architecture of cognition*. Cambridge, MA: Harvard University Press

Anderson, J. R. (1992). *Rules of the mind*. Lawrence Erlbaum, Inc.

Andrews, K. (2007). The effects of implicit and explicit instruction on simple and complex grammatical structures for adult English language learners. *Teaching English as a Second or Foreign Language*, 11(2), 1-15.

Baars, B. J. (1988). *A Cognitive theory of consciousness*. Cambridge, MA: Cambridge University Press.

- Baars, B. J. (1997). *In the theater of consciousness*. New York, NY: Oxford University Press.
- Bardovi-Harlig, K. (1987). Markedness and salience in second language acquisition. *Language Learning*, 37, 385-407.
- Belkacem Bouricha, K. (1999). The effects of explicit grammar teaching on learners' proficiency level in English (Unpublished Magister Thesis in TEFL). University of Constantine, Constantine, Algeria.
- Bialystok, E. (1978). A theoretical model of second language learning. *Language Learning*, 28(1), 69-83.
- Bialystok, E. (1979). Explicit and implicit judgments of second language grammaticality. *Language Learning*, 29, 81-103.
- Bialystok, E. (1982). On the relationship between knowing and using forms. *Applied Linguistics*, 3, 181-206.
- Bialystok, E. (1988). Aspects of linguistic awareness in reading comprehension. *Applied Psycholinguistics*, 9, 123-139.
- Bialystok, E. (1991). Letters, sounds, and symbols: Changes in children's understanding of written language. *Applied Psycholinguistics*, 12, 75-89.
- Bialystok, E. (1994). Analysis and control in the development of second language proficiency. *Studies in Second Language Acquisition*, 16, 157-168.
- Braidi, S.M. (1999). *The acquisition of second language syntax*. London, England: Arnold.

Bresnan, J. (1982). Control and complementations. In J. Bresnan (ed.), *The mental representation of grammatical relations* (282-390). Cambridge, MA: MIT Press.

Brumfit, C. J. (1978). The teaching of advanced reading skills in foreign languages, with particular reference to English as a foreign language. In V. Kinsella (Ed.), *Language teaching and linguistics: Surveys* (pp. 173-184). (Centre for Information on Language Teaching and Research and English Teaching Information Centre of the British Council). Cambridge: Cambridge University Press.

Carr, T. H., & Curran, T. (1994). Cognitive factors in learning about structured sequences: Applications to syntax. *Studies in Second Language Acquisition*, 16, 205–230.

Celce-Murcia, M. (1991). Grammar pedagogy in second and foreign language teaching. *TESOL Quarterly*, 25, 459–480.

Celce-Murcia M. 2007. Rethinking the Role of Communicative Competence in Language Teaching. In A. Soler & S. Jordà (Eds.), *Intercultural Language Use and Language Learning*, (pp.41–57). Dordrecht: Springer.

Celce-Murcia, M., & Larson-Freeman, D. (1983). *The grammar book*. Rowley, MA: Newbury House.

Chomsky, N. (1965). *Aspects in the theory of syntax*. Cambridge, MA: MIT Press.

Chomsky, N. (1986). *Knowledge of language: Its nature, origin and use*. Praeger Books, New York.

Corder, S. (1967). The significance of learners' errors. *IRAL*, 5, 161-170.



Curran, C. (1976). *Counselling-Learning in Second/foreign languages*. Apple River, IL: Apple River Press.

De Graaff, R. (1997) The eXperanto experiment: Effects of explicit instruction on second language acquisition. *Studies in Second Language Acquisition*, 19, 249–276.

DeKeyser, R. (1995). Learning second language grammar rules: An experiment with a miniature linguistic system. *Studies in Second Language Acquisition*, 17, 379-410.

DeKeyser, R. (1997). Beyond explicit rule learning: Automatizing second language morphosyntax. *Studies in Second Language Acquisition*, 19, 195–222.

DeKeyser, R. (1998). Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 42–63). Cambridge, England: Cambridge University Press.

DeKeyser, R. M. (2000). The robustness of critical period effects in second language acquisition. *Studies in Second Language Acquisition*, 22, 499-533.

DeKeyser, R. M. (2003). Implicit and explicit learning. In C. J. Doughty & M. H. Long (Eds). *The handbook of second language acquisition* (pp. 313-348). Oxford: Blackwell.

DeKeyser, R. M. (2005). What makes learning second-language grammar difficult? A review of issues. *Language Learning*, 55(Supplement 1), 1-25.

Doughty, C. (1991). Second language instruction does make a difference. Evidence from an empirical study of SL relativization. *Studies in Second Language Acquisition*, 13, 431-469.

Doughty, C. (2001). Cognitive underpinnings of focus on form. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 206–257). Cambridge, England: Cambridge University Press.

Doughty, C. (2003). Instructed SLA: Constraints, compensation, and enhancement. In: C. Doughty and M. Long ( eds.) , *The handbook of second language acquisition*, 256-310. Oxford: Blackwell.

Doughty, C. (2004) Effects of instruction on learning a second language: A critique of instructed SLA research. In B. VanPatten, J. Williams and S. Rott ( eds.) *Form-meaning connections in second language acquisition*, 189–212. Mahwah, N. J.: Lawrence Erlbaum.

Doughty, C., Williams, J.(1998a). *Focus on form in classroom second language acquisition*. Cambridge University Press, Cambridge.

Doughty, C. and Williams, J. (1998b). Pedagogical choices in focus on form. In C. Doughty, and J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp.197-262). Cambridge: Cambridge University Press.

Dulany, D., Carlson, R., & Dewey, G. (1984). A case of syntactical learning and judgment: How conscious and how abstract? *Journal of Experimental Psychology: General*, 113, 541-555.

Dulay, H. & Burt, M. (1973). Should we teach children syntax? *Language Learning*, 23, 245-258.

Dulay, H. C., & Burt, M. K. (1976). Creative construction in second language learning and teaching. *Language Learning*, (Special Issue Number 4), 65-79.

Ellis, N. (1993). Rules and instances in foreign language learning: Interactions of explicit and implicit knowledge. *European Journal of Cognitive Psychology*, 5, 289–318.

Ellis, N. (1994) Introduction: Implicit and explicit language learning – an overview. In N. Ellis (ed.), *Implicit and explicit learning of languages* (pp. 1-31). San Diego: Academic Press.

Ellis, N. (2005a). At the interface: How explicit knowledge affects implicit language learning. *Studies in Second Language Acquisition*, 27, 305–352.

Ellis, N. (2005b). At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition*, 27(2), 305–52.

Ellis, R. (1984). *Classroom second language development*. Oxford: Pergamon.

Ellis, R. (1985). *Understanding second language acquisition*. Oxford, England: Oxford University Press.

Ellis, R. (1989). Are classroom and naturalistic language acquisition the same? A study of classroom acquisition of German word order rules. *Studies in Second Language Acquisition*, 27, 305-352.

Ellis, R. (1990). *Instructed second language acquisition*. Oxford: Blackwell.

Ellis, R. (1991). Grammaticality judgements and second language acquisition. *Studies in Second Language Acquisition*, 13, 161–86.

Ellis, R. (1993a). Naturally simplified input, comprehension and second language acquisition. In M. Tickoo (Ed.), *Simplification theory and application*. Singapore: SEAMEO Regional Language Centre.

Ellis, R. (1993b). The structural syllabus and second language acquisition. *TESOL Quarterly*, 27, 91–113.

Ellis, R. (1994a). Implicit/Explicit knowledge and language pedagogy. *TESOL Quarterly*, 28, 166-172.

Ellis, R. (1994b). *The study of second/foreign language acquisition*. Oxford: Oxford University Press.

Ellis, R. (1995). Interpretation tasks for grammar teaching. *TESOL Quarterly*, 29, 87-105.

Ellis, R. (1998). Teaching and research: Options in grammar teaching. *TESOL Quarterly*, 32, 39-60.

Ellis, R. (2001). Investigating form-focused instruction. In R. Ellis (Ed.), *Form-focused instruction and second language learning* (pp. 1–46). Malden, MA: Blackwell.

Ellis, R. (2002b). The place of grammar instruction in the second language curriculum. In E. Hinkel, & S. Fotos (Eds.), *New perspectives on grammar teaching in second language classrooms* (pp. 17-34). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford: Oxford University Press.

Ellis, R. (2005a). Measuring implicit and explicit knowledge of a second language: A psychometric study. *Studies in Second Language Acquisition*, 27, 141-172.

Ellis, R. (2006b). Modeling learning difficulty and second language proficiency: The differential contributions of implicit and explicit knowledge. *Applied Linguistics*, 27, 431-463.

Ellis, R., (2008) Explicit form-focused instruction and second language acquisition. In B. Spolsky and F. Hult ( eds.) , *The handbook of educational linguistics* (pp. 437–455). Oxford: Blackwell.

Ellis, R., (2010) Does explicit grammar instruction work? *NINJAL Project Review*, 2, 3-22.

Faerch, C. (1986). Rules of thumb and other teacher formulated rules in the foreign language classroom. In G. Kasper (Ed.), *Learning, teaching and communication in the foreign language classroom* (pp. 65-79). Aarhus, Denmark: Aarhus University Press.

Felix, S. (1981). On the (in)applicability of Piagetian thought to language learning. *Studies in Second Language Acquisition*, 3(2), 201-220

Fotos, S. (2002). Structure-based interactive tasks for the EFL grammar learner. In E. Hinkel & S. Fotos (Eds.), *New perspectives on grammar teaching in second language classrooms* (pp. 135-154). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Gascoigne, C. (2002). *The debate on grammar in second language acquisition: Past, present, and future*. Lewiston, NJ: Edwin Mellen Press.
- Gass, S., & Selinker, L. (2008). *Second language acquisition: An introductory course*. New York: Routledge.
- Gategno, C. (1976). The silent way. In J. Fanselow and R. Crymes (eds.), *On TESOL 76*. Washington D.C. : TESOL.
- Givon, T. (1991). Isomorphism in the grammatical code: Cognitive and biological considerations. *Studies in Language*, 15(1).
- Givon, T. (1995). *Functionalism and Grammar*. Amsterdam and Philadelphia: J, Benjamins.
- Goldschneider, J. M. and DeKeyser, R. M. (2005), Explaining the “Natural Order of SL Morpheme Acquisition” in English: A Meta-analysis of multiple determinants. *Language Learning*, 55, 27–77.
- Green, P., & Hecht, K. (1992). Implicit and explicit grammar: An empirical study. *Applied Linguistics*, 13(4), 168–184.
- Hammerly, H. (1991). *Fluency and accuracy: Toward balance in language teaching and learning*. Clevedon, UK: Multilingual Matters.
- Han, Y. and Ellis, R. (1998). Implicit knowledge, explicit knowledge and general language proficiency. *Language Teaching Research*, 2,1–23.
- Hawkins, J. (2004). *Efficiency and Complexity in Grammars*. Oxford: Oxford University Press.

Horgan, J. (1995). From complexity to perplexity. *Scientific American*, 272, 747-982.

Housen, A., Van Daele, S. and Pierrard, M. (2005). Rule complexity and the effectiveness of explicit grammar instruction. In A. Housen, and M. Pierrard (eds.): *Investigations in Instructed Second language Acquisition* (pp. 29-56). Berlin: Moulton de Gruyter.

Housen, A. and Pierrard, M. (2006) . Investigating instructed second language acquisition. In: A. Housen and M. Pierrard ( eds.) *Investigations in instructed second language acquisition* (pp. 1–27). Berlin: Moulton de Gruyter.

Hulstijn, J. (1995). Not all grammar rules are equal: Giving grammar instruction its proper place in foreign language teaching. In R. Schmidt (Ed), *Attention and Awareness in Foreign Language Learning* (pp. 359-386). Honolulu: University of Hawaii Press

Hulstijn, J. (2002). Towards a unified account of the representation, processing and acquisition of second language knowledge. *Second Language Research*, 18, 193-223.

Hulstijn, J. and De Graaff, R. (1994). Under what conditions does explicit knowledge facilitate the acquisition of implicit knowledge? In J. Hulstijn & R. Schmidt (Eds.), *Consciousness and second language learning: Conceptual, methodological and practical issues in language learning and teaching*. *AILA Review*, 11, 11-26.

Hulstijn, J. & Hulstijn, W. (1984). Grammatical errors as a function of processing constraints and explicit knowledge. *Language Learning*, 34, 23–43.

Hymes, D.H. (1972). On communicative competence. In Pride, J.B.; Holmes, J. (Eds.), *Sociolinguistics: selected readings*. Harmondsworth: Penguin. pp. 269–293.

Karmiloff-Smith, A. (1979). *A functional approach to child language: A study of determiners and reference*. Cambridge: Cambridge University Press.

Knowlton, B.J. & Squire, L.R. (1994). The information acquired during artificial grammar learning. *Journal of Experimental Psychology: Learning, Memory & Cognition*. 20, 79-91.

Krashen, S. (1977). The monitor model for second language performance. In Burt, Dulay and Finocchiao (eds.). *Viewpoints on English as a Second Language*. New York: Regents.

Krashen, S. (1978). Individual variation in the use of the Monitor. In W. C. Ritchie (ed.), *SLA Research: Issues and Implications*. New York: Regents.

Krashen, S. (1979a), The monitor model for second language acquisition. In R. Gingras (ed.) *Second Language Acquisition and Foreign Language Teaching*. CAL

Krashen, S. (1979b). A response to McLaughlin, "The monitor model: Some methodological considerations." *Language Learning*, 29, 151-167.

Krashen, S. (1980). The input hypothesis. In J. Alatis (Ed.), *Current Issues in Bilingual Education*. Washington, D.C.: Georgetown University Press.

Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon.



Krashen, S. (1982). *Principles and practice in second/foreign language acquisition*. New York: Pergamon Press.

Krashen, S. (1985). *The input hypothesis: Issues and implications*. Oxford: Pergamon Press.

Krashen, S. (1991). The input hypothesis: An update paper presented at the Georgetown Round Table on Languages and Linguistics. Washington D.C.

Krashen, S. (1992). Under what circumstances, if any, should formal grammar instruction take place? *TESOL Quarterly*, 26, 409-411.

Krashen, S. (1993). The effect of grammar teaching: Still peripheral. *TESOL Quarterly*, 27, 717-725.

Krashen, S. (1994). The input hypothesis and its rivals. In N. Ellis (Ed.), *Implicit and explicit learning of language* (pp. 45-77). London: Academic Press.

Krashen, S.D. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the Input Hypothesis. *The Modern Language Journal* 73 (4), 440-464

Krashen, S., & Terrell, T. (1983). *The natural approach: language acquisition in the classroom*. Oxford: Pergamon.

Kowal, M., and Swain, M. (1997). From semantic to syntactic processing: How can we promote it in the immersion classroom. In R. K. Johnson, and M, Swain (eds.), *Immersion education: International perspectives* (pp. 284-310). Cambridge: Cambridge University Press.

Larsen-Freeman, D. (2003). *Teaching language: From grammar to grammaring*. Boston: Heinle.

Lightbown, P. (1983). Exploring relationships between developmental and instructional sequences in SL acquisition. In H. Seliger, & M. Long (Eds.), *Classroom-oriented research in language acquisition* (pp. 217-243). Rowley, MA: Newbury House.

Lightbown, P. (1985). Input and acquisition for second-language learners in and out of classrooms. *Applied Linguistics*, 6 (3): 263-273

Lightbown, P. (1991). What have we here? Some observations on the effect of instruction on SL learning. In R. Phillipson, E. Kellerman, L. Selinker, M. Sharwood Smith, & M. Swain (Eds.), *Foreign/second language pedagogy research* (pp. 197– 212). Clevedon, England: Multilingual Matters.

Lightbown, P. M. (1998). The importance of timing in focus on form. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 177-197). Cambridge: Cambridge University Press.

Lightbown, P. M., & Spada, N. (1990). Focus on form and corrective feedback in communicative language teaching. *Studies in Second Language Acquisition*, 12, 429-448.

Long, M. H. (1983). Does second language instruction make a difference? A review of the research. *TESOL Quarterly*, 17, 359-382.

Long, M. (1988). *Instructed Interlanguage Development*. Rowley, MA: Newbury House.

Long, M. (1991). Focus on form: A design feature in language teaching methodology. In K. D. Bot, D. Coste, R. Ginsberg & C. Kramersch (Eds.), *Foreign*

*language research in cross-cultural perspectives* (pp. 39-52). Amsterdam: John Benjamins.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. Ritchie & T. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego: Academic Press.

Long, M.H., Robinson, P. (1998). Focus on form: theory, research and practice. In C. Doughty, and J. Williams (Eds.), *Handbook of second language acquisition* (pp. 15–41.

Lozanov, G. (1978). *Suggestology and outlines of suggestopedy*. New York: Gordon and Breach.

Lyster, R. (1994). The effect of functional-analytic teaching on aspects of French immersion students' sociolinguistic competence. *Applied Linguistics*, 15, 263–287.

Mackey, A. and Philp, J. (1997). Conversational interaction and second language development: recasts, responses and red-herrings? *Modern Language Journal*, 82, 283–324.

McLaughlin, B. (1987). *Theories of second-language learning*. London: Edward Arnold.

McLaughlin, B. (1990). Restructuring. *Applied Linguistics*, 11 (2), 113-128.

Miller, S. (1975). *Experimental Design and Statistics*. Methuin.

Muranoi, H. (2000). Focus on form through interaction enhancement: Integrating formal instruction into a communicative task in EFL classrooms. *Language Learning*, 50, 617–673.

- Nagata, N. (1993). Intelligent computer feedback for second language instruction. *Modern Language Journal*, 77(3), 330-339
- Nation, I.S.P.; Newton, J. (2008). *Teaching ESL Listening and Speaking*, (1st ed.), Routledge.
- Norris, J., & Ortega, L. (2000). Effectiveness of SL instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50, 417-428.
- Norris, J. M. & Ortega, L. (2001). Does type of instruction make a difference? Substantive findings from a meta-analytic review. *Language Learning*, 51, Supplement 1, 157-213.
- Odlin, T. (1993). Rediscovering Interlanguage. *Language*, 69(2), 379-383.
- Perruchet, P., & Pacteau, C. (1990). Synthetic grammar learning: Implicit rule abstraction or explicit fragmentary knowledge? *Journal of Experimental Psychology: General*, 119(3), 264-275.
- Perruchet, P., & Pacteau, C. (1991). Implicit acquisition of abstract knowledge about artificial grammar: Some methodological and conceptual issues. *Journal of Experimental Psychology: General*, 120(1), 112-116.
- Pienemann, M. (1984). Psychological constraints on the teachability of languages. *Studies in Second Language Acquisition*, 6, 186-214.
- Pienemann, M. (1989). Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 10(1), 52-79 . Oxford: Oxford University Press.
- Poole, A. (2005a). Focus on form instruction: foundations, applications, and criticisms. *Reading*, 5 (1), 47-56

- Prabhu, N.S. (1987). *Second language pedagogy*. Oxford: Oxford University Press.
- Reber, A. S. (1967). Implicit learning of artificial grammars. *Journal of Verbal Learning and Verbal Behavior*, 6, 317-327.
- Reber, A. S. (1969). Transfer of syntactic structure in synthetic languages. *Journal of Experimental Psychology*, 81, 115-119.
- Reber, A. S. (1986, 1995, 2001). *Dictionary of psychology*. London: Penguin Viking (Second edition, 1995; Third Edition, 2001 (A. S. Reber & E. S. Reber).
- Reber, A. S. (1989). Implicit learning and tacit knowledge. *Journal of Experimental Psychology*, 118(3), 219–235.
- Reber, A. S. (1992). The cognitive unconscious: An evolutionary perspective. *Consciousness and Cognition*, 1, 93-133.
- Reber, A. S. (1993). *Implicit learning and tacit knowledge: An essay on the cognitive unconscious*. Oxford: Oxford University Press.
- Reber, A.S., Kassim, S., Lewis, S., & Cantor, G. (1980). On the relationship between implicit and explicit modes in the learning of a complex rule structure. *Journal of Experimental Psychology: Human Learning and Memory*, 6,492-502.
- Reber, A. S., Walkenfeld, F. F., & Hernstadt, R. (1991). Implicit learning: Individual differences and IQ. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 17, 888-896

Reed, J.M. and Johnson, P.J. (1998). Implicit learning: Methodological issues and evidence of unique characteristics. In M.A. Stadler, and P.A. Frensch (Eds) *Handbook of implicit learning*, (pp. 261-294). Thousand Oaks, CA: Sage.

Rescher, N. (1998). *Complexity: A Philosophical Overview*. New Brunswick: Transaction publishers.

Richards, J. C. & Rodgers, T. (2001). *Approaches and Methods in Language Teaching* (2nd Ed.). Cambridge University Press.

Rivers, W.M. (1983). *Communicating naturally in a second/foreign language: theory and practice in language teaching*. Cambridge University Press.

Robinson, P. (1995a). Aptitude, awareness, and the fundamental similarity of implicit and explicit second language acquisition. In R. Schmidt (Ed.), *Attention and awareness in foreign language learning* (pp. 303–358). Manoa, HI: Second Language Teaching & Curriculum Center.

Robinson, P. (1995b). Attention, memory and the noticing hypothesis. *Language Learning*, 45, 283-331.

Robinson, P. (1996a). Learning simple and complex second language rules under implicit, incidental, rule-search, and instructed conditions. *Studies in Second Language Acquisition*, 18, 27-67.

Robinson, P. (1996b). *Consciousness, rules and instructed second language acquisition*. New York: Peter Lang Publishing.

- Robinson, P. (1997). Generalizability and automaticity of second language learning under implicit, incidental, enhanced, and instructed conditions. *Studies in Second/foreign language Acquisition, 19*, 223-247.
- Rosa, R., & O'Neill, M. D. (1999). Explicitness, intake, and the issue of awareness. *Studies in Second Language Acquisition, 21*, 511-556.
- Rutherford, W.E. (1987). *Second/foreign language Grammar: Learning and Teaching*. London: Longman.
- Rutherford, W. and M. Sharwood Smith. (1985). Consciousness-raising and universal grammar. *Applied Linguistics, 6*, 274-82
- Saint John, M. F. and Shanks, D. R. (1997). Implicit learning from an information processing standpoint. In D. C. Berry (ed.). *How implicit is implicit learning?* (162-194). Oxford: Oxford University Press.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics, 11*, 129-158.
- Schmidt, R. (1995) Consciousness and foreign language learning: A tutorial on the role of attention and awareness in learning. In R. Schmidt (ed.) *Attention and Awareness in Foreign Language Learning* (Tech. Rep. No. 9, 1-63). Manoa: University of Hawaii, Second/foreign language Teaching and Curriculum Center.
- Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3-33). Cambridge: Cambridge University Press.
- Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. Day (Ed.),

*Talking to learn: Conversation in second/foreign language acquisition* (pp. 237-326). Rowley, MA: Newbury House.

Seliger, H. (1979). On the nature and function of language rules in language teaching. *TESOL Quarterly*, 13, 359-396.

Selinker, L. (1972). Interlanguage. *IRAL*, 10(3), 209-231.

Sharwood Smith, M. (1981). Consciousness-raising and the second language learner. *Applied Linguistics* 2(2), 159-168.

Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15, 165–179.

Skehan, P. (1989). *Individual differences in second-language learning*. London: Edward Arnold.

Sorace, A. (1985). Metalinguistic Knowledge and Language Use in Acquisition-poor Environments. *Applied Linguistics*, 6(3), 239-254

Spada, N. (1997). Form-focused instruction and second language acquisition: A review of classroom and laboratory research. *Language Teaching*, 30, 73–87.

Spada, N., & Lightbown, P. (1993). Instruction and the development of questions in SL/FL classrooms. *Studies in Second Language Acquisition*, 15, 205-224.

Spada, N., & Lightbown, P. (1999). Instruction, first language influence, and developmental readiness in second/foreign language acquisition. *The Modern Language Journal*, 83(1): 1–22.

Spada, N., & Lightbown, P. M. (2008). Form-focused instruction: Isolated or integrated? *TESOL Quarterly*, 42, 181-207.



Spada, N. and Tomita, Y. (2010), Interactions Between Type of Instruction and Type of Language Feature: A Meta-Analysis. *Language Learning*, 60, 263–308.

Stevick, E.W. (1980). *Teaching Languages: a Way and Ways*. Rowley, M.A.: Newbury House.

Stern, H. H. (1992) *Issues and options in Language Teaching*. Oxford: Oxford University Press.

Swan, M. (1990): A Critical Look at the Communicative Approach. In R. Rossner, and R. Bolitho (eds.), *Currents of Change in English Language Teaching*. Oxford, Oxford University Press.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass and C. Madden (eds.), *Input in Second/foreign language acquisition* (pp. 235-253). Rowley, MA: Newbury House.

Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *Canadian Modern Language Review*, 50, 1, 158-64.

Tarone, E. (1988). *Variation in interlanguage*. London: Edward Arnold.

Tavakoli, H. (2013). *A Dictionary of Research Methodology and Statistics in Applied Linguistics*. Rahnama Press.

Terrell, T. (1977). A natural approach to second language acquisition and learning. *Modern Language Journal*, 61, 325-337.

Thornbury, S. (1999). *How to Teach Grammar*. Harlow: Longman.

Ur, P. (1996). *A course in language teaching*. Cambridge: Cambridge University Press.

Van Baalen, T. (1983). Giving learners rules: A study into the effect of grammatical instruction with varying degrees of explicitness. *Interlanguage Studies Bulletin Utrecht*, 7, 71–100.

VanPatten, B. (1987). Classroom and naturalistic language acquisition: A comparison of two case studies in the acquisition of clitic pronouns in Spanish. *Foreign Language Learning: A research perspective*, 61-75.

Westney, P. (1994). Rules and pedagogical grammar. In T. Odlin (Ed.), *Perspectives on pedagogical grammar* (pp. 72-96). Cambridge: Cambridge University Press.

White, L. (1987). Against comprehensible input: The input hypothesis and the development of second language competence. *Applied Linguistics*, 8, 95–110.

Williams, J., & Evans, J. (1998). What kind of focus and on which forms? In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp.139-155). Cambridge: Cambridge University Press.

Widdowson, H. (1990). *Aspects of Language Teaching*. Oxford: Oxford University Press.

Widdowson, H. (1991). The description and prescription of language. In J. Alatis (ed.), *Georgetown University Round Table on Languages and Linguistics* (pp. 11-24). Washington, D.C.: Georgetown University Press.

Zimmermann, D. H. (1984). Talk and its occasion: The case of calling the police.  
In D. Shiffrin (ed.), *Meaning, form and use in context: Linguistic applications* (pp.  
210-228). Washington D.C.: Georgetown University Press.

## **LIST OF APPENDICES**

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# Appendix I

## *THE GRAMMATICALITY JUDGEMENT TEST USED TO IDENTIFY THE UNFAMILIAR STRUCTURES*

Could you please give the following information?

Age:

What are the languages you know?.....

How long have you been studying English?.....

Have you been taught English grammar rules?

Yes.....

No.....

**Read the following sentences and decide whether, according to you, the sentence is grammatical (i.e, correct grammatically), ungrammatical (i.e, incorrect grammatically) or whether you are not sure.**

1- Alice's piano playing amused Beckham.

Grammatical

Ungrammatical

Not sure

2- In the morning, he eats.

Grammatical

Ungrammatical

Not sure

3- Who did she send letters to?

Grammatical                      Ungrammatical                      Not sure

4- That there book gives a lot of information.

Grammatical                      Ungrammatical                      Not sure

5- Into the house John ran.

Grammatical                      Ungrammatical                      Not sure

6- Where the cheese is is in the bag not in the basket.

Grammatical                      Ungrammatical                      Not sure

7- I sent the book to Peter.

Grammatical                      Ungrammatical                      Not sure

8- John's hitting him shocked me.

Grammatical                      Ungrammatical                      Not sure

9- To whom does he tell the story?

Grammatical                      Ungrammatical                      Not sure

10- Where the boy played was in his room.

Grammatical                      Ungrammatical                      Not sure

11- This here dictionary explains many things.

Grammatical                      Ungrammatical                      Not sure

12- What Peter does is write letters not invitations.

Grammatical                      Ungrammatical                      Not sure

13- I saw the dog that played.

Grammatical                      Ungrammatical                      Not sure

14- In the garden, plays the dog.

Grammatical                      Ungrammatical                      Not sure

15- On Wednesday, works Peter.

Grammatical                      Ungrammatical                      Not sure

16- I saw the dog barked.

Grammatical                      Ungrammatical                      Not sure

17- Where the cat was is in the house not in the garden.

Grammatical                      Ungrammatical                      Not sure

18- Who did you suggest I talk to?

Grammatical                      Ungrammatical                      Not sure

19- Where lived Peter is near the Mississippi River.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

20- I placed spoon that on the shelf.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

21- There exists a copy of that book.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

22- Who is Anna happy to see?

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

23- What Peter reads is newspapers not books.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

24- John hit him so I was angry.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

25- What eats Susan is chocolate.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

26- I saw the dog that you feed.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------

27- Stayed Anna in the library.

Grammatical	Ungrammatical	Not sure
-------------	---------------	----------



28- Peter sleeps in his bed.

Grammatical

Ungrammatical

Not sure

29- That supermarket there offers plenty of discounts.

Grammatical

Ungrammatical

Not sure

30- Where John stayed was in his shop.

Grammatical

Ungrammatical

Not sure

31- I saw the dog you feed.

Grammatical

Ungrammatical

Not sure

32- Joan's leaving the party is on Wednesday.

Grammatical

Ungrammatical

Not sure

33- I saw the dog who barked.

Grammatical

Ungrammatical

Not sure

34- What Anna did was read a book.

Grammatical

Ungrammatical

Not sure

35- There was many spoons near your plate.

Grammatical

Ungrammatical

Not sure

36- What writes John is a text not a telex.

Grammatical

Ungrammatical

Not sure

## **Appendix II**

### ***TEACHERS' QUESTIONNAIRE: CLASSIFICATION OF RULES***

Could you please give the following information?

Number of years EFL teaching experience:

Degrees and/or qualifications earned:

***Please consider the following rules and say whether they are simple or complex.***

***RULE 1: Rule governing time and place adverbial fronting***

Some sentences are composed of a subject, a verb and an adverb of place or adverb of time.

Eg. Peter (subject) walked (verb) over the bridge (adverb of place).

Eg. Susan (subject) arrived (verb) in the afternoon (adverb of time).

We can begin the sentence with the adverb of time or place, as in:

Eg. Over the bridge, Peter walked.

Eg. In the afternoon, Susan arrived.

We can put the verb before the subject only when the adverb of place introduces the sentence.

Eg. Over the bridge walked Peter.

This means that the following sentence is ungrammatical.

Eg. In the afternoon, arrived Susan.

- **SIMPLE**
- **COMPLEX**

***RULE 2: Rule governing the gerundivization of subject***

Some sentences express an action, and others express reaction.

Eg. Anna greeted Peter. (action)

Susan was astonished. (reaction)

We can combine such sentences as

Eg. Anna's greeting Peter astonished Susan.

To make such combinations, make the subject of the first sentence (expressing action) possessive and change its verb into present participle, then delete the subject and verb of the second sentence (expressing reaction) and change its adjective into a verb that respects the tense. The subject of the second sentence becomes then the object of the new sentence.

Eg. Anna's (the subject becomes possessive) greeting (the verb becomes present participle) astonished (the adjective becomes verb) Susan (the subject of the second sentence becomes the object of this sentence).

- **SIMPLE**
- **COMPLEX**

***RULE 3: Rule governing the formation of pseudo-cleft construction headed by 'Where'***

Some sentences contrast two locations.

Eg. Peter lives in France but Anna lives in New York.

It is possible to contrast these locations by making sentences like these:

Eg. Where Anna lives is in New York not in France.

To make sentences like these, first choose the subject whose location you want to emphasize. Then place 'where' in front of it.

Eg. Where Anna .....

Next, follow the subject with its verb as in the original sentence.

Eg. Where Anna lives .....

Note that the verb cannot come before its subject:

Eg. Where lives Anna ..... (this is ungrammatical)

Then, add a singular form of the verb 'to be' which agrees in tense, followed by the phrase contrasting the locations:

Eg. Where Anna lives is in New York not in France.

If the verb 'to be' does not agree in tense, the sentence is ungrammatical.

Eg. Where Anna lives was in New York not in France. (this sentence is ungrammatical)

- **SIMPLE**
- **COMPLEX**

***RULE 4: Rule governing the formation of pseudo-cleft construction headed by 'What'***

Some sentences contrast activities.

Eg. Anna reads the novel but Peter watches TV.

It is possible to contrast these activities by making sentences like this:

Eg. What Anna does is read the novel not watch TV.

To make sentences like these, first choose the subject whose activity you want to emphasize, then place 'what' in front of it.

Eg. What Anna .....

Next, follow the subject with a form of the verb 'to do' that agrees with the subject:

Eg. What Anna (subject) does (a form of the verb 'to do' that agrees with the subject Anna)

Note that the verb 'to do' cannot come before the subject.

Eg. What does Anna ....(ungrammatical)

Next, add a singular form of the verb 'to be' which agrees in tense, followed by the phrase contrasting the activities. Note that the activities will be expressed with bare-infinitive:



Eg. What Anna does is read the novel not watch TV.

Note that if the form of 'to do' and 'to be' do not agree in tense with the verb of the original sentence, the sentence is ungrammatical.

Eg. What Anna does **was** read the novel or

What Anna **did** is read the novel ...

- **SIMPLE**
- **COMPLEX**

***RULE 5 : Rule governing question formation with preposition stranding and pied-piping.***

Some sentences describe transfer of possession from one person to another.

Eg. Peter gave the book to Anna.

It is possible to turn this sentence into a question if the person receiving the object is unknown.

Eg. Who did Peter give the book to? (***wh-question involving preposition stranding***)

Or To whom did Peter give the book? (***wh-question involving preposition pied-piping***)

To make questions like these, first formulate the interrogative form of the sentence:

Eg. Did Peter give the book ..... ?

Note that the auxiliary DO takes the tense of the sentence and that the main verb is in the bare-infinitive form and it does not carry tense:

Eg. Did Peter give .....

Did Peter gave ..... (ungrammatical)

Then, choose a wh-word that agrees with the unknown indirect object you are

questioning. For people, the wh-word is 'who' or 'whom' depending on whether the preposition fronts the question or occurs at the end of it.

Eg. Who did Peter give the book to?

To whom did Peter give the book?

- **SIMPLE**
- **COMPLEX**

***RULE 6: Rule governing the pre- and post-subject use of the emphatic adverbial.***

Some sentences are used to indicate a specific subject.

Eg. That cow gives a lot of milk.

We can use an adverb of location to emphasize where the subject is located.

This adverb of location can be placed before or after the subject:

Eg. That cow (subject) there (adverb) gives a lot of milk.

Or That there (adverb) cow (subject) gives a lot of milk.

- **SIMPLE**
- **COMPLEX**

**Please order these rules according to their degree of complexity; i.e. from the simplest to the most complex.**

- 1- The most simple rule is rule number .....**
- 2- .....**
- 3- .....**
- 4- .....**
- 5- .....**
- 6- .....**
- 7- The most complex rule is rule number .....**

**- According to you, why is the rule in the first position of your ordering the simplest?**

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

**- Why is the rule in the last position of your ordering the most complex?**

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

## **Appendix III**

### **ESP TEXTS and ACTIVITIES**

#### **Text 1**

Economics is a social science. It is concerned by human beings and the systems by which they organize their activities to satisfy basic material needs (eg. Food, shelter, clothing...) and non-material needs (eg. Education, knowledge ...).

Economists are social scientists and their activities are rooted in the same social context. Unlike the physical sciences, the social science of economics can claim neither scientific laws nor universal truth. In economics, there are only 'tendencies' and even these are subject to great variations in different countries and cultures and at different times. Economic investigations and analyses, therefore, cannot simply be lifted out of their institutional, social and political context in economics.

What the central economic problem of all societies includes is answer to traditional questions such as what, where, how, how much and for whom goods and services should be produced not propose universal scientific theories. However, it should also include the fundamental question at the national level about who or which groups actually make or influence economic decisions, and for which principal benefit these decisions are made.

**1- Give a title to the text.**

**2- QUESTIONS:**

- In what is economics interested?
- In what does economics differ from other sciences?
- What is the major concern of economics?

**3- Replace the underlined words by others having the same meaning.**

- What the social science of economics can claim is not the ultimate truth.
- Even these are subject to variations in different countries and cultures.
- In different countries, influence groups on national economic decisions.
- Therefore, what economic investigation finds is answers to practical questions.
- Where traditional questions such as what, where, and how are considered is in economics.

**Text 2**

Markets bring together buyers and sellers of goods and services. In some cases, such as a local fruit stall, buyers and sellers meet physically. In other cases, such as the stock-market, business can be transacted by phone, almost by remote control.

A market is a shorthand expression for the process by which households' decisions about consumption of alternative goods, firms' decisions about what and how to produce, and workers' decisions about how much and for to work are all reconciled by adjustment of prices.

Prices of goods and resources such as labour, machinery and land adjust to ensure that resources are used to produce those goods and services that society demands.

Much of economics is devoted to the study of how markets and prices enable society to solve the problems of what, how and for whom to produce. Suppose you buy a hamburger for your lunch, what does this have to do with markets and prices?

**Questions:**

1- The title of the text is .....

2- What example of a market where buyers and sellers really meet?

.....  
.....

3- How are households' decisions on what to buy reconciled?

.....  
.....

4- What do prices adjust for?



.....  
.....  
5- What problems do markets and prices solve for society?  
.....  
.....

**Read the statements and say whether they are true or false.**

- In all markets buyers and sellers meet.
- In some markets discuss buyers and sellers.
- In some markets transactions are done by remote control.
- What the term market means is the system whereby decisions of consumers are respected by adaptation of prices.
- Where society imposes prices is in markets not in shops.
- Where prices of goods and resources are not important is in markets.
- Prices and markets are studied in economics.

The Global Financial Crisis - La Crise Financière Mondiale



Quelques verbes

<b>To trigger</b> <i>déclencher</i>
<b>To hit</b> <i>toucher, frapper</i>
<b>To grant a loan</b> <i>accorder un prêt</i>
<b>To live on credit</b> <i>vivre à crédit</i>
<b>To entail</b> <i>entraîner</i>
<b>To spread</b> <i>s'étendre</i>
<b>To soar</b> <i>monter en flèche</i>
<b>To rise</b> <i>(attention verbe intransitif, jamais suivi d'un COD) monter, augmenter</i>
<b>To bail out</b> <i>renflouer</i>
<b>To sell at auction</b> <i>vendre aux enchères</i>
<b>To keep</b> <i>garder</i>
<b>To borrow</b> <i>emprunter</i>
<b>To lend</b> <i>prêter</i>
<b>To pay back</b> <i>rembourser</i>
<b>To go bankrupt</b> <i>faire faillite</i>



Des adjectifs:

Global <i>mondial</i>
Economic <i>économique</i> (ne pas confondre avec <u>economical</u> qui signifie économique, dans le sens de : pas cher)
Booming <i>prospère</i>
Low / high <i>bas / haut</i>
Weak <i>faible</i>
Huge <i>énorme</i>
Risky <i>risqué</i>
On the verge of <i>au bord de</i>



Des noms :

Real estate <i>l'immobilier</i>
A mortgage <i>un crédit immobilier</i>
A loan <i>un prêt</i>
A housing loan <i>un prêt immobilier</i>
A mortgage loan <i>un crédit immobilier</i>

<i>hypothécaire</i>
An interest rate <i>un taux d'intérêt</i>
A fixed rate <i>un taux fixe</i>
A floating / adjustable rate <i>un taux variable</i>
A prime lending rate <i>un taux de prêt financier de base</i>
A subprime (lending rate) <i>un taux de prêt élevé pour prêts à hauts risques</i>
The growth <i>la croissance</i>
The households <i>les ménages</i>
A turmoil <i>un tumulte</i>
Debts <i>les dettes</i>
The recession <i>la récession</i>

***Exercise: Fill in the gaps with the terms considered before***

When the US economy was \_\_\_\_\_ and the interest rates were very low, millions of Americans signed for housing \_\_\_\_\_. As the interest rates were low, many took on bigger..... loans for bigger houses. Then, due to a huge demand for \_\_\_\_\_, housing prices soared. What some investment banks did was make the usual procedures to get a loan much easier and ..... loans to households with low income or unstable jobs. These loans were granted with very high interest rates. They are called \_\_\_\_\_. Then, when the economy began to slow and interest rates began to \_\_\_\_\_, people were no longer able to pay back their \_\_\_\_\_. A huge \_\_\_\_\_ began : A famous investment bank, Lehman Brothers \_\_\_\_\_ bankrupt and over one million homes were sold at \_\_\_\_\_. A rescue package was signed by the \_\_\_\_\_

US president to stimulate economic..... However, the financial crisis is spreading and economists say that many countries are now on the verge of .....

---

*Achats / Shopping*



**Acheter**  
**To buy**



**Vendre**  
**To sell**



**Faire payer**  
**To charge**



**Payer**  
**To pay**



**Échanger**  
**To exchange**



**Coûter**  
**To cost**



**Bon marché**  
**Cheap**



**Cher**  
**Expensive**



**Avoir les moyens**  
**to afford**



**Dépendre**  
**To depend**



**En solde**  
**Reduced**



**En promotion**  
**On special offer**



**D'occasion**  
**Second hand**



**Faire ses courses**  
**To do the shopping**



**Vendeur (euse)**  
**Salesman**  
**Saleswoman**



**Caissier (ère)**  
**Cashier**



**Client(e)**  
**Customer**



**Caisse**  
**Checker**



**Passant**  
**Walker**

***Exercise: Fill in the gaps with one of the terms considered before***

1. What I was told was he will \_\_\_\_\_ his house in a few months.
  
2. My dress doesn't fit me. What I do is take it back and \_\_\_\_\_ it.
  
3. We have to think about the \_\_\_\_\_ of our new strategy.
  
4. Oh! It's sunny today; would you like \_\_\_\_\_ with me? I saw a nice dress yesterday.
  
5. How much does that coat \_\_\_\_\_ ?
  
6. I need a new car but not a brand new one; I think I'll get a \_\_\_\_\_ one.
  
7. Oops !!! Can you reduce the \_\_\_\_\_ for this vase?
  
8. Yes I know, this house is fantastic but I can't \_\_\_\_\_ it



9. Where I shopped was near here. However, these shops are shut. I need online.

10. What I'm worried about is the bill. This restaurant is very

---

---

## ***Augmentation et diminution de prix***

**Les verbes ci-dessous peuvent être utilisés pour décrire une augmentation ou une diminution des prix, quantités, sommes et montants.**

**On distingue entre:**

**' Transitive verbs ' : verbes qui supposent un objet comme**

- **Increase , raise ( augmenter )**
- **Decrease , reduce , drop (diminuer)**

**et ' Intransitive verbs ' : verbes qui ne supposent pas d'objet comme**

- **Increase , rise, go up (augmenter)**
- **Decrease, fall, drop, go down, decline (diminuer)**

**De même, plusieurs mots sont aussi utilisés pour décrire les mouvements comme:**

- **An increase, a rise, a raise (salaires) (augmentation)**
- **A decrease, a fall, a drop, a decline, a reduction ( diminution)**

**Exercise: Fill in the gaps with the terms considered before**

1. The prices of electronic goods .....

2. Where we ..... our prices by 10 per cent is in malls
3. There are several competing companies entering the market and this has caused a 20% .....in prices
4. Last year was a good year for the company and our sales considerably .....  
.....
5. The price of coffee has .....as a result of the bad weather conditions
6. As a result of the recession, we have had to..... the amount of money we spend on research and development
7. What the..... in profits causes is the result of poor management
8. Where the recent..... investment has been good for the economy is overseas.
9. Economists predict that interest rates will..... in the next few years.
10. Because of high profits last year, the company has announced a .....in salary for all its employees
11. The population of the world is.....
12. What the government had.....was income tax.

## *Bill, tip, fare, fine, fee*

### **BILL**



*This man has finished dinner, he wants to pay for it. He is raising his arm to call the waiter.*

*'Could I have the **bill** please?'*

*Also: an electricity / gas / phone **bill***

### **TIP**



*After paying the bill you can leave a small amount of additional money to the waiter, it's a **tip**.*



**FARE** The woman is paying the bus **fare** to the driver.

**Fare:** the price you pay to travel by bus, train, taxi,



plane...

## ***FINE***



If you don't take a ticket when you park your car you will have to pay a **fine**.

***Fine (noun):*** *the money that you have to pay as a punishment when you have done*

*something illegal or broken a rule.*

***Fine (verb):*** *in a car a little child must be seated in a safety seat, if not,*

*the driver can expect to be **fined**.*

## ***FEE***



the money you pay to a professional: doctor, lawyer ...

*the money you pay for school*



*the money you pay to enter a place: cinema, museum...*

*the money you pay to join something like a tennis club*

***Exercise: Fill in the gaps using the terms considered before.***

**1.**



**I am going to the reception desk to pay the.....**

**2.**



**Meanwhile, you should give the porter a big ....., this man has been very helpful.**



**3. A trial at court.**

What the man has robbed is not anything, it's a bank. If found guilty, he faces many years in jail and a heavy..... .

4.



The high speed train Eurostar

A: How will I cross the Channel?



B: Try the Eurostar, it's so comfortable!

their standard..... starts is from £49

5.



For sure, what private school .....are is expensive.

6.



Sorry sir, but the speed limit is 110km per hour. You will be..... for speeding.

7.



Look at this huge phone.....! I am sure Sonia talks to her boyfriend for hours when we are out.

8.



I am going to see lions and giraffes with the children,  
today the admission..... to the zoo is cheap

.

9.



A: 'You look angry, what happened?'  
B: 'I have just been..... for parking in a prohibited area.'



**10.**



**On some planes, children under 14 travel  
half.....**

## APPENDIX IV

### Instruction: Rules and Exercises

#### ***RULE 1:***

Some sentences are composed of a subject, a verb and an adverb of place or adverb of time.

Eg. Peter (subject) walked (verb) over the bridge (adverb of place).

Eg. Susan (subject) arrived (verb) in the afternoon (adverb of time).

We can begin the sentence with the adverb of time or place, as in:

Eg. **Over the bridge**, Peter walked. (*grammatical*)

Eg. **In the afternoon**, Susan arrived. (*grammatical*)

We can put the verb before the subject only when the adverb of place comes at the beginning of the sentence.

Eg. **Over the bridge**, walked Peter. (*grammatical*)

Adverb of place      verb      subject

This means that it is ungrammatical to put the verb before the subject if it is the adverb of time that comes at the beginning of the sentence.

Eg. In the afternoon, arrived Susan. (*ungrammatical*)

**Exercise:** Consider these sentences. Some of them are incorrect. Identify the error and correct it

- 1- Tommy walked into the room.
- 2- Arrived Anna on Friday night.
- 3- On Tuesday morning stopped Anna.
- 4- Across the street ran John.
- 5- Over the town Dora flies.
- 6- In the afternoon John studied.
- 7- Out of the door Anna goes.
- 8- At the wall Maria looked.
- 9- Anna started on Monday afternoon.
- 10- On Tuesday evening danced John.
- 11- On Friday morning Tommy left.
- 12- Eats Peter on the table.
- 13- On his birthday Tommy plays.
- 14- In the supermarket Anna works.
- 15- On the bed sleeps the child.
- 16- Plays Anna in the evening.
- 17- In Summer jogs Anna.
- 18- The cat sleeps on the floor.
- 19- Walked John in the town.

## ***RULE 2***

Some sentences contrast two locations.

Eg. Peter lives in France but Anna lives in New York.

It is possible to contrast these locations by making sentences like these:

Eg. Where Anna lives is in New York not in France.

To make sentences like these, first choose the subject whose location you want to emphasize. Then place 'where' in front of it.

Eg. Where Anna .....

Next, follow the subject with its verb as in the original sentence.

Eg. Where Anna lives .....

***Note that the verb cannot come before its subject:***

Eg. Where lives Anna ..... (*this is ungrammatical*)

Then, add a singular form of the verb 'to be' which agrees in tense, followed by the phrase contrasting the locations:

Eg. Where Anna lives is in New York not in France.

If the verb 'to be' does not agree in tense, the sentence is ungrammatical.

Eg. Where Anna lives was in New York not in France. (*ungrammatical*)

### ***RULE 3***

Some sentences contrast activities.

Eg. Anna reads the novel but Peter watches TV.

It is possible to contrast these activities by making sentences like this:

Eg. What Anna does is read the novel not watch TV.

To make sentences like these, first choose the subject whose activity you want to emphasize, then place 'what' in front of it.

Eg. What Anna .....

Next, follow the subject with a form of the verb 'to do' that agrees with the subject:

Eg. What Anna (subject) does (a form of the verb 'to do' that agrees with the subject Anna)

***Note that the verb 'to do' cannot come before the subject.***

Eg. What does Anna .....(ungrammatical)

Next, add a singular form of the verb 'to be' which agrees in tense, followed by the

phrase contrasting the activities. Note that the activities will be expressed with bare-infinitive:

Eg. What Anna does is read the novel not watch TV.

Note that if the form of 'to do' and 'to be' do not agree in tense with the verb of the original sentence, the sentence is ungrammatical.

Eg. What Anna does **was** read the novel or

What Anna **did** is read the novel ...

## *Exercises*

### **1- Write sentences respecting the focused element (underlined).**

Eg. I want **a new computer.**

What I want is a new computer.

- Anna likes **flowers.**
  
- John needs **a book.**
  
- He does not like **horses.**
  
- Anna loved **cats.**
  
- John prefers **football.**
  
- Anna studies **mathematics.**
  
- She liked **numbers.**

### **2- Write a sentence respecting the focused activity (underlined).**

Eg. She **waits for the bus.**

What she does is wait for the bus.

- Anna **answers the questions.**

- I write letters.
  
- John stops a car.
  
- They sell goods.
  
- He worked a lot.
  
- Anna is buying fruit.
  
- She has opened the door.
  
- Peter cleaned his room.
  
- Alex eats cakes.

3- *Some of these sentences are ungrammatical. Identify the error and correct it.*

- What she likes was a cake.
- What I writes is a text.
- What John needs is a pen.
- What she eats was a cake.
- What Anna needed was a new computer.
- What reads Anna was a funny story.
- What they love was a horse.



- What played peter is piano.
- What Tommy cleaned was his jeans.
- What the teacher prepares is the exam.

**4- Contrast activities like in the example:**

Eg. Anna walks in the garden. Peter listens to radio.

What Anna .....

What Anna does is walk in the garden not listen to radio.

- Susan prepares a cake. John repairs a car.

What Susan .....

- Tom answers the phone. Juliet sends a telex.

What tom .....

- I read a text. My sister writes a letter.

What I .....

- Helen played piano. Anna danced.

What Helen .....

- John closed the door. Anna cleaned the table.

What john .....

- The dog barked. The cat jumped.

What the dog .....

- Peter eats a sandwich. Maria drinks coffee.

What Peter .....

- Anna jogs in the garden. John drives a bus.

What Anna .....

5- *Some of these sentences are ungrammatical. Identify the error and correct it.*

- What he did was read the text not play football.
- What Anna does was eat hamburger not prepare dinner.
- What he does was sing a song not play guitar.
- What does john is close the door not jump in the room.
- What did Anna is dance in the club not stay at home.
- What John does is watch football matches not prepare exams.
- What Susan did is play outside not study at home.
- What Peter does is send a telex not send a letter.

## ملخص

مهما تكن من فائدة كبيرة عموما للطريقة التي تُعلَّم بها اللغات في درس لغة ثانية/ أجنبية، يطرح السؤال لمعرفة أي طريقة لتعليم النحو هي الأكثر نفعاً، وكذا للتعرف على أي نوع من القواعد النحوية يكون التمرُّن. تبحث هذه الدراسة نتائج التعليم الواضح من خلال التدرُّب على نوعين من قواعد النحو؛ القواعد البسيطة والقواعد المُركَّبة. في حين أن القاعدة البسيطة المستهدفة تتعلق بالقلب الاختياري لعناصر الجملة الفاعل والفعل الذي يلي ظرف المكان حين يوضع في بداية الجملة، ومثاله: في المتجر تعمل أنا/ أنا تعمل، القاعدتان المركبتان المستهدفتان مرتبطتان بتكوين الجمل (شبه – منقسمة) التي يتم إدخالها ب"أين" و "ما"، ومثال ذلك: أين الكلب يوجد في حجرة الكلب لا في المطبخ، وكذلك: ما أنا تفعل هو كتابة الرسائل لا قراءة الكتب. هذا البحث أنجز بصيغة تجريبية تشمل على فوج تجريبي وفوج شاهد، وتمَّ تقويم المشاركين ضمن كلا طريقتان، حسب مستوى تدريبهم على البنية النحوية المدروسة باستعمال مقاييس تقويم متماثلة أي اختبار- قبلي واختبار- بعدي. الاختلاف في نموذج التعليم يتبع وجود أو غياب المعلومات النحوية الواضحة المتعلقة بالقاعدة النحوية المستهدفة. دلت النتائج على أن المشاركين في المجموعة التجريبية تجاوزت بوضوح بالغ نتائج مشاركي المجموعة الشاهدة في كل من القواعد البسيطة والمركبة. ومع أن نتائج مشاركين المجموعة الاختبارية في القاعدة البسيطة لم تكن إحصائياً ذات دلالة كاشفة، فإنه يبدو أن يكون للتعليم الواضح أثر أكثر إيجابية على المتعلمين في التدرُّب على القواعد النحوية للغة الأجنبية، لا تبلغه الطريقة البيداغوجية الضمنية. هذه النتائج تؤكد نتائج دراسات سابقة أثبتت أن التعليم الواضح يساعد التدرُّب الخاص بالبنى النحوية البسيطة بالقدر ذاته الذي يساعد به التدرُّب في البنى المركبة للغة أجنبية/ ثانية. أشارت النتائج أيضاً إلى أن معرفة أكثر بمعلومات حول النحو يمكنها إثراء أرضية خصبة لمتعلمي الإنجليزية كلغة أجنبية لتطوير مستواهم فيها.

## RÉSUMÉ

Généralement, même s'il y a un grand intérêt à la façon dont les langues sont apprises dans le cours d'une langue deuxième / étrangère, la question qui se pose est de savoir quel type d'enseignement de la grammaire est le plus efficace, et concernant l'apprentissage de quel type de règles grammaticales. Cette étude examine les effets de l'enseignement explicite sur l'apprentissage de deux types de règles de grammaire : des règles simples et complexes. Alors que la règle simple ciblée est relative à l'inversion facultative du sujet - verbe qui suit l'adverbe de lieu quand placé en début de phrase (par exemple, ( 'Dans le supermarché, travaille Anna / Anna travaille ' ), les deux règles complexes ciblées concernent la formation de phrases 'pseudo- cleft' introduites par 'où' et 'que' (par exemple, 'Où le chien est est dans la niche pas dans la cuisine' et 'Qu'est-ce qu'Anna fait est écrire des lettres pas lire des livres'). Ce travail de recherche a été effectué d'après un format expérimental, comprenant un groupe expérimental et un groupe témoin. Les participants dans les deux conditions ont été évalués sur leur niveau d'apprentissage de la structure grammaticale en question en utilisant des mesures d'évaluation identiques, à savoir un pré -test et un post -test. La différence dans le type d'instruction dépend sur la présence ou l'absence d'informations grammaticales explicites concernant les règles de grammaire ciblées. Les résultats indiquent que les sujets du groupe expérimental ont surperformé les sujets du groupe témoin sur les règles simples et complexes. Bien que les résultats des sujets du groupe expérimental dans la règle simple n'ont pas été statistiquement significatifs, ils suggèrent que l'enseignement explicite a un effet plus positif sur les apprenants dans l'apprentissage des règles de grammaire de langue étrangère que ne le fait la méthode pédagogique implicite. Ces résultats confirment des résultats d'études antérieures qui prouvaient que l'enseignement explicite aide l'apprentissage de structures grammaticales simples aussi bien que complexes d'une langue seconde / étrangère. Les résultats semblent indiquer aussi que la connaissance de plus d'informations sur la grammaire peut fournir un terrain fertile pour les apprenants de l'anglais comme langue étrangère pour améliorer leur niveau.