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**A Cognitive and Focus-on-Form Approach to Free Stabilized
Interlanguage and Avoid Putative Fossilization**
**The Case of Third Year LMD Students of English at the University
Centre of Mila Learning Parallel Structures**

**Thesis Submitted to the Department of Letters and English of the University of Constantine in
Candidacy for the Degree of "Doctorat Es-Sciences" in TEFL**

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Dedication

I dedicate this dissertation to:

- ❖ The memory of my beloved mother
- ❖ My dear father
- ❖ My sustaining wife
- ❖ My daughter Israa
- ❖ My sons: Yasser & Ilyas
- ❖ My sisters and brothers, their husbands and wives
- ❖ My nieces and nephews
- ❖ My close friends and colleagues
- ❖ L2 learners who do not give up when stabilized, and who do not lose hope in face of the ghost of fossilization.

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Abstract

It cannot be denied that the ultimate aim of L2 teaching/learning is to produce functionally competent performers who are not at a disadvantage, or short, of grammatical equipments. However, undue *focus on meaning* or communicative skills at the cost of *forms* or grammatical accuracy results in learners who stop developing at a grammatically inaccurate level of proficiency. Evidence from several immersion studies justifies the motivation for formal instruction, i.e. the inclusion of grammar, an issue that constitutes the cornerstone of the endless debate in L2 teaching methodologies: Should we teach grammar at all? It is our contention that *focus-on-form* instruction should be adopted as a mediator between extreme practices by teaching grammar forms in situations where the focus is primarily on meaning and communication. The present study suggests a cognitive and focus-on-form approach to free stabilized interlanguage, escape putative fossilization, and boost L2 acquisition. It seeks to investigate the differential effect of different types of instruction, namely focus-on-form, focus-on-meaning and no-instruction. In order for us to determine the role of *focus-on-form* instruction in the acquisition of English parallel structures, five research questions are put forward, where two are most prominent: 1) Does focus-on-form instruction, both preemptive and reactive, have a differential effect on learners' interlanguage system? 2) Are short-term gains, if at all, maintained in the long-term? These are translated into working hypotheses which are roughly summarized as follows: the *focus-on-form* instructed subjects and the *focus-on-meaning* subjects would outperform the uninstructed participants of the control group; secondly, different types of instructional conditions would have differential effects on the short-term learning of parallel structures; thirdly, the *focus-on-form* group would outperform the *focus-on-meaning* group in the short-term; and finally, short-term gains would be maintained in the long-term and higher for the *focus-on-form* group than for the *focus-on-meaning* group. Seventy eight (78) third-year LMD university English language learners are divided into three groups: a focus-on-form group (N=27), a focus-on-meaning group (N=27), and a control group (N=24). A Grammaticality Judgment Test (GJT) was used to measure accuracy of the target parallel forms over the short- and the long-term; therefore, three similar but not identical tests were administered at three temporal times: a pre-test, an immediate post-test, and a delayed post-test. The results of the present study show that focus-on-form instruction had a differential effect in language learning in both the short- and the long-term. Recommendations for both research and pedagogy are discussed, and a model course of instruction is suggested.

Key words: Interlanguage – fossilization – stabilization – instruction – focus on form – focus on meaning – input enhancement – feedback – consciousness-raising - noticing.

List of Abbreviations

APP: Analysis-Practice-Personalization

ARC: Authentic use-Restricted use-Clarification and focus

CA: Contrastive Analysis

CAH: Contrastive Analysis Hypothesis

EA: Error Analysis

ELT: English Language Teaching

EPP: Exposure-Presentation-Practice

ESA: Engage-Study-Activate

ESL: English as a Second Language

FFI: Form-Focused Instruction

FonF: Focus on Form

FonFs: Focus on Forms

FonM: Focus on Meaning

IL: Interlanguage

L1: First Language

L2: Second Language

MEP: Multiple Effects Principle

MMC: Mechanical, Meaningful, and Communicative (Drilling)

NL: Native Language

OHE: Observe-Hypothesize-Experiment

P1: Presentation

P2: Practice

P3: Production

PI: Processing Instruction

PPP: Presentation-Practice-production

SLA: Second Language Acquisition

T0: Pre-Test

T1: Immediate Post-Test

T2: Delayed Post-Test

TTT: Test-Teach-Test

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General Introduction

1. Statement of the Problem

1.1. The L2 Learning Continuum

Language learning takes place along a continuum: Starting from zero competence and ending up, ideally, in native-like competence. All throughout, however, there are states of *transitional dialects* (or interlanguage) which vary from one individual learner to another. The crux of the matter is that while some learners succeed in working their way to language acquisition, others happen to *stabilize* at best, or to *fossilize* at worst, at given stages along the continuum. Such learners never come to perform well as if there is a cognitive fixation of an erroneous language form or structure.

1.2. Status of Linguistic Competence

It is our belief, no matter how fashionable instruction is, that undue emphasis on communicative skills (together with teacher misconception of, and lack of training in, communicative and meaning-based approaches – which shaped notably the Algerian L2 instructional system for a considerable span of time) at the cost of grammatical accuracy (and therefore explicit grammar instruction) results in learners who *stabilize*, mid-way, at a grammatically inaccurate level of proficiency (and who may be tongue-tied at the same time). It should be informative to note that we are, in no way, against functional proficiency; rather, we need to produce functionally competent performers who are not at a disadvantage, or short, of grammatical equipments.

1.3. A Cognitive Route to L2 Learning

Stabilization/fossilization may be accounted for in terms of a number of such factors as: linguistic, sociolinguistic, psycholinguistic, communicative, motivational forces, etc. (c.f. Chapter 2). All along the present research, we suggest to take a *cognitive* route, and thereby raise linguistic awareness and reduce the problem of inaccurate interlanguage to a minimum.

The term *cognitive* is very telling here, meaning that learning may be subject to the use of cognitive processes or strategies as deductive reasoning (c.f. Chapters 5, 7, & 8), rule analysing, monitoring, comparing, planning, attending, noticing, conscious-raising and *focus-on-form* learning (c.f. Chapters 3, 4, & 5), and the like. Explicit/implicit grammar instruction stands for cognitive instructional strategies (e.g., formal instruction/input enhancement) used to raise learner awareness and consciousness of the target language form and structure. We share the view that a consciousness-raising process is necessary for learners to learn language forms and that intake is what learners consciously notice.

In the spirit of the foregoing account, the present study attempts to approach L2 proficiency development from a cognitive perspective in a focus-on-form framework. It seeks to investigate the way in which presenting input under *enhancement* conditions along with the use of *feedback* could affect intake of target structures. It is our contention that directing learners' *attention* to formal aspects of the input, and promoting *noticing* through saliency of input aids acquisition thereof.

2. Aims of the Study

The present scientific investigation into the nature of L2 learning and the individual learner is a cognitive approach to language prediction through which we aim to:

1. Measure the effect of instruction.

2. Compare the value of different types of instruction and find out how type of instruction and progress over time interact.
3. Measure the extent to which *intake* is affected by a preemptive and reactive *focus-on-form* instruction – that is to investigate the effect of focus-on-form treatment on the development of *explicit knowledge*.
4. Evaluate the extent to which *focusing on form* through explicit/implicit grammar instruction, teacher negative feedback, learner consciousness-raising, and input enhancement assist learning and effect change in learners who show symptoms of cognitive and linguistic stabilization i.e. to destabilize *stabilized* interlanguage states, escape putative fossilization and boost L2 acquisition.
5. Call for explicit and implicit grammar-based classroom materials which are making a come-back in some schools and English language teaching (ELT, henceforth) textbooks (e.g., Nitta & Gardner, 2005).

3. Research Questions

In order for us to determine the role of *focus-on-form* instruction in the acquisition of English parallel structures, five research questions have been put forward:

1. Does instruction make a difference?
2. Do differences in the types of instructional conditions lead to differences in the short-term learning of English parallel structures?
3. Is *focus-on-form* instruction, both preemptive and reactive, through input enhancement and consciousness-raising more optimal than *focus-on-meaning* instruction in promoting L2 forms in the short-term?
4. Do different types of instruction have different effects in the long-term?

5. Will the *focus-on-form* short-term gains be maintained in the long-term?

Having advanced the research questions, we should now specify the comparisons to obtain by translating the foregoing research questions into working hypotheses.

4. Hypotheses

This study attempts to investigate whether a given type of instruction could impact on the development of L2 proficiency, as measured by explicit knowledge tests, and thus destabilize or free a stabilized L2 form to escape putative fossilization. In the pursuit of our aims, we hypothesize that:

Hypothesis 1

Instruction would make a difference in that the *focus-on-form* and *focus-on-meaning* instructed groups would have differential effects on the short-term learning of parallel structures i.e. the *focus-on-form* instructed subjects who receive a focused treatment and the *focus-on-meaning* subjects would outperform the uninstructed participants of the control group – those who receive no instructional treatment.

The *null hypothesis* is that instruction would not make a difference or that there would be no difference in the short-term learning of parallel grammar structures between the selected groups.

Hypothesis 2

Different types of instructional conditions would have differential effects on the short-term learning of parallel structures.

The *null hypothesis* is that different types of instruction would not yield to different effects on the learning of parallel structures in the short-term, or if they do it would be due to pure chance factors.

Hypothesis 3

In the short-term, the *focus-on-form* group who receive a form-focused treatment would outperform the *focus-on-meaning* group who receive a purely meaning-focused treatment i.e. raising learners' awareness of specific L2 forms would facilitate acquisition.

The *null hypothesis* is that the *focus-on-form* group would not be outperforming in the short-term learning of parallel grammar structures, or if it does it would not be due to the treatment itself, but the result of pure chance factors.

Hypothesis 4

Short-term gains would be maintained in the long-term and higher for the *focus-on-form* group than for the *focus-on-meaning* group.

The *null hypothesis* is that the gains of instruction would not be maintained in the long-term nor be higher for the *focus-on-form* group than for the *focus-on-meaning* group.

5. Research Instruments

Progress in the use of the target structures is measured through the administration of a paper-and-pencil *untimed grammaticality judgement test* – which is said to measure explicit knowledge – administered immediately after instruction and delayed two months after.

6. The Sample

The subject sample of the present study consists of 78 third year LMD university English language learners from the University Centre of Mila. In point of fact, all the parent population – which itself consists overall of three groups– is recruited. To put it otherwise, three intact classes were randomly assigned to different groups. Only the participants from the three classes who were present in all temporal phases of the experiment were accounted for.

7. Structure of the Thesis

The present work is a total of eight chapters: The first five chapters constitute the theoretical background to our study and survey the extant literature that touches upon the present multifaceted topic, while the remaining three chapters constitute our practical work which is supposed to test the hypotheses we have just advanced.

Chapter one is an attempt to review the concept of contrastive analysis and error analysis and how these shape *interlanguage* continua. A review of the history of interlanguage as a concept is also presented so that to know where it came from and where it may be going.

In Chapter two, and in light of our review of the concepts of contrastive analysis, error analysis, and interlanguage, we deem it useful to consider the historical context of the development of the concept of *fossilization* and *stabilization*. Fossilization was identified by Selinker (1972) when conspicuous studies on interlanguage were conducted. As he pointed out, the phenomenon of fossilization is the most important fact in describing interlanguage development. Both phenomena are outlined along with causal variables, and the chapter is closed with a critique.

It cannot be denied that much of the process of second language acquisition (SLA) is driven by *cognitive* activity; Chapter three outlines a hot and thorny issue in SLA: The role of

consciousness, attention and awareness in processing input as intake for language learning. The notorious umbrella term 'consciousness' is prone to a terminological confusion due to the conflation of distinct senses of consciousness in research, and as such an attempt is made to clarify the picture.

Chapter four reviews empirical research for evidence of the effect of awareness in SLA i.e. an attempt is made to look for evidence of association or dissociation therein, thus putting studies under the attentional framework on/off the defensive. The chapter underscores the point that attention and awareness are held to be essential cognitive processes that mediate input and interlanguage development.

The impact of noticing – and attention studies – has been cited as a theoretical motivation for research on the proposed benefits of *formal instruction* which is at the very heart of the debate in second language acquisition. Chapter five surveys the literature on *focus-on-form instruction*, *consciousness raising*, *input enhancement*, *processing instruction*, along with empirical evidence thereof. Specifically, it moves from the question of whether instruction makes a difference to an account of the relative effect of different types of instruction, namely focus on form. The *interface debate* is central to the foregoing discussion; the efficacy of L2 instruction, that is, addresses the issue of the interface between explicit and implicit knowledge and the chapter outlines the three respective positions.

Chapter six is an experimental study which compares the value of different types of instruction so as to find out how *type of instruction* (focus-on-form instruction, focus-on-meaning instruction, and no-instruction) and *progress over time* (T0, T1, and T2, corresponding, respectively, to the pre-test, immediate post-test and delayed post-test) interact. In particular, it attempts to measure the extent to which intake of English parallel structures is affected by a *focus-on-form* treatment – that is, to investigate its effect on the development of explicit

knowledge in order to free *stabilized* forms and aid L2 acquisition. The chapter outlines the research questions along with the hypotheses, the research design, the structures under study, the selected sample and the target population, the instructional conditions, the instruments utilized, the scoring procedure and the analysis. Then, the results are expounded together with a discussion thereof.

As for the implications induced from the present study, they are left for Chapter seven. This chapter attempts to discuss a number of implications while drawing on the results we obtained – results which reveal a complex picture. A number of limitations and hence recommendations are then volunteered with some further elaboration.

The eighth Chapter, and the last, suggests a form-focused model course followed by a discussion and an evaluation subject to some defining criteria. The course follows the presentation-practice-production (PPP) sequence. For critics of the PPP *default* model, we end up the chapter with an attempt at both *varying* and *extending* the model's sequence patterns so as to take the *fault* off the default model.

CHAPTER ONE:

The Nature of Learner Interlanguage

Introduction

The puzzling process of language learning has attracted increasing interest from researchers working in different fields: Education, psychology and the like. The field of second language acquisition (henceforth, SLA) has grown into a vast field with a literature of its own, using more often than not explorations, by way of contrastive analysis, in first language as a point of departure and the way this fosters or hinders second language learning.

The Contrastive Analysis Hypothesis, which may be said to have started with Lado (1957), was once, perhaps, the most controversial issue. The central aims of Contrastive Analysis are the identification of areas of similarity and difference between languages, and the prediction of areas of difficulty. Contrastive Analysis is, then, primarily concerned with the influence of learner first language (L1, henceforth) over a second language (henceforth, L2), that is, L1 interference. Errors, as such, are accounted for in terms of transfer i.e. the projection of L1 habits onto those of L2. In this line of thought, one of the most important strategies, in language learning, is the use that the learner makes of his¹ native language (NL) in order to get his meaning across. Such a strategy may yield a negative effect: Properties of L1 in learner language that fall short of the target and hinder communication. It should be mentioned, however, that this may lead to positive effects as well.

Ever since the introduction of Corder's 'transitional competence' or 'idiosyncratic dialect' (1967), the field of SLA has received welcome overwhelming data by research concerning the learner's language system with respect to phonological, morphological, syntactic, and pragmatic aspects. Error Analysts such as Corder (1967, 1971) viewed that we should deal with three varieties of language, instead of two. That is, we have the *source*

(1) A word of apology must be said to female readers. Students are referred to throughout as 'He' to avoid the clumsy repetition of 'He or She' 'his or her', etc. Moreover, the English pronoun system forces us to choose between the two, and 'He' is considered to be an unmarked term for sex.

language, the *target language* and the gap therein along the continuum; this is now widely referred to as *interlanguage*. Transfer from the learner's native language is believed, by proponents of Contrastive Analysis and Error Analysis, to have an important role to play in the shape of interlanguage.

The 1970's witnessed the withdrawal of behavioural thinking and structural linguistics and the rise of cognitive thinking and generative linguistics; here, the learner came to be seen as one who has internalized a system of rules. Before the introduction of interlanguage, contrastive analysts, as afore-mentioned, tried to predict and describe learners' errors in terms of interference. Language transfer, however, could only account for some errors, while many others do not bear resemblance to either L1 or L2. Now, in the light of the concept of interlanguage, learners are viewed as constructing their own grammatical systems. These systems are learner-driven rather than teacher-driven – the learner builds his interlanguage by employing a number of different strategies, some of which are based upon his L1, others upon his desire to communicate, and yet a number of them may be rooted in Universal Grammar. As a matter of present facts on the nature of interlanguage, the list is in no way exhaustive.

In the present chapter, it will be of use to review the concept of contrastive analysis and error analysis. A review of the history of interlanguage as a concept is also, urgently, warranted so that to know first where it came from and then where it may be going.

1.1. Contrastive Analysis and Error Analysis

1.1.1. Contrastive Analysis

Interlanguage studies are not normally primarily concerned with 'languages' in the conventional sense, except if we take interlanguage as a system just like other language systems (c.f. Adjemian's, 1976, definition in 'Section 1.2.' below). Interlanguage is a branch being interested in the development of language, not in the product (James, 1980). In this sense, Contrastive Analysis (henceforth, CA), a component under the rubric of interlanguage

studies, is rather diachronic than synchronic, not in the Saussurian sense but in the sense of change within an individual's interlanguage (*ibid.*). Child L1 acquisition, however, is not a form of interlanguage for there is only one language involved. Monolinguals becoming bilinguals are, then, what we call truly interlingual diachronic study i.e. learner L1 and the L2 to be learned are involved.

A word of caution seems warranted here: Translation involves two languages also but it does not make part of interlingual studies because there is no involvement of learning; on the other hand, contrary to bilingualism which is concerned with the use of two languages either by an individual or society, CA deals only with the individual. Error Analysis is a third branch of interlanguage study where there are involved two languages and monolinguals becoming bilinguals. Error analysts suggest that, in working his way to target language (TL), the learner builds a set of 'approximative systems' (Nemser, 1971) or 'transitional dialects' (Corder, 1971); the successive stages are unique in certain respects and intersect with those before and after in other respects.

Perhaps the most controversial issue of the past decades is the Contrastive Analysis Hypothesis (CAH). Modern CA is taken to have started with Lado (1957), yet it goes back to the late 19th century (see James, 1980). Lado (1957) is the name most closely associated with CAH. Being one of its strongest proponents, he suggested that the major aims of CA are: (1) providing insights about areas of similarity and difference between languages, (2) explaining and predicting problems in the learning of L2, and (3) developing course material for the purpose of language teaching. These constitute, clearly, a number of objectives, which can be glossed as linguistic, psychological and even pedagogic (more on each of these is sketched below).

CA is, then, primarily concerned with the differences between languages and the influence of L1 on L2, yet not the reverse; so, the directionality speaks for itself. It has *psychological* as well as *linguistic bases* for it is, as James (*ibid.*) put it, a hybrid bearing both

on linguistics and psychology. Contrastivists take it upon their shoulders to explain some L2 learning phenomena. They use descriptive means in their account for L1 and L2, and comparative techniques when dealing with the descriptions. As such, they use linguistic means for psychological ends. With respect to the linguistic basis, it concerns itself with the formal properties of language. Thus, for explaining certain aspects of L2 learning, contrastivists adopt descriptive accounts of L1 and L2 and use the linguistic procedure of breaking up language into three levels: Phonology, grammar (i.e. morphology and syntax), and lexis. Moreover, any contrastive analysis goes, usually, through two steps, *description* where each of the two languages is accounted for at the appropriate level and *comparison* where levels along with their respective descriptions are juxtaposed in an attempt to identify the extent of interlingual contrast or non-correspondence.

It should be noteworthy that CA in its linguistic component does not concern itself with (L2) learning, an issue being, it goes without saying, the subject-matter of psychology i.e. the psychological component of CA. The need for a psychological basis is thus justified. The foregoing leads us to account for *transfer*, a concept which refers to the effects of (L1) prior learning on subsequent (L2) learning. Transfer theory is then the psychological basis of CA. Now, how is transfer responsible for the form and function of a learner's interlanguage?

In fact, there have been hot debates as to whether transfer is a valid concept at all in discussing language acquisition. The debate may be seen as a continuum having extreme poles. Extremes range from those who view that transfer is not that crucial in the development of interlanguage, to those (e.g., Lado, 1957) who claim that L2 learners rely almost entirely on their L1 in the process of learning the TL. The latter (*ibid.*: 2) held that: "*Individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture.*" Nevertheless, as pointed out by Corder (1967), interlanguage is not a hybrid of L1 and L2, even if some features of one language or the other, or both, may be present. Much research suggests that transfer is an

important element in the construction of an interlanguage. Nemser (1971), in a study of the production and perception of certain sounds, provided evidence for at least partial autonomy of interlanguage and supported the crucial idea that language transfer does have a role, but not in an extreme way, typical of the CA hypothesis. James reported on a study which suggested two types of transfer: When positive there is *facilitation* of learning, when negative there is *interference* (thus, errors). However, for Corder (1978, cited in James), non-facilitation should not be equated with or opposed to interference. The opposition should rather be to no-effect of L1 on L2. Now, *positive transfer* takes place when L1 matches with L2. Learning, as such, would take place with little or no difficulty. As for *negative transfer*, it occurs where there is a mismatch, at any of the afore-mentioned levels, between L1 and the L2 to be learnt. That is, structurally different areas of the two languages would result, as claimed by the CAH, in interference. In such a situation, L2 learning would be more difficult and take longer because of the ‘newness’, resulting therefore in a difficulty, of the L2 structure.

Taking the discussion further, these two concepts of transfer are central to the CAH and reflect a behaviourist model of language learning, which believes that language acquisition is a matter of habit formation. They refer to the automatic and subconscious use of old behaviour in new learning situations. Language acquisition is held to take place in ways similar to Skinner’s interpretation of his experiments on rats (1957), where positive and negative stimuli induce certain learned behaviours. These views came into vogue in the 50s and 60s and gave rise to the Audiolingual Method of teaching which uses extensive drilling in an attempt to get the required language habits. ‘Error’, here, is seen as an unwanted behaviour which must be eradicated.

1.1.2. Pedagogical Import of CA

Given the development of modern linguistic science, several new techniques, in addition to the one mentioned above, have been used in the field of language teaching. CA, on

its part, has added welcome new data. Of note is the fact that it has pedagogical uses (c.f. Sanders (1976) and Lee (1969) for the relevance of CA to language teaching). James (1980) suggested that it can be applied for, among others, prediction, diagnosis and so-called fossilized errors. Concerning *prediction*, CA is claimed to have the ability to *predict* the very aspects that will cause problems, difficulty, or errors. By error prediction, he means aprioristic capacity to tell that an error will occur, not to tell the very form of error. So, the predictive capacity of CA, he insisted, should not be given more than its credit. Put simply, CA claims that it is possible to predict the areas of difficulty for language learners by comparing and contrasting the linguistic systems of L1 and L2, a comparison that is crucial for any prediction to be made (Eckman, 1977). Decades before, Fries wrote: "*The most effective materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner*" (1945: 9). Lado (*op cit.*) claimed that the teacher who attempts such a comparison will know better what the real learning difficulties are and can provide for making up for them. It seems obvious from this that the major concern of CA is pedagogic.

James (*op cit.*) pointed out that where prediction is associated with CA, the job of *diagnosis* belongs to Error Analysis. Diagnosis relates to why an error has occurred (see below 'sub-section 1.1.4.' for explanation of errors), a duty of the error analyst and the teacher as well. Only on the basis of such diagnostic account, can the teacher provide feedback or any remedial work.

Pushing further on pedagogical lines, the import of CA is the fact that it may suggest two principles of teaching input, namely *selection* and *grading* (James, *op cit.*). By selection, it is meant *what* to teach. When a contrastive analysis is conducted, similarities and differences between L1 and L2 may uncloak. This is, clearly, an indication to the teacher that the learner is expected to acquire structures similar to those of his L1 before he gets introduced to structures of a different kind. As for grading, it is simply meant *when* to

introduce the language input. Contrastivists believe that the teacher should proceed from the simple to the complex on the grounds that language items which prove to be similar are predicted to be easy to learn while those which are different will be difficult. In effect, grading is too difficult an issue to resolve that it remains, up to now, a crucial SLA conundrum. As such, CA seems to be too ambitious, perhaps more than we give it credit for; the extent of prediction, that is, is exaggerated (see 'sub-section 1.1.5.' on critique below). Error Analysis may help in here, for it does suggest explanations other than L1 Transfer. Yet, CA and Error Analysis should better be seen as complementary rather than competing (James, 1980). It is to Error Analysis that we now turn.

1.1.3. Error Analysis

By way of introduction, Error Analysis (henceforth, EA), insofar as source of error is concerned, can be approached in one of two ways (Corder, 1967). Firstly, there is the belief that because of the use of inadequate teaching techniques, error would always occur no matter how perfect our teaching method is thought to be. The second school of thought holds that errors would always be committed in spite of teacher effort, for we live in an imperfect world. For Corder, we should find, therefore, ways of dealing with error after its occurrence.

According to Corder (*ibid.*), errors are either *systematic* or *non-systematic*, the opposition of which is important. By systematic, he meant errors of competence which are committed because of ignorance of the rules in question. Such errors, then, characterize the learner's underlying knowledge or what Corder called *transitional competence* (see 'Section 1.2.' below). As for non-systematic errors, also called performance errors, they are caused by inattention, anxiety, lapses, tiredness and the like. In this way, they are not errors proper; they are rather seen by error analysts as mistakes – caused by a mixture of affective, cognitive and physical factors – which can be corrected by the performer himself/herself for they are not characteristic of his/her competence. In effect, it is from systematic errors that we can

reconstruct the learner's current knowledge or transitional competence, and that is why they are significant in the process of language learning (contrary to non-systematic mistakes).

Errors, thus, provide evidence of the language system the learner has acquired, and hence is using, at a particular point in the learning course. In this perspective, they are *significant* in three ways (*ibid.*). First, they inform the *teacher* about the extent of learning i.e. what the learner has learnt and what remains to learn. Second, they tell the *researcher* the way language is learnt and what strategies are used. Third, and perhaps most importantly, they are *necessary strategies* for the *learner* to test language hypotheses and thus learn the target system. As Corder suggested:

Simple provision of the correct form may not always be the only, or indeed the most effective, form of correction since it bars the way to the learner testing alternative hypotheses. Making a learner try to *discover* the right form could often be more instructive to both learner and teacher.

(1967: 168; emphasis mine)

For analysis of any error, three stages should be gone through (Corder, 1971). The first stage is that of *recognition*. Recognition of idiosyncrasy entails a correct interpretation of learner sentences i.e. the allocation of meaning in the given context. Corder (*ibid.*: 155) suggested the following law: "*Every sentence is to be regarded as idiosyncratic until shown to be otherwise.*" For example, a sentence may be superficially well-formed, but when analyzed in context proves to be erroneous. Corder called such sentences *covertly* idiosyncratic (but *overtly* well-formed). Take his example: "*After an hour it was stopped*" (p. 155); overtly, and when de-contextualized, it conforms to the rules of the target language, yet knowing, when interpreted in context, that '*it*' refers to '*the wind*' there is the recognition that it is erroneous. As such, methodologically speaking, it is wrong to deal only with overtly idiosyncratic sentences; at the same time, it is equally worth analyzing the superficially well-formed ones for they are very much telling in terms of what a learner knows. This means that somehow the interlanguage investigator has to know what the learner intends to say – a study of interlanguage intended meaning, that is.

Description of idiosyncrasy is the second stage of EA. This stage is, by definition, a comparative process where pairs of sentences (the learner's erroneous sentence and the reconstructed TL sentence) are juxtaposed. Before this stage is secured, it should be important to note, Corder (1971) objected to calling certain items erroneous or deviant for this implies an explanation being made *a priori* i.e. before a description is due.

Third, the *explanation* stage is the ultimate aim of EA. Where the first two are obviously linguistic, the present stage is rather psycholinguistic. It answers the questions 'why' and 'how' learner output is as it is. Answering these questions may help better the teaching field. The following are some explanations of error.

1.1.4. Sources of Error

So far, it has been realized that the making of error is inevitable in the learning process. However, errors are not a unitary concept, nor are they all of one kind. That is, they may be explained as having different sources. These sources are termed by Selinker (1972) processes central to L2 learning, in terms of which the shape of interlanguage could be predicted and structures could *fossilize*. First and foremost, many errors are due to *interference* of the mother tongue (c.f. Corder, 1971; Selinker, 1972; Han and Selinker, 1999). In this case, they are referred to as *transfer*, or negative transfer, errors. Because it is a question of two languages, L1 and L2, errors are also viewed as being *interlingual*.

Overgeneralization (of a L2 rule) is also a potential candidate for explaining error commitment (Selinker, 1972). Such errors are also known as analogical or *intralingual* errors inherent in the learning process, with no recourse to L1.

Another explanation is *transfer of training* (*ibid.*). The belief is that errors are teaching-induced i.e. they are due to the methods and techniques used by the teacher. Researchers, then, try to find justification for an interlanguage structure in the pedagogical input.

Errors can also be explained as a result of cognitive processes, a sort of data-processing and *hypothesis formation* (Corder, 1971). That is, the learner formulates false hypotheses to meet the rules of L2 when more data is processed.

However, there are a number of errors whose source is unknown. Pedagogically, the teacher, in such a case, would be much more concerned with how to deal with them than identifying them. For Corder (1967), teachers could identify errors all throughout their teaching course, and thus the linguist remains helpless as to ‘how’ to deal with them, bringing nothing new as far as identification is concerned.

1.1.5. Critique

Selinker (1992) proposed to rethink the Interlanguage Hypothesis (c.f. Selinker and Lamendella, 1979) by reading the early scholars (such as Fries, Lado, and the like) so as to have a better understanding of how, in the process of SLA, such processes as fossilization, language transfer, and universal processes operate and interact with each other. For him, this is necessary in order to answer many theoretical questions, bearing upon current interlanguage and SLA research that remain moot. Such questions, he pointed out, were at least discussed, if not answered, by early scholars.

However, as James (1980: 166) noted: “*CA is not only problematic but also fraught with controversy*”. Its limitations stem, mainly, from the fact that not all errors originate from L1 interference (see other sources in Selinker, 1972, for example). It seems, by now, that interference is dubbed a vacuous and outdated concept (in fact, the Ignorance Hypothesis became an alternative to interference; to stop it, one should stop ignoring L2 norms – see James, 1980). Lado was attacked on the grounds that he made the assumption that the learner will not have difficulty learning the L2 patterns that exist in his L1. This has not been empirically proved. Language learners may use some grammatical knowledge from their L1; still, it is already a fact that they have equally certain cognitive abilities that are not directly

related to their native language. The severe criticism addressed to CA is the fact that while it is possible for researchers to predict which L2 aspects would prove difficult to learners, they have difficulty predicting the strategies used to make up for the problems.

A question which may loom on the horizon is how a field like SLA that has recently come of age reverts to the early ages and uses research procedures that already proved defective. Certain aspects of language learning may match with behaviourist principles, but there is counter-behaviourist evidence that children produce forms they may not have heard in their environment such as "goed". As a matter of fact, language is rule-governed and structure-dependent. Chomsky is famous for his sharp reaction to the behaviourists, a reaction which viewed children as perceiving regularities and constructing rules about the way language works instead of imitating adults around them.

Richards (1971), a strong proponent of EA, suggested a *non-contrastive approach* to EA, meaning that there is more to errors than L1 transfer; the source could be, among others, the very strategies the learner employs. Clearly, he reduced the *import* of CA and contended that, for pedagogical purposes, it is necessary to consider the nature of errors – be they interlingual, intralingual, or developmental.

Nevertheless, Selinker (1992) noted that the CA enterprise had been fallaciously attacked for its failure to predict processes, influencing learners' performance, other than transfer. In fact, there are two fallacious notions about CA that need clarification. On the one hand, CA does not claim that it can guarantee explanation of all learner errors. On the other hand, the non-occurrence of errors by no means invalidates, necessarily, the prediction. Apart from all this, Selinker argued that CA is a pedagogically necessary tool for its ability to foresee potential learning problems having their roots in L1 transfer and thus its provision of valuable insights to the field of teaching.

It stands to reason that factors other than L1 transfer contribute to the shaping of learner interlanguage; deficiency or failure of CA in terms of its predictive power is,

therefore, no excuse to abandon it altogether. Still, it is certainly worth our while to shed some light on the nature of interlanguage, its vulnerability to the phenomenon of *stabilization* and/or *fossilization*, and some explanatory factors, in addition to transfer. It is to this – interlanguage – that we now turn.

1.2. The Birth of Interlanguage: Its Different Versions

The understanding of the learner's *interlanguage* (Selinker, 1972) is vague. Thus, it is necessary to define interlanguage and its relationship to a learner's native language and/or target language, if not to other variables.

The term 'interlanguage' (henceforth, IL) coined by Selinker (*ibid.*) refers to the structured system which the learner internalizes at any given stage in his development. Certainly, Selinker is the one who coined the term “interlanguage”, yet it is Corder (1967) who is held responsible for raising issues which became central to IL studies. Building on ideas already explored by theorists and researchers, Corder claimed that there is structure in *learner language*, the thing which makes it possible to make certain inferences about the learning process by accounting for, and analyzing, successive states of learner language.

The term IL (Selinker, 1972) has first been referred to as *transitional competence* (Corder, 1967), *idiosyncractic dialect* (Corder, 1971), and *approximative system* (Nemser, 1971). The following is a sketch on each.

First, learner language, for Corder (1967), is better termed *transitional dialect*, highlighting its instability or unsteadiness (see below). In this way, he appeared to consider IL as a developmental process of transitional competence.

With regard to *idiosyncractic dialects* (Corder, 1971), they all contain some rules that are peculiar to the individual; thus, some idiosyncratic sentences “*are not readily interpretable*” (p.149). Idiosyncractic dialects are normally *unstable*, too, and the data derived are, thus, fragmentary, the thing that makes it difficult for the linguist to describe such

dialects. Corder argued for a position against calling idiosyncratic sentences deviant or incorrect (this applies for lapses, for example, which are failure of performance) for this implies that the rules are known; a parallel is made here with child sentences, or say first L1 acquisition. To put it all differently, the learner, here, follows the only rules he knows, rules of his transitional dialect.

Moving to Nemser (1971), he called attention, when analyzing phonological and phonetic data, to *deviant* learner language. Though they bear some resemblance, many of his ideas differ from the now-well-established concepts of IL. He pointed out, for example, that learner output at any given time stems from a linguistic system, indeed an internally structured system distinct, as it is, from his L1 and the L2 he is learning. He argued that in producing IL forms, these sometimes match with those of L1 or L2, yet sometimes they do not. At times, however, they may have their origin from sources other than L1 and L2. The least that can be said here is that this is evidence for partial autonomy of learner IL system.

These are only Corder's and Nemser's perspectives. Other theories of the nature of learner language have been proposed in addition – and in contrast– to these. An extension of *approximative system* is popularly referred to as *Interlanguage Hypothesis* (Selinker, 1972). Selinker hypothesized that the L2 learner has a separate linguistic system observable in his output, a system referred to as *interlanguage*. According to this hypothesis, the learner, in acquiring a L2, builds a system of rules which may be different from both the TL and the NL, though similar in certain respects. In this perspective, IL may be, therefore, a continuum with two extreme poles, L1 and L2, along which learners traverse.

To sum up, from what is sketched above, three different theoretical approaches to the nature of SLA can now be identified (Selinker, 1992), each of which makes significantly different claims and predictions about the nature of IL. First, the *Transitional Competence Hypothesis* strongly highlights the transitional nature of learner's language, claiming that it is "*a dynamic, goal-oriented system of increasing complexity*" (Corder, 1981: 90). The

Approximative System Hypothesis, the second approach that is, claims that learner language develops in directional, and *discrete*, stages towards TL norms (Nemser, 1971). Third, the *Interlanguage Hypothesis* denies the *approximative* nature of the system and claims the existence of the phenomenon of *fossilization* (Selinker, 1972).

1.2.1. Interlanguage Competence

Some questions may loom on the horizon of the above definitions: What is meant by ‘IL competence’? Is there a unitary IL interpretation? In which way does it differ from ‘native speaker competence’? Does the difference of IL knowledge reside in *variation* (see Tarone, 1982)?

Selinker (1992) discussed ‘competence’ as being manifold. Of note are the three main types of IL competence which are as follows: *fossilized competence*, *functional competence* and *transitional competence*. First, investigators, like Nemser (1971), long before the coinage of the term, were conscious of the need for a concept such as ‘interlanguage’ since their subjects often performed in a ‘language’ containing neither NL norms nor ones of the TL. Selinker (1972) handled this as *fossilized competence*.

The second type of competence (c.f. discussion in Selinker, 1992) is referred to as *functional competence*. As it stands, this type means that a learner might be not willing to learn any more for being satisfied with acquiring the linguistic means with which to survive functionally in a given situation or domain, a competence which is likely not to fit in other TL domains (take the case, for example, of English for specific purposes teaching). In this way, the learner’ IL may be prone to *fossilization*, because of making use of ‘survivalist communication strategies’. In this way, the notion of ‘functional competence’ matches clearly with the view of IL competence being quite fragmentary and varying across domains.

As for the third type of competence, Corder (1967, 1971; see also discussion in Selinker, 1992) called it *transitional competence*. He argued that error in a learner’s IL is

evidence that he is building his linguistic knowledge at a given point in time. Errors, he pointed out, are the most important source of information, revealing that there is a *'built-in syllabus'* and that processes of *hypothesis formation* and *restructuring* are continuously at work. Such a built-in syllabus is claimed to be *transitional*. By transitional, he wanted to capture the *dynamic* nature of the learner's system, a system held to be *developing*. That is, learner language is claimed to be *unstable* (Corder, 1981: 16) in the sense that when a learner is not understood, he makes an attempt to get his meaning across by matching, as near as possible, the TL linguistic and cultural norms. In case he is understood with what little competence he has, the IL is hypothesized to *stabilize*, leading possibly to *fossilization*; this is when the learner thinks he can rely on the IL competence he has developed thus far in interactive communication. Just like Selinker, Corder held that IL is systematic, regular, and consistent. He claimed that, because of this systematicity, IL draws upon knowledge or competence which is a well-defined 'personal grammar'. He insisted, however, on the importance of analyzing the IL process by pointing out that as ILs develop they share many properties in common with variability resulting from the very learning situation or learner personality.

It seems that Corder's work is very much in keeping with that of Nemser's (1971) *approximative systems*. It might well have been thought that transitional competence is synonymous with approximative competence and with IL competence (see Selinker, 1992). Regarding the notions IL competence and native-like competence, different theoretical claims were in effect made, the former often standing for a *developing* system, the latter a *static end-state* system. Likewise, the claims may vary with regard to the differing IL appellations, in the sense that with respect to transitional competence the competence is claimed to be always developing or unstable in nature, whereas in the case of approximative systems the claim is that the approximation is directional i.e. always towards or approximating the TL. All three, however, make the testable claim that the learner is proceeding systematically and that his

language is not just a random set of errors but rather a system probably like all other natural language systems.

1.2.2. The Nature of Interlanguage

The IL hypothesis came into being upon recognizing that adult L2 learners perform in ways different from the TL norms and such differences are not always describable in terms of NL transfer.

According to Selinker (1972) and others (e.g., Corder, 1967, 1971), the learner builds up his own rules and uses a language which is neither the TL nor the NL. The learner *builds up* his IL by using a series of strategies, or say processes, which help him learn the language and use it for communication.

1.2.2.1. The Five Central Processes

Selinker (*ibid.*) proposed *five central processes*, in L2 learning, existing in a latent psychological structure that can be activated in the L2 learning after the close of the critical period for language acquisition. He claimed that, in the light of these processes, predictions about the shape, or say nature, of IL should be made and in terms of which items, rules and subsystems are fossilizable (see Chapter 2). These so-called (c.f. Adjemian, 1976) central processes are by no means the only ones, Selinker noted; they are: (1) L1 transfer, (2) transfer of training i.e. training procedures used, (3) strategies of L2 learning i.e. learner approach to target input, (4) strategies of L2 communication i.e. learners know enough to communicate with native speakers using TL, and finally (5) overgeneralization of TL linguistic material.

1.2.2.2. Characteristics of Interlanguage

Adjemian (*ibid.*) considered that hypotheses are only strong if their claims are testable; for this, claims should be specific enough and narrowly made. This can certainly aid research

and make it promising. She reviewed the nature of IL as formulated and attempted to reformulate some of its characteristics or differences. For research and testability purposes, then, agreement should be on what points of inquiry, in the IL hypothesis, are pertinent.

There are many areas, in the concept of IL, in fact, that are obscure because of the multiplicity of the issue. It is argued that the IL hypothesis, as it stands, is in need for clear definitions of its main characteristics (Adjemian, *ibid.*). Selinker, Swain and Dumas (1975) assumed that IL is similar to other language systems, in that it is a natural language. In defining IL, however, it is necessary to clarify what is meant by 'natural language'. For Adjemian (1976: 298), it is: "*any human language shared by a community of speakers and developed over time by a general process of evolution.*" Selinker *et al.* proposed four *observables* which they considered the most salient IL characteristics; these are: *mutual intelligibility, systematicity, stability* and *backsliding*. For others, like Adjemian, these may not necessarily be all that salient. These will be examined below.

Be that as it may, before accounting for them (i.e. the characteristics or differences), it is noteworthy that there are some similarities between IL systems and other language systems (Adjemian, *ibid.*). First, ILs are linguistic systems *like* natural languages. Underlying the Interlanguage Hypothesis, that is, is the assumption that IL is systematic enough to allow scientific description. This assumption underlying IL is an essential condition for the hypothesis. Dismissing IL from being so drives it out of the reach of linguistic science and its procedures. Second, *like* natural languages, following this assumption, learner IL has a system of linguistic rules whose actual nature, though, remains unknown. Also important is the fact that ILs can normally be used among their speakers. Pushing further on these lines, Bialystok (1984) suggested that IL has many properties of a 'natural' language for the same cognitive processes are operant in it as those responsible for L1 acquisition. Now, let us turn to the differences, according to the theory.

1.2.2.2.1. Mutual Intelligibility

As afore-mentioned, for Selinker et al. (*op cit.*), there are characteristics central to IL. These were examined by Adjemian (1976) – an examination coupled with a critique. To begin with, ILs are distinguished from other language systems on the basis of the property of *mutual intelligibility*. In other words, before ever assuming whether or not a group of learners share an IL system, we need first to identify whether they can communicate with each other. Being used, however, for communication among their speakers, ILs cannot be differentiated from other language systems.

1.2.2.2.2. Systematicity

Second, according to IL theory, the learner proceeds from one IL stage to the next by using the different learning strategies that help build up mental grammars of the L2. As these grammars are provisional and heuristic, the rules can be seen as hypotheses. One might well hazard a guess that, at any one time, IL may include several competing hypotheses, and that the speaker's language is, in fact, variable, as he tests different hypotheses. *Systematicity*, as claimed by the theory, is another salient IL property. Contrary to Selinker *et al.* (*op cit.*) who apparently defined systematicity cognitively in terms of strategy use in the processing of language data (e.g., transfer, overgeneralization, etc.), i.e. IL sentences being the product of learning strategies and linguistic rules, Adjemian suggested to keep the linguistic meaning of the notion. She defined it as:

an internal consistency in the rule and feature system which makes up the IL. Like all human languages ILs must contain an organized set of rules and basic elements (lexical items, phonological units, grammatical categories, etc.).

(1976: 301)

All along the IL continuum, as such, the grammar of the learner is systematic i.e. rule-governed, common to all learners; in case of differences, this may stem from differences in their learning experiences. This does not mean there is a steady growth in the building of IL

(Larsen-Freeman and Long, 1991). Hence, such a property may not be said to differentiate ILs from other language systems. According to Adjemian, focus should not be on systematicity as such, but on learning strategies:

Notice that since learning strategies presumably have little, if anything, to do with deriving a speaker's NL speech forms, the utilization of learning strategies to derive speech forms would be a unique property of ILs.

(Adjemian, 1976: 302-3)

Therefore, researchers, she suggested, should discover and identify what learning strategies are at work in the production of particular IL forms.

Still with systematicity, Tarone (1982) called our attention to the important issue of *variability*, the way it relates to systematicity, and whether or not it is true to say that IL systematicity resides in its variability. Before all, however: What is meant here by systematicity? Simply, the concept means that learner IL is rule-governed; still, learner rule-governed competence is believed to be variable, or rather, systematically variable. The learner may be said to have different linguistic systems, or norms (to use Tarone's term) containing several styles in a continuum, running from the formal to the informal. A learner's IL competence is, thus, variable in terms of shifting styles depending on the situation; style-shifts are also defined in terms of how much attention is allocated to form i.e. paying most of it when using formal speech, and least when informal (see Tarone, *ibid.*: 73, reporting evidence about variability of syntax and morphology).

1.2.2.2.3. Stability

As regards *stability*, Adjemian remarked that Selinker *et al.* (1975) did not provide us with a clear definition though they hypothesized that there is stability in IL when the learner makes use of more than one strategy. She cited Tarone, Frauenfelder, and Selinker (1976) who defined it in terms of the reoccurrence of some forms in learner IL. For them, there is evidence showing that stability is twofold; they distinguished between occurrence of correct

forms and that of incorrect forms over time, both of which being regularly produced. Insofar as Adjemian is concerned, though she acknowledged the usefulness of such a distinction in determining progress towards the TL, she believed that it is better to define the concept of stability by accounting for the overall systematicity, if at all, of the IL rather than doing so by considering correct forms vs. incorrect ones.

Pushing further on the notion of stability, she restricted it to parts of an IL that have become impermeable. In this sense, stability may yield correct as well as incorrect forms according to TL norms; according to the IL grammar, however, the forms in question are always correct as long as they are stable and produced in a systematic way. Adjemian, in fact, equated IL stability with 'IL norm'. She claimed that a learner's IL, which in any part, at a given point in time, does not show stability, may be still developing, "highly permeable", and that the variable forms in question have not yet been replaced by correct TL generalizations. So far, so well and good but the notion of stability may raise, according to Adjemian (1976: 318), a number of questions: "*How stable is stability? How long does it last? Do we need to establish a minimal period of time over which to define it?*"

To push further, regarding the key difference between IL systems and other natural language systems, Adjemian opened room for stability as a possibly unique property of IL provided IL is considered in relation to a TL norm, in which case such a stability results in forms that are 'incorrect'. This does not hold, however, when IL is considered as a linguistic system. What constitutes a key difference is variability, or the absence of stability, which is provoked by permeability.

The foregoing discussion of stability may prompt us to invoke the issue of *fossilization*. The process of fossilization is one of the ways, for her, by which stability can be evidenced in ILs. Fossilization is a property specific to ILs and learner speech for all learners tend to arrive at a plateau where particular forms get fossilized (see Chapter 2).

1.2.2.2.4. Backsliding

Some learners continue working their way toward TL norms but may suffer from *backsliding* (c.f. Selinker, 1972: 215; see also Chapter 2), another central characteristic according to the IL hypothesis. The phenomenon of backsliding is used here to mean supposedly eradicated fossilized errors that reappear regularly, that is, non-target-language forms that re-emerge in IL, forms that are thought to be supplanted. 'Back' here is back to an IL form (see Selinker, *ibid.*: 216). For Adjemian, backsliding, as suggested by the IL hypothesis, may be *one* of the properties peculiar to IL. Fossilization and backsliding, in her perspective, thus, are two variables which evidence stability in IL.

Implied in Selinker (*ibid.*), however, is the point that fossilization may be evidenced by backsliding (i.e. falling back on a form that has fossilized). Adjemian (*op cit.*) hesitated with this regard, that both phenomena are closely related, that is. She believed that, contrary to backsliding where the learner has *a priori* "an active alternative form" which may be the correct TL form and which is not used for contextual or emotional reasons, the learner with fossilized forms is assumed not to have yet "an active alternative form". What is interesting to note is that: "*in the case of backsliding the speaker should have intuitions about the correct rule or form, whereas in the case of fossilization he may not*" (Adjemian, *ibid.*: 316). We may note in passing that the above is a moot point; because the claims made remain but hypothetical distinctions, Adjemian urged the need for research to explore the link between the two processes.

The above, being the characteristics observed by Selinker *et al.*, are by no means defining properties of IL, in the view of Adjemian. What is perhaps a salient property of ILs, she argued, is that they are, by nature, incomplete linguistic systems that are 'in a state of flux'. This explains their being inconsistent which in turn may be due to the 'penetration' of NL rules, or improper overgeneralization, or distortion of a TL rule. *Permeability* of ILs is the term she gave to denote an IL property that allows this penetration (i.e. transfer) or

overgeneralization. The property of *permeability*, then, together with *backsliding* and so-called *fossilization* are, she argued, what make IL systems different from all natural language systems i.e. ILs are permeable grammars that may show symptoms of backsliding or fossilization. Adjemian believed that the fact that ILs are different from other language systems, as claimed by the IL hypothesis, is surprisingly what makes them interesting for study, and as such the object of research should be the study of these differences. The ‘why-different’ question, or say explanation, follows when precise definitions of differences are due (it goes without saying that such an explanation of the processes underlying SLA is clearly psychological).

1.2.3. Interlanguage and Discourse

Of course, IL can be investigated at different levels, one example level being discourse about which we know little. Hatch (1984) claimed that discourse analysis is enlarging our knowledge on IL in three main ways: Interactive discourse, discourse of text types, and form/function to parameter setting (given the nature of our present work, we will not run into details here, except briefly in relation to the first and the third areas; the interested reader is referred to Hatch, *ibid.*). For example, according to Vigil and Oller (1976), pragmatic variables of interaction may either reinforce or *destabilize* L2 forms at the cognitive and affective levels (see Chapter 2 on fossilization, below). Krashen (1980) elaborated on the input/interaction research, claiming that language acquisition is fostered by interactions and comprehensible input which results from these interactions. As for the other discourse area, Hatch (1984) cited Gough (1975) who stated that it is possible for a child to acquire forms without their function (i.e. the context), and the reverse situation also holds true. Gough argued that studies on the acquisition and use of linguistic forms should, therefore, be made in context. If not, one may ask whether the phenomenon of fossilization can be brought into play, a mere conjecture with no further evidence, of course. We may even ask whether or not

such discourse properties as turn-taking, fillers, and the like fossilize, whether or not discourse skills guarantee progress in syntax.

The foregoing is a non-pedagogic review of the discursual perspective to IL. Allwright (1984) in his pedagogic account surveyed the literature and distinguished between *descriptive* and *explanatory* IL studies (c.f. also Corder, 1971, on error analysis, above). The *descriptive* orientation attempted to shed light on the sorts of linguistic and psychological processes involved in the process of SLA (Adjemian, 1976). It sought to determine the ways that best characterize L2 development. Selinker (1972), for example, directed his attention, in dealing with fossilization, to the 'extent' to which development possibly takes place. In addition to Selinker, Allwright cited Upshur (1968) and Long (1983a, a then-recent review) who studied 'the rate of development' i.e. how fast is development for learners (which is clearly a pedagogical issue). However, most descriptive studies highlighted, Allwright stressed, the *course* or *route* of learner language development which has largely been accounted for in terms of the 'natural order' (see Krashen, 1981) of language acquisition, a hypothesis which claims, in trying to explain certain morpheme acquisition sequences, that there is a natural order which we all follow. According to Allwright (1984), the descriptive account has relatively little importance if it is not paralleled with an explanatory work that accounts for the factors underlying the descriptive findings. This is to mean exploring the *causal variables* together with their concomitant processes. Although he did not himself account descriptively for the causal variables associated with L2 development, he attempted an explanatory, yet discursual, account. In this way, important questions for him are whether language classroom discourse properties help us come to a better understanding of learner IL development; if so, in which way is this manifest in theory? In answering, he stated that they can be causal factors themselves or "*mediating between some other causal variables and the actual processes that constitute acquisition*" (*ibid.*: 205). As concerns the second question, discourse characteristics can affect linguistic development for they constitute the 'input' (or an important part of it), the

‘practice opportunities’, and determine ‘receptivity’ which he explained as willingness to learn.

If these three can themselves be expected to influence the extent, rate, or especially the course of linguistic development, then we have a case for studying those discorsal characteristics as potentially contributing to our understanding of the phenomena of linguistic development.

(*ibid.*, 1984: 205)

Allwright reported on a study by Ellis (1984) who investigated and suggested "*quantity of practice, consistency and accuracy of teacher feedback, and quality of interaction*" (p. 216) as more important candidates than ‘frequency’ of input language improvement. Still, he also reported on a study by (Seliger, 1977) presenting counter-evidence or a negative correlation between ‘quantity of practice’ and improvement.

Conclusion

The IL concept has proved a baffling issue over the years, perhaps because there is at play a cluster of cognitive concepts under the rubric ‘Interlanguage Hypothesis’. IL is a psycholinguistic concept, which has, in fact, always been a pre-existing construct brought into the open by empirical research. Therefore, it would be more appropriate to view IL as a phenomenon – pertinent to second language learning – that has always been there, given different names by different researchers.

Among the many factors operant on IL, L1 transfer is held to be in the lead. To what extent this holds true is, as yet, unknown. In effect, any field of research thrives because it moves in a progressive, not regressive, way. It is not warranted to depend retrospectively – and excessively – on contrastive studies as did Selinker (1992) to rediscover the phenomenon of IL, because what data we have now shows the facilitative, not only inhibitory, effect of the learner’s prior linguistic knowledge, and that universal properties of language learning play a crucial role in the development of learner’s language.

It is already a fact that the learner, in the case of L1 acquisition, starts with no prior linguistic knowledge and acquires, ultimately, adult knowledge. In the case of SLA, however, the learner has prior knowledge of L1 and constantly constructs a system of L2 rules. Thus, it would be wrong to think that he starts with zero knowledge. The learner has some grammar before he begins learning a L2 which may stem from his L1, but which, at the same time, may not bear any resemblance to his prior knowledge. Now, whether we call it Universal Grammar at all is subject to empirical research. Concerning the role universal processes play in creating IL, Selinker (1992: 261) pointed out that: "*Language transfer concerns at times are prime and universal properties are activated if the learner's attempt at interlingual identifications fails.*" Such a claim is equivalent to saying that universal properties are triggered by the learner only when language transfer fails as a strategy. This is, however, unfounded. In fact, more studies on Universal Grammar in IL are warranted, though much research energy has already been spent on its pertinence or not to L2 learning.

Though the picture about IL seems to be better than before, we have still a vague idea about the concept of *fossilized/stabilized* competence. As such, important questions remain. Is there fossilized/stabilized competence at all? How can we be sure, at a certain stage of development, that fossilization/stabilization has indeed taken place? Must there be transfer constraints, cultural or personality factors hindering successful L2 attainment? Is it not an unreasonable exaggeration to assume that, no matter what strategies are employed, the learner will never reach native-like proficiency? These and other equally crucial questions will be addressed in the chapter that follows.

CHAPTER TWO:

On the Stabilization-Fossilization Continuum

Introduction

In acquiring a second language (L2), learners internalize a system of rules which is believed to be structured, yet a system which in most cases falls short of the target (see Chapter 1). Selinker (1972), in his theory of interlanguage, then, postulated the concept of *fossilization*, which is, in almost all cases, juxtaposed to an equally important phenomenon, that of *stabilization*. This has made of *interlanguage* (IL) an important area of investigation resulting in the resurgence of interest in second language acquisition (SLA) research.

Fossilization was identified by Selinker (*ibid.*) when studies on IL were conducted. The notion is generally accepted in IL studies, although ‘*what we think we know*’ (Selinker and Han, 1996) is little or scarce on the ground. So far, the phenomenon has been *seriously* investigated by only a small number of researchers, and from different perspectives, under different names, with definitions far from uniform, each providing theoretical arguments and, at times, some empirical evidence. Before all, however, a note for clarification is in order: fossilization has been observed to be operant in L2, but not in first language (L1), acquisition – with the exception of pathological cases, of course (White, 2003).

As Selinker (*ibid.*) pointed out, the phenomenon of fossilization is the most important fact in describing IL development. *Fossilized ILs* may contain items the learner has never completely acquired, or ones he has apparently mastered but cannot consistently reproduce, especially in a state of excitement, anxiety, or extreme relaxation. The whole set of fossilized items is known as *IL competence*, and fossilization of such competence could lend itself to the production of a new *dialect*. It has been observed that despite being exposed to reasonable amounts of input and in many cases receiving feedback in the classroom, most adult L2

learners plateau in their learning and fall short below native-like proficiency. This state of *fossilization* is a process whereby the learner ceases from developing, thus his IL is far from complete. In this sense, adult language learners are hardly ever completely successful; it is contended that they cannot achieve L2 native-like competence, and failure is often attributed to language transfer and age-dependent factors.

A classic issue of SLA, fossilization remains the subject of scholarly and pedagogical attention. Across the decades, there has been a growing realization of its import, yet its general conception has been far from uniform, and so has the general application of the term. There are even growing doubts as to whether or not it actually exists, thus calling it *putative*.

In the present chapter, and in light of the foregoing review of the concepts of contrastive analysis, error analysis, and interlanguage, it may be useful to consider the historical context of the development of the concept of fossilization and stabilization. The phenomena are outlined along with causal variables, and the chapter is closed with a critique.

2.1. Fossilization

2.1.1. Definition

Fossilization has had miscellaneous definitions and uses in the SLA literature. Fossilization, a psycholinguistic phenomenon and a concept central to the Interlanguage Hypothesis (see Selinker and Lamendella, 1979), has, in effect, gone through a number of definitions, different as they are for the same author and across different researchers and theorists as well. Selinker himself had evolving definitions; he stated:

Fossilizable linguistic phenomena are linguistic items, rules, and sub-systems which speakers of a particular L1 tend to keep in their IL relative to a particular TL (target language), no matter what the age of the learner or amount of explanation and instruction he receives in the TL....
(1972: 215)

Selinker came 20 years later, after 1972, to defend the term, which was handled with doubt, and broaden the concept of fossilization, claiming at last that no adult L2 learner can work his

way to native-likeness; in 1992, that is, he added to *fossilized ILs* the dimension of 'cessation of further systematic development'. Even years before, the notion of *permanent cessation of learning* and the very fact of remaining short of native-like proficiency "*in all discourse domains in spite of the learner's positive ability, opportunity or motivation to learn or acculturate into target society*" (Selinker and Lamendella, 1978: 187, quoted in Long, 2003: 489), was invoked. A year later, fossilization is suggested to be also *context dependent* and thus one could demonstrate it by change or variability from one context to another (Selinker and Lamendella, 1979). The phenomenon became later:

a situation in which the learner might produce a target language form correctly in one context but not in another, thereby evidencing a fluctuation in interlanguage performance. In order to qualify as fossilization, this fluctuation would have to have persisted in the learner's speech for an extended period of time (perhaps two to five years at the very least)
(Selinker, 1989, cited in Long, 2003: 489)

Thus, *fluctuation* or constant change is a new dimension on which fossilization is accounted for.

The term fossilization has even made entries in several dictionaries; the following are noteworthy: The Random House Dictionary of the English Language (1987) defined it as follows:

fossilize 5. *Ling.* (of a linguistic form, feature, rule, etc.) to become permanently established in the interlanguage of a second-language learner in a form that is deviant from the target-language norm and that continues to appear in performance regardless of further exposure to the target language.
(House, 1987: 755)

This, surprisingly, is very close to Selinker's original 1972 definition which suggested that fossilized items are characterized by, being persistent, resistant to external influences and affecting both children and adults learning a L2. Note also that the dictionary made it clear that fossilized forms are resistant to change regardless of exposure; the very question of the present study is whether this is true of formal instruction as well. This remains for us to prove or disprove (see Chapter 6 ahead).

The Encyclopedic Dictionary of Applied Linguistics (1999) defined fossilization as:

the phenomenon whereby linguistic items (particularly erroneous ones) become permanent in a learner's INTERLANGUAGE. The term is used by Selinker (1972) in relation to the processes of 'levelling' (lack of forward movement) or 'regression' ('backsliding', where a learner's language reverts to an earlier stage). Fossilization may occur in relation to any linguistic level, a 'foreign accent' being the result of one form of fossilization.

(Johnson & Johnson, 1999: 135)

Interestingly, such a definition hints to an important fact, the fact that fossilization can be of erroneous rules as it can be of correct ones i.e. any item that gets stuck in learners' language repertoire, or say IL (see Vigil and Oller, 1976 in 'sub-section 2.4.6.' below).

According to Long (2003), the phenomenon is explained as *relative failure* i.e. he shared the view that IL learning culminates in a state of grammar differing from TL norms by permanently retaining deviant forms no matter what room is provided for improvement; nevertheless, he insisted that correct forms may also be fossilized (see p. 492).

The above definitions are yet criticized on a number of fronts, one of which is their lack of sophistication and measurability (see Han, 2004b). Notwithstanding, they raise several issues in relation to the way we handle fossilization, namely the relationship of *fossilization* to *backsliding*, on the one hand, and to *stabilization*, on the other. We will turn next to these.

2.1.2. Backsliding

It is already a fact that fossilized forms tend to *re-emerge* in the IL performance long after they are thought to be eradicated. Such persistent reappearance is termed by Selinker (1972) *backsliding*. In this perspective, fossilization is closely related to backsliding; it is this reappearance of linguistic structures in learner IL, Selinker revealed, that prompted him to postulate the existence of fossilization. Backsliding, he believed, may be due to the newness and difficulty of the intellectual subject matter, anxiety, extreme relaxation and the like.

This phenomenon manifests itself in the *variational appearance* of IL forms over time, suggesting that learning has *not ceased*. Depending on the context, target-like forms

manifest at some times, and the *stabilized* forms manifest at others i.e. the stabilized form takes place only occasionally in certain contextual conditions and in others it is learning which may take place. Of note is that *backsliding* phenomena are not random, nor are they towards the learner's NL; instead, 'back' here is back towards an IL norm (Selinker, *ibid.*).

For Adjemian (1976), backsliding, as suggested, may be *one* of the properties peculiar to IL. Fossilization and backsliding, in her perspective, evidence *stability* in IL (see Chapter 1 'sub-section 1.2.2.2.').

2.2. Stabilization vs. Fossilization

A salient property of fossilization manifesting in most definitions is *stabilization* of IL forms. An important issue in the literature on fossilization is the extent to which the concept of fossilization relates to stabilization. Selinker and Han (1996) posed a number of questions among which: What is stabilization? Is it synonymous with, and always a prelude to, fossilization?

Han (2003: 100) reported on Selinker and Han (2001) for whom the two concepts can be looked upon in terms of a *continuum*, but stabilization should not be equated with *putative* fossilization (see Han and Selinker, 1999: 271, note 12 for a non-technical differentiation) since, as we read the literature, she indicated that for them, the former has three possible cases, at least: (1) stabilization can be *a temporary stage of 'getting stuck'*, i.e. a natural phenomenon in all learning, though with specific SLA properties; (2) it can be *restructuring of interlanguage* or reanalysing and progressing towards a target language norm, no matter what the surface appearance of the stabilized IL features might be; *and* (3) it can be permanent or *long-term cessation of interlanguage development*.

In this case, stabilization is seen, and interpreted by many, as the 'harbinger' of, or a prelude to, fossilization. As such, the two are indistinguishable only here. Given that this is

so, it follows that stabilization makes part of the process of fossilization, the latter being the end-state.

Hence, stabilization, as has been noticed, can be either *short-term* or *long-term* though it is difficult to distinguish in the literature between them by using a theoretical property. From (3), one can clearly see how intricately stabilization and fossilization are related; the latter is less observable than the former, and is rather inferential (Han, 2003). In the absence of longitudinal evidence, it is clearly hard to say with all certainty that the cessation in question is an instance of fossilization, as opposed to stabilization. *Persistence* or *resistance*, which still lack an operational definition, are considered as the main symptoms or indicators of fossilization (*ibid.*).

As Selinker and Han (1996) noted, *restructuring* could be opposed to the cessation of IL learning, although this is not necessary. As regards the role of *corrective feedback*, which is closely related to the processes of stabilization/fossilization, it may vary, they believed, with the above three cases. To illustrate, in cases (1) or (2), i.e. in temporary stage or restructuring, it could be conjectured that it may not be necessary to provide explicit negative evidence or such a provision can even be hindering; the absence of feedback, however, may result in 'false restructuring'. In case (3), that of permanent cessation of IL learning, corrective feedback would not help; the Multiple Effects Principle (see 'sub-section 2.4.1.') would predict this.

Granting that, as it is believed, stabilization is the 'harbinger' of fossilization, it follows then that the processes of stabilization and fossilization might be looked at as a *continuum* or, say, a 'cline progression'. Stabilization can, thus, manifest in certain 'consistently' appearing structures (this may be juxtaposed to 'variational' appearance) even when continuous exposure to TL input is secured. The stabilized structure, in this case, would be both persistent and resistant.

Very much in keeping with the above are Long's (2003) ideas. He advanced the following claims: Stabilization is the *first sign* of so-called fossilization; *permanence* is what differentiates between stabilization and fossilization; stabilization is seen as being mutually exclusive with fluctuation. He allowed for the possibility for the processes of stabilization and fossilization to have similar characteristics at the surface level, even though they may '*differ in their underlying causes*' (p. 490). Given that this is so, it follows, according to him, that knowing what causes *stabilization* and *destabilization* might well help working on SLA theory in general and fossilization in particular (see Long 2003: 490).

2.3. Fossilization as Product or Process

Fossilization lacks sophistication as a concept so far defined and, therefore, measurability as a phenomenon (Han, 2003). Han reported on her doctoral dissertation (see Han, 1998: 50) suggesting a twofold definition, compounding its innate aspect and external manifestation; in other words, she defined it both *cognitively* and *empirically*. On the one hand, there are at work cognitive processes which are underlying mechanisms resulting in stabilized IL forms that are long-term or permanent. At the empirical level, the phenomenon is seen as stabilized IL forms that, whatever we do, manifest in learner language production and resist change over the years. In keeping with this is what Long (2003: 488) reported:

The permanent non-nativelike state was termed "fossilization" (as product), while "fossilization" (as process), constrained by L1 transfer, was viewed as part of the individual learner's underlying psychological structure, a putative cognitive mechanism which could explain the failure.

The cognitive and empirical levels relate to fossilization as *product* and as *process*. Han (2003; c.f. 2004a) claimed that the former level relates to fossilization as process while the latter level is pertinent to its being a product. Besides, there is a *cause-effect relationship* between the two: The cognitive level of fossilization results in the empirical level or, say, fossilization as process leads to fossilization as a product. Also noteworthy is the fact that:

fossilisation on the whole is predicated on the condition of ‘no matter what the input or what the learner does’, thus suggesting that fossilisation, as a cognitive mechanism, would function regardless of learning conditions, and that fossilisation, when showing up in interlanguage output, would be out of a learner’s control.

(Han, 2003: 99)

Still, her definition, Han added, invites many interpretations: What processes make up the mechanism(s) at the cognitive level? When are they activated and how? What length does stabilization take at the empirical level and what manner? Besides, the definition runs into another problem when using ‘cognitive processes’ as an umbrella term for internal processes of the learner; what once were thought to be cognitive may now be viewed as neural and socio-affective processes, she asserted.

Empirical investigations of fossilization can be conducted either in terms of product or process (Han, *ibid.*). Insofar as fossilization as product is concerned, the phenomenon is just assumed; therefore, subjects are presumably called ‘fossilized’, waiting for research to establish the ‘fact’ through *defossilizing* the IL forms in question. In case defossilization fails, this is evidence, for the researcher, that fossilization has indeed taken place. By contrast, researchers working on fossilization as process need to conduct, usually, a longitudinal, or sometimes, pseudo-longitudinal, study in an attempt to establish the phenomenon – as a reality.

Han (2003) handled the phenomenon as process, a putative cognitive mechanism, constrained by L1 transfer and a host of other variables (see the 'Multiple Effects Principle' below). She (2003) pointed out that fossilization, being intricately related to stabilization (see case 3 above), should be conceptualized as process, not product, due to the fact that it can only be *inferred*, unlike stabilization which can be *observed*; as such, fossilization should be operationalized as “*long-term stabilization which is impermeable to any external influences and irrespective of leaning motivation and readiness*” (p.100).

2.4. Explanations for Fossilization

SLA research has lately come of age; still, learner linguistic behaviour is difficult to explain in a simplistic way, for many complicated processes are involved in language learning. There is a growing concern among researchers and theorists with L2 ultimate attainment and the logical problem i.e. the questions: 'Why are few adult learners successful while many struggle helplessly and then fail miserably? What triggers the process of fossilization? Why some fossilize at a given point along the IL continuum? Is fossilization inevitable for L2 learners? What are the causes of such fossilization? Is it possible for fossilization to be overcome through pedagogical intervention?' These and other related questions have puzzled scholars, because as Han (*ibid.*: 115) put it: "*fossilisation is no longer a monolithic concept but rather one tied up with different manifestations of failure in L2 learning.*"

Various interpretations of the concept of fossilization are associated with a wide range of *causal factors*, depending on the learning conditions. In the discussion and investigation of the phenomenon, researchers have had recourse to a number of variables – and phenomena – which Han (*ibid.*: 101-2) summarized under the name of denotations; here are some of these:

1. Backsliding (e.g. R. Ellis, 1985; 1988; Selinker; 1972)
2. Stabilized errors (e.g. Schumann, 1978)
3. Cessation of learning (e.g. Odlin, 1993)
4. Ultimate attainment (e.g. Selinker, 1996)

These and other denotations have led to a myriad of explanations; some of which are empirically-based studies, others are mere speculations. The following terms, besides others, miscellaneously originating over time from a number of perspectives, are used to *explain* fossilization in relation to Han's surveyed variables or denotations (Han, 2003: 102-3, citing Selinker and Han, 2001; see also Long, 2003: 513-4):

1. Multiple factors acting in tandem (e.g. Han & Selinker, 1999; Selinker, 1992; Sharwood Smith, 1994)
2. Satisfaction of communicative needs (R. Ellis, 1985)
3. Absence of corrective feedback (Vigil & Oller, 1976)

4. Lack of acculturation (e.g. Schumann, 1978)
5. Lack of input (Schumann, 1978)
6. Maturation constraints (e.g. Selinger, 1978)
7. L1 influence (e.g. Han, 2000; Selinker & Lakshmanan 1992)
8. Age (e.g., Schmidt, 1983)
9. Lack of instruction (Schmidt, 1983)
10. Inability to notice input-output discrepancies (e.g. Klein, 1986)
11. Change in the emotional state (Selinker, 1972)
12. Lack of opportunity to use the target language (Swain, 1995)
13. Natural tendency to focus on content, not on form (Skehan, 1998)
14. Failure to resolve the inherent variation in the interlanguage (R. Ellis, 1999)
15. Transfer of training (Han & Selinker, 1999)
16. Lack of sensitivity to input (Long, 2003)

According to Han (*ibid*), it will, therefore, be inadequate if researchers attempt to provide a singular explanation of the phenomenon, given that it is no longer monolithic as a construct. Elaborating on the afore-mentioned *explanations*, or *factors*, she categorized them as follows: *cognitive*, *neurobiological*, *socio-affective*, and *environmental*. These ‘putative’ causal factors are either *external* (like environmental variables), or *internal* (the remaining categories).

Both external and internal factors are at work in fossilization. The external variables are, by definition, environmental in nature. As regards the internal factors, we find the cognitive, the neurobiological and the socio-affective. The cognitive, for example, include factors relating to knowledge representation, knowledge processing and psychological processes such as simplification, attention, avoidance, emotion, restructuring. Some of the above-mentioned variables are sketched below.

2.4.1. Multiple Effects Principle (MEP)

Han and Selinker (1996; 1999) studied error resistance in relation to the MEP which predicts that when language transfer acts in tandem with other factors, structures tend to stabilize, leading possibly to eventual fossilization no matter what type of intervention. In terms of instruction, the researchers believed, as evidenced by their study, that:

an MEP-inspired analysis of multiple factors could be significant in the elaboration of pedagogical strategies which may prevent or delay

fossilization in cases where explicit negative evidence by the teacher seems to have had no effect.

(*ibid.*, 1999: 248)

2.4.2. Transfer

Selinker (1992) claimed, while supporting the views of Fries (1945) and Lado (1957; see Chapter 1), that L1 is always the point of departure for the learner. That IL begins with L1 is, in effect, not backed up and proved, so far, by empirical research. We need, therefore, to find out whether IL really begins with transfer only, before we make such claims.

By language transfer, we mean cross-linguistic influence of one language system over another, taking place in the mind of the language learner; that is, the learner transfers a rule or pattern from his L1 to the L2 to be learned. As a reminder, the term transfer is twofold: When positive it is believed to be facilitative (Corder, 1971), when negative it results in interference (Corder, *ibid.*; Selinker, 1972; Han and Selinker, 1999). It is worthwhile stressing that it is interference, the second side, which may induce stabilization/fossilization. It is, therefore, believed that transfer plays a crucial role in the shape of IL and the phenomenon of stabilization/fossilization (see, for example, Han and Selinker, *ibid.*). In their study, Han and Selinker pointed out that: "*Among various possible SLA factors that have stabilizing effects, language transfer has been singled out as the principal one*" (p. 249).

Nemser, on his part, proposed a language system of "*permanent intermediate systems and subsystems*" (1971: 118), being equivalent to IL fossilization. He asserted, in his study of the production and perception of particular sounds, that the mechanisms in question are not similar, meaning that language transfer is at play, but not exemplary of the patterns of CA hypothesis (*ibid.*).

Because of transfer and a host of other factors (Han and Selinker, *op cit.*), second language acquisition is seldom, if ever, complete; fossilization, thus, usually takes place. Scovel (1969, 1988), for example, maintained that no adult ever achieves native-like

pronunciation in L2. Instances of morphological and syntactic stabilization are already a reality. This is an indication that there might be at play transfer but also other age-dependent factors. In reference to the MEP, i.e. when transfer works in tandem with others, Selinker (1992: 263) made a strong theoretical prediction by claiming that there is involvement of language transfer "*in every instance of the multiple effects principle*".

Often, transfer is viewed as a learning strategy. In Selinker (*ibid.*), for example, one notices a tendency to view language transfer as the principal learner strategy, a strategy, however, which, it must be recalled, either prevents or induces stabilization and/or fossilization.

To carry the discussion further, the term *interference* is by no means a uniform concept i.e. one which always denotes fossilization or, its supposedly prelude, stabilization. Dulay, Burt and Krashen (1982) pointed out that interference can be described in one of two ways. From a psychological perspective, there is influence from old habits when new ones are learned (see Lado, *op cit.*). From a sociolinguistic perspective, different language interactions and *processes* take place when two language communities get in contact: For example, we have such processes as borrowing, code-switching and fossilization. By *borrowing*, it is meant that linguistic forms are incorporated from one language into another. As for *code-switching*, it refers to the use of two language systems for communication, where a sudden and brief shift takes place from one to another. Where communication is successful, there are certainly errors which are overlooked i.e. there may be no provision made of formal correction. *Persistent errors* may result in *fossilization* or *stabilization* where a learner, uncorrected, but still able to successfully get his meaning across, has no socio-functional need to modify his production; therefore, it fossilizes in that state. It could not have escaped attention that fossilization is viewed, here, as being a sociolinguistic phenomenon – a claim which may be true yet with no sound evidence.

As seen above, a psychological explanation may also be possible. Theoreticians claim that physical resemblances between two language systems that are phonetically approximate are prone to fossilize in the learner's IL system. However, whereas there may be some truth in this challenging claim, it must be borne in mind that this is in the case of phonology. The same situation may as it may not exist in other language levels. We are far from claiming the ultimate certainty for it is not valid to use a phonology example and then claim to have revealed the truth about IL learning. Language learners, on the other hand, do not always compare linguistic systems, and if they do, they do not always go astray. On the contrary, it happens that they do not only escape fossilizing a given IL item, but they use the L2 to their advantage as well. We should, in fact, learn from scholars like Corder who maintained that L1 is rather facilitative, and not necessarily negative or hindering. He pointed out that the field of SLA has come a long way, yet researchers should not assume the classical CA position which fails to make correct predictions. This is not an indication for the researcher to shut an eye at the interference effects of learner's L1 but a reminder so that not to look at language learning phenomena as an either/or question.

2.4.3. The Critical Period Hypothesis

The Critical Period Hypothesis (Lenneberg, 1967) states that there is a critical period for language acquisition, a period in which one must be supposedly exposed to language in order to acquire it – often a mother tongue – and after which acquisition can never be complete. Put another way, when learners reach a certain age critical for L2 learning, this results in the difficulty of certain L2 features to be acquired, thus they become prone to fossilization.

Technically speaking, Lenneberg's (*ibid.*) physiological explanation suggests that, after puberty, mastery of a L2 is difficult for a learner, namely pronunciation, because a critical period in brain maturation takes place. The result is that learner IL tends to *fossilize*.

He referred to such a phenomenon as *lateralization*. This is the completion of cerebral dominance where the brain loses plasticity. Lateralization, in his view, prevents the learning of L2 phonology more than its syntax or vocabulary. Slobin (1993), on his part, asserted that adult learners of a L2 suffer from some degree of *biological handicap*, the thing that makes them fall short of native-like proficiency.

Long (1990) suggested that such maturational constraints provide a more plausible explanation than others. He pointed out that there is a cause-effect relationship between the very time of the first exposure to L2 and ultimate attainment or fossilization. Although the arguments are sound enough, the relationship remains an issue having to do with empirical testing seeking sound evidence.

In this perspective, Krashen and Harshman (1972), in reanalyzing Lenneberg's results, provided evidence setting doubt in his finding. Lateralization, they argued, takes place long before the close of the critical period.

2.4.4. Focus on Meaning not Form

Fossilization can also be understood when considering research on psychological processes characteristic of adult L2 learners. Skehan (1998) drew attention to adult learners' tendency to attend to *meaning*, not to *form*, with respect to their productive and receptive skills. When learners become mature over the years, they will have more ability to use communication strategies. They would put focus off form, on meaning, or less on the former and more on the latter.

Of importance is that adults, after Piaget's stage of formal operations, also capitalize more on the social context (such as the setting, role- relationships, etc.) to get information than on analyzing the structure of input. From another perspective, instruction may induce learners to focus on meaning at the cost of form – take focus-on-meaning instruction or communicative approaches, for instance. One might, then, well ask if *form-focused*

instruction helps at all. This may include such issues as the role of attention, awareness, noticing, restructuring and cognitive processes of the like (see Chapters 4, 5 and the present research findings in Chapter 6).

2.4.5. Pidginization

A good case in point of learners who simply get stuck at a plateau and never go any further may be that of Alberto (Schumann, 1978). He was 33 years old, from Costa Rica; he lived in Massachusetts for four months before his IL development was set under study. His IL speech production was studied along ten months, together with five other subjects who were Spanish-speaking immigrants, through a variety of means. What is astonishing is the fact that Alberto got fossilized at a plateau when the rest of subjects went on working their way to L2 acquisition. Schumann explained such a phenomenon by claiming that Alberto developed a *lingua franca* basic enough to function in the limited social situations he set in, a process similar to *pidginization*. Alberto was far from TL norms namely in his use of negatives, interrogatives, auxiliaries, and the like.

According to Schumann, age and cognition are not possible explanations for the case of Alberto's pidginization. He held that Alberto's speech was strikingly similar to classic pidgins i.e. his subject was in a situation very similar to that of a speaker of a pidgin. This is, he believed, an important finding in SLA. As a matter of fact, a pidgin is a variety of language that has developed for immediate communication purposes between speakers of mutually incomprehensible languages who are at some social distance and who come into contact with each other.

2.4.6. Extrinsic Feedback

Fossilization may also be accounted for on dimensions other than the afore-mentioned. It seems, as yet, that the difference is apparently that *stabilization* is *correctable* and

fossilization is not; yet, there might be some researchers who are sceptical about *corrective/evaluative feedback* being the only criterion for disentangling stabilization of IL forms from fossilization of those forms. At any rate, the following is a tentative model claiming that affective and cognitive feedback is a variable that yields to grammatical fossilization or 'de-fossilization'.

Vigil and Oller (1976) attempted to know the ways in which IL forms get fossilized i.e. to identify the factors and processes resulting in fossilized structures with no further modification. Contrary to Selinker's original view which held fossilizable items to be accounted for via errors – the thing which inspired many applied linguists dealing within the realm of error analysis – they preferred to account for fossilization in terms of both correct and incorrect forms and rules (indeed, Selinker, 1972, acknowledged that correct forms can also fossilize or re-emerge; see p.216, note 14). They believed that: "*It is not only the fossilization of so-called 'errors' that must be explained, but also the fossilization of correct forms that conform to the target language norms*" (1976: 283). By fossilization of correct forms, they meant the relatively permanent incorporation of these forms into their IL.

In their cybernetic model of factors pertinent to fossilization, they made a distinction between *cognitive* and *affective dimensions* of communication (and between expected and unexpected feedback). They argued that in the development of learner grammars, the main de-stabilizing factor is *expected negative feedback* on the *cognitive* dimension. As such, they predicted that learner IL tends to fossilize in the presence of *expected positive feedback* on the cognitive dimension; yet,

if feedback on the affective dimension is not predominantly as expected, and predominantly positive, the feedback on the cognitive dimension will lose much of its force. Predominantly negative affective feedback whether expected or unexpected is likely to result in abortion of further communication attempts.

(1976: 281)

Originally, the process of fossilization is principally *syntactically* determined (Selinker, 1972). Vigil and Oller (*ibid.*), however, argued that it is rather *pragmatically* governed. Stated otherwise, the factors bearing on the process of fossilization are primarily *interactive*, manifest in messages being sent back and forth by participants in the interaction. In any given interaction, there are the cognitive and the affective aspects. Information transmitted between speakers and listeners can, thus, be either at the affective or cognitive level: Cognitive like facts, beliefs and the like, whereas affective information are realized in facial expressions, gestures, tone, etc. Vigil and Oller claimed that, in language learning, their cybernetic model is "*prerequisite to a theory of rule fossilization*" (p. 284). The feedback on the part of the listener, the focal point for them, is very telling and informative for it tells the speaker about the way in which the other participants in the interaction perceive, and react to, his message. The development of learner IL, they claimed, is controlled by such feedback, the primary factor. They pushed further pointing out that central to rule fossilization is corrective feedback, whether the learner's own self-monitoring feedback or generated by his interlocutors. In the absence of feedback or if it drops below some threshold level, the L2 forms which are not 'fed-back' will have a tendency to fossilize. When the learner produces erroneous forms of the TL and, at the same time, receives positive affective and positive cognitive feedback, such forms will tend to fossilize in learner IL. Affective means encouraging more attempts at communication; cognitive means, simply, meaning gets across.

The above certainly impacts on the learner's IL grammar. *First*, negative affective feedback, it is worthwhile noting, will 'override' all types of cognitive feedback (be it positive, negative, or neutral). When negative, to put it otherwise, the learner may understand it as being negative cognitive feedback (i.e. non-comprehension takes place and the language form in question, possibly a correct form, is thus eradicated). *Second*, when positive affective feedback takes place, likewise, the danger is that he might interpret it as positive cognitive (i.e. comprehension is due and fossilization, of all forms used in that communicative event,

thus takes place). *Third*, if communication fails (no understanding or misunderstanding) at the cognitive level (i.e. negatively unexpected cognitive feedback) for one or another reason, all grammar forms part of the exchange will *destabilize* with no change. *Fourth*, if negative cognitive feedback is coupled with unexpected positive affective feedback, the learner is predicted to make another attempt while *destabilizing* the language forms previously used.

From a pedagogical standpoint, granting that feedback conditions which beset learning are what trigger *fossilization* and *de-fossilization* of IL forms, it follows that, as claimed by Vigil and Oller (*ibid.*), learner errors are likely to fossilize if appropriate types of feedback are not provided. Besides, the fact that learners should be encouraged to make errors may need reinterpretation; there is, in fact, no harm in providing the learner with negative cognitive feedback so long as the affective counterpart is positive, predominantly (we could go, as a matter of fact, even so far as to add that such feedback is sometimes necessary for acquisition). Stated another way, when incorrect utterances are produced, there should be a positive affective feedback on the part of the teacher inviting more communication of the same, but a negative cognitive feedback requiring the learner to effect some change or appropriate modification lest the form fossilizes.

Selinker and Lamendella (1979: 363) called Vigil and Oller's (*ibid.*) "*the first explicit and testable theoretical claims*" concerning the source of fossilization. They held that the source of fossilized IL is only one among other important aspects such as nature, object, manner, persistence of fossilization. They listed six conclusions on the role of extrinsic feedback in IL fossilization, and accounted for them briefly in relation, and as a response, to Vigil and Oller's model which they discussed at length (Selinker and Lamendella, *ibid.*: 365-370). These conclusions are discussed below.

(1) *Internal factors* constitute the domain of control over the onset of fossilization.

Put otherwise, intrinsic learner characteristics are the energetics of his linguistic behaviour in the sense that they are the factors responsible for acquisition or fossilization to

take place. As for *external* conditions, they are only operant to the extent allowed by these internal factors. This is so because the learner may happen to pay little or no attention to speakers' reaction and what this carries in terms of feedback, which is considered by Vigil and Oller (1976) as the motor factor that brings about change to learner IL. In this way, Selinker and Lamendella did acknowledge the role of extrinsic feedback in rule fossilization (i.e. 'successful IL learning'), a role, however, that should in no way be divorced from those internal factors specifying the role of feedback. For them, then, rule fossilization is learner specific. Vigil and Oller, it should be mentioned, did not deny the fact that there is room for such intrinsic factors as motivation, attitudes, acquisition/communication strategies at play in fossilization.

(2) *The interactive needs* of particular learners constitute the most direct source of fossilization and may be considered to provide the fundamental *lower bound* on it.

That is, when a learner's interactive needs are met, there is a tendency for the IL rules to *stabilize*. Selinker and Lamendella (*ibid.*) insisted that stabilization here may not lead necessarily to permanent fossilization. For instance, when a learner communicates 'adequately' in real-life situations, and his interactive needs are met, there could be no further communicative competence development in TL interactions, and the current IL *permeability* could end. So, like Vigil and Oller (*op cit.*), Selinker and Lamendella believed that rule stabilization takes place when a given learner succeeds interactively to an adequate degree with what IL he has.

(3) *Selected portions of the learner's utterances* may be differentially reinforced via extrinsic feedback.

According to Vigil and Oller (*op cit.*), grammatical rules used in successful communicative interaction have a tendency towards stabilization no matter correct or not, yet the reverse (i.e. when unsuccessful) would destabilize. Although Selinker and Lamendella (1979) agreed to a certain extent with such a claim, they wondered how the learner would

define 'successful' vs. 'unsuccessful interactions'. In other words, what portion or aspect of an utterance exactly would cause an 'interactive failure'? The learner should, therefore, know that there is a communication breakdown; still, such a breakdown is reacted to negatively by TL interlocutors, not as much for linguistic reasons as it is for communicative (i.e. truth-value of an utterance) or cultural (i.e. violation of cultural taboos) ones. Given that this is so, it follows that it is difficult for a learner to establish what area of an utterance makes the object of negative feedback. As Selinker and Lamendella (*ibid.*: 368) put it:

A conservative estimate suggests that a typical utterance might involve a minimum of 50 rules of linguistic structure at the *allophonic, phonemic, morphophonemic, lexical, syntactic, semantic* and *pragmatic* levels. Do all 50 rules and all levels of language structure become de-stabilized when there is a failure of communication involving some utterance? V & O [Vigil and Oller] seem to answer yes.

They added saying that many of these rules, however, have been accepted in other utterances which the learner might have produced.

(4) Fossilization in interlanguage learning *cannot* be accounted for solely (or even primarily) in terms of a need for particular sorts of feedback.

In other words, there are a great many people who learn a number of TL structures without having face-to-face interactions such as picking up the input from books or in language classes. In addition, Vigil and Oller seemed to believe that a learner who never spoke, and therefore who has received no feedback from TL interlocutors, would learn nothing or very little. Is that so, in reality?

(5) Reinforcement may take place separately for *communicative competence* versus *grammatical correctness*.

Some people have the capability of communicating a great deal of data or information while having little knowledge about the TL. Therefore, there should be a distinction between feedback on the linguistic features of the IL and that on communicative competence. Although we grant, by now, the fact that language is a whole that holds, there are different

routes a given learner might approach learning. It follows that one *may* work his way to the TL in terms of linguistic features but not in those of communicative skills; the reverse situation may also hold (see, for example, Chapter 5).

(6) Extrinsic feedback *per se* plays a problematic role in primary language acquisition, and the term fossilization should *not* be applied to the *stabilized adult NL grammar*

This is Selinker and Lamendella's conclusion that extrinsic feedback factors may not be the primary source of fossilization, a term which should not, again for them, be applied to the stabilized grammar resulting from L1 acquisition. Parents often tend to provide feedback on the truth-value of the child's speech and provision is less made on grammar correctness as such. Thus, in the process of L1 acquisition, children are not directly influenced by extrinsic, corrective feedback on grammar. On the other hand, negative feedback on the part of the parents, in an attempt to make sense of what the child tries to communicate, has no fossilization consequences on child speech. Selinker and Lamendella (*ibid.*: 372) exemplified this stating that often: "*a child's idiosyncratic label for some common object becomes the normal household word for that object and yet the child moves on to adopt the standard adult word.*" Hence, extrinsic feedback is *not*, they pointed out, the principal factor determining L1 linguistic rule stabilization. For this, L1 stabilization is different, for them, from that in L2 acquisition.

In sum, according to Vigil and Oller (*op cit.*), it is pragmatic conditions of interaction that reinforce or destabilize the language rules used to exchange information at the cognitive level and express oneself in relation to others at the affective level; such conditions, constituting extrinsic feedback, are the factors determining the linguistic rules subject to fossilization. As for Selinker and Lamendella, extrinsic feedback is only influential within the limits of learner intrinsic characteristics. Rule fossilization is motivated by realized interactive needs; where these are not met, the reverse takes place. In respect of (3), it is extremely difficult for the learner to match negative feedback with the appropriate item which may be

erroneous at one of many language levels. Selinker and Lamendella saw that (4) runs opposed to Vigil and Oller's claim. Also of note is the important point that there should be a distinction between linguistic feedback and communicative feedback. Following from (6), they urged the need for a distinction to be drawn between *fossilization* and *stabilization*, the latter being observed and manifesting in learner speech unlike the former which is merely inferred. Like Vigil and Oller, they highlighted the distinction between 'relative stability' of certain forms and features of the language and global or 'generalized stability' of the whole IL system; the two are different sides of the concept of stabilization.

The factors we have dealt with so far are themselves explanations for fossilization. For Long (2003), almost all explanations do not work at least for fossilization, even when this is possible for stabilization, for some learners or for some supposedly fossilized structures. Only when they survive an empirical test can they be 'candidate explanations'. He argued that an explanation is worthwhile if it has predictive, not descriptive, power i.e. an ability before, not after, the fact to tell whether the explanation works with all learners and all putatively fossilized features of L2 performance. If the explanation applies only to some of these, not all, and if fossilization or stabilization is predicted to take place but does not, it is not reliable or credible. In this way, several of the above factors, he claimed, can describe cases after the fact and, thus, lack the predictive power, while very few, if at all, can predict successfully stabilization and/or fossilization.

Stabilization and/or fossilization should not be accounted for only by one factor, say transfer; two or more variables may work in tandem (Han and Selinker, 1999), that is. Even such a claim, i.e. the MEP, in Long's (*ibid.*) view, is clearly not grounded for it cannot resist the 'universality test'. However, Long acknowledged that very few of the afore-mentioned putative explanations can potentially "*predict fossilization, due to the simple, but crucial, fact that they concern either universal human characteristics or pervasive qualities of the linguistic environment*" (Long, 2003: 515).

To put it, finally, all in a nutshell, Selinker and Han (1996) proposed a summary list of salient concerns bearing on the issue of fossilization and stabilization, concerns we discussed thus far:

1. How does fossilization relate to stabilization, cessation of learning, ultimate attainment, corrective feedback, persistence of IL form/resistance to change, contextual or variational variables and the like?
2. Are stabilization and fossilization an either/or issue or do they take place in a continuum, forming thus a cline progression?
3. In longitudinal studies, how long is long enough? In other words, what theoretical criteria or empirical evidence do we have, at hand, showing that IL will not change after a certain period of time – namely, Selinker's (1972) five years? Is the often proposed five years on the right track?
4. Why does learning take place with regard to one sub-system but does not elsewhere?

2.5. Methodological Approaches to Fossilization

Empirical studies tend to use one or more methodologies as approaches to fossilization (Han, 2003). These are the corrective-feedback approach, longitudinal approach, typical-error approach, advanced-learner approach, and length-of-residence approach.

2.5.1. Corrective Feedback Approach

Any study of stabilization and putative fossilization should identify IL structures having supposedly ceased to develop (Han, *ibid.*). In this perspective, together with other approaches, corrective feedback is used by researchers to determine whether or not there is cessation of further learning i.e. despite pedagogical intervention therein (see Han, *ibid.*, reporting on a study by Kellerman, 1989).

Studies are in need to see if, even with explicit rule explanation and corrective feedback, the subject is still fossilized/stabilized perhaps for inability to analyze and synthesize linguistic elements. In the case of fossilization, it is often taken for granted that de-fossilization is something like impossible; research, however, must put such a hypothesis on the defensive, through explicit instructional feedback and longitudinal studies for example, to answer the persisting question whether or not it is possible. Long (2003: 523, note 5) pointed out:

Despite assertions to the contrary [...], the answer *must* be negative, or fossilization is an empty construct. By contrast, “de-stabilization of previously considered fossilized forms” [...] is conceptually coherent.

As detailed in the course of the present chapter, the cessation of an IL form may be *permanent* as it may be *temporary*. How can one claim that a given L2 form has permanently fossilized and is not a mere temporary cessation of learning? If we succeed, through corrective feedback for example, to *destabilize* it, then all that we have is an instance of a *plateau* reached in IL learning before attaining native-like competence (Selinker and Lamendella, 1979). Therefore, we have recourse to explaining the plateau at issue as potential fossilization when it proves permanent. Because fossilization is believed to be rather *inferred* than *observed* (*ibid.*), we are then in an urgent need for longitudinal research to uncloak the matter, where all the conditions are provided:

the conclusion that a particular learner had indeed fossilised could be drawn only if the cessation of further IL learning persisted in spite of the learner’s *ability, opportunity, and motivation* to learn the target language and acculturate into the target society.

(*ibid.*: 374)

2.5.2. Longitudinal Approach

In an empirical longitudinal research, there are at least four phases the researcher goes through (Han, 2003). Firstly, he must find out if his subjects are placed in optimal conditions, both externally and internally, for acquisition to take place. Secondly, that a given structure

has indeed persisted or stabilized must be evidenced. Thirdly, he has to identify the underlying processes of such persistence. Last but not least, an analysis of the underlying processes has to be conducted, together with evidencing, through *well-grounded* judgements, that the stabilized forms are eventually prone to fossilization. In Han and Selinker (1999), there is mention of another important phase, namely attempting, pedagogically, to *destabilize* the structure which has persisted by triggering its *restructuring* (see Chapter 5).

This is all well and good, but there are, of course, difficulties when conducting longitudinal studies on fossilization. How long would be long? That is, is there a definite time span for a so-called longitudinal study? Will five or ten years do? Why not twenty? Such questions constitute the *sine qua non* of the issue we are after, namely longitudinal studies on fossilization. Long (2003) asserted the importance of such studies. For him, a longitudinal study has both a *lower bound* and an *upper bound*. The former reflects Selinker's minimum requirement of two to five years; the latter goes even so far as to exceed five years in order to support a fossilization claim.

Long (*ibid.*) reported on studies by Han (1998, 2000) as instances of the lower bound of fossilization, and studies by Long (1997) and Lardiere (1998a, 1998b, 2000a, 2000b; see also Han, 2003 reporting on Lardiere) going beyond the upper bound and giving, according to Long (2003: 512), "the strongest evidence to date for fossilization as *product*". Note that the remainder of researchers, including Han, dealt with the issue as process.

2.5.3. Length of Residence Approach

In order to demonstrate IL cessation, in spite of the learner's optimal position for learning both internally and externally, researchers often tend to study subjects who have lived in the L2 environment to ensure there is exposure to the TL given the number of years of residence, which is an indicator of a favourable environment for acquisition (Han, 2003, reporting on Selinker, 1985).

2.6. Critique

Given the assumed existence of fossilization, many explanations followed.

Nevertheless, in explaining it:

Surprisingly, no one seems to have considered the possibility that if fossilization is, as Selinker (1972) claimed, a cognitive mechanism producing the non-target-like end-state also called “fossilization”, there is no need for other explanations, or conversely, that if L1 transfer, learnability, markedness, etc., or some combination of linguistic and psycholinguistic factors is responsible, there is no need for “fossilization” as an explanation.

(Long, 2003: 512-513)

Selinker (1972) believed that there exists a cognitive mechanism (i.e. fossilization) which stands for the construct, fossilization, as product (i.e. controlling ILs), but that, at the same time, such factors as L1 transfer are at work controlling the very mechanism in question. Stated otherwise, fossilization as product is constrained by a cognitive mechanism which, in turn, is controlled by transfer and variables of the like. If such is the case, then: *"fossilization (as process) is not itself an explanation, but really a cover term for one or more variables in SLA, such as transfer, that is, a process itself in need of explanation"* (Long, *ibid.*: 513).

In effect, Selinker (*ibid.*) admitted that there are a number of questions that can be raised with regard to his perspective. For instance, one might well ask if it is always possible to clearly attribute the observable linguistic data to the appropriate process(es), say language transfer, or transfer of training, or perhaps both; of course, the answer is in the negative. Another issue may be how we can predict fossilizable forms in advance of their occurrence. For these reasons, Selinker admitted that his framework yields *descriptive*, not *explanatory*, accounts (for we cannot say with all certainty why some structures fossilize while others do not). Thus, for him, prediction may be an impossible mission.

In deciding, then, on fossilization as a psychological reality, if at all, Long prompted the need for agreeing on the definition of the construct; in supporting cases of fossilization,

such a position is bound to the definition together with an evaluation of the methodology used.

For Long (*ibid.*), four problems are encountered when dealing empirically with fossilization: (1) fossilization is assumed, not demonstrated, unlike stabilization which is a well-attested phenomenon; (2) the subjects for the study are inappropriate; (3) researchers give insufficient data as a basis for their findings; and (4) their analytic procedures are inadequate.

Defining fossilization as *process* or *product* raises a number of methodological problems (Long, *ibid.*: 490-501). First, with regard to *testability*, performance is unfalsifiable in a learner's lifetime, though the only difference between fossilization and stabilization is permanence. Thus, fossilization is untestable with no specification of a minimum period (5 or 10 years, see Han, 2003).

Concerning the *scope* of putative fossilization, it is not specified. For Long, neither learners nor whole ILs, or whole IL systems (i.e. phonology, syntax, etc.) fossilize; what does is IL development within certain contexts and discourse domains. Still, often, contexts are vague in their sociolinguistic definition and discourse domains are elusive.

Third, insofar as age is concerned, Selinker (1972) asserted that fossilization takes place regardless of it (c.f. definition of fossilization). However, Long argued that:

No studies have shown fossilization in child L2 acquirers [...]. On the contrary, given adequate opportunity, children appear to attain nativelike levels in a second language, just as they do in their first.

(2003: 491)

This appears to be so provided they are first exposed to L2 before the offset of a sensitive period for language acquisition. Selinker's well known expression '*no matter what the age of the learner*' (1972: 215) is especially true if fossilization is a phenomenon pertinent to L2 acquisition and does not characterize *adult* language acquisition, as such.

Another issue is the *level* at which language items fossilize, and what items or units of analysis i.e. is it: "*the whole IL, the module, the linguistic rule, particular forms, words, meanings, collocations, form-function relationships, ranges of variation, all of these, or something else?*" (Long, 2003: 491). These are certainly important questions; other questions are: In order to support a fossilization claim, should plural –s marking, for example, appear in all noun phrases or just on particular ones (i.e. should fossilization occur at the level of type or token, in Long's terms)? Maybe, it always appears correctly in some, but always inaccurately in others.

As regards *deviance*, one might well wonder if the issue of fossilization is accountable for only in terms of deviant rules and forms, not of correct ones as well. It is already a fact that learners of different kinds, successful and otherwise, acquire many target-like and non-target-like norms and that these are kept, in their IL repertoire, permanently unchanged (c.f. Vigil and Oller, 1976).

Another ground on which the fossilization claim may be attacked is the fact that *putative* fossilization is often assumed, not demonstrated. One finds just claims which remain plain speculations that so-called fossilized forms are the result of this or that factor without actually demonstrating that one has a case of long term stabilization of IL forms. Selinker and Han (1996) believed that the majority of cases are mere conclusions and inferences about fossilization no matter what the topic of study, and at times what is at issue is not fossilization proper; explanation is, mostly, not coupled with description; instead, mere conjecture about the different types and causes of fossilization is all we can find. Many researchers (see Long citing, for example: Lin, 1995; Washburn, 1992) claimed that certain forms, and even whole ILs fossilized while such claims remain mere speculations answering the *why* question. They argued that the frequency of an error shows that it is fossilized; the rule operating on the production of the error in question, that is, has fossilized. Other factors, in line with these, besides frequency, are the length and type of language learning experience and an acceptably

long period of residence in the TL environment. With regard to the latter, a form is said to be fossilized when it has stabilized for a period of more than five years, a criterion being basic to Han's above-cited PhD dissertation.

Pushing further on these lines of thought, researchers have had a tendency to select *inappropriate informants*. Findings, that is, should be based on subjects with adequate *ability*, *motivation*, and *opportunity* to learn the TL. Thus, studying beginners with low proficiency is absurd (see researchers, cited in Long, 2003, like Agnello, 1977; Sola, 1989; Washburn, 1992; and others). In line with inappropriateness is, maybe, that, in a non-longitudinal study, the researcher tends to categorize subjects as fossilized or the reverse while simply drawing on their time of residence in the TL environment.

Already reported is the critique that findings are based on insufficient data. Long reported on some studies (for example, Lin, 1995, and others) which based their findings on *one* sample of learner IL performance; other reported studies (e.g., Bean and Gergen, 1990) *assumed* fossilization with data collected at one point in time, on two or more tasks from the same subject(s); still, others (e.g., Mukkatash, 1986) made up for such insufficiencies but their studies were conducted over too short a period that they could provide evidence, if at all, for stabilization, but not for fossilization.

Another methodological problem is that researchers used inadequate analyses, given their ignorance about fossilization and uncertainty of its existence. Long (*ibid.*) listed the following problems which are cases of inappropriate analyses: (1) using group means instead of individual scores; (2) using accuracy or accuracy ranges instead of stability or change measures; (3) considering 'type' not 'token' (e.g., the case of '-s' plural marker for NPs vs. all individual cases of NPs, see above). One may, also, hazard a question: Are particular scores in a L2 production of some kind, short of native-like proficiency, indications of fossilization and not simply that acquisition is incomplete and thus in progress? Evidence for a fossilization claim is, therefore, scarce on the ground and the use of the term *putative* fossilization may,

then, be appropriate. Long (*ibid.*: 501), basing his standpoint on analysis of several research works which, for him, did not support a fossilization claim for they merely assumed, not demonstrated, the phenomenon, stated that: "*while widely taken to be a proven universal feature of IL development, the empirical evidence for fossilization in the 30 years since the construct's first appearance in the SLA literature has been vanishingly small.*" The alternative is that ongoing longitudinal studies should be undertaken to show ultimately the myth or reality of the issue.

Given the scarcity, as yet, if not the inexistence, of evidential support for a fossilization claim as product, researchers are only justified if they investigate *stabilization*, not putative fossilization, and seek explanations for it (*ibid.*; see also Han, 2003). This is so because stabilization is already a reality; it does not suffer from permanence as a methodologically problematic issue, let alone the fact that it is testable. As for its end-state, i.e. fossilization, the construct is largely unexplored given that it is beset with definitional and methodological constraints. Be that as it may, is it alternatively possible to prove that it does not exist? One might of right ask, and this may very well be the reason why researchers could not abandon the claim. Long (*ibid.*) admitted the fact that it is both *premature* and *unwarranted* to reject the construct of fossilization or accept it as a reality. In line with Long, Han (*ibid.*) viewed that stabilization, not fossilization, should be more relevant in inquiry for empirical research works on fossilization. Notwithstanding, she was not satisfied with his postulations (see above). This is so for such claims equate, in Han's view, stabilization with fossilization which is not plausible both theoretically and empirically:

Theoretically, it risks conflating learning plateau – a natural learning process –with permanent cessation of learning. [...] On the empirical level, even though the equation seemingly aids in operationalizing 'fossilisation', it compounds the empirical research by advocating the casting of an unnecessarily wide net (i.e. due to having to include every instance of stabilisation) yet with the possibility of still missing the target (i.e. not finding the type of stabilisation functioning as a precursor to fossilisation).

(Han, *ibid.*: 101)

In respect of the definitions of *fossilization*, they are varying and imprecise in the literature; some studies, that is, referred to Selinker's 1972 definition and each interpreted it differently in an attempt to describe totally different phenomena (Selinker and Han, 1996). Apart from Selinker's, for many, fossilization is both a process and a product (see Han, 2003); it is persistent and resistant (Han and Selinker, 1999; Han, *ibid.*); it is an IL and relates both to correct and incorrect language items (c.f. Vigil and Oller, 1976; R. Ellis, 1985); it affects the IL system and sub-systems; it may stand for the ultimate outcome of L2 learning (Tarone, 1994). Such definitions make of fossilization a *non-measurable* phenomenon for they lack sophistication (see Han, *ibid.*). Such heterogeneity in interpretation and application results in confusion; this, in turn, may very well prove counterproductive to both theory and practice of SLA.

When L2 development is seen as process, information is then perceived, encoded, stored and finally retrieved. In which phase fossilization takes place may remain, as yet, an SLA conundrum (see Han, 2003).

Finally, the process of continued learning may be obstructed or affected by a number of linguistic, social, cultural, and psychological variables, but this does not guarantee that fossilization has taken place. At any rate, these critiques could certainly serve as methodological guidelines in future research.

Conclusion

What we think we know about IL is that language transfer has an important bearing on its shape, the extent of which is yet unknown. Some scholars, like Corder, however, believed in the NL additional effect – the facilitating approach to the new world of TL use. What we do know about IL is the fact that it tends to stabilize, if not fossilize. It may be partially fossilized i.e. retaining some non-target-language forms while progressing in others, or it may get stuck upon a plateau. The plateau is fairly close to sea level for some learners, while it attains higher

levels for others. Most learners, it is believed, get stuck sooner or later. This phenomenon is motivated by a number of causal factors. Language transfer is believed to be one such factor. The age of the learner is another. Other factors which intervene in the process, and which may either induce fossilization or prevent it include: affective factors, amount of exposure (to input) and opportunity for practice, feedback, etc.

In contrast with transfer, about which much has been verified or refuted by researchers over the past decades, other IL concepts, though equally central to the Interlanguage Hypothesis (such as stabilization and/or fossilization, backsliding, learning strategies...) have proved more baffling over the years, and as such less open to verification or refutation. We really do not know what the notion of IL competence is, or whether adult fossilized competence is doomed to incompleteness. One might even conjecture that it is not inconceivable that a fossilized steady state IL competence might well become an artifact of the classroom, or ask if there is, at all, a developing, as opposed to a stabilized, IL competence. Provision of a more precise description, then, of what affects and shapes the form of IL system is needed if we were to make constructive progress.

No scholar has, as yet, provided us with a sound theory of L2 acquisition that captures all the processes and phenomena at play in learning. Granting the complication of a great many factors such as language transfer, stabilization, fossilization, individual variation, social and psychological variables, capturing them within a single theory is, let it be said, a daunting task, the magnitude of which may go beyond expectations. Simplistic theories, which heavily draw upon language transfer or other exemplary variables may not be able to capture everything related to the complicated process of SLA and, thus, uncloak the reality of the phenomenon. What we need to have may be the exploration of how a given variable works in tandem with a number of others – like the Multiple Effects Principle, for instance, which is predicted to account for instances of stabilization and possibly those of fossilization – and/or a broader framework covering everything related to the complex and intellectually challenging

phenomena of language learning. Therefore, further attempts should continue, but ones stemming from longitudinal or life-time studies, in order to get a better understanding of the interrelationships of linguistic, mental, social and other factors in the process of L2 acquisition. In an attempt to deal with our polemic questions, we may learn much about linguistic universals – a promising research area which, when it interacts with language transfer, may justify variability in IL forms.

In making endless attempts to rediscover IL by collecting and analyzing data, rethinking it in a different light, making progress and adding new dimensions, we will possibly come to a better understanding of language learning and the way this relates to the multiplicity of processes therein; something the earlier scholars did not succeed in reaching. Meanwhile, questions like the following seem to have resisted, therefore remaining short of answer: Can one achieve so-called *near-native* competence in L2? How near is near and is there an index of being near? What is the role of *consciousness-raising*, *attention*, *noticing* and exemplary *cognitive* variables? Issues of this sort have proved baffling over the years. An equally baffling question is the role of *instruction*, namely explicit grammar teaching, in the shape of IL. It is to these that we turn next – in the remainder of the chapters.

CHAPTER THREE:

On Consciousness, Awareness, and Attention: The Noticing

Hypothesis

Introduction

Over the years, the role of attention and awareness in processing input as intake for L2 learning has been a hot and thorny issue in SLA (e.g., Krashen 1985; Schmidt, 1990; Tomlin and Villa, 1994; Robinson, 1997a; see Chapter 4 next). Researchers have urged the need for avoiding the notorious umbrella term *consciousness* – a term being vague, ambiguous, and difficult to operationalize at a time (e.g., McLaughlin, 1990b; Tomlin and Villa, 1994) – in search of more refined and finer-grained constructs.

Schmidt (1990, 1993, 1994, 1995) acknowledged the fact that there exists a terminological confusion due to the conflation of distinct senses of consciousness in research; however, this has not deterred him from using it for a reason. He argued that Krashen inadequately described the critical notion of *unconscious* learning, given that the construct is threefold, in essence, in that it can be used to describe one of three different things: (1) unconscious learning without explicit metalinguistic knowledge of L2 rules; (2) learning without intention; and (3) learning without awareness. Schmidt indicated that learning without awareness is the type of learning that must be conscious, in terms of the subjective experience of *noticing*.

At the very heart of the debate in the field of SLA as well as that of cognitive psychology are the discussions of the role of conscious and unconscious processes – and the notion of interface – in IL development. Considerable research, having different theoretical motivations (e.g., Krashen, 1979, 1981, 1982, 1985; Bialystok, 1979; McLaughlin, 1990b;

Reber, 1989, 1993), has been conducted to put the underlying claims to the test. Overall, there is agreement that conscious L2 learning contributes to successful L2 acquisition if not central to it (see Long, 1983; Ellis, 1990 reviewing such research).

3.1. Consciousness

Schmidt (1990), in investigating the role of consciousness in L2 learning, distinguished several meanings of the term: consciousness as awareness, consciousness as intention, and consciousness as knowledge. Later, the construct was deconstructed into four basic meanings bearing especially upon language learning theory and practice; these are: intentionality, control, attention, and awareness (Schmidt, 1994). Let us, for the purposes of the present work, elaborate on the construct of awareness.

3.1.1. Consciousness as Intention

Consciousness is commonly used in the sense of intentionality which in common usage bears upon plans, aims, and deliberateness. As put by Schmidt, "*One might apologize for an unintended offense by saying that it was done unconsciously, meaning without intent*" (1994: 15). In psychology, intentional learning has been contrasted with incidental, non-intentional learning and both have been widely researched. A key issue is the fact that researchers have been equally interested in whether the two types of knowledge resulting from the foregoing respective types of learning are represented in different ways (e.g., Paradis, 1994) or they have the same mental representation (e.g., McLaughlin, 1990b). Incidental learning or behaviour is now commonplace and so is the incidental learning of languages (see Krashen, 1989).

In SLA, intentionality is a defining characteristic of the distinction between voluntary learning and involuntary (unintended) acquisition. In this sense, unconscious learning is

possible and even commonsensical as long as one can learn without intending to. Schmidt (1994) recommended that the term incidental learning should be used instead of the umbrella and coarse-grained (Tomlin and Villa, 1994) term unconscious learning in the absence of the intent to learn. Of note is the fact that our intentions may be conscious as they may be unconscious (see Baars, 1985, cited in Schmidt, 1990). Schmidt (1994: 16) insisted that:

It is important not to assume without independent evidence that either the process or the product of such learning is unconscious in any other sense, e.g., that such learning is unaccompanied by attention or awareness or that the knowledge gained cannot be expressed.

3.1.2. Consciousness as Control

Another sense of consciousness is control; it is the executive function of attention or, more broadly, consciousness. In commonsense usage, to take Schmidt's (1994) example, when we have been effortfully involved in the execution of something we also happen to say that we did it consciously.

There is, as it seems, an overlap between consciousness as control and consciousness as both attention and awareness. Schmidt allowed that one could argue "*that control and attention are the same from a theoretical perspective*" (1994: 20). He distinguished between the two in order to emphasize output processing in the former (especially, the issue of fluency) and input processing in the latter. L2 learning, like the learning of other things, is twofold: It has a skill aspect and a knowledge aspect. As learning progresses, it tends to become more automatic i.e. moving from its being a mere knowledge (declarative knowledge of facts) to a skill (procedural knowledge of how to do things). Another terminology is the distinction of memory into implicit and explicit memory; this contrast concerns performance rather than competence factors. The former type of memory stands for the influence on performance of some unconscious event while the latter denotes changes in behaviour due to consciously remembered prior experience. In L2 learning, Schmidt pointed out that the

problem of control *"is essentially the problem of accounting for fluency. In psychology, relevant theories typically come under the rubric of automaticity"* (p. 21).

3.1.3. Consciousness as Attention

A third sense of consciousness commonly used in everyday situations refers *"to subjective awareness of the objects of focal attention"* (Schmidt, 1994: 16). Different environmental stimuli, that is, to which our senses are exposed, compete for gaining our attention; however, our consciousness can be focused only on a few of these stimuli, if not one at a time.

In psychology, consciousness is held to be the product of an attention mechanism (see Baars, 1988) which in part is under voluntary control i.e. an individual can voluntarily attend to one environmental stimulus but not another at least briefly. In this sense, it is clear that there is an overlap with consciousness as intention. Still, as Schmidt pointed out, one can unintentionally attend to a number of stimuli and be aware of, or say notice, them, meaning that *"attention is not completely under voluntary control"* (p. 17). In applied linguistics, incidental learning (see Hulstijn, 2003) is sometimes argued to entail or to equal unattended learning. Paradis (1994) addressed the incidental acquisition of grammar forms on which no focus of attention is initiated. Schmidt (1990: 129) held that incidental learning:

is clearly both possible and effective when the demands of a task focus attention on what is to be learned. Even so, paying attention is probably facilitative, and may be necessary if adult learners are to acquire redundant grammatical features.

In psychology, it is held that learning with no prior attention to what is to be learned is something like impossible; in SLA, it is argued that for input to convert into intake attention is a pre-requisite (Schmidt, 1990, 1993a, 1993b). Still, the picture is not always uniform; objections seem to be around against this position (see ahead, especially Chapters 4 and 5).

3.1.4. Consciousness as Awareness

Consciousness is commonly used as *awareness* in both common usage and scientific discussion (Schmidt, 1994). Tomlin and Villa (1994) pointed out that the notion of awareness, both in cognitive psychology and SLA, stands for "*a particular state of mind in which an individual has undergone a specific subjective experience of some cognitive content or external stimulus*" (p. 193). The problem with viewing consciousness as awareness is that we need to know which level or type of awareness is in question. According to Schmidt (1990), there are degrees or levels of awareness: *perception*, *noticing*, and *understanding*. They are hierarchical in that they function at different degrees of consciousness.

3.1.4.1. Perception

The first level of awareness is perception of the physical world. As stated by Baars (1997), it may be the oldest mode of consciousness. This was especially studied, though differently, with the then coming of age of modern psychology as a science by two classical schools, namely Structuralism pioneered by Wilhelm Wundt and Gestalt theory. Baars held that perception culminates to mental organization by way of an individual's exposure to different external stimuli and subsequent creation of internal representations. As noted by Schmidt, subliminal or unconscious perception is doomed to take place for the simple reason that our perceptions are not necessarily conscious. This, in fact, is very much in keeping with Baars for whom our conscious capacity is surprisingly limited.

3.1.4.2. Noticing (focal awareness)

The second level of consciousness as awareness is *noticing*, also referred to as focal or conscious awareness. The distinction made between conscious and unconscious learning is central to discussions on learning at this level of awareness; noticing is the basic sense we

attribute to our experience of being consciously aware of something. In fact, perceived information should be regarded as being distinct from information that is noticed (Bowers, 1984, cited in Schmidt 1990). When reading, for example, we are aware of, i.e. notice, the input we are exposed to instead of other information we derive from sensory sources or stimuli around us. Focal awareness of the reading content primes, but we do perceive other external events which we may decide to pay attention to. Noticing is a subjective experience, a '*conscious registration of the occurrence of some event*' (Schmidt, 1995b: 29), which is operationally defined by Schmidt (1990: 132) as "*availability for verbal report, subject to certain conditions.*" Two such conditions are the fact that

The lack of a verbal report cannot be taken as evidence of failure to notice unless the report is gathered either concurrently or immediately following the experience. There are also conscious experiences that are inherently difficult to describe....When problems of memory and metalanguage can be avoided, verbal reports can be used to both verify and falsify claims concerning the role of noticing in cognition.

(Schmidt, *ibid.*: 132)

A higher level of awareness than noticing is rule understanding, which, Schmidt posited, is not necessary for learning, though it can be facilitative.

3.1.4.3. Understanding

Schmidt distinguished a higher level of awareness which is understanding. As aforementioned, noticing is the basic meaning we attribute to the experience of being aware of something; this is not, however, exhaustive of other senses. When we come to notice some external event, this can be analytically and comparatively processed with what we happened to notice in other situations. When brought together, the elements of our conscious experiences can be reflected upon and an attempt to making sense of them can be made; here comes the experience of understanding. Such mental activity, thinking or the experience of analyzing, comparing, and testing hypotheses about the linguistic input, takes place in 'the

theatre of consciousness' (to borrow Baars', 1997, title). Other mental activities that take place within the realm, and at this level, of consciousness are problem solving and meta-cognitions (i.e. awareness of awareness).

The distinction into conscious and unconscious learning can be discussed, just like noticing, in relation to awareness at the level of understanding. This is Schmidt's (1990) *implicit* learning question: "*can second language learners acquire rules without any conscious understanding of them?*" (p. 134). In this perspective, whereas unconscious learning implies the induction of rules and principles unconsciously, its antithesis – conscious learning of such rules – takes place due to understanding. Thus, whereas noticing is described as the '*conscious registration of the occurrence of some event*', understanding refers to the '*recognition of a general principle, rule or pattern*' (Schmidt, 1995b: 29). Let us take the omission of subject pronouns in Spanish as a good case in point. According to the Noticing Hypothesis (see 'Section 3.2.' below), Spanish learners need to notice that subject pronouns are sometimes omitted; this is the case for awareness at the level of noticing. By contrast, if they come to notice that Spanish is a pro-drop language, this would be the case for awareness at the level of understanding.

Added to the above levels identified by Schmidt (1990), another level of awareness is revealed in Leow's (1997) study; this is *meta-awareness*, respectively. His findings, drawn from the qualitative analysis of the think-aloud protocols of L2 learners completing a problem-solving task, suggested that meta-awareness happened to correlate with the use of conceptually-driven processing, namely hypothesis testing and morphological rule formation, whereas its absence was coupled with an absence of such processing while noticing L2 data. One might object, however, arguing that this was first identified by Schmidt (*ibid.*). Indeed, Schmidt spoke of meta-awareness in Leow's sense naming it 'meta-cognition' (awareness of awareness), but he subsumed it within the level of understanding (see above). At any rate, as

Robinson (1995a) proposed and Leow reminded, type of task may trigger differences in processing (e.g., conceptually-driven processing vs. data-driven processing). Indeed, Leow pointed out in his study that even though learners performed the same task, they demonstrated differences in processing and because of that learners' individual choice might also trigger a specific type of processing in addition to type of task.

3.2. The Noticing Hypothesis

Schmidt's (1990) Noticing Hypothesis is, by definition, a rejection of the claim that learning can occur without learners consciously observing the learnt items in the input. As he stated it, "*while there is subliminal perception, there is no subliminal learning*" (Schmidt, 2001: 26). That is, one may unconsciously attend to the input but not be able to process it as intake for long-term storage.

The distinction between conscious and unconscious learning made Schmidt (1990) propose that instead of its being a single question, whether or not L2 learning is conscious hides a number of different questions or contrasts. He formulated six questions bearing on consciousness and learning, one of which being the *subliminal* learning question i.e. awareness at the level of noticing (or the lack thereof): "*is it possible to learn aspects of a second language that are not consciously noticed?*" (p. 134). Another is the *incidental* learning question distinguishing conscious from unconscious learning on the basis of intention and effort: granting that noticing is necessary, "*is such noticing automatic or must learners consciously pay attention?*" (p.134)

As already described, there are levels of awareness, one of which is noticing. Schmidt (1995b) defined *noticing* as the '*conscious registration of the occurrence of some event*' (p. 29), a subjective experience that is operationalized as being available for verbal report (Schmidt, 1990). The *Noticing Hypothesis* (Schmidt, 1990, 1993, 1994, 1995b) made the

claim that noticing, or conscious awareness and apprehension, is the necessary and sufficient condition for learning to occur i.e. for input to convert into intake and get further processed. Put otherwise, what becomes intake for learning is what learners notice in input (Schmidt, 1995b). With respect to the incidental learning issue, whether a learner deliberately attends to a linguistic form, Schmidt argued, or it is unintentionally noticed, if it is noticed it becomes intake no matter. Given the crucial role awareness plays in tuning up the noticed forms in spontaneous communication, it follows that L2 learners must consciously notice some particular form in the input for any subsequent intake of what is noticed. In brief, Schmidt argued that focal attention and awareness are isomorphic, meaning that learning does not and cannot take place without awareness.

Discussions of noticing are usually a response against theories of unconscious acquisition, namely Krashen's (1985). Krashen's Input Hypothesis is, by definition, a rejection of any role for consciousness; L2 acquisition is basically a subconscious process. In addition to the major claim that consciousness is necessary for learning, Schmidt (2001) made also the claims that attention can be associated with awareness, and that attention research lends support to his major claim. However, he was less certain about the degree of awareness required for attention in order for learning to be due. He also allowed for different subsystems of the second language (e.g., vocabulary, syntax, morphology) to differ in their attentional demands; that is, given that not all features of language are learnt in the same way (Robinson, 1996a, 1996b; Schmidt, 1995; VanPatten, 1994), it follows that not the same level of attention and awareness is required in learning every area of language.

Schmidt (1990) set out discussing noticing in terms of consciousness; his attention came to be directed later to the nature and role of attention, where noticing remained a central cognitive and attentional process. The Noticing Hypothesis (Schmidt, 2001) came to draw upon the fine-grained model of attention (see next section) of Tomlin and Villa (1994). Their

model contributed three levels of attention, as described below, the third of which being *detection* around which controversy in SLA theory and research and disagreement between Schmidt, on the one hand, and Tomlin and Villa, on the other, are going on. As a matter of fact, the Noticing Hypothesis came to have both a weak and a strong version. In its weak form, contrary to the strong form representing his earlier position, L2 learners need not have to notice specifically any details of input; they need only to have a global awareness of it. Besides, unattended input is likely to be represented and stored in memory, making attention helpful but not necessary, and if so then it might not be sufficient for some advocates. According to Robinson (1997b), consciousness at the level of *noticing* is not sufficient for learning; what is noticed, that is, may be rehearsed in short-term memory only temporarily, then subsequently lost.

Proponents of the Noticing Hypothesis, of course, adhere to the strong view i.e. the view that conscious awareness of grammatical form is crucial for input to translate into subsequent intake. As Schmidt put it, "*attention is the necessary and sufficient condition for long-term storage to occur*" (2001: 16). He agreed that it is not possible for attention and awareness to be completely separated.

Noticing is very often associated with the notion of *consciousness-raising* (Rutherford, 1987; Sharwood Smith, 1981), *focus-on-form* instruction (see Chapter 5), *input enhancement* (Sharwood Smith, 1991). Advocates of *noticing* also address the notion of *Noticing the gap* (Schmidt and Frota, 1986; Ellis, 1995); that is, L2 learners come to be consciously aware of a mismatch or a discrepancy, via comparing, between the input and their own output, eventually incorporating the new L2 features into their developing interlanguage (henceforth, IL). For Schmidt (1994), awareness here bears upon the issue of *negative evidence*. Sharwood Smith (1991) argued that negative evidence when noticed is likely to *destabilize* (see Chapter 2) the learner's current stabilized IL, but this is in no way automatic.

Matching is the term used by Klein (1986) to refer to the process of L2 learners making comparisons between the current state of their developing linguistic system, evident in their output, and the target language system, presented to them as input. In this perspective, L2 teachers should promote noticing in their classroom, by having their learners' attention focused on the targeted forms, as well as on the gap between their current IL system and the target language system.

Ellis (1995) used the term *cognitive comparison* to replace the term *Noticing the gap* (Ellis, 1993a), arguing that the former "*better captures the fact that learners need to notice when their own output is the same as the input as well as when it is different*" (p. 90). Such a cognitive comparison, he hypothesized, would help L2 learners know what it is that remains to be learnt by noticing the gap and being able to confirm or disconfirm hypotheses in implicit knowledge.

Ellis (1997), in the spirit of Schmidt, viewed that noticing plays a role for input to become intake before any processing and availability for integration into a learner's developing IL system. He proposed the following model, which is useful for clarifying the process of learning implicit knowledge as well as Schmidt's hypothesis and the place of noticing in L2 acquisition. He suggested that input may convert into implicit knowledge when the L2 learner carries out three processes: (1) noticing i.e. the ability to notice targeted L2 features in the input; (2) Comparing i.e. drawing a parallel between what features the learner noticed in the input and those of his own output; and (3) Integrating i.e. forming new hypotheses about the L2 in order for the noticed features to be incorporated in the learner's IL system.

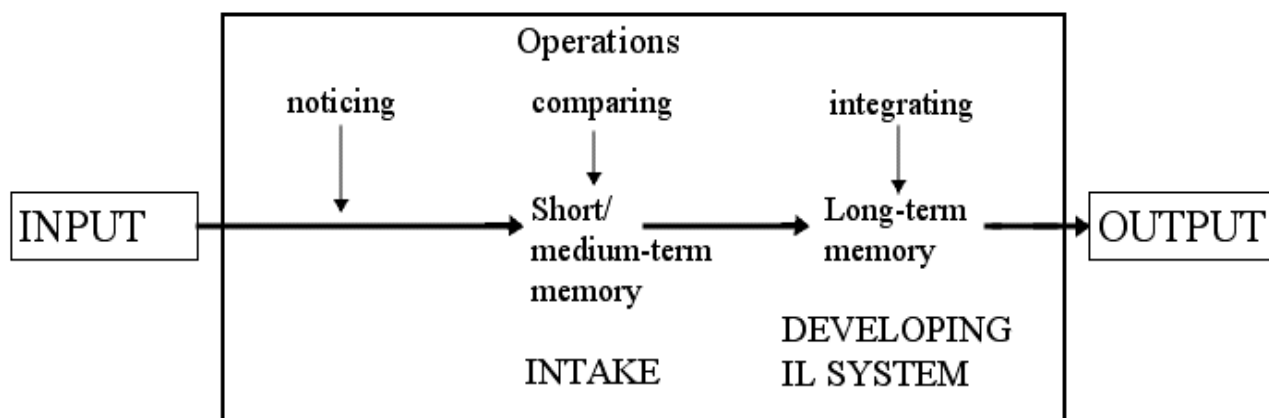


Figure 3.1: *The process of learning implicit knowledge (Ellis, 1997: 119)*

Drawing on current theories of L2 acquisition, Ellis distinguished in his model, above, two main stages involved in the process of input becoming implicit knowledge. The first stage, in which input converts into intake, involves the process of noticing L2 features in the input, incorporating them into their short- or medium-term memories and comparing them to features produced as output. Gass (1988), likewise, maintained that *noticing* is the first stage of L2 acquisition. At this stage, it is worthy to note that Kihlstrom (1984) posited that consciousness and short-term memory are essentially the same; Schmidt departed from this as a premise to his conclusion that "*storage without conscious awareness is impossible*" (1990: 136). The second stage is one in which intake becomes part of the IL system. It is important to note that changes to the learner's IL system take place only when the new L2 features become part of long-term memory.

3.3. The Fine-Grained Model of Attention

Theoretically, Tomlin and Villa's (1994) model of attention has usually been contextualized with Schmidt's Noticing Hypothesis, namely the issue of whether awareness is necessary to operate at the level of detection or noticing. Tomlin and Villa argued that the construct of attention has been too coarse-grained in SLA research. In their view, conscious

awareness (or noticing) may not be all that crucial as opposed to other attentional functions dissociated from it. Indeed, they proposed a finer-grained analysis of attention in their model of input processing while drawing on the work of Posner and Petersen (1990).

Tomlin and Villa contributed a different view with regard to the role of attention in L2 learning. They attributed three functions to attention: alertness, orientation, and detection. The attentional process of *alertness* is defined as "*an overall, general readiness to deal with incoming stimuli or data*" (p. 190). This function is related to the learner's affective and motivational state and directly related to the rate at which information is selected for further processing in the sense that the more the individual is alert the bigger the rate, notwithstanding concomitant costs in accuracy. Tomlin and Villa posited that a higher level of alertness may result in a lower level of accuracy. They held that the function of alertness does not have a very important role to play in SLA. It is only of general import to the field, given that L2 learners usually need to have readiness to process information. This is not the case, however, for the second component of attention.

Orientation is defined as the function of directing attentional resources to some type of sensory stimuli or pieces of information (i.e. focused attention) while neglecting others. In SLA, it is attributed more importance than alertness, according to Tomlin and Villa. It is instructive to note that orientation can have either a positive, facilitative effect on further processing when information which attentional resources are focused on occurs as expected, or a negative, inhibitory effect when it does not. When attention is directed to a particular stimulus or input i.e. when orientation takes place, it is argued that detection – the next attentional function – is generally facilitated.

Detection, being the third function of attention, refers to "*the cognitive registration of sensory stimuli.*" It is "*the process that selects, or engages, a particular and specific bit of information*" (Tomlin and Villa, 1994, p. 192). Detected information, Tomlin and Villa

claimed, causes great interference with the processing of other information and exhausts more attentional resources than even orientation of attention. They even argued that the function of detection is responsible for intake to take place; that is, once information is detected, it is likely to be processed further. In this perspective, detection is the most important component of attention for SLA and language processing.

Tomlin and Villa's work has generated considerable impact on SLA, especially because of the two claims it made: (1) that detection can occur separately without alertness and orientation, and (2) that the three attentional functions can be dissociated from awareness. The second claim is in sharp opposition with Schmidt's Noticing Hypothesis, and both claims received considerable critique (see 'sub-section 4.3.3.' on Critique, Chapter 4). Be that as it may, the fine-grained model of attention has advanced SLA research by breaking down the construct into interrelated yet separable and more precise functions, small enough for empirical measurement, thus providing SLA researchers with a deeper understanding of the nature and role of attentional processes in learning. As indicated by Simard and Wong (2001: 107):

because of their proposal that attention may be dissociated from awareness, the discussion has shifted from a debate on whether SLA involves primarily conscious or unconscious processes to a discussion on the importance of attention (which may or may not require awareness) and, in turn, on the proposed benefits of focus on form and input enhancement.

Simard and Wong, however, reacted sharply to Tomlin and Villa's fine-grained analysis of attention in different respects – namely, given the research context on which the model was based and the difficulty of operationalizing its claims – and for that matter they themselves proposed an even finer-grained model in which they reconceptualized attention in a way that, they claimed, would be more appropriate for the context of SLA (see 'sub-section 4.3.3.' on Critique, Chapter 4).

3.4. Awareness Torn at the Seams

So far, an account has been provided of the principal characteristics of awareness along with noticing and the attention system. This importance of attention and awareness notwithstanding, disagreement exists. It seems that the issue of awareness can be combated from two *main* standing positions. The first is Tomlin and Villa's position that awareness at the level of detection is not crucial for further L2 processing; that is, of the three attentional processes, only detection, for which conscious awareness is not required, is crucial for learning. Second, Schmidt's antithesis held that awareness is necessary at the level of noticing. A third middle position may, in fact, be added to mediate between the two extremes, namely that of Robinson (1995b). It is to this contrast that we now turn our attention.

Attention is a system limited in capacity having three principal functions which, Tomlin and Villa argued, can be isolated both theoretically and empirically. Besides, they pointed out that "*both orientation and alertness may separately or together enhance the chances for detection to occur, but neither is required.*" (p. 197). A question that might loom on the horizon is: how does either *awareness* or *consciousness* fit into the human attentional system?

Some researchers, as afore-mentioned, urged for avoiding the umbrella term *consciousness* due to its ambiguity and difficulty of operationalization (e.g., McLaughlin, 1990b; Tomlin and Villa, 1994). For example, Tomlin and Villa pointed out that conscious attention (i.e. noticing) may not be as crucial a function as the attentional process of detection, which can be dissociated from awareness. Tomlin and Villa, that is, made the important claim that attention can be dissociated from awareness, which they defined as a "*subjective experience of any cognitive content or external stimulus*" (p. 193). They argued that (1) awareness is not a prerequisite for any of the three functions of attention, (2) detection and

subsequent processing of data may be dissociated from awareness, and (3) awareness is not one of the essential components of learning even if it may enhance it:

None of the central components of attention – alertness, orientation, or detection – require awareness, either to operate or as the result of processing. Detection is the most related to awareness, but there is considerable evidence indicating that information can be cognitively detected, even though the individual is not aware of its having occurred.

(*ibid.*: 193)

Clearly, Tomlin and Villa argued that detection does not require conscious registration of what is detected. Contrariwise, though acknowledging the terminological confusion created by the conflation of distinct senses of consciousness in current research, Schmidt (1990, 1993, 1994, 1995) in his Noticing Hypothesis argued that consciousness, in the sense of awareness of specific forms in the input at the level of noticing (conscious attention or focal awareness), is the necessary and sufficient condition for language learning to take place. Building on the same studies that Tomlin and Villa (1994) cited as evidence for attention without awareness, he pointed out that focal attention is isomorphic with awareness and that there is no such a thing as learning without awareness.

To the above extremes, there is a mid-way position. Addressing Schmidt's *noticing*, Robinson (1995) defined it as what is detected and then further activated due to the attentional resources allocated from a central executive. Robinson added that different task demands trigger different types of further cognitive processing.

3.5. Operationalizing and Measuring Awareness

Operationalizing and measuring awareness in SLA have been 'quite a thorny issue', subject to terminological and theoretical disagreement and methodological debate (Leow, 1997; 2000). The task has been:

largely problematic due to (a) different definitions of what constitutes awareness; (b) the rapidity of a learner's subjective experience of cognitive

registration; and (c) the potential inability to verbalize one's awareness (Schmidt's 1995, p. 29, "higher level of awareness").

(*ibid.*, 1997: 471-472)

Awareness has been *operationalized* both in cognitive psychology and SLA (e.g., Allport, 1988; Curran and Keele, 1993; Reber, 1989; Robinson, 1996a, 1997a; Leow, 1997, 2000; Schmidt, 1990, 1994, 1995; Tomlin and Villa, 1994). It has been operationalized as the ability to verbalize a subjective experience. As will be described below, studies dealing with the role of awareness and noticing in (L2) learning have used both *offline* (e.g., diary entries, questionnaire completion, immediate and delayed retrospection) and *online* measures (e.g., concurrent think-aloud protocols) as research methodologies.

3.5.1. Allport (1988)

Allport (1988) contributed three important criteria for establishing whether or not awareness has taken place; subjects must: (1) demonstrate some behavioural or cognitive change due to the experience, (2) report being aware of the experience, and (3) describe the subjective experience. However, as he suggested, lack of self-report or recall of the experience does not necessarily imply lack of awareness.

3.5.2. Schmidt (1990)

Schmidt (1990) operationalized awareness at the level of *noticing* as a cognitive operation, a subjective experience available for verbal report, subject to such conditions as: (1) the lack of a verbal report is not evidence of absence of noticing unless the report is verbalized either concurrently or immediately after the experience, (2) memory and metalanguage problems should be avoided before considering unavailability of subjective experience for verbal report. As for *understanding*, a higher level of awareness, it is operationalized as the ability to analyze, compare, and test hypotheses about the input.

3.5.3. Tomlin and Villa (1994)

Attentional awareness for Tomlin and Villa (1994) refers to "*a particular state of mind in which an individual has undergone a specific subjective experience of some cognitive content or external stimulus*" (p. 193). Drawing upon Allport's (*ibid.*) work, they suggested specific criteria to determine whether or not an individual is aware and the level of his awareness. In order for individuals to be considered aware, they must: (1) show some behavioural or cognitive change that is due to the experience (i.e. learning) and report that they are aware of the experience (this is the lower level of awareness or meta-awareness) or (2) show some behavioural or cognitive change that is due to the experience and describe the subjective experience (higher level of awareness).

3.5.4. Rosa and O'Neill (1999)

Along the same line, Rosa and O'Neill (1999) collected verbal reports and coded them for level of awareness: (1) awareness at the level of noticing was operationalized '*as a verbal reference to the target structure without any mention of rules*' (p. 528) i.e. only reports mentioning the target structure were considered as instances of awareness; this is by giving clear indication that the subject directed focal attention toward the form in question, for example, by pausing after the verb form while reading the subordinate clause or by reading the verb and commenting on it, and (2) awareness at the level of understanding was operationalized as explicitly formulating the rule governing the structure in question.

3.5.5. Robinson (1996a, 1997a)

Robinson (1996a, 1997a) used a written questionnaire, immediately after the completion of a grammaticality judgment test, to elicit, through yes/no questions, three levels of awareness, namely whether respondents (1) noticed any rules (of English underlying the

sentences they saw in the training sessions), (2) looked for rules (of English grammar), and (3) could verbalize the rules (that were illustrated by the sentences they saw).

3.5.6. Leow (1997, 2000, 2001)

Leow (1997, 2000, 2001) attempted to address two methodological limitations found in previous research on the role of awareness in IL development; he tried to define precisely what constitutes awareness and to operationalize and measure its different levels while drawing upon Schmidt's (1990) Noticing Hypothesis. He set out to ensure that noticing, as the baseline, indeed took place before ever addressing the role of levels of awareness, or the lack thereof, in L2 behaviour. To address the levels of awareness, Leow used concurrent think-aloud protocols while drawing on Tomlin and Villa's (1994) definition of awareness along with three methodological criteria bearing upon Allport's (1988) work; subjects must: (1) show some behavioural or cognitive change due to the experience (e.g., verbal or written production of the targeted form); and either (2) report being aware of the experience, or (3) provide some form of metalinguistic description of the underlying rule. Leow operationalized awareness at the level of noticing as some form of subjective awareness of new targeted forms in L2 input demonstrated through a verbal or written self-correction of the targeted linguistic forms, for example, after noticing a mismatch between one's answer and that provided by another clue, and/or commenting on the targeted form (e.g., "OK, I see"), as revealed in learners' think-aloud protocols produced during the completion of a problem-solving task.

3.6. Critique

3.6.1. Critique to Operationalization

Of note, empirical studies arguing for the non-effect of awareness on learning, both in cognitive psychology and SLA studies, have more often than not administered post-exposure questionnaires to measure awareness. Questionnaire completion is a retrospective, offline reporting method aiming at identifying whether respondents were aware, in the sense of *noticing*, detecting or being able to report any explicit knowledge, of some stimuli (e.g., Curran and Keele, 1993; Robinson, 1995a, 1995b, 1996a, 1996b, 1997a, 1997b).

Leow (2000) raised an important methodological issue that needs to be addressed in studies investigating the role of attention and awareness in SLA, namely, the type of data collection procedures used in the research design (i.e. the use of online versus offline data-elicitation measures to gather information on learners' internal processes). Notwithstanding the importance of offline measures, retrospective measures can be attacked on the grounds of their validity concerns. For instance, Leow (1997, 2000) argued that post-exposure questionnaires, used as a data collection procedure to measure the presence or absence of awareness by establishing a relationship between learners' awareness while being experimentally exposed to some input and their performance after exposure, fail to determine what learners actually paid attention to (i.e. the content of the attentional focus) or became aware of during exposure to the input.

It appears that the timing of operationalizing awareness, i.e. during or after exposure to L2 input, is crucial for deciding on what role, if at all, it plays during learners' actual use of the language (Leow, *ibid.*). Stated otherwise, post-exposure reporting methods have proved problematic in measuring the role of awareness in (or rather, *during*) language learning. Rosa and O'Neill (1999) reported that retrospective measures have been attacked on the grounds that they are subject to memory limitations and that instead of recalling information, subjects

may report data generated through inference processes. Similar concerns were raised by Tomlin and Villa (1994) who indicated that reports of noticing may only coarsely analyze noticing experiences and that cognitive processing of input "*takes place in relatively brief spans of time, seconds or even parts of seconds*" (p. 185) while instruments such as questionnaires and diaries may span hours or even days. Schmidt (1990), on his part, advised to gather reports either concurrently or immediately after the subjective experience so as to make appropriate decisions on the presence of noticing or the lack thereof. Like Rosa and O'Neill, he pointed to other factors at work, namely problems of memory and metalanguage that must be avoided.

Notwithstanding the foregoing critique, such limitations can be avoided by using concurrent introspective measures to collect verbal information on learners' cognitive processes during online input processing. Verbal reports such as think-aloud protocols have been used as measures to obtain reports of awareness in general and noticing in particular 'in a finer temporal context' (Mackey, 2006: 409). Indeed, a number of SLA studies (e.g., Leow, 1997, 2000; Rosa and O'Neill 1999) have used think-aloud protocols as valuable sources of data collection in the assessment of learners' awareness during task performance. As put forward by Leow (1997: 473):

the use of concurrent think-aloud protocols should provide a clearer picture of learners' allocation of cognitive resources, the role of awareness, and potential levels or degrees of awareness while processing L2 forms.

Besides, as indicated by Leow (2000), online elicitation or process measures, i.e. data gathered concurrently while learners are exposed to L2 input, address more effectively the internal validity limitation (they yield relatively more substantial evidence of what is being elicited and measured) which many studies fell victims to. Such studies used, instead, post-exposure tasks in gathering data to *infer* what learners paid attention to or became aware of

while being exposed to input. Online measures aim first at establishing that noticing did indeed occur before addressing the role of levels of awareness in L2 learners' intake.

3.6.2. Critique to the Use of Online Verbal Reports

The picture is not always lighter on the other side of online verbal reports, however; there is a darker side, in fact. It is noteworthy, thus, that there has been controversy over the use of concurrent think-aloud protocols in SLA research. On the one hand, researchers in favour of their use posited that input which the learner attends to is available for verbal report. Leow (1997, 2000), for instance, argued that only if there is evidence of learners' internal processes can we make claims of such processes. In this vein, Rosa and O'Neill (1999) indicated that using introspective verbal reporting procedures to collect data during online input processing exceed by far more indirect methods – such as retrospective verbal reports collected after exposure to the input has taken place – of assessing attention and awareness.

On the other hand, just like offline, retrospective measures, introspective or online verbal protocols can be attacked on the grounds of their validity concerns. For instance, Rosa and O'Neill reported on the fact that thinking aloud during online input processing might interfere with the learning process proper in that a learner might experience an attentional capacity (c.f. Robinson, 1995, 2003) load due to the imposition of a secondary task and that, as they put it, "*verbal protocols may present considerable variation according to the individual's aptitude, linguistic ability, and cognitive style (P. Robinson, personal communication, February 12, 1998)*" (1999: 519). In the same perspective, Mackey (2006) reported on the critique that when using think-aloud protocols, learners might be required "*to report their mental processes under temporal and communicative pressure, potentially leading to underreporting*" (p. 409). It is also likely that such protocols produce a more

systematic performance on the part of some learners than would be otherwise; in this way, they would alter the very process that the researcher set out to investigate (Rosa et al, *ibid.*).

Another important methodological issue raised by Leow (2000) and Izumi (2002) that needs to be addressed when investigating the role of attention and awareness in SLA, so as to provide supporting evidence for its effects or the lack thereof, is the need for multiple data-elicitation measures of learners' internal processes of awareness. This is very much in keeping with Ellis, Basturkmen, and Loewen (2001a) who called for triangulation of research methods in the examination of cognitive processes by using experimental, introspective, and descriptive instruments. Answering their call, Mackey (2006) urged "*to triangulate methods of collecting noticing data to obtain as full a picture as possible of learners' noticing*" (p. 409) and conducted a study whose goal was to investigate the effect of interactional feedback, or the lack thereof, in the cognitive process of noticing L2 form, as well as to determine any relationship between noticing and learning. According to Leow, the use of multiple data-elicitation measures, both online and offline, to obtain a full picture of learners' internal processes and awareness may become greatly needed:

(a) if the process of attention or awareness has not been methodologically established or operationalized prior to the analysis of post-exposure task performances or (b) when post-exposure tasks in which an element of guessing is possible (e.g., yes-no, multiple-choice, true-false, grammaticality judgment tasks, questionnaires) are used as a measuring tool.

(Leow, 2000: 574)

In fact, various researchers (e.g., Schmidt, 1990, 1995; Mackey, 2006) pointed out that a lack of evidence of noticing or attention does not constitute evidence that these two processes did not take place; 'absence of evidence', as Mackey differently put it, is not equivalent or identical to 'evidence of absence'. Pushing further on this line of thought, Mackey indicated that evidence of awareness at the level of noticing but not understanding is no evidence that understanding did not take place. Moreover, according to Schmidt (1995), in

categorizing participants' levels of awareness, several studies (e.g., Curran and Keele, 1993; Robinson, 1995b) did not, in fact, methodologically establish a complete absence of awareness in language learning, given that some so-called unaware subjects could have been described, instead of completely unaware, as somewhat aware. This makes me advance the following conjecture: Granting that the awareness issue can be viewed as a continuum rather than a dichotomy, and therefore instead of its being an either-or question, it follows that there may be rather degrees of awareness and that participants can be categorized, as more or less aware. Consequently, regarding the studies which classified participants as 'aware' vs. 'unaware', and which addressed as unaware participants who were more likely partially 'aware', their classification of the participants' levels of awareness could lead to potential new interpretations of the results (see Leow, 1997).

Coarsely-grained coding of awareness may fail to distinguish among the processing levels (i.e. noticing, understanding, or the lack thereof); more finely-grained coding systems are thus very much in order. Leow (2000) posited that lack of awareness is methodologically challenging to operationalize and measure and, as such, it is extremely difficult to operationalize a complete absence of awareness in L2 learning. However, as afore-mentioned, he suggested that one way out may be to ensure that noticing (operationalized as a report of being aware of the experience), as the baseline, indeed took place before ever addressing the role of levels of awareness, or the lack thereof. In this way, one can compare, he argued, the performance of learners showing awareness with the performance of those with no evidence of low-level awareness.

Conclusion

To bring this chapter to a close, clearly it cannot be denied that much of the process of SLA is driven by cognitive activity; as such, the field of SLA can gain insightful information

from work in cognitive psychology. Research work on the nature of learning and the way it relates to attention and awareness constitutes an important source of information that SLA theory cannot afford to ignore; indeed, proponents as well as opponents of noticing and attention have done a service to the field when ascribing this research area a prominent place in discussions of L2 acquisition (Truscott, 1998).

Empirical investigations into the relationship between noticing and learning are, thus, clearly warranted given the fact that learner-internal factors (e.g., noticing) are central to IL development. Precisely, the issue of whether awareness is essential for subsequent processing to take place, and which remains unsolved, needs further exploration (Leow, 1997, 2000; Izumi, 2002; Mackey, 2006), with research design triangulating data collection procedures, namely online measures so as to ascertain what learners actually attend to or are aware of, or both, while exposed to L2 input. Finding ways to measure and operationalize the complete absence of awareness in SLA is equally very much in order.

CHAPTER FOUR:

Empirical Evidence of the Role of Awareness in SLA

Introduction

Researchers distinguished between two types of *knowledge*, partly in terms of their relation, or lack thereof, to consciousness. Similar distinctions hold true for *learning*. Schmidt (1994) recommended that though implicit/explicit *learning* and implicit/explicit *knowledge* are related, they are separate concepts that need to be distinguished. The former stands for the process of learning, while the latter is the end-product.

Recent research has witnessed a growing concern with the role of conscious processes in L2 learning or the lack thereof, a research concern centered on Schmidt's (1990) Noticing Hypothesis as a theoretical motivation, but also on Tomlin and Villa's (1994) attentional framework. While trying to put research studies under the attentional framework on/off the defensive, we will show that the bulk of empirical studies provided evidence in favour of the role of awareness at the level of noticing in SLA but also evidence against.

All in all, we may underscore the fact that attention and awareness are held to be essential cognitive processes that mediate input and IL development.

4.1. The Role of Awareness

The role of consciousness and awareness in learning has long been a topic of great interest and the focus of research both in cognitive psychology and in SLA. In SLA, it has been particularly controversial. On the one hand, several researchers tended to reject any role of consciousness in L2 learning and argued for *dissociation* between learning and awareness (e.g., Tomlin and Villa, 1994). On the other hand, Schmidt (2001) indicated that there is now a growing consensus that the construct of attention is critical for understanding almost all

aspects of SLA. He admitted that this is so perhaps in part thanks to the work of Tomlin and Villa which has moved the attention research forward by claiming that detection is crucial for SLA. However, in sharp contrast to their claim that awareness can be dissociated from attention, he maintained the view that conscious attentional processes are central to learning.

It is clear that the role of attention was first discussed when addressing the role of *conscious* and *unconscious* processes in SLA; attention, here, was closely related to the former (Bialystok, 1978, 1981a, 1981b, 1981c; Krashen, 1978, 1981, 1982, 1985). It is worthy reminding that Schmidt (1990) separated between implicit learning (i.e. that abstract knowledge develops unconsciously) and subliminal learning (meaning that learners can learn without consciously observing the learnt items). Indeed, he questioned the validity of claims of implicit learning and just as his hypothesis is a rejection of subliminal learning, it is as well an adherence to the role of conscious processes.

Recent years have witnessed a growing concern with the role of conscious processes in L2 learning, a research concern (e.g., Ellis, 1993, 1994b; Fotos, 1993, 1994; Fotos and Ellis, 1991; Harley, 1993; Long, 1991; Robinson, 1995b, 1996b) more often than not centered on Schmidt's (1990, 1993a, 1994, 1995a, 1995b; Schmidt and Frota, 1986) Noticing Hypothesis as a theoretical motivation. Be that as it may, it may be argued that a large and probably growing body of research (e.g., Leow, 1997, 2001) is perhaps departing from Schmidt's so-called anti-thesis, namely the work of Tomlin and Villa (1994).

The pivotal work of Tomlin and Villa has made an important contribution to SLA by suggesting the fine-grained analysis of the construct of attention. Their model stirred up the discussion on the role of attention in L2 processing by urging the need for precise definitions for the processes involved therein before we can have a clear understanding of what role attention plays during input processing. In point of fact, it is becoming increasingly agreed upon that the role of attention is as important to understanding SLA issues as the role of input proper.

Tomlin and Villa's contribution that attention involves three interrelated functions has directed SLA research by breaking down the construct of attention into more isolated components. Of these, detection, they pointed out, is the crucial process for language acquisition. Their claim that attention is dissociated from awareness has prompted the shift, in SLA, from a debate on the importance of conscious/unconscious processes to a debate on the importance of attention (with or without awareness).

To cut it short, it cannot be denied that such theoretical assertions are particularly useful for deriving insights into the nature of interlanguage (IL, henceforth) development; be that as it may, it is only through empirical research that theorizing is validated. It is to this that we now turn our attention.

4.2. Some Empirical Evidence

4.2.1. Evidence in Favour of Dissociation

There has been considerable debate and controversy with respect to the role of awareness in SLA or the lack thereof (Krashen, 1993; Lightbown and Pienemann, 1993; Tomlin and Villa, 1994; Robinson, 1995b, 1997a, 1997b; Leow, 1997, 2000, 2001; Rosa and O'Neill, 1999; Schmidt, 1990, 1993a, 1994, 1995b; Izumi, 2002; Williams, 2005), ranging from peripheral (e.g., Krashen, 1993) to robust effects (e.g., Lightbown and Pienemann, 1993). Such effects remain inconclusive and the issue, thus, remains unsolved (Leow, 1997); Leow contended that there are "*two methodological problems in addressing its role in language learning: namely, defining precisely what constitutes awareness and operationalizing or measuring it*" (p. 473).

A number of studies (Curran and Keele, 1993; Tomlin and Villa, 1994; Williams, 2005) denied that awareness has any effect on learning. In cognitive psychology, the position of learning without attention was defended, for example, by Curran and Keele (*ibid.*) who

claimed that learning must be dissociated from awareness; indeed, they demonstrated that 'less aware' individuals did show some learning of stimuli sequences.

As a second case in point, Tomlin and Villa (1994), interpreting Curran and Keele's findings as evidence for learning without awareness, argued that the process of attention has been too coarse-grained in SLA studies. Specifically, they posited that the role ascribed to conscious awareness (i.e. noticing) may not be that crucial as opposed to other attentional functions dissociated from it. This brought them to propose a fine-grained analysis of attention (namely, the attentional functions of alertness, orientation, and detection) in their model of input processing. Whereas detection is the level at which acquisition takes place – for its being crucial for learning – and the most related to awareness, they claimed that none of the three attentional functions may require awareness.

A third study is the work of Williams (2005). In pursuit of evidence for learning without awareness, he conducted two experiments in which he examined the learning of form-meaning connections. The experiments took place under conditions where the respective forms were noticed but not the critical aspects of meaning. The study demonstrated learners' ability to generalize which provided evidence of learning form-meaning connections without awareness. Both experiments showed a correlation between generalization test performance and knowledge of languages encoding grammatical gender. This, according to Williams, denotes the role of prior knowledge in implicit learning.

In assessing rule awareness, Robinson (1997b) used a debriefing questionnaire, immediately after the completion of a grammaticality judgment test, to measure, through yes/no questions, three levels of awareness, namely whether respondents (1) noticed any rules (of English underlying the sentences they saw in the training sessions), (2) looked for rules (of English grammar), and (3) could verbalize the rules (illustrated by the sentences they saw). He found no correlation between awareness at the level of noticing and superior learning in any of the four different training conditions, namely the implicit condition (memorization of

sentences containing the target structure), the incidental condition (focus on content), the rule-search condition (looking for the rules underlying the input), and the instructed condition (formal instruction on the target linguistic structure). That is, no difference was obtained in the learning performance of aware and unaware participants at the level of noticing, no matter what the condition was. However, awareness correlated with superior learning of a simple and a complex rule at the level of Looking for Rules in the Implicit condition, and at the level of Ability to Verbalize rules, in both the Implicit and the Rule-search conditions.

Robinson (1995a, 1995b) viewed Schmidt's *noticing* as what is first detected then further activated through the allocation of attentional resources from a central executive, and he maintained that different task demands trigger different types of further cognitive processing. Though he agreed that learning without awareness (in Tomlin and Villa's terms, simple detection of a form outside of focal attention), if possible at all, has limited or even negligible effects, he pointed out, contrary to Schmidt's (1990, 1993a, 1995b) Noticing Hypothesis, that awareness at the level of *noticing*, though a necessary condition, is not sufficient for learning to take place in that what is noticed may be rehearsed only temporarily in short-term memory, ending in being lost. Permanent storage of a form into memory, Robinson argued, following Schmidt (1990), cannot be due without detection plus noticing and subsequent rehearsal of noticed input in short-term memory.

In fact, Robinson (2003) is against zero-point claims (i.e. the claim of no learning without noticing or the issue of whether learning is possible without attention or noticing). He allowed the likelihood for zero-point issues to be theoretically interesting, yet practically they are of much less interest to L2 pedagogy, he claimed, than the evidence provided by studies claiming association between noticing/awareness and intake. Indeed, as he put it, in experimental studies where control is guaranteed, few would argue the zero-point issue with regard to attention and learning. Robinson appears to have followed and agreed with Schmidt (1994, following in his turn Baars, 1988) who stated that:

given the fact that it may be impossible to agree upon an operational definition of noticing that will allow falsifiability of this hypothesis, it may be wiser to replace zero-point claims (no learning without noticing) with a modified hypothesis that more noticing leads to more learning.

Schmidt (*ibid.*: 17-18)

Given the above, his position seems to reconcile both Tomlin and Villa's and Schmidt's competing views, though there is disagreement as to the amount and type of attention needed for learning.

4.2.2. Evidence in Favour of Association

The Noticing Hypothesis (Schmidt, 1990, 1994, 1995a, 2001) claimed that *noticing* crucially requires focal attention on the part of the learner for input to translate into intake. Of note, empirical studies arguing for dissociation of awareness, and of noticing (e.g., Robinson, 1995b, 1997b), and learning have more often than not administered post-exposure questionnaires to measure awareness. Robinson (1997b), for example, claimed that noticing, though necessary, is not sufficient. Be that as it may, to measure whether learners demonstrated awareness under experimental conditions, he used offline elicitation measures – post-exposure questionnaires – which are prone to limitations (see critique, Chapter 3). Notwithstanding their contribution, post-exposure questionnaires (as seen before) suffer from potential internal validity limitations for not being "*able to account for what learners actually paid attention to or became aware of during the experimental exposure*" (Leow, 2000: 559).

Besides, Robinson acknowledged the fact that he used low power criteria to categorize subjects as 'Noticing rules' in that no assessment was carried out with regard to '*the actual content of what they reported having noticed*' (1997b: 76) and as 'Able to Verbalize rules' in that he did not distinguish subjects who could verbalize rules both accurately and in a detailed way from those who gave partial verbalizations. Consequently, replicating the same studies, while making up for the above-mentioned limitations, could lead to potential new interpretations of the results.

In effect, Schmidt (1995b) did allow for the possibility for processes to take place outside the realm of awareness, but rejected the very idea of abstraction without awareness (unconscious abstraction is used here to mean the internalization or construction of abstract rule systems completely outside of awareness). It stands to reason that studies lending empirical support for the dissociation between attention and awareness in language learning have certain limitations. On the one hand, Schmidt pointed out that Curran and Keele's study did not provide evidence for learning without awareness. The authors showed, instead, that more awareness entailed more learning and the reverse situation held true i.e. less awareness yielded to less learning. Put another way, they found that different degrees of learning matched different degrees of awareness, and they referred to 'more aware' and 'less aware', not to 'unaware', subjects. According to him, in categorizing participants' levels of awareness, several studies (e.g., Curran and Keele, 1993; Robinson, 1995b) did not, in fact, methodologically demonstrate a complete absence of awareness, since some so-called unaware participants could have been categorized, instead of completely unaware, as somewhat aware. Closely related to this line of thought, Schmidt (1995b) and Mackey (2006) pointed out that a lack of evidence of noticing or attention does not constitute evidence that these two processes did not take place. In other words, 'absence of evidence', as Mackey put it, is not equivalent to 'evidence of absence'.

Empirical back up for the *facilitative* effects of awareness and attention on L2 learning and, as such, for Schmidt's (1990) Noticing Hypothesis, can be found in some L2 classroom studies (e.g., Schmidt and Frota, 1986; Leow, 1997, 2000; Robinson, 1995b, 1997a, 1997b; Rosa and O'Neill, 1999; Izumi, 2002) which, while using different data collection procedures, reported an overall positive role for awareness in learners' L2 intake and subsequent performance. Of these, Leow (1997) reminded that, as afore-mentioned, effects remain inconclusive and the question is still unsolved.

For reminder purposes, Schmidt (1990, 1993a, 1994, 1995b) argued that awareness is a *necessary* and *sufficient* condition for intake to take place and get further processed. His Noticing Hypothesis claimed that awareness has a crucial role to play in L2 processing in that a conscious apprehension, or say awareness, of some particular form in the input needs to be experienced for any subsequent intake of what is noticed. Schmidt argued that focal attention and awareness are isomorphic, meaning that learning does not and cannot take place without awareness. As such, no input translates into intake without being noticed beforehand.

Now, we will briefly account for what empirical evidence there is in favour of the role of attention and awareness in SLA.

4.2.2.1. Schmidt and Frota (1986)

To support his position for the role of consciousness in the sense of awareness at the level of noticing, Schmidt cited a diary study of his attempts to learn a L2 (Schmidt and Frota, 1986). He analyzed his own learning of Portuguese during a five-month stay in Brazil. While Schmidt recorded his interactions with native speakers, he kept a diary, alongside, of what he noticed during instruction. Schmidt and Frota compared the two sources of data and found a significant association between diary recorded noticings and Schmidt's use of Portuguese forms. Schmidt and Frota claimed that this is evidence for a close connection between noticing and L2 learning.

4.2.2.2. Robinson (1997a, 1997b)

Robinson (2003) rejected zero-point claims (i.e. the claim of no learning without attention or noticing). In spite of his denial that noticing is *sufficient*, he (1995b, 1997a, 1997b) concurred with Schmidt's argument for the role of awareness as a *necessary* condition for intake to take place and get subsequently processed.

Taking a midway position between Schmidt's and Tomlin and Villa's, Robinson (1995a, 1995b) attempted to settle the conflict by rethinking the concept of *noticing* as the combination of detection and rehearsal in short-term memory before being committed to long-term memory. He argued that before ever becoming a part of awareness, activation in the short-term store must go beyond a certain threshold, concurring with Schmidt's (1990, 1995b, 2001) definition of noticing whose minimum requirement is to pay attention to key L2 forms in the input exceeding a threshold level of subjective awareness i.e. awareness reportable subsequent to the experience. Awareness is viewed as being concomitant with noticing, thus distinguishing it from simple detection (Robinson, 1995a). Detection without awareness is ascribed a less crucial role, contrary to Tomlin and Villa's, in the encoding of information into short-term memory. This is very much in keeping with Schmidt's position that learning cannot occur without awareness at the level of noticing.

Empirically, Robinson (1997a) placed subjects under implicit, incidental, instructed conditions, and an enhanced condition was added so as to draw learners' attention to both meaning and form in the input. Insofar as the last condition is concerned, the L2 structure was enhanced by drawing a box around it. There were mixed results, but as indicated by a three-item post-exposure questionnaire, input enhancement had the facilitative effect of stimulating learners to notice rules.

As mentioned above, in another study, Robinson (1997b) measured three levels of awareness, namely whether respondents (1) noticed any rules, (2) looked for rules, and (3) could verbalize the rules. Albeit no difference was obtained in the learning performance of aware and unaware participants at the level of noticing, awareness correlated with superior learning at the level of Looking for Rules in the Implicit condition, and at the level of Ability to Verbalize Rules, in both the Implicit and the Rule-search conditions.

Overall, Robinson provided evidence for awareness being *essential* for learning and agreed that learning without awareness (in Tomlin and Villa's terms, simple detection of a

form outside of focal attention), if possible at all, has limited or even trivial effects. To put it another way, committing a particular form permanently into memory, Robinson argued, following Schmidt (1990), is not plausible without detection plus noticing and subsequent rehearsal of noticed input in short-term memory.

4.2.2.3. Leow (1997, 2000)

Leow (1997) addressed, both qualitatively and quantitatively, the role of awareness in SLA, or the lack thereof, in relation to Schmidt's Noticing Hypothesis and Tomlin and Villa's work of the attention literature in SLA. He sought to uncloak the following research question:

How do different levels of awareness of morphological forms in a problem-solving task influence learners' mental representations and subsequent recognition and accurate written production of such forms?

(p. 474).

One of the merits of this study was that noticing of the target forms was assessed through verbal reports during online processing of Spanish L2 input. Such online elicitation measures provide the researcher with important insights as to which parts of the L2 input have been attended to by learners during language processing. Leow analyzed the think-aloud protocols produced concurrently by 28 adult beginning learners of Spanish during a problem solving task (a crossword puzzle) and their immediate performances on two post-exposure assessment tasks, namely, a recognition and written production task of the targeted morphological forms: the irregular third-person singular and plural preterit forms of stem-changing *-ir* verbs in Spanish.

Upon analyses of subjects' performances, he drew the following conclusions: (1) meta-awareness appeared to correlate with an increased usage of conceptually-driven processing such as hypothesis testing and morphological rule formation whereas its absence tended to correlate with an absence of such processing; that is, different levels of awareness led to differences in processing, (2) level of awareness played a *facilitative* role in subsequent

further processing of forms noticed during interaction with L2 data i.e. a higher level of awareness, or say an increased allocation of attention, contributed to more recognition and accurate written production of noticed forms, as opposed to a lower level of awareness, (3) awareness at the level of understanding (c.f. Schmidt, 1990) appeared to help call subjects' attention significantly more to the irregularities of some forms in the problem-solving task whose potential noticing was not noticeably highlighted, and (4) the findings provided empirical support for the *facilitative* effects of awareness on foreign language behaviour.

As such, his conclusions are very much in accordance with Schmidt (1990, 1993a, 1994, 1995b) and Robinson (1995a) who argued that conscious attention or awareness plays a *crucial* role in IL development. Besides, Leow (*ibid.*) provided empirical evidence in support of Tomlin and Villa's (1994) fine-grained analysis of attention; thus, it contributed to making their research a pivotal work of the attention literature in SLA. However, as he himself remarked, "*due to the nature of the experimental exposure task, the issue of whether awareness is essential for subsequent processing to take place remains unsolved*" (*ibid.*: 494).

Targeting the same morphological forms used by Leow (1997), namely, the irregular third-person singular and plural preterit forms of selected stem-changing *-ir* verbs in Spanish, Leow (2000) conducted a quantitative and qualitative investigation of the effects of awareness, or the lack thereof, on the subsequent intake and written production of 32 adult beginning L2 learners of Spanish. It was an attempt to replicate Leow's (1997) study with various methodological features (using both online – the inclusion of the learners' think-aloud protocols while learners completed a problem-solving task through a crossword puzzle – and offline – probe questions and a follow-up post-exposure interview – data collection procedures), designed to elicit relevant data, as measured on a multiple-choice recognition and written production task.

Again, the findings of this study: (1) indicated that learners who demonstrated awareness of targeted morphological forms during exposure to L2 input 'took in' and

produced in writing significantly more of these forms, but this was not the case for learners who were not aware of these forms, (2) provided further empirical evidence for the association between awareness and subsequent processing of targeted forms, an evidence being very much in keeping with such studies as Leow (1997), Robinson (1997a), Rosa and O'Neill (1999). In other words, no empirical support was found for *dissociation* between awareness and learning as claimed by some studies. This is to mean that the findings lent further support to the claim that awareness plays a *crucial* role in subsequent processing of L2 data (e.g., Schmidt, 1990, 1993a, 1994, 1995b; Robinson, 1995b; Leow, 1997, 2001).

4.2.2.4. Rosa and O'Neill (1999)

In the same vein, extending Leow's (1997) line of research and working on the hypothesis that the implicit/explicit conditions of exposure to L2 input together with the level of awareness raised during processing it are likely to be strongly tied to the learning process, Rosa and O'Neill (1999) explored the effect of awareness, at a syntactic level, on 67 learners' intake of Spanish conditional sentences in the context of a problem-solving task. In other words, they investigated how intake was subject to both awareness and the conditions of performance, namely the five different conditions translating into five degrees of explicitness (a combination of the factors [\pm formal instruction] and [\pm directions to search for rules]). Intake was measured by means of a multiple-choice recognition task administered to subjects immediately after the experimental task. As for level of awareness, it was measured by using concurrent think-aloud protocols.

Very much in keeping with Leow (1997), the findings mainly indicated that: (1) the degrees of explicitness had a differential effect on the conversion of input into intake, and (2) reported levels of awareness had a differential effect on intake of a Spanish structure by L2 learners i.e. when awareness was experienced at a higher level, its effect on intake was stronger. However, they also found that

whereas both awareness at the levels of noticing and understanding contributed substantially to a significant increase of learners' ability to recognize the targeted structure, awareness at the level of understanding also had a differential impact on the amount of intake when compared to awareness at the level of noticing.

(Rosa and O'Neill, 1999: 561)

4.2.2.5. Izumi (2002)

Izumi (2002) investigated whether output and visual input enhancement, being internal and external attention-drawing devices, in isolation and in combination, could promote the noticing and subsequent acquisition of relativization by adult L2 learners of English. The study set out to find out: (1) whether output yielded to noticing of specific forms in the input and led to subsequent learning of them, and (2) whether output-induced noticing and learning, if at all, was similar to visual-input-enhancement-induced noticing and learning. The inclusion of these two variables, they hoped, would help show how they may interact or contrast in promoting SLA. The experiment used a computer-assisted reconstruction and reading task as a technique for the presentation of the target input materials.

The results were in favour of output: (1) output–input subjects attended to the target form in the input and in their own output, therefore, outperforming those exposed to the same input for the mere objective of comprehension in learning English relativization, (2) visual input enhancement, contrary to the positive effect of output, produced no significant gains in learning, notwithstanding the documented positive role of enhancement in drawing learners' attention to problematic form features in the input and, thus, the noticing of the target form features in the input, and (3) given the above, the effect of input enhancement on noticing and learning was by no means comparable to that of output.

It seems, in view of these findings, that output promoted (1) detection of formal features in the input, (2) integrative processing of the target structure, and (3) noticing the gap i.e. possible mismatches between learners IL form and the target language input. As for input enhancement, the study suggested that it might help only with detection of the enhanced

forms without necessarily engaging the learner in further cognitive processing. Granting that this is so, Izumi argued for the need, in exploring the construct of noticing, to consider levels and types of processing so as to determine how sensory detection can lead to learning.

4.2.2.6. Mackey (2006)

Attention has been identified as a cognitive process that mediates input and IL development via interaction (Robinson 1995b, 2003; Long 1996; Gass, 1997). Researchers have claimed that the provision of feedback during conversational interaction facilitates IL development. During negotiated interaction, that is, interactional feedback is likely to help direct learners' attention toward any possible mismatch between the L2 form and the IL form (i.e. noticing the gap), and provide them with opportunities to produce modified output (Swain 1995, 1998).

Mackey (2006) investigated empirically the relationship between learners' noticing of L2 forms and their eventual learning. Specifically, she addressed the research questions whether interactional feedback promoted noticing of L2 form in a L2 classroom context, and whether there was a relationship between learners' reports of noticing L2 forms and their learning outcomes. She answered the call of Ellis, Basturkmen, and Loewen (2001a) for triangulation of research methods in the examination of cognitive processes by utilizing multiple methods of collecting noticing data, namely online learning journals, introspective comments while viewing classroom videotapes, and questionnaire responses. Learners were provided with interactional feedback in response to their production difficulties with questions, plurals, and past tense forms. Using a controlled pre-test, post-test design, the researcher carried out analyses of noticing and learning for each learner. The findings showed a complex and positive relationship between interactional feedback, learners' reports about noticing and their learning of L2 question forms.

These arguments of the role of awareness in learning or the lack thereof notwithstanding, a thorough examination and a sound critical discussion of both the theoretical and empirical foundations of the major opposing views are very much warranted. It is to such critique that we now move.

4.3. Putting it all on/off the Defensive

4.3.1. The Noticing Hypothesis on the Defensive, off the Offensive

Not surprisingly, Schmidt's Noticing Hypothesis and its role in L2 acquisition have so far generated some support as well as criticism. Even some of those who happened to agree that noticing L2 features in the input is essential in L2 processing pointed out that noticing a form in input and noticing the gap may be a conscious or an unconscious process (Sharwood-Smith, 1981; McLaughlin, 1987; and Rutherford, 1987), contrary to Schmidt. For Ellis (1997), this issue remains controversial; indeed, he supported Krashen's (1982) argument that there are too many features in L2 input for them all to be acquired in a conscious way. Some considered noticing an internal process which, being not directly observable, requires a high degree of inference from observation of L2 learner behaviour (e.g., Cross, 2002). Robinson (1995b, 1996b, 1997b) viewed consciousness at the level of noticing as not sufficient, though necessary, for learning to take place, given that what is noticed may be rehearsed only temporarily in short-term memory and then get lost. However, while underscoring the difficulty of measuring awareness which aggravates the situation, he admitted that "*any counter-claim that learning is possible without the momentary subjective experience of awareness must also demonstrate its absence*" (2003: 638). This is very much in line with Leow (2000) who admitted that it is more problematic to operationalize the lack of awareness than its presence. In light of this caveat, it suffices to say that results of a number of attention studies appear to lend support to Schmidt's hypothesis that consciousness is necessary for L2 learning.

Truscott's (1998) critical review of the notion of consciousness and attention addressed the work of Schmidt (1990, 1993a, 1994, 1995b), believing that he provided '*the clearest statement and the most thorough defense of the Noticing Hypothesis*' (p. 105). He argued that the Noticing Hypothesis is vulnerable in a number of respects. First, he critiqued its foundations in cognitive psychology as being weak, arguing that it provided no support – for the claim that conscious awareness is necessary or helpful for learning – from this field of research (see also VanPatten, 1994; Simard and Wong, 2001 ahead though not necessarily combating the issue of attention by taking the Noticing Hypothesis as a point of departure). He reminded that, much has been learnt and the insightful contribution of psychology notwithstanding, we should be wary of strong claims of its findings for the mere reason that the role of consciousness in cognition continues to be a source of considerable debate and confusion.

Claims made by Schmidt that consciousness is necessary for learning to occur, that attention can be equated with awareness, and that attention research lends support to the claim that consciousness is necessary for learning are difficult to evaluate and to interpret, in part given the confusing nature of the notion of attention. As Truscott (1998: 105) put it:

It is very difficult to say exactly what attention is and to determine when it is or is not allocated to a given task. Its relation to the notoriously confused notion of consciousness is no less problematic.

Second, the attention research cited to support the Noticing Hypothesis did not indicate that L2 acquisition requires learners to consciously notice the particular details of input for it to be learnt. Contrary to this interesting version which makes a much stronger claim, the research cited supported the hypothesis only in its weak, uninteresting form, namely that global awareness of input is necessary for learning.

Third, in applying the concept of *noticing* to language acquisition, the problem of interpreting the Noticing Hypothesis is much more delicate in that serious conceptual problems arise, the thing that makes both interpretation and testing difficult. The problems of

vagueness and testability here are related, for example, to the separation Schmidt (1990) made between awareness at the level of noticing (being necessary for learning) and awareness at the level of understanding (probably not necessary). For the hypothesis to be clear and meaningful, identification of the items involved at the level of noticing (i.e. determining what learners must notice) and explanation of what it means to notice them must be made. As he put it, "*An adequate explication must include reasonably clear distinctions between noticing and global awareness of input, and between noticing and understanding*" (1998: 111). Granting that clear predictions can be made, the problem of testability persists, he maintained, because the claim that consciousness is a pre-requisite for learning is not refuted by researchers failing to associate awareness with learning. However, while acknowledging that the Noticing Hypothesis is probably not falsifiable (Schmidt, 1995b), Schmidt (1990) argued that "*When problems of memory and metalanguage can be avoided, verbal reports can be used to both verify and falsify claims concerning the role of noticing in cognition*" (p. 132).

Before moving to the next objection, and in relation to the implicit/explicit debate, VanPatten (1994) pointed out that *research on attention* should be considered as one i.e. research on attention. This is so given the observation that attention, more often than not, is not studied directly in SLA but rather inferred from learners' output (c.f. research on implicit/explicit learning, for example). Such "*research uses a paradigm that confuses focus or purpose of attention with type of attention*" (p. 32). The problem here, he argued, is the conflation of consciousness with grammar practice and sub-consciousness with meaning.

Fourth, the Noticing Hypothesis is, as Truscott claimed, not based on any coherent theory of what language is. It draws rather on ideas from connectionism, old linguistic theory, specific-knowledge approaches, and commonsensical views of language. In part, because of that there is big difficulty in determining exactly what it means in the context of SLA; besides, it is difficult to draw potentially testable predictions from it.

Empirically speaking, he pointed out that partly because of its vagueness, the Noticing Hypothesis drew conclusions from focus-on-form instruction and feedback research (see Chapter 5) – i.e. the effects of a type of instruction intended to bring about awareness of form in learners – which provided only indirect evidence, thus aggravating the situation in that additional interpretation problems came into the open. For example, just as effects of focus-on-form instruction may be interpreted as being due to increased noticing, so too improved comprehension might very well be involved. Besides, Truscott wondered how we can draw on focus-on-form instruction research, which has attempted to affect learners' IL via direct explanation and output practice, when the Noticing Hypothesis is actually about input processing (c.f. however work on consciousness-raising, for example, that deals directly with input, not output; see Chapter 8 for some elaboration). He allowed that such practices undoubtedly impact input processing, but the manner in which this takes place is difficult to predict. At any rate, in reviewing extensive evidence on focus-on-form instruction and feedback, he concluded that on the whole it spoke to the general ineffectiveness of such a type of instruction (see Chapter 5 for evidence of the reverse situation), the thing which poses a problem for the Noticing Hypothesis (granting that effectiveness or the lack thereof of focus-on-form instruction is taken *de facto* to the advantage or disadvantage of the Noticing Hypothesis).

4.3.2. Reformulating the Noticing Hypothesis

In light of the problems noted above, Truscott proposed a reformulation of the Noticing Hypothesis, one which is much narrower and weaker than Schmidt's strong version. In so doing, he prompted the use of the famous division of knowledge into two types, one being primarily *conscious* and the other primarily *unconscious*, believing that such a distinction plays an important role in language study in that it potentially provides a borderline between two areas: an area where noticing is relevant and one where it is

irrelevant. In light of this division, his proposed reformulated version posited that the acquisition of metalinguistic knowledge bears upon (conscious) noticing while development of competence does not. He asserted that this weak version of the hypothesis:

has the potential to eliminate or greatly reduce each of the problems found in the original version. One problem was identifying the items learners must notice in order to acquire grammar. The revised version dissociates noticing from competence, so there is no such set of items.

(1998: 124)

The new hypothesis, being considerably weaker than the original, was claimed to be in no way uninteresting, given the fact that metalinguistic knowledge covers an important research area. One of the research issues related to the revised Noticing Hypothesis is that metalinguistic knowledge can be used to make learners' output more target-like; thus, their own output serves as input for them (see, for example, Sharwood Smith, 1981). Another possible research issue is the likelihood that such knowledge could supplement competence and even improve comprehension, he claimed.

In a nutshell, whereas the stronger version of the hypothesis held that conscious awareness (i.e. noticing) of form is a necessary condition for its acquisition, the weaker version claimed that noticing is helpful but not necessary.

4.3.3. Tomlin and Villa's Model of Attention on/off the Defensive

Simard and Wong (2001) raised serious doubts against the theoretical and empirical (Leow, 1998) aspects of Tomlin and Villa's (1994) fine-grained model of attention in SLA. For reminder purposes, Tomlin and Villa specifically claimed that the attentional processes of alertness and orientation, which may together or separately enhance detection, are not a prerequisite for detection to occur. They also claimed that the subjective experience of awareness can be dissociated from attention given that the former is not required for any of the three attentional functions. Schmidt (2001), on his part, rejected their second claim, that awareness at the level of detection is not crucial for further L2 processing, indicating that

cognitive psychology research was successful to the extent it distinguished attentional levels, yet they were not so in demonstrating that awareness did not take place. Simard and Wong pointed out that Tomlin and Villa's work has been frequently cited and has contributed the theoretical basis for studies of input enhancement, especially of textual enhancement, in SLA. In order to address the appropriateness of using such a model to advance SLA research, they reviewed the psychology studies on which it is based, along with Leow's (*ibid.*) study which they believed was an attempt to provide empirical support for this model, and they examined the two claims, above-mentioned, made by the fine-grained analysis of attention. Indeed, they warned that the impact generated by the fine-grained analysis of attention must be viewed with caution in the field of SLA.

To begin with, regarding the first front on which Tomlin and Villa's model for SLA was attacked, according to Simard and Wong they used the neuroscience and psychology research to draw their conclusions for SLA and this they demonstrated being problematic. They acknowledged the fact that language acquisition is primarily a cognitive activity and that in an effort to enrich our understanding of the way different areas of the brain function to carry out various cognitive processes, drawing upon such research is very much in order. They maintained, however, that it is not always prudent to make direct comparisons from one domain to another. In raising the question of the extent to which findings from psychology are generalizable to SLA, they stated that:

Given that much of the process of SLA is driven by cognitive activity, Tomlin and Villa (1994) are correct to point out that the field of SLA can only gain from insights from cognitive psychology and neuroscience. However, we must question the validity of applying a model that is based on findings from the research contexts of psychology and neuroscience to SLA and the feasibility of operationalizing concepts taken from these disciplines for SLA.

(Simard and Wong, 2001: 105)

Indeed, they repeatedly questioned Tomlin and Villa's model for its inadequacy for SLA, arguing that the cognitive psychology and neuroscience studies on attention were inadequate

because they did not treat SLA properties as such, and also because orientation in such studies was limited to spatial or visual locations. Such type of orienting informs the purposes of neuroscience alone, while it is only of limited use to SLA research because it *"has little or nothing to do with the need for learners to direct their attentional resources to features of L2 input to facilitate their intake of that input"* (p. 110). This made them conclude that the way the fine-grained model of attention went about researching awareness together with the three attentional functions might not be generalizable to the context of SLA. The model, that is, suggested conceptualizations of attention and awareness that did not adequately meet with the complex nature of the interaction between SLA and the different attentional processes. They argued, for example, that Marcel's (1983) lexical priming, among other studies, is not applicable to the issue of learning and awareness in SLA and is particularly in no way evidence that detection of L2 input can take place without awareness, given that the task was on the processing of familiar L1 lexical items; they indicated that studies such as these *"cannot address the question of whether L2 learners can make some kind of L2 form-meaning connection in the absence of awareness"* (p. 120).

VanPatten (1994) is of the same mind with regard to drawing upon non-SLA studies (see also Truscott, 1998). In evaluating the role of consciousness in SLA, he came to assert that research on consciousness (alongside the explicit/implicit, learning/acquisition distinction), has missed the important question: 'What do we mean by the acquisition of grammar?' This has led to conflicting hypotheses. For that matter, he warned against the danger of drawing conclusions from cognitive psychology research on attention and the acquisition of grammar; he argued that language as such did not even constitute a focus of study when experiments were conducted on consciousness and attention, and that the research designs used instead colours, faces, numbers, shapes and other variables that are visual stimuli. He stated that *"research from cognitive psychology related to attention and consciousness cannot speak to the issues of attention and consciousness in the acquisition of a*

natural language" (p. 31). However, he acknowledged the exception of research which used artificial linguistic systems (called 'finite state grammars'), but even here he questioned their likeness to natural languages claiming that they suffer from critical deficiencies rendering them 'non-language like'. As such, making conclusions about SLA departing from these made such conclusions suspect.

Secondly, insofar as the separability of the three functions of attention and their association with awareness are concerned, Simard and Wong questioned the prematurity of Tomlin and Villa's model; they pointed out that one should demonstrate that detection and learning can occur without awareness in the context of SLA even though there is evidence for that from studies in cognitive psychology. Additionally, in neuroscience, separability was dealt with in terms of the three networks of attention (posterior, anterior, and vigilance) and the anatomically different brain areas that make up each network. As such, it is clear, they asserted, that this is different from Tomlin and Villa's claim that the functions of alertness and orientation are separable or that they are not a prerequisite for detection to take place.

To back up their critique, Simard and Wong cited a personal communication with M. I. Posner who stated that all three networks of attention are usually activated at the same time to carry out detection and so are the three functions of attention, specifically in higher order level tasks involving processing language data. Thus, contrary to Tomlin and Villa whose claim was critiqued as unsupportable and not reflecting the complex nature of SLA, Simard and Wong proposed that it is more feasible to conceptualize attention not by viewing alertness, orientation, detection, and awareness as separable entities, but by considering them:

as coexisting and interacting in graded levels, and whose degree of activation is determined by the nature of the task, the linguistic item in question, and individual differences, among other factors.

(Simard and Wong, 2001: 119)

This held for them especially in the light of a variety of variables that are hypothesized to influence attentional demands during the processing of L2 input.

Indeed, they urged future research on attention to explore in greater depth the way various degrees of attention and awareness may impact SLA, a research orientation they held to be more feasible for the context of SLA and to reflect better the processing nature of the different functions of attention. They maintained that in the time when the operationalization of attention and awareness as ‘all-or-nothing entities’ (p. 120) is difficult, one could design L2 conditions and tasks engaging different levels of learners’ attention and awareness (c.f. Leow, 1997; Robinson, 1996a, 1996b; Rosa and O’Neill, 1999). Therefore, researchers should not seek whether or not attention and awareness are necessary for SLA; they should rather investigate how different levels or degrees of attention and awareness may bear upon learning i.e. would there be less learning, more learning, or none at all?

In the same vein, as hinted to previously, the way and the degree to which attentional functions and awareness are activated and maintained should be viewed from a more interactive perspective in terms of a number of independent variables. Stated more clearly, the role of the three functions of attention is subject to the nature of the task, the nature of the linguistic item, and individual learner differences, factors which research on the role of attention in SLA needs to consider. Here, Simard and Wong proposed to move research to asking finer grained questions such as:

How much attention and awareness is necessary for the detection of X, if at all? Is the same amount of attention and awareness necessary when the linguistic item is Y? How much attention and awareness is necessary to detect X (if at all) when the task demand is A? And if the task demand were B? Could an individual difference variable, such as processing or working memory capacity, constrain the amount and type of L2 input a learner can pay attention to?

(p. 121)

The critics asserted that a deeper understanding of the nature of the different functions of attention together with awareness in SLA may obtain as long as more research in this area moves towards addressing such questions.

Again, much of the above critique is very much consonant with VanPatten's (1994). He indicated that one should not lump linguistic features together when researching the hypothesis that learning can take place without awareness. He underscored the idea that:

The selection of linguistic items for research must be considered in light of the various components of a grammar itself and the relationship of these components to UG. One should not make claims about the acquisition of grammar as though all grammatical features of language function in the same way and are learned in the same way.

(p. 31)

Another constraining factor is the learnability issue i.e. whether or not learners are indeed psycholinguistically able to learn the targeted form. Izumi (2002), for example, recommended examining beforehand the learner's developmental readiness or level of proficiency regarding the target form.

Thirdly, with respect to operationalizing the fine-grained analysis of attention, Simard and Wong asserted that the separate effects of each attentional function should first be observed in a L2 task involving input processing so as to determine the contribution of each component to SLA and to assert that detection does not require alertness and orientation for it to occur. To their mind, it proved difficult to operationalize and measure separately the three functions in neuroscience research, let alone accomplishing such a task in SLA research with the instruments then at hand. Therefore, they pointed out that: "*Designing a task that could adequately examine the isolated effects of alertness and orientation during detection of L2 input seems virtually impossible*" (p. 110). However, they reported on one SLA study (Leow, 1998) which they viewed as an attempt to operationalize the fine-grained model of attention and whose author claimed to have found empirical evidence for Tomlin and Villa's (1994) model, but they argued that it fell victim to methodological limitations (due to the difficulty of isolating the three functions of attention) that rendered the evidence weak. It is to this, Simard and Wong's critique to Leow, that we now turn.

4.3.4. Critique to Leow

While putting Tomlin and Villa's theoretical model on the defensive, Simard and Wong (2001) raised similar doubts against the empirical (Leow, 1998) aspects of the fine-grained analysis of attention in SLA. As cited by Simard and Wong (*ibid.*), Leow (*ibid.*) attempted to isolate the effects of the three attentional functions of alertness, orientation, and detection at a morphosyntactic level through a problem-solving task, namely four crossword puzzles. He targeted the Spanish irregular third-person singular and plural preterit forms of stem-changing *-ir* verbs.

Simard and Wong critically examined the way Leow went about operationalizing the fine-grained model to provide empirical support and argued that his effort fell short of that goal. They demonstrated that he did not isolate, and hence operationalize or measure, alertness as a variable, meaning that it was present in every condition as a co-variable with orientation and detection, and that detection was the only measurable definition he provided for the three attentional functions. Therefore, his results were no evidence, contrary to his claim that detection was the crucial attentional process for intake to occur. The critics went even so far as to conjecture that alertness was not isolated due to the fact that it is virtually impossible to do so, particularly in a language processing task. Following Posner and his associate, they maintained that alertness per se might not be central to SLA, yet it might need to be maintained for orientation and detection to be activated in such complex tasks as those of Leow.

As for orientation, it was operationalized in Leow's study by providing subjects in the '+orientation' groups with a bolded instructive sentence directing their attention to the fact that some of the verb forms are 'IRREGULAR'. Simard and Wong rejected the idea that the subjects in the '-orientation' groups were not also oriented to the verb forms given that all the target verbs were italicized (i.e. a kind of orientation) for all four groups, and in parallel lines receiving a bolded sentence is no proof that attention was paid to it. For them, this study

spoke to the issue of degrees of orientation due to the fact that it was not successfully isolated as a variable. They, therefore, contended that instructions such as this type do not actually measure, or effectively operationalize, orientation.

As regards detection, alertness and orientation may or may not lead to it; in this line, Simard and Wong argued that Leow (*ibid.*) did not, in fact, demonstrate that these two attentional functions could be absent when detection took place in language-processing tasks. Alertness and orientation, that is, may occur without detection taking place, but there is no empirical evidence in support of the idea that detection can occur without also activating the other two cognitive processes of the construct of attention.

To put it in a nutshell, according to Simard and Wong (2001), then, Leow's (1998) empirical research did not lend support to the fine-grained analysis of attention in SLA and therefore the model was not successfully operationalized. Granting that Simard and Wong are correct and in the absence of any empirical evidence for Tomlin and Villa's position, such a critique seems, in my view, an argument for Schmidt's Noticing Hypothesis, namely that awareness or conscious attention is a prerequisite for L2 intake.

That detection, along with the other two attentional functions, can be dissociated from awareness is, as already indicated, Tomlin and Villa's second claim in pointing out that detection is the attentional function responsible for intake to take place. Simard and Wong, and others before them, cautioned against drawing conclusions from research findings in neuroscience and cognitive psychology pointing out that results are not generalizable (see above). Specifically, many studies of lexical priming may not be applicable to the issue of learning and awareness in SLA (e.g., see Marcel, 1983, above cited in Tomlin and Villa). Another case in point cited by Tomlin and Villa was Carr and Curran (1994) whose work, Simard and his co-author indicated, was in no way an empirical study; instead, it was a review article on sequential and artificial grammar learning. An empirical study that investigated the role of attention in learning and which was cited by Tomlin and Villa to back up their claim

about the dissociation between awareness and learning was Curran and Keele (1993). However, as afore-mentioned and as pointed out by Tomlin and Villa, the authors showed that subjects who were classified as more aware learned more than those who were less so, not that there can be learning in a total absence of awareness. Thus, Curran and Keele did not claim that awareness is dissociated from learning. In this perspective, Tomlin and Villa (1994) appear not to have provided empirical evidence for the position that detection of L2 input for further processing does not require awareness. According to Simard and Wong, whether or not awareness plays a role in SLA is an issue that resists solving attempts given the fact that operationalization of the construct remains a challenge.

For that matter, they proposed a model of attention, a conceptualization of awareness and attentional functions, which they claimed would better reflect the complex nature of SLA. Such a model:

is one in which awareness and attentional functions are viewed as being present in graded amounts, and whose degree of activation is influenced by the interaction among task type, linguistic items, individual differences (such as processing capacity), and by any other concurrent cognitive activity competing for processing resources.

(Simard and Wong, 2001: 119)

4.3.5. Leow's Response to Simard and Wong

In response to Simard and Wong (2001), Leow (2002) critiqued them from a number of fronts. First, he argued reactively that it is inaccurate and potentially misleading to claim that the fine-grained model has had a strong theoretical impact on subsequent SLA research for its being frequently cited. Their claim was inaccurate simply because two of the four cited studies were theoretically based on Schmidt's (1990) Noticing Hypothesis, and the other two discussed findings while drawing upon Schmidt's Noticing Hypothesis, notwithstanding their claim to have theoretically grounded their work on Tomlin and Villa's. In effect, in comparison with Tomlin and Villa's (1994) model, he asserted that Schmidt's Noticing

Hypothesis has had a stronger impact on SLA research (see, for example, Leow, 2001) i.e. contrary to what Simard and Wong claimed.

Secondly, Leow argued that Simard and Wong provided no empirical evidence whatsoever to falsify Tomlin and Villa's fine-grained model; they rather cited a mere personal communication with Posner to support its infelicities with regard to attention in SLA, namely the separability of the three attentional functions. In this way, their argument about the model's prematurity does not hold in the absence of empirical findings to support or refute the fine-grained analysis. Perhaps, one can even underscore Simard and Wong's attack as being premature in light of the following statement advanced by Leow: "*it is only after all the major aspects of a model have been subjected to thorough empirical testing that one can reasonably claim with some conviction that its predictions are robust or weak*" (p. 115).

Thirdly, Leow pointed out that Simard and Wong were inconsistent in rejecting the applicability of attentional findings from neuroscience and cognitive psychology research to the SLA field given the sources for the model they themselves proposed, a model of attention that they claimed would better reflect the complex nature of SLA. That is to say, it is all the more disappointing to see that they were not consistent in applying the tenets of their own critical view since they themselves drew on research from the above-mentioned fields. For reminder purposes, Simard and Wong based their arguments also on a personal communication with Posner, which does not constitute empirical evidence. Leow considered this inconsistency, and therefore their proposal, as the weakest aspect of their study in light of the accusation they attributed to the fine-grained model, namely its prematurity due to drawing on non-SLA sources to support its claims.

Added to this, Simard and Wong's proposed model of attention in SLA missed the defining criteria for a good theory. Such a model was argued to suffer from lack of explicitness and explanatory power for addressing both specific variables such as task type, linguistic item, and individual differences, and less specific variables when not specifying

what ‘other factors’ meant. Besides, their model was argued to be incoherent and inconsistent for not being able to account for the relationships between the various components. It is, also, all the more surprising, Leow argued, that in their even finer-grained model of attention and awareness, they did not address the methodological thorny issue of operationalizing and measuring the construct of awareness in SLA. Last but by no means least, what they proposed in terms of new research orientations were not, for the most part, all that innovative, he asserted.

To bring this critical discussion to a close, it cannot be denied that much of the process of SLA is driven by cognitive activity; as such, the field of SLA can gain insightful information from work in cognitive psychology. Research work on the nature of learning and the way it relates to attention and awareness constitutes an important source of information that SLA theory cannot afford to ignore; indeed, proponents as well as opponents of *noticing* and attention have done a service to the field when ascribing this research area a prominent place in discussions of L2 acquisition (Truscott, 1998). At any rate, we hope the criticisms raised in this chapter serve as a stepping stone both for theory construction and empirical work on the role of attention and awareness in SLA.

Conclusion

To bring this discussion to its conclusion, we may underscore the point that, all in all, attention and awareness are held to be essential cognitive processes that mediate input and IL development. That noticing and awareness are required for L2 learning is more controversial than the necessity of attention (Schmidt, 1995b, 2001; Robinson, 2003), yet the above reported findings could be interpreted as further empirical support for the facilitative role of awareness in IL development and, consequently, for Schmidt’s (1990 and elsewhere) Noticing Hypothesis. Of course, the above reported studies are not comparable because of variations in

focus and in the conditions operationalized, as well as the possibility that the level of noticing may have been affected by variables including attention being directed elsewhere.

At any rate, the impact of noticing – and attention studies – is evident as it has been cited as a theoretical motivation for research on the proposed benefits of *focus-on-form instruction*, *consciousness raising*, *input enhancement*, *processing instruction* in SLA (c.f. Chapter 5). Drawing on Schmidt's and Tomlin and Villa's contributions that noticing/detection of input is a necessary condition for further processing, focus-on-form studies in general, which are hypothesized to induce noticing, have investigated different ways of drawing learners' attention to specific features of L2 input in order to facilitate their noticing/detection. Granting that noticing is not necessary, it stands to reason that it does facilitate L2 learning and intake in that, as already mentioned, it allows learners to notice the gap between their IL system and that underlying the L2 input. The perception of a gap or a mismatch may, in turn, lead to IL restructuring (McLaughlin, 1990a); that is, being aware of a discrepancy bears upon the issue of negative evidence which, Sharwood Smith (1991) argued, when noticed is likely to *destabilize* (see Chapter 2) the learner's current IL.

As such, inducing learners' noticing of, and attention to, L2 forms through such pedagogical techniques as consciousness-raising (Rutherford, 1987), focus-on-form (Long, 1991; Long and Robinson, 1998), input enhancement (Sharwood Smith, 1991), processing instruction (VanPatten, 1996) is claimed to be beneficial for learning (see Robinson, 2003), and possibly for *destabilization* of erroneous IL forms which is – for reminder purposes – the claim of the present research.

We hope the criticisms raised in this chapter serve as a stepping stone both for theory construction and empirical work on the role of attention and awareness in SLA. In particular, given the bulk of empirical studies which provided evidence in favour of the role of awareness at the level of noticing in SLA, it seems pedagogically justified to secure opportunities for noticing and make an attempt to develop it in L2 learners.

It is to cognitive issues that we now turn in the chapter that follows: a work that speaks to the relationship between consciousness and Focus-on-Form as presumably a theoretically grounded and a pedagogically sound approach to intervention via instruction when dealing with the phenomenon of stabilization/fossilization.

CHAPTER FIVE:

On the Cognitive Route to Acquisition: Focus-on-Form

Instruction

Introduction

Since the mid-nineties, the bulk of the research has focused on finding various methods and techniques to integrate formal instruction within a communicative framework. This is especially due to evidence from several immersion studies suggesting that, in a purely communicative context, some L2 forms do not develop to target-like accuracy in spite of years of meaningful, comprehensible input and interaction (Williams, 1999). This justifies, then, the motivation for instruction, particularly the inclusion of *focus on form* (Long, 1991; Long and Robinson, 1998) in situations where the focus is primarily on meaning and communication.

Formal instruction is at the very heart of the debate in second language acquisition (henceforth, SLA). Indeed, it has been subject to controversy and speculation among researchers for years (Long, 1983; Ellis, 2001). Part of the controversy is whether L2 instruction is, at all, effective (in comparison with simple exposure or meaning-oriented communication), and also the relative effectiveness of different types of instruction. Our concern in this chapter, it must be noted, and indeed in the whole work is whether or not *focus-on-form instruction* impacts on learner interlanguage (IL, henceforth) development and thus L2 acquisition.

Given the bulk of research, there seems to have been mixed results: Three main positions can be identified with regard to the role of instruction in SLA: (1) the no-effect position, (2) the detrimental-effect position, and (3) the positive-effect position. Reviewing

research results and comparing between twelve studies exploring the effects of instruction, Long (1983) claimed that there is ample evidence that instruction does make a difference.

The *interface debate* is at the very heart of the foregoing discussion. The efficacy of L2 instruction addresses the issue of the interface, a debate which has motivated research in applied linguistics, SLA, and psychology – let alone research on the borderline – for years (Ellis, 1994a, 1997; Bialystok, 1982, 1994b; Krashen, 1981, 1982, 1985; McLaughlin, 1987, 1990b; DeKeyser, 1997, 1998; Reber, 1989, 1993; Schmidt, 1990; N. Ellis, 1994a; Paradis, 1994).

Central to the interface issue is the distinction of language knowledge into *explicit* and *implicit* and the way it is organized. The crux of the matter with regard to the debate is whether L2 *implicit* and *explicit knowledge* are associated or dissociated. Therefore, researchers are concerned with the separateness of implicit and explicit language *learning* and the investigation of whether or not explicit knowledge impacts upon the development of its counterpart; that is, how should grammar be taught so as to achieve second language proficiency? Should grammar instruction be *explicit* or *implicit* for ultimate success or attainment? The question of the primacy of formal instruction and whether or not it has any effect is addressed in terms of possible interfaces, or conversions, between the two types of L2 knowledge. The interface positions attribute different effects that the former has on the acquisition of the latter. In fact, three positions are distinguished: the non-interface, the strong interface, and the weak interface.

Ever since Long (1983) demonstrated that instruction makes a difference in SLA (i.e. that there is an interface), a research agenda has appeared in L2 instruction (Williams, 1995; Robinson, 1996; Doughty and Williams, 1998) investigating grammar instruction as opposed to communicative language use. Different terminologies emerged, as a result, each of which standing for a different type of L2 instruction. Those proposed by Long (1991, 1997; Long

and Robinson, 1998) are the most widely used terms. Long has established the following instructional options: (1) *Focus on Forms*, (2) *Focus on Meaning*, and (3) *Focus on Form*.

Experimental research has used several pedagogical techniques to put research hypotheses to the test. Review of such research is presented in the course of the present chapter. Each research study investigated the effectiveness of focus-on-form instruction as opposed to other types, moving therefore from the question of whether focus-on-form instruction is effective to the investigation of what kinds are effective (Cadierno, 1995).

For reminder purposes, in the present work, our goal is to assess the value of focus-on-form instruction to IL development and to freeing learner *stabilized* IL (see Chapter 2). In general, research on the effectiveness of focus-on-form instruction concerns itself with behavioural or, say, linguistic change, but mostly, though not necessarily, with how to make explicit knowledge impact on implicit habits. The difficulty, however, is the fact that behaviours which are deeply entrenched are resistant to change. Given that the practical import of explicit knowledge is largely determined by whether or not there is an interface between the two types of knowledge, we will discuss what predictions are made concerning how and when grammar teaching is most effective – hence, the motivation for focus-on-form instruction.

Resistance to linguistic change, as demonstrated at the end of the present chapter, is especially articulated by a number of factors related to the interface debate. They are important in the development of L2 proficiency and the success of focus-on-form instruction. These are, to name but a few, developmental readiness i.e. the notion that focus-on-form instruction can only be successful when the L2 learner is in a particular stage of linguistic development, the type of target grammar structures, and individual differences. These variables and others exemplary of them, it must be noted, may either foster acquisition or hinder it.

5.1. Grammar on/off the Defensive

The debate over grammar seems a war that never ends. Nowadays, the teacher is bombarded by a plethora of methods ascribing different roles for grammar in language learning. Each method presents a justification, pronouncing itself good and others not. Let us have a quick look at the place of grammar from two different and opposing perspectives.

5.1.1. The Grammar-Translation Approach

Chomsky made the famous distinction between competence and performance. He was much concerned with linguistic competence which he restricted to perfect knowledge in a homogeneous speech community. Such a competence refers to the ability of an ideal speaker-hearer to associate sounds and meanings in accordance with the rules of his language.

Grammar-Translation textbooks, following the Chomskian spirit, teach learners communicatively useless pieces of language. The learner is taught not the language but about the language. Such an approach to language teaching and learning takes language outside its context of use. If we concern ourselves just with linguistic forms and neglect the whole of language that makes it hold, we will distort the reality of language use. Experience has shown that even if the learner develops a stock of grammatical rules, this will prove of no utility for some future use. Put another way, the mere knowledge of sentences does not in fact assume knowledge of how a language functions in communication.

This methodology has not produced optimal results, and the learner therefore remains unable to use the language for communicative purposes. In fact, there is knowledge about the grammatical system, but grammar is used for non-communicative ends. The way teachers have gone about teaching languages seems to have gone the wrong way round. In order for the learner to use language for communication purposes, then, socio-cultural knowledge is evidently necessary. This is to say that language is better viewed in its social context because speech varies from one situation to another.

5.1.2. The Communicative Approach

The swinging of the pendulum went on, resting at a given period of time on the *Communicative Approach*. In sharp contrast, this approach draws upon the work of sociolinguists and anthropologists, particularly that of Hymes (1972). Hymes was critical of Chomsky's way of looking at competence claiming that it is too narrow a concept to follow for it fails to account for the socio-cultural dimension. For him, then, the notions of competence and performance should be redefined and expanded so as to include socio-cultural features.

In the usage of Hymes (1979: 19), communicative competence involves four sectors; they are also known as parameters of communication, 'of which the grammatical is one':

1. Whether (and to what degree) something is formally possible;
2. Whether (and to what degree) something is feasible in virtue of the means of implementation available;
3. Whether (and to what degree) something is appropriate (adequate, happy, successful) in relation to a context in which it is used and evaluated;
4. Whether (and to what degree) something is in fact done, actually performed, and what its doing entails.

So, it is clear from this that the grammatical aspect constitutes a numerical minority (in terms of the four sectors of communication) and thus shows the extent of narrowness of Chomsky's theory. Linguistic means are a means to a communicative end.

The Hymesian construct got elaborated, later, by Canale and Swain (1980). They pointed out that communicative competence includes all of grammatical, sociolinguistic, discursive, and strategic competence. By grammatical competence, it is meant linguistic competence i.e. the knowledge of phonological, syntactical, and lexical systems. Second, sociolinguistic competence means the ability to use language in appropriate contexts; it bears upon the social rules governing language use: Purpose of the interaction, participants' role relationships, their shared knowledge, spatial and temporal settings. As for discursive competence, it refers to knowledge of the different types of discourse and their

appropriateness to the communicative situation where the message is understood and interpreted. The exchange is seen in its global sense, not as isolated sentences. Finally, strategic competence stands for the ability to get meaning across effectively; success or effectiveness can be due if communication strategies (such as how to initiate, terminate, maintain or repair a conversation) are made use of when problem situations arise. Communicative strategies help compensate, linguistically or sociolinguistically, for failures in communication. For Canale and Swain, strategic competence should be taught at the very beginning of L2 learning because it helps fill the gap present in the other types of competence.

In order for learners to use the L2 appropriately in a given situation, they should, then, build a *communicative competence* in the language with all its aspects. Modern theories of language stress the urgent need to teach language as communication (Widdowson, 1978). Here, the learner should learn to establish form-meaning relationships in the foreign language after having, of course, developed communicative competence.

5.1.3. Critique

So far, it is so well and good. When the theory of communicative competence is practised in the classroom, however, several problems arise. Although it is widely believed that the ultimate aim of language learning is to acquire communicative competence, it is not clear just how this aim is to be achieved. One might wonder just how the different components are to be taught in an integrated way. One might also wonder how teachers can bridge the gap between linguistic form and communicative meaning. It seems that most English language teaching practices happen to grope, more often than not in vain, for L2 *meaning* while missing L2 *form*.

Given that the goal of native speaker communicative competence is not clearly relevant to, or appropriate in, learning settings (take Algeria, for instance, where learners of English have no immediate need to use the language outside the classroom for they all share

the same mother tongue), some scholars questioned the validity of the native speaker norm of communicative competence. Indeed, Alptekin (2002) claimed that such a norm is utopian and unrealistic.

Pushing further, an important issue that constitutes the cornerstone of the endless debate in L2 teaching methodologies is *grammar*: Should we teach grammar at all? Traditionally, focus is put on linguistic skills, and it is believed that after these are deeply rooted, communicative skills will soon follow. The reverse situation is also true; there is a misconception among many teachers subscribing to the Communicative Approach that grammar should not be taught and that this will look after itself when communication practice is guaranteed. For Rivers (see Interview with J. Arnold, 1991), grammar is so important that no communication is possible without it; otherwise, how can people agree on the accepted forms to get their meaning across?

The coming of age of functions within the Communicative Approach to language teaching and learning made the teaching of grammar melt in functional syllabi. Many teachers have been so preoccupied with the then-new-born language view that they left little if any room for *grammar practice* in the classroom, thinking, falsely, that teaching such a component is a misconception of language teaching, forgetting at the same time that grammar is the backbone of any language teaching/learning, whatsoever. All this has taken place in reality, though in theory grammar remains a basic component of the Communicative Approach. For Jones (1983), we should not confuse between ‘structures’ and ‘structural language teaching’ i.e. between ‘content’ and ‘organization’; indeed, this is a very important distinction.

Insofar as I am concerned, grammar ought to be focused on in a focus-on-meaning classroom (see below section on types of instruction) as structures or content, not more not less. Jones drew our attention to the fact that: "*It is the ends that are communicative, not*

necessarily all the means" (Jones, *ibid.*: 97). Still, one might hazard a question at this stage: does the communicative end justify all the means?

In fact, we do not seek to produce 'tongue-tied grammarians' nor communicators with 'fossilized/stabilized' English. Meaning and grammar are essential if instruction is to be effective for we believe that language is a whole that holds together. In principle, we must confess that notional-functional courses do incorporate grammatical items which make these functions operate. According to the definition of Canale and Swain, communicative competence gives room for grammar; still, grammar, here, operates within the more broadly defined competence that is meaning-based.

Let us agree that communicative tasks aiming at developing learners' communicative competence can in no way take place with no recourse being made to grammar. Where teachers, theorists, and researchers (for example, see Cadierno, 1995) alike differ is not so much in whether grammar should be taught as it is in how it should be taught. Whereas some opt for the more traditional presentation of a rule followed by mechanical practice (see above Grammar- Translation methodology and below focus on forms), others hold that grammar will develop naturally from practice in communicative interaction that is meaningful (see above the Communicative Approach and below focus on meaning). However, a progression of a functional-notional type is not always compatible with a strict grammatical progression. This is the problem with the Communicative Approach and methodologies whose concern is pure focus on meaning: If we arrange notions and functions in order, and in parallel terms we proceed in teaching grammar from the simple to the more complex, great difficulties will arise. One such difficulty is the danger of not covering all essential areas of grammar when taught only through functions and notions. Another breath-taking danger is the risk of fossilization/stabilization (see Chapter 2).

Language teaching should make exhaustive use of the various components of communicative competence. Teachers should teach communicative competence in all its

forms without stressing one at the expense of the other – be it linguistic, sociolinguistic, discursive or strategic. This, doubtless, is too hard a task to set for oneself. Be that as it may, to exclude one or more components in practice is a distortion of the facts of what language is: Excluding the linguistic component completely is nonsense since we cannot imagine a learner who is fairly good at communication while lacking the means to realize it. The reverse situation does not hold either, that is, teaching only the linguistic component and letting the communicative component to look after itself.

All this is to say that just like the Grammar-Translation Approach and other methodologies, the Communicative Approach also is established on some fragile bases. In fact, a great many methods have so far been used, but not all of them work with different students: All of them have shortcomings. For more success of the Communicative Approach, a new way of looking at form vis-à-vis meaning and an adequate theory of action for teachers seems to be in order.

The outlet, in our view, might well be the use of *focus-on-form* methodologies or instruction (see below focus on form); in point of fact, there is nowadays a growing importance attributed to *formal instruction*. That is, with regard to how grammar should be taught, and in comparison with the two previous positions, other theorists and practitioners are rather motivated to teach grammar within a communicative framework, hence bridging the gap between traditional formal instruction and the full communicative use of language. Since the mid-nineties, the bulk of the research has focused on finding various methods and techniques to integrate formal instruction within a communicative framework. This is especially due to evidence from several immersion studies suggesting that, in a purely communicative context, some L2 forms do not develop to target-like accuracy in spite of years of meaningful, comprehensible input and interaction (Williams, 1999). This justifies, then, the motivation for formal instruction, particularly the inclusion of focus on form (Long,

1991; Long and Robinson, 1998) in situations where the focus is primarily on meaning and communication.

5.2. Instruction

In fact, in SLA, three areas of investigation can be distinguished: Foreign language, instructed second language, and uninstructed second language (VanPatten, 1990). As far as *foreign language learning* is concerned, it takes place in the classroom environment i.e. learners learn a language that is not usually spoken out of the classroom context. *Instructed second language acquisition* also occurs in the classroom, yet in an environment where the tutored language is used in everyday situations. By contrast, *uninstructed second language acquisition* takes place in the host environment i.e. outside the classroom.

Upon analysis of the three areas, VanPatten (*ibid.*) identified them as intersecting circles and pointed out that second language acquisition is placed in the intersection; he argued that "*it is what [a] learner does that is common to all contexts which forms the core of SLA theory*" (p. 25). In keeping with these lines, Gass (1989: 35) went further and stronger in his claim; he argued that SLA is essentially the same *psycholinguistic process*, no matter which environment is in question:

It is difficult to imagine a situation in which the fundamental processes involved in learning a non-primary language would depend on the context in which the language is learned . . . All learners have the capability of taking information from the input and organizing it within the framework of their current linguistic system and modifying and restructuring that system.

At this stage, it is worth our while to define what *formal instruction* is. Cadierno (1995: 179) defined it as follows: "*any attempt by teachers to intervene directly in the process of interlanguage construction by providing samples of specific features for learning.*" As a matter of fact, the importance of teacher intervention, or say instruction, cannot by any means be denied. Instruction is likely to secure provision of input that is not salient, as it may provide an environment for focus-on-form instruction proper (c.f. Bardovi-Harlig, 2000).

A question that is legitimately asked may be: 'Is explicit grammar instruction all that necessary?' In point of fact, as Baars (1997) put it: "*The more novelty we encounter, the more conscious involvement is needed for successful learning and problem-solving.*" In addition, *implicit* processes alone do not guarantee full acquisition for the mere reason that various aspects of a L2 are unlearnable (N. Ellis, 1994b; 2005). In case of a communication breakdown, for example, we tend to negotiate meaning and we come to learn a lot about form. In this way, grammar is necessary for meaning construction.

Over the years, there has been a growing concern among researchers, theorists and teachers alike about the effect, if at all, of formal instruction on SLA. Put another way, does formal instruction make a difference in L2 acquisition? This will make up the content of the next section.

5.2.1. Effects of Instruction

Formal instruction is at the very heart of the debate in SLA and has been subject to controversy among researchers for years (Long, 1983; Ellis, 2001). Looking back at the debate over the past 30 years or so, L2 instruction research seems to be at least twofold in that two major questions have emerged and thus two broad trends have been identified. The first trend raises the issue of whether formal instruction has any effect on SLA, an issue seemingly controversial (see R. Ellis, 2002). The second trend raises the question of the relative effectiveness of different types of L2 instruction. Since the mid-nineties, the bulk of the research has, consequently, focused on finding various methods and techniques to integrate formal instruction within a communicative framework (see next section on types of instruction).

The role of instruction has been investigated in four different aspects of SLA (Cadierno, 1995); these are (1) the *route* of development, (2) the *rate* of development, (3) the *eventual attainment* or success of acquisition, and (4) the *accuracy* of acquisition. The route

of development refers to the general sequence or specific order of acquisition; the second aspect stands for the speed of learning; the third relates to the overall L2 proficiency; the last bears upon the accuracy with which specific linguistic items are acquired.

One of the conundrums of SLA is the question: 'Does instruction make a difference?' (see Long, 1983). In other words, does L2 instruction promote SLA? While for some studies instruction does not promote SLA and is even 'counter-productive', others hold that it is optimal. In light of the available research, that is, there seems to have been mixed results i.e. three main positions can be identified in respect of the role of instruction in SLA: (1) the no-effect position, (2) the detrimental-effect position, and (3) the positive-effect position. In fact, two issues are at stake here: whether instruction has any effect at all whatsoever, and whether it is beneficial.

As indicated by Long (1983), the question of whether instruction makes any difference at all can be answered by a number of comparisons. Reviewing research findings and making comparisons between twelve studies exploring the effects of instruction, Long held that there is ample evidence showing that instruction does make a difference; it aids both children and adults; beginning, intermediate, and advanced students; both on integrative and discrete-point tests; and both in acquisition-rich and acquisition-poor environments. Long also added that these four findings, being based on the studies he reported, are worthy to be discussed for they have implications and yield supporting evidence for theories which make predictions about SLA with the provision of L2 instruction – or disconfirmatory evidence for theories, such as Krashen's Monitor Theory, which encourage withholding instruction. They are worthy to be discussed also because, as he put it, these findings speak to the efficacy or utility of instruction (and/or exposure). Cadierno (1995), however, contended that research has been especially interested in investigating whether L2 instruction affects the route, rate, accuracy, and ultimate success of language acquisition, when it is still not clear why instruction would make a difference.

5.2.2. Reviewing Experimental Research on the Effects of Instruction

According to Krashen, learning is less important than acquisition; this is so because instruction does not promote acquisition directly and should, therefore, be limited to some learnable rules. Krashen (1973, 1981) pointed out that there is a natural sequence in the way learners learn a L2 similar to that on which children acquire their first language, of course with some language forms being acquired before others. Instead of instruction, he (1985) held that L2 learners, in order to acquire a given L2, need nothing more than sufficient motivation and exposure to comprehensible input. In this section, I attempt to review a number of experimental studies on the effect of instruction on learners' IL. The intent is to highlight whether targeted instruction influenced learners' development. The selected studies compared instructed learners who received experimental treatment to other learners with no special instruction.

Harley (1989) demonstrated that formal instruction contributes to SLA. His study aimed at the acquisition of French tense-aspect, namely the distinction between 'passé composé' and 'imparfait' by immersion students in Canada. Those subjects belonging to the control group received their regular instruction while those belonging to the experimental group were taught for a period of eight weeks. The effect was lasting for the experimental group who did not lose ground. That is, the experimental group scored significantly better in the post-test than they did in the pre-test on three different tasks which was not the case for the control group. Harley, thus, concluded that instruction was effective in both planned (written composition, cloze test) and unplanned language use (oral interview) i.e. the three administered tasks.

Pushing further on these lines of thought, the lines that hold evidence for the benefit of formal instruction, White (1991) conducted an experiment about adverb placement with Canadian French learners of English. The experimental group received two weeks of

instruction on the use of adverbs unlike the control group who did not receive any instruction. The experimental group performed better on different tasks, namely a grammaticality judgment task, a preference task, and a card sorting task. However, their accuracy faded in the five-months delayed post-test. This finding provides ample evidence that formal instruction, in spite of the fact that it may have short-term effects, fosters, indeed, language accuracy.

5.3. The Interface Debate

The efficacy or utility of L2 instruction, then, is said to address the issue of the *interface*, a debate which has motivated research in applied linguistics and SLA for the last 30 years or so (Ellis, 1994a, 1997; Bialystok, 1982, 1994b; Krashen, 1981, 1982, 1985; McLaughlin, 1987, 1990b; DeKeyser, 1997, 1998; Han and Finneran, 2013). There is, however, more to observation of the linguistic aspect, in the interface debate, than meets the eye. Cognitive psychology, indeed, was itself researching, though independently, the separateness of *implicit* and *explicit learning* (Reber, 1989, 1993). Years after, researchers on the borderline between applied linguistics and cognitive psychology (Schmidt, 1990; N. Ellis, 1994a; Paradis, 1994) put in harmony these different bodies of research. Agreeing that *implicit* and *explicit knowledge* are dissociated, these bodies of research investigated the separateness of implicit and explicit *knowledge* and of implicit and explicit language *learning*; however, they disagreed, even within the same body, on the very robustness of explicit knowledge and whether or not it impacts upon the development of implicit knowledge.

Central to the interface issue, then, is the distinction of language knowledge into explicit and implicit and the way it is organized. At this stage, some operational definition of the construct is very much in order.

5.3.1. On the Explicit / Implicit Knowledge Conundrum: Continuum or Dichotomy?

5.3.1.1. Defining Explicit / Implicit Knowledge

Explicit knowledge, an area of mental representation, has been characterized as "*that knowledge of language about which users are consciously aware*" (Ellis, 2004: 229); that is, explicit knowledge is knowledge about language. Implicit knowledge, its counterpart, has been used to refer both to the ability to use the L2 fluently and accurately, and to the primary source of knowledge giving rise to L2 proficiency.

According to Ellis (*ibid.*), explicit knowledge is not a 'reflexive attitude' to language and its manipulation, which is the case for metalinguistics; it is rather the outcome of this attitude, one being distinct from the other. Explicit knowledge, besides, is not a 'practice' nor is it an 'activity', contrary to metalinguistic phenomena, in that what one knows explicitly and the actual uses to which one puts this knowledge are quite distinct. Of note also, Ellis deemed it necessary not to confuse explicit knowledge with the ability to verbalize such knowledge, granting at the same time the fact that explicit knowledge is a mental phenomenon that cannot be directly accessed only through activities that involve its use.

5.3.1.2. Implicit Vs. Explicit Knowledge

Explicit knowledge, for R. Ellis, can only be accounted for with reference to implicit knowledge. That the two knowledge systems are distinct is beyond doubt (R. Ellis, 2004; N. Ellis, 2005; Krashen, 1985, among others), but the extent and the ways of distinctiveness must be set out.

First, developmental psycholinguists such as Tunman and Herriman (1984) held that the two knowledge types differ in the very processes they utilize. That is, where little or no attention is needed by production and comprehension processes with respect to spontaneous L2 use, conscious focus is there operant when explicit knowledge is made use of. Therefore,

automatic processes draw upon implicit knowledge unlike controlled processes that bear on explicit knowledge.

Second, Reber (1989), a cognitive psychologist, claimed that unconscious and automatized knowledge can be rendered conscious through 'reflection' (on this knowledge) from which explicit knowledge derives but also is distinct. N. Ellis (2005), also a cognitive psychologist, reviewed various psychological and neurobiological processes by which explicit knowledge of form-meaning associations impacts upon implicit language learning. He argued that the two areas of knowledge are, indeed, 'dissociable but cooperative'.

Third, in the field of SLA, Paradis (1994) contended that explicit and implicit knowledge are separate mental representations for they inhabit two 'neuroanatomically distinct systems'. Allowing the possibility for the two systems to interact, he maintained that in no way can explicit knowledge be converted into implicit knowledge even through practice. As such, he adheres to the non-interface position (see below), similar to Krashen. In his turn, Krashen (1981) insisted on the disassociation of implicit or acquired knowledge and explicit or learned knowledge, the latter used, as he viewed it, only as a monitor of output initiated by implicit knowledge. Along the same line, R. Ellis (2004) viewed the explicit / implicit knowledge issue as one involving a dichotomy instead of its being a continuum. This means that he supported the separateness of the two mental representations and pointed out that they are distinct knowledge systems. He denied, however, any suggestion or implication that implicit knowledge cannot be converted into its explicit counterpart or vice versa.

However, against all these views (developmental psychology, cognitive psychology, and SLA theory) which seem to meet on the issue at hand, DeKeyser (1998, 2003), for example, held that explicit knowledge may be *proceduralized* to meet with the defining characteristics of implicit knowledge. Ellis (2004) made reference to Dienes and Perner (1999) who went even so far as to claim that the distinction into explicit and implicit mental representations can rather be viewed as a continuum than a dichotomy; put otherwise, there

are at play different degrees of consciousness in the use of explicit knowledge. Schmidt (1994), in his turn, happened to be of the view that implicit and explicit knowledge are continuous, not dichotomous, though he did not dig further into this issue.

It seems, by now, that explicit knowledge has a number of key characteristics. According to Ellis (*ibid.*), explicit knowledge is said to be *conscious* (i.e. L2 learners are aware about what they know) contrary to implicit knowledge which is entirely tacit. However, in a footnote, he (p. 235) stated:

Bialystok (1994) [...] comments that "only a small portion of the knowledge that becomes explicit will ever become conscious" (p. 566). This is because what is criterial for Bialystok about explicit knowledge is that it is "analysed," and analysis need not imply consciousness. In line with this position, it might be more accurate to say that explicit knowledge can be brought to consciousness.

Explicit knowledge is, also, *declarative* in that it contains facts about the L2. The declarative rules of learner's IL are more often than not 'imprecise and inaccurate'. In addition, unlike implicit knowledge which is accessed through *automatic processing*, explicit knowledge is generally characterized by *controlled processing*. Stated differently, explicit knowledge is used to edit or monitor production, of course when there is sufficient time that allows the learner to access the declarative facts pertinent to the L2 form in question. Explicit knowledge, as such, and therefore careful on-line planning, is time-constrained for it might not be readily available in spontaneous L2 use. Another characteristic of explicit knowledge, according to Ellis, is that it may be brought to bear on language *tasks* that prove *difficult* for the language learner: The form under study is not part of his IL yet. As afore-mentioned, though Ellis warned against the danger of confusing explicit knowledge with the ability to verbalize it, he claimed that it is potentially *verbalizable*. We bring the discussion, now, to its conclusion by stating that such knowledge is *learnable* just like implicit knowledge; however, it is worth our while to stress the fact that, and this is the very core of the present study, most adult L2 learners happen to either *stabilize* or *fossilize* midway in the course of their learning

and never seem to develop an implicit knowledge similar to that of a native speaker (see Chapter 2). For reminder purposes, it is the development of implicit knowledge that should be the target in SLA, but we deem it likely that it is explicit knowledge, a cognitive approach, that is the route.

A major concern for teachers and researchers alike is how grammar should be taught so as to achieve second language proficiency. That is, should instruction be *explicit* or *implicit* for ultimate success or attainment – let alone accuracy of acquisition? Such a concern has been addressed by theories subscribing to instructed SLA. These often make a distinction between *explicit* and *implicit knowledge*. However, sometimes there is use of different appellations (see Krashen, 1981; Bialystok, 1994b; R. Ellis, 1990; 1994b; DeKeyser, 1998, 2003). For reminder purposes, *explicit linguistic knowledge*, also termed declarative or learned knowledge, refers to conscious factual knowledge about the second language rules. *Implicit linguistic knowledge*, also referred to as procedural or acquired knowledge (albeit with a slight difference), stands for the knowledge that enables someone to use the L2 appropriately in spontaneous language use. Carrying the previous concern further, at this stage, a question looms on the horizon: Can there be an *interface* (see below) between explicit knowledge and its counterpart? It seems, that is, that teaching/learning the L2 explicitly is only optimal when there exists an interface between explicit and implicit knowledge i.e. when there is conversion of knowledge from explicit to implicit, or when explicit knowledge directly impacts upon the acquisition or use of implicit knowledge.

The question of the primacy of formal instruction and, before that, whether or not it has any effect might well be answered, as demonstrated above, in terms of possible interfaces, or say conversions, between explicit and implicit L2 knowledge. The interface positions attribute different effects that the former has on the acquisition of the latter. In point of fact, three positions are distinguished. These are respectively the *non-interface position*, the *strong interface position* and the *weak interface position*. As the names might imply, each of these

positions argues that there is a different role for explicit knowledge. Each, then, provides a different approach as to how form should, if at all, be taught.

5.3.2. The Three Interface Positions

In respect of the relationship between *explicit* and *implicit knowledge*, three positions have come into play. Each of these *interface* positions holds a very different view on the role of explicit knowledge in the development of learner IL and, therefore, his L2 implicit knowledge. Interface positions came into being as a result of an informed investigation of the process of SLA, and difference in their underlying ideas about L2 acquisition is what unites them. Krashen's non-interface position stems from the parallelism he assumed between first language (L1, henceforth) and L2 acquisition. DeKeyser built his ideas on skill acquisition theory which draws upon cognitive psychology. Ellis's theory bears upon information processing theories contributed by Gass (1988), Schmidt (1990, 1994), VanPatten (1987).

The crux of the matter, insofar as the interface debate is concerned, is the way linguistic knowledge is organised: Each of the three positions makes a distinction between explicit and implicit knowledge. Where the strong interface position views explicit / implicit linguistic knowledge as a continuum along which different degrees of awareness and control manifest, the non-interface position and the weak interface position agree that the two types of mental representation are separate systems. Stated differently, the strong interface hypothesis posits that there exists only one knowledge system contrary to the two last positions which hypothesize a distinction therein. It is to the three interface positions that we now turn our attention.

5.3.2.1. The Non-interface Position

It is a point of theoretical debate whether external attempts to teach L2 knowledge explicitly can truly impact upon learners' IL, let alone if it is stabilized or fossilized. The *non-*

interface position postulates that *exposure* is more effective than *instruction* and that there is no interface between explicit and implicit knowledge. That is, the explicit and implicit knowledge systems are completely dissociated. This is very much pioneered by Krashen's theory of SLA (1981, 1982, 1985, 1994; Krashen and Terrell, 1983). Krashen's (1985) non-interface view, evident in the Input Hypothesis, calls for implicit learning to the exclusion of all else. Krashen argued that explicit knowledge cannot become implicit and consequently grammar should not be taught. Grammar instruction is effective only in the sense that it provides exposure to the target language. Paradis (1994), along the same line, argued that explicit knowledge neither becomes implicit knowledge, nor can it be converted to it. Therefore, he viewed it inappropriate to talk of their interface given their being of different types.

According to Krashen, adults have two independent ways of developing competence in a L2: *acquisition* and *learning*. *L2 acquisition*, which is similar to a child's acquisition of his L1, is a *subconscious* process and so is the competence acquired i.e. such a process leads to acquired knowledge (meaning *implicit knowledge*). Language rules are acquired unconsciously and correctness is a matter of feel. Acquisition, as such, results from interaction that is basically communicative and meaningful. In this perspective, focus is on meaning, not form (see below section on types of instruction). While error correction has little, if any, effect on subconscious acquisition, it is useful for the *conscious* process of *learning* which requires conscious effort on the part of the learner and results in conscious or 'learned' knowledge (meaning *explicit knowledge*). When a language form has been consciously learned but not acquired, the learner tends usually to avoid it. That is, when the learner knows that there is an error but cannot repair it, he tends to avoid the structure in question. In our view, such avoidance strategy may lead to the phenomenon of fossilization or to the less harmful case of temporary stabilization. In brief, Krashen claimed that language forms can be internalized in two different ways and this gives birth to two totally different

knowledge systems. He also claimed that explicit knowledge which results from learning has only a very limited effect on the development of L2 proficiency.

In fact, even if doubt is cast on the very role of grammar instruction in L2 acquisition, Krashen did acknowledge that the kind of knowledge accumulated through learning (i.e. explicit knowledge) might well be beneficial. He attributed a very limited and indirect role to explicit knowledge in learners' output which may serve only as a monitor to edit instant speech or writing, providing the learner is motivated, has time and knows the rule. Moreover, explicit knowledge, he claimed, may have some use if it affects positively the acquisition process. Krashen allowed a role, indirect as it is, for explicit or learned knowledge in SLA (1985; 1981): Grammar instruction is likely to lower learners' affective filter perhaps because it matches with certain learner type or learning desires to know about the structure of the L2. Formal grammar instruction might even make the input comprehensible, the thing that triggers the acquisition process. In brief, the role of explicit knowledge is limited to a *facilitating* and *indirect* role but its effects on L2 proficiency development are severely limited.

From the above, it follows that the effects of formal grammar instruction are limited or scarce on the ground because Krashen pointed out that there is, in SLA, a natural order. Attempts to manipulate the developmental route, as such, will go astray. Selinker's model of fossilization (1972), it must be stressed, is incompatible with the notion of a natural order of morpheme acquisition in that it allows only a small five percent of adults to access the latent device responsible for these orders (see Chapter 2). Natural exposure to L2 input with no instruction being provided, Selinker claimed, leads to premature fossilization. This puts in doubt both Krashen's approach, and the over-insistence on communication. An opposite view, then, might well challenge the ghost of stabilization/fossilization.

5.3.2.2. The Strong Interface Position

Turning our attention now to the *strong interface hypothesis*, which provides a counter-perspective and which investigates how declarative or explicit knowledge converts into implicit knowledge (e.g., DeKeyser, 1997, 1998; McLaughlin, 1990b), we should note that it has its roots in cognitive psychology. It postulates that, with time, it is likely for explicit knowledge of grammar developed from instruction to be converted into implicit knowledge that can be used in spontaneous communication. Proponents of this position held that there is a strong relation between explicit and implicit knowledge in that they fall at both extremes of the same continuum. To put it another way, the nature of linguistic knowledge changes all the way through acquisition and becomes increasingly more available in instant communication.

In fact, the strong interface position is twofold; it consists of two variants which seem to be in complete contrast. Firstly, Bialystok (1994a; 1994b) pointed out that the default linguistic knowledge is initially implicit yet turns out to be more explicit as the L2 learner becomes more proficient. Secondly, DeKeyser (1998), Sharwood Smith (1988) and others argued that L2 proficiency is developed through a process of *automatizing* explicit knowledge so that it becomes eventually implicit. Let us see this in some detail.

Bialystok (1994a) argued that L2 proficiency develops along two dimensions: *Analysis* and *control*. *Analysis* means 'awareness of structure' i.e. the way the formal structure relates to meaning is apparent. Granting that language is a structured knowledge system, Bialystok pointed out that one of the main goals of L2 instruction is to develop in learners awareness of the structure of the language for it to be inserted in their IL. When the learner develops awareness of a given L2 form or structure through analysis, it tends to be ready for use in new contexts; the knowledge of the structure remains inherently the same, gradually becoming available in instant conversational contexts.

Control, the second dimension, stands for the L2 learner's ability to access linguistic information, or the degree of his *automatizing* the L2 form. There may be differences among

learners in their ability to access a particular linguistic structure, the thing that explains the differences in the degree of their fluency. Bialystok suggested that a L2 is learned through *increasing explicitness* (1994b). Of note is the fact that she used the terms *implicit* and *explicit knowledge* to refer to *unanalysed* and *analysed* knowledge, respectively. This does not in any way mean that explicit knowledge is conscious knowledge proper: It can only be brought to consciousness if called upon. Bialystok (1994a; 1994b) posited that explicit analysed knowledge derives from implicit unanalysed knowledge. As such, all linguistic knowledge necessarily is originally implicit and non-automatic. Explicit knowledge, in this way and as afore-mentioned, is not the default knowledge and that the point of departure is its implicit counterpart.

Most advocates of the strong interface hypothesis, by contrast, view learning as rather *increasing implicitness*. DeKeyser (1998, 2007) claimed that L2 knowledge goes through three stages of development. Learner IL sets out as *declarative* (factual) knowledge, converting into *procedural* (knowing how), before ending up in being fully *automatized* (DeKeyser used *declarative* and *procedural* knowledge to refer to *explicit* and *implicit* knowledge, respectively – despite slight differences in meaning, as he pointed out). Declarative knowledge may vanish when a learner reaches the last stage of linguistic development. Through the process of *proceduralization*, *declarative* knowledge turns out to be procedural. That is, the language learner sets out using a given L2 form departing from his declarative knowledge. Repeated *practice* of factual knowledge yields to more procedural knowledge in the form of linguistic behaviour – instead of facts. Again, through practice, i.e. fine-tuning, the language behaviour becomes fully *automatized*. Despite the fact that time is necessary to access the declarative facts pertinent to the L2 form in question, some learners can proceduralize their explicit knowledge and access it as rapidly as they do for implicit knowledge, the thing that makes them ‘functionally equivalent’ (DeKeyser, 2003).

N. Ellis (1994a) agreed that declarative knowledge or rules can become automatized, but only if the L2 sequences are *sufficiently* practiced. However, he insisted that it is the sequences *per se* that become implicit, not the rules that vehicle them.

Proponents of the strong interface position consider as pedagogical recommendations the development and *automatization* of L2 knowledge. DeKeyser (1998) argued for the use of mechanical drills so as to develop declarative knowledge, these being exercises on linguistic form with no attention being paid to meaning on the part of the learner; as for proceduralization, it is catered for through communicative drills.

Sharwood Smith (1981) viewed grammar instruction as a process of *consciousness-raising* (see below) and pointed out that "*explicit knowledge may aid acquisition via practice*" (*ibid.*: 167). Clearly enough, the role of explicit instruction in the development of learner IL is most articulated in the strong interface position; considerable importance is, therefore, given to explicit instruction of the rules of L2 grammar. Assuming explicit knowledge to be the starting point of L2 proficiency (DeKeyser, 1998; Sharwood Smith, 1981, 1988; compare with Bialystok above who claimed the reverse though she subscribes to the same interface position), it follows that a direct relationship exists between explicit grammar teaching, or focus-on-form instruction (see below), and L2 ultimate attainment and accuracy.

5.3.2.3. The weak interface position

The *weak interface position* is pioneered by R. Ellis (1990; 1994a; 1997). Ellis, like Krashen, N. Ellis and Paradis, held that implicit and explicit knowledge are two dissociable and coexisting knowledge systems. The weak interface position claims that learner's L2 *explicit* knowledge can become *implicit*. Instruction, however, should be properly *timed* for those features of the input that are developmentally constrained (see factors affecting instruction, end of this chapter). Explicit knowledge, moreover, is hypothesized to positively affect implicit learning processes, but the effects of instruction will rather be delayed. Ellis

also claimed that L2 knowledge does not necessarily set out as being explicit. Rather, it is the reverse situation that often holds as default. This, in fact, is very much the same with, though not identical to, the view of Bialystok (1994a, 1994b; see the strong interface position above) and close to that of N. Ellis (2005: 306) who stated that: "*Most knowledge is tacit knowledge; most learning is implicit; the vast majority of our cognitive processing is unconscious.*"

The weak interface position argues that explicit knowledge has a *facilitative* role in the acquisition of implicit knowledge and this is by engaging the learner's *attention* and helping him *notice* crucial features of the L2 (Schmidt, 1990). As Schmidt (2001: 23) put it:

since many features of L2 input are likely to be infrequent, non-salient, and communicatively redundant, intentionally focused attention may be a practical (though not theoretical) necessity for successful language learning.

While asserting the implicit/explicit distinction at the level of knowledge, he (1994) contested Krashen's view on the acquisition of implicit knowledge being an entirely unconscious process. Instruction subscribing to this position may help the learner *notice* what passes unnoticed otherwise. In fact, certain instructional techniques might well help learners *attend* to the target language forms and speed up or *facilitate* the acquisition process (see Schmidt, 1990, 2001; Doughty and Williams, 1998a; Sharwood Smith, 1981; Terrell, 1991; Robinson, 2003, 2001). Research studies subscribing to the present position aim, as such, at demonstrating the very way(s) instruction helps direct learners' *attention*.

Contrary to Krashen, in order for acquisition to take place according to Ellis, learners *attend to* features of the input and compare them to their output, using such mechanisms as *noticing* and *comparing*. *Frequency* and *salience* of the input, together with particular task demands may be noticed and compared. In this perspective, the learner might well rethink the hypotheses he makes about the L2. Explicit knowledge might, therefore, prove optimal insofar as it helps *notice* a language form, especially one that is communicatively frequent and/or salient. It might also help the learner *notice the gap* between the L2 input or positive evidence and his own output.

From a different perspective, N. Ellis (2005) is of the same mind with Krashen (though combating the issue from the weak interface standpoint in cognitive and neurobiological terms), R. Ellis and others in respect of the organization, or say separateness, of L2 knowledge; he argued that the two types of knowledge "*involve different types of representation and are substantiated in separate parts of the brain*" (p. 307). He reviewed various processes through which explicit knowledge of form-meaning associations promotes implicit L2 learning. He agreed with Paradis (1994; see the non-interface position) whom he cited stating that explicit knowledge neither becomes implicit knowledge, nor does it convert to it; however, he argued that the two types of knowledge *interact dynamically*. N. Ellis built on a number of proposals (N. Ellis, 2002b; Robinson, 2001, 2003; Schmidt, 2001; Doughty, 2001; Gass, 1997; VanPatten, 1996, 2002; DeKeyser, 2001; R. Ellis, 1994a; Terrell, 1991) by reviewing a number of psychological processes of interface which all show that it is a dynamic process happening transiently in conscious processing, "*but the influence upon implicit cognition endures thereafter*" (2005: 305); he argued that metalinguistic information and implicit learning meet and interact in processing, yielding to a dynamic interface (c.f. Van-Patten, 2002; Norris and Ortega, 2000; Cadierno, 1995, showing the effectiveness of processing instruction in L2 learning). He argued that, regarding fluency, the implicit system processes the L2 input automatically, while the conscious self focuses on meaning instead of form. Nevertheless, when automatic processing fails, recruitment of 'additional collaborative conscious support' may follow. As he (2005: 308) put it, "*We only think about walking when we stumble, about driving when a child runs into the road, and about language when communication breaks down.*" He proposed, then to bring it into consciousness, following in this way Sharwood Smith (1981) and others (see above the strong interface position).

Han and Finneran (2013) are counter to all previous positions, claiming that both explicit and implicit knowledge are likely to obtain in IL. Of note, three types of relationships

co-exist between them; the question is which aspects of grammar are subject to a strong, weak, or no interface relation.

To sum up, the value of explicit knowledge to L2 proficiency development has so far been discussed. Of course, the practical value of explicit knowledge is largely determined by whether there is an interface between explicit and implicit knowledge i.e. whether the former impacts upon the development of the latter. The strong and the weak interface positions predict explicit knowledge to convert into implicit knowledge. The weak and the non-interface positions hypothesize that the former type of knowledge facilitates the acquisition of implicit knowledge. They both hold, also, the view that the two mental representations are separate systems. The strong interface position claims their being a dichotomy. Still, as stated by R. Ellis (2004: 235): "*Although there is controversy regarding the interface of explicit and implicit knowledge at the level of learning, there is wide acceptance that they interact at the level of performance.*" This can, of course, be explained in neurological terms ((e.g., N. Ellis, 2005; 2002). Again, given the bulk of evidence at hand, especially the neurological evidence, we are more inclined to hold the view that there is interface and that the two knowledge types are rather dichotomous than continuous, though one must confess that the question is still a matter of controversy (R. Ellis, 2004). Further empirical validation is urgently in order.

From the above interface discussion, we might conclude that explicit L2 learning differs from its implicit counterpart; that they give birth to different aspects of L2 proficiency; that attention is decisive in the former; and that automaticity is defining in the latter.

5.4. Types of Instruction

Ever since Long (1983) demonstrated that *instruction* makes a difference in SLA, as opposed to simple naturalistic *exposure*, a research agenda has emerged in L2 instruction (Harley, 1989; Williams, 1995; Cadierno, 1995; Robinson, 1996a; Doughty and Williams, 1998; Norris and Ortega, 2000) prompting the adoption of grammar instruction while

coupling it with communicative language use, the thing that would make it possible for learners to hit two birds with the one stone: Hitting language use and language accuracy altogether. The major concern of such research has eventually shifted from whether instruction, in formal contexts, has the potential to affect L2 acquisition to what *types* of instruction are most effective (Harley, 1989; Doughty, 1991; Long, 1991; Ellis, 1993; Cadierno, 1995; VanPatten and Cadierno 1993a, 1993b; Norris and Ortega, 2000). The question that makes up the content of the present section, then, is: Does type of instruction make a difference? If it does, what is the relative effectiveness of different types of L2 instruction? Or, as Cadierno (1995: 190) put it, "*the question that should be addressed is not so much whether grammar should be taught in FL classrooms, but how it should be taught.*" Studies on types of instruction assume that instructional treatments should aim at effecting changes in learners' focal *attention* during L2 processing (Sharwood Smith, 1993). In this way, certain L2 forms are likely to be *noticed* (Schmidt, 1993) and therefore acquired.

According to Long (1988), it is inadequate to teach grammar out of context just as it is to teach language in a purely communicative fashion. This is so simply because the former approach tends to handicap L2 learners in their use of grammar forms communicatively and because the latter gives little, if any, importance to grammar instruction. Given that this is so, Long proposed a third approach called *focus on form* which would match communicative language use with grammar instruction in context, an approach that is basically task-based in instruction. Such an approach is based on an examination of the research evidencing the optimal effect of instruction both on rate of learning and level of L2 attainment (see above). For some, however, and this is of course justified, the argument for using structural and functional instruction is not that new (Fotos, 1998).

A great many researchers have attempted to name and operationalize the forms of instruction which can be used in L2 classrooms; yet, there is still a great debate over the precise terminology (Long, 1991; Doughty and Williams, 1998b; Ellis, 2001). Those

proposed by Long (1991, 1997; Long and Robinson, 1998) are the most widely used terms. He established the following instructional options or types: (1) *Focus on Forms (FonFs)*, (2) *Focus on Meaning (FonM)*, and (3) *Focus on Form (FonF)*.

Instruction requiring learners to *focus on forms*, in isolation, is directed at teaching the forms rather than the messages they convey (i.e. the forms themselves make up the content of instruction) and it holds that the target forms need to be presented in a sequence i.e. one by one according to their complexity. It is adopted in traditional methodologies such as the grammar-translation method.

Second, instruction that is based on *FonM* allocates no attention to the forms used in conveying a message i.e. the instruction is directed to communication only and it posits that exposure to rich input and meaningful communication might well cause incidental acquisition of the L2.

As for *FonF* instruction (also termed *FFI* – an acronym standing for form-focused instruction – see, for example, Spada, 1997; Ellis, 2002), which presents the linguistic form, as it arises *incidentally* or in a *planned* way (see R. Ellis, 2001, below), in a lesson within a meaningful context, it is said to secure a balance between a *FonFs* and a *FonM*, thus bridging the gap between traditional formal instruction (with a *FonFs*) and the full communicative use of language or *FonM* (see Ellis, Basturkmen and Loewen's study (2001) – an indication that *FonF* can take place with no risk of disturbing the communicative flow of a classroom). It stresses the importance of brief *reactive* and/or *proactive* interventions, directing learners' attention to formal properties of linguistic items which (might) prove problematic during meaningful L2 use and which are learnable in terms of the learner's internal developmental state. *FonF* instruction has at least two advantages over *FonM* in that it makes positive evidence more salient, and it provides essential negative evidence through direct or indirect negative feedback (Long, 1996).

5.5. Focus-on-Form Instruction

Long (1991, 1997) held that *FonF* instruction might well be more effective because it is very much in keeping with what is known about the way a given L2 is acquired. There is, now, at hand a bulk of research data demonstrating that in a meaning-based instruction, focus on the L2 formal properties, whether through explicit explanations (Spada and Lightbown 1993; Robinson 1995a, 1996a) or structured input, where the learner's attention is directed at the L2 formal properties (VanPatten and Cadierno, 1993a & b; VanPatten and Oikkenon, 1996; VanPatten, 1996), affects positively the acquisition of linguistic structures of the L2 being learned. Some, however, argued that their findings did not support the dichotomies between *FonM* and *FonF* instruction established, as they are, in the literature (Cadierno, 1995). According to Cadierno, such a dichotomy is 'not always necessary' (p. 191) for such methodologies as processing instruction (see below) do focus on form and meaning at the same time.

An issue of considerable importance is how *FonF* can be employed to promote input processing mechanisms. For instance, *FonF* research investigates the value of shortly shifting the learner's attention to form while using the L2. In the spirit of *FonF* instruction, three central claims about L2 acquisition can be made (Ellis, Basturkmen and Loewen, 2001). First, learners acquire new linguistic forms by virtue of *attending to* them. Second, learners' frequent difficulty in attending to forms in communication and using them is due to their limited information-processing capacity. Third, learners take advantage, thus, of the opportunities met in communication by attending to form.

According to Long (1991), *FonF* draws learners' attention to L2 formal properties, overtly but incidentally, in lessons which focus primarily on meaning. Ellis *et al.* (*op cit.*) claimed that Long's definition hints to a number of assumptions that can be viewed as criterial features: (1) *FonF* is *observable* and takes place interactionally (Ellis *et al.* deny the existence of any assumption that in parallel with this external *FonF* there is a necessary internal *FonF*

on the part of learners; they may or may not 'notice' the focal form); (2) focus is primarily on *communicative* language use; thus, (3) *FonF* is *incidental*, not preplanned (yet, they raised the point that researchers other than Long see it important to distinguish between a *FonF* that involves intentional learning and a *FonF* that takes place incidentally in trying to repair a communication breakdown); (4) *FonF* is necessarily occasional and *transitory*, otherwise focus on meaning would be sidestepped and no longer primary; (5) *FonF* is necessarily *broad-based* (i.e., many different forms may be attended to within a single lesson).

It might be interesting to note that differently from Long, Spada (1997) used *FFI* as a label targeting instructional types that are very much in keeping with L2 theories of the role of *consciousness* and *attention* (Schmidt, 1993; Sharwood Smith, 1993). These form-focused instructional options aid learners to shift their focal attention to target forms during L2 communication.

5.5.1. Types of Focus-on-Form Instruction

A number of L2 researchers held that communicative instruction should draw learners' attention to linguistic forms so as to build a well-balanced communicative competence (Swain, 1985; Lightbown and Spada, 1990; Doughty and Williams, 1998a; Long and Robinson, 1998). This approach has come into vogue notwithstanding the diversity in terminology use and practice of the approach. Doughty and Williams (1998a) argued that it is timely now to account for and clarify terminology and research issues relating to *FonF* studies, mainly because of the disagreement and diversity in handling such a construct.

5.5.1.1. Preemptive vs. Reactive FonF Instruction

Long and Robinson (1998) distinguished between *preemptive FonF* and *reactive FonF*. In a *preemptive* approach to *FonF*, exposure to and use of linguistic forms are determined in advance: The teacher or the learner attempts to attend to a linguistic form, with

the use of structured or enhanced input for example, because it might prove problematic later. The latter type comes into play when a learner uses a linguistic form that appears to be erroneous and a participant reacts to the error by requesting clarification (a kind of feedback), for example.

Long and Robinson (*ibid.*: 23) defined it in a way that highlights a *reactive, unplanned FonF*; it involves: "*an occasional shift in attention [during communication] to linguistic code features—by the teacher and/or one or more students—triggered by perceived problems with comprehension or production.*" Ellis *et al.* (*op cit.*), however, contended that preemptive *FonF* itself may take place as a *reaction* to some linguistic form that occurs during communication; therefore, the labels *preemptive* and *reactive* may not really qualify the situation. They also raised the issue of the extent to which it is possible to provide reactive *FonF* without unduly disturbing the flow of communication. Williams (1999), on her part, made the observation that preemptive *FonF* has largely missed attention on the part of researchers contrary to reactive *FonF* which has received most of their attention.

At any rate, a predominant concern among SLA theorists and researchers alike is the fact that the most effective cases of *FonF* result from learner *need* (Long, 1996; Long and Robinson, *op cit.*) and *learner-generated attention* to formal aspects of the L2 (Williams, 1999). Williams, for example, studied learner-initiated attention to form within a collaborative group work environment and considered *preemptive FonF*. Providing room for various kinds of *FonF* and *FonM* activities, she reported that the learners attended to form albeit not very often, and that these were mostly learners with higher proficiency levels.

5.5.1.2. Planned vs. Incidental FonF Instruction

Pushing further on the terminology pertinent to different types of formal instruction, and without losing sight of Long's (1991) definition, Ellis (2001) distinguished between *planned FonF* and *incidental FonF*. He defined *FonF* as "*any planned or incidental*

instructional activity that is intended to induce language learners to pay attention to linguistic form" (ibid.: 1-2). In the former type, FonF takes the form of prior planning on the part of the researcher or teacher (Leow, 2001; Fotos, 1994), giving room for 'intensive attention to preselected forms' (Ellis, 2001: 16). In the latter, learners attend, extensively, to a number of forms but none is preselected for subsequent instructional treatment (Loewen, 2003; Ellis, 2001; Williams, 2001; Ellis, Basturkmen, and Loewen, 2002).

Doughty and Williams (1998b), however, held that *FonF* is rather *planned* such that the teacher intentionally presents planned linguistic forms within the context of communicative activities. However, the learner engages with meaning before allocating attention to form; attention, here, should be drawn to form briefly and overtly. Besides, in disagreement with Long's, instead of its being broad-based or, say, *extensive*, *FonF* appears to be *intensive* involving repeated treatments to a single form.

Of cardinal importance is the fact that *incidental* in Ellis' terms should not be interpreted as the opposite of *planned*. On the contrary, incidental *FonF* instruction is equally planned for it takes place intentionally when there is an incidental communication breakdown. At this stage, we should note the fact that one feels lost when faced with labels that do not clearly stand for what they are supposed to. It should also be noted that by form, it is not meant only grammar, although most of *FonF* investigations have taken grammar forms as a target; rather, it stands for all formal aspects of the L2, be it grammar, spelling, pronunciation, intonation, or any aspect of the like.

5.5.1.3. Implicit vs. Explicit FonF Instruction: The Use of Feedback

Researchers such as DeKeyser (1998), Harley (1998), Lightbown (1998) defined *FonF* in broader terms; there is, according to them, room for, among other things, explicit positive / negative evidence and metalanguage. Spada (1997) accounted for the construct in both

implicit (e.g., use of recasts) and *explicit* terms (e.g., metalinguistic feedback, explicit correction, etc.).

Central to the discussion on *FonF*, then, is the notion of *feedback*. An important issue addressed by research studies, along the *FonF* perspective, is the positive role of *corrective negative feedback* and its impact on IL development (see Spada and Lightbown, 1993). In this perspective, *FonF* is seen as being *reactive* in approach (i.e., teacher provision of feedback in reaction to students' utterances that contain a linguistic error) and can take place either *implicitly* (e.g., the use of recasts) or *explicitly* (e.g., the use of explicit correction). In point of fact, feedback is said to be manifold. Lyster and Ranta (1997) identified six types of feedback: (1) *Explicit correction* (i.e. providing the student with the correct form and pointing out explicitly the incorrectness); (2) *Recasts* (i.e. implicit reformulation of all or part of a learner's utterance); (3) *Clarification requests* (i.e. using clarification questions such as "I beg your pardon?"); (4) *Metalanguage* (i.e. using language to comment on the well-formedness of the students' utterances); (5) *Repetition* (i.e. repeating the student's erroneous utterance while highlighting the error); (6) *Elicitation* (i.e. asking the students to reformulate an erroneous utterance). It is worth our while, however, to note that the most effective types of feedback conducive to repair, according to Lyster and Ranta's study (*ibid.*), were elicitation and clarification requests. This may be an indication that feedback, and thus *FonF* instruction, is optimal for IL development and L2 acquisition when it involves the learner actively in attending to form and initiating repair (see subsection next).

It is worthy to mention that such differences add welcome new data to the bulk of information at hand but as it is customary we share the view that operational definitions of these distinct types of *FonF*, and so labels, are urgently in order.

5.5.2. Learner-Generated Attention to Form

In parallel with the growing concern, among theorists, researchers and practitioners, for *FonF*, concern has also grown considerably with respect to developing learner centeredness in the process of learning – his role in drawing attention to form. Teaching follows the ways the learners learn: their needs, difficulties, dis/abilities; in this way, when instruction matches with learning, or when the noticing of L2 formal features is triggered by learners' need and/or attention, there is the likelihood of more room for acquisition to take place (see Leow, 1998).

Very much in keeping with the above is Ellis, Basturkmen, and Loewen's study (2001). It suggested that it is a more effective strategy to invite learners to ask their own questions about L2 form than having teachers ask their students questions they believe to be problematic. This is so perhaps because, as Ellis *et al.* (*ibid.*: 312) put it:

students attend much more closely to form when they are addressing problems they themselves have identified, partly because such problems reflect clear gaps in their linguistic competence. In contrast, the forms that teachers nominate for attention may not reflect actual gaps in the students' knowledge of the L2 or may not be perceived as relevant by the students even if they do represent gaps in their knowledge.

Learners are said to have a role in drawing attention to form (Williams, 1999). Williams addressed the importance of knowing the role learners might play in developing awareness of form, but she also warned against the potential danger of completely sidestepping the teacher and encouraging the learner to assume the learning responsibility alone (namely, the danger that they might unknowingly inevitably focus on what Long (1991) categorized as *FonFs*; that is, instead of its being *negotiation of meaning* following a communication breakdown, it might rather be *negotiation of form* for the sake of developing accuracy (see, for the distinction, Lyster, 1998; Lyster and Ranta, 1997), which is after all not the objective of SLA).

Williams mentioned, among other roles, that learners can decide on what they want or need to focus on, thus indicating their readiness to acquire a given form. When they make use of their IL features, they might become aware of 'holes' in their IL system (Swain, 1998), leading them to effect changes in their output. In this way, it is our contention in the present work that learner IL is likely to escape being stabilized and/or fossilized and, therefore, continues to work its way to native-like competence.

5.5.3. On Pedagogical Techniques: Reviewing Experimental Research

For reminder purposes, to the question 'does instruction make a difference?', the answer seems to be in the positive. On the horizon of such answer, however, looms another question: the question of whether type of instruction makes a difference i.e. whether some types effect more changes than others, or what kinds of *FonF* instruction are more effective (Ellis, 2001).

So far, *FonF* research has put theories of instructed SLA to the test by tracking the linguistic progress of different learners exposed to different instructional types or techniques (Lightbown and Spada, 1990; Spada and Lightbown, 1993; Doughty, 1991; Harley, 1998; Doughty and Varela, 1998; Day and Shapson, 2001; Cadierno, 1995; Norris and Ortega, 2000; Ellis, Basturkmen, and Loewen, 2001; Doughty, 2001). This explains very well why specific pedagogical techniques have been investigated and compared in these last decades. Good cases in point are rule-based instructional techniques such as feedback-based instruction through the use of such techniques as recasts, preemptive / reactive / metalinguistic feedback, interaction enhancement; explicit grammar instruction, implicit / inductive grammar teaching, consciousness-raising; input-based instruction which manifests in the use of processing input / instruction, flooding, input enhancement and the like; and practice-based instruction seen in input processing and output practice. Let us now review the bulk of the research into the effects of different types of second language instruction to date.

Lightbown and Spada (1990) observed the English spoken development of French elementary school students in Quebec receiving five months of intensive English as a second language (ESL) communicative instruction. They investigated the use of the progressive *-ing* form together with the adjective-noun order in noun phrases. They found that when *FonF* instruction was given within a communicative language teaching framework it contributed to the development of linguistic knowledge and improved command of the forms in question. Lightbown and Spada concluded that type of instruction, in effect, makes a difference on accuracy and that form-based communicative instruction, i.e. *FonF*, might well yield to more accurate linguistic proficiency and performance.

Similar results were found in a Canadian study conducted by Spada and Lightbown (1993) on the effects of *FFI* and corrective feedback on the development of several English structures by young (10–12-years-old) learners in an intensive ESL course. They supported their earlier conclusion (Lightbown and Spada, 1990) that when learners focus on form within a communicative context, they benefit and become more proficient, let alone the observation that this is true even for young learners, with cognitive abilities and metalinguistic awareness much more limited than adults’.

Another study on the very effects of type of instruction on L2 acquisition is Doughty’s (1991). She made research on twenty university ESL students to measure the effects of *meaning-based instruction*, *rule-based instruction* and *no instruction* on the acquisition of English relative clauses through reading texts. For clarity purposes, the former type bears upon *FonF* whereas the latter draws on *FonFs* (Long, 1991). Whereas the meaning-oriented group received instruction on semantic rephrasing and sentence clarification strategies, the rule-oriented group received explicit grammar instruction. In contrast, the control group read the text again and received no particular instruction. Both experimental groups performed significantly better than the control group. However, insofar as text comprehension is concerned, the meaning-oriented group was considerably better than the rule-oriented group.

This is to mean that formal instruction, in which saliency and frequency of the target form were enhanced, is optimal for L2 acquisition and so is type of instruction, or say *FonF*. The pedagogical implication may be that teachers can direct learners' attention to language forms effectively within meaning-oriented instruction if saliency and abundance of forms are made use of.

Harley (1998) conducted a study on *FonF* instruction and its effect on young L2 French immersion learners having as a target French gender. Both of the experimental group (i.e. those subjects receiving *FonF* instruction) and the control group (i.e. the one exposed to normal instruction) received a pre-test, a post-test immediately after five weeks of instruction and a delayed post-test six months after instruction took place. The experiment yielded results very much in keeping with the afore-mentioned, that participants focusing on form outperformed those having no focus and they even had a metalinguistic knowledge of French gender.

Within the same perspective, Sharwood Smith (1993) held that language learners' consciousness can be raised by using *enhanced input* which is possible by way of typographical modifications of target forms in a written passage. Leeman, Arteagoitia, Fridman and Doughty (1995) investigated the effects of *FonF* on the use of the Spanish past and imperfect in a communicative classroom. The *FonF* group worked on an enhanced version of a reading text which contained the verbs under study, underlined and colour-coded. It was shown that *input enhancement* bettered learners' Spanish accuracy in a content-based instructional context. That is, the effect on accuracy was significant with regard to the *FonF* group in the passage from pre-test to post-test, contrary to the purely communicative group i.e. the *FonM* group. Moreover, the former group was increasingly successful in using past forms in past environments. No wonder, again, type of instruction, namely *FonF*, does make a difference.

Doughty and Varela (1998) examined the effect of *FonF*, in a communicative context, on the acquisition of the simple past and the conditional past by 34 ESL content-based science class learners in a middle school. The science reports which the students wrote and presented in class included both target forms. Instruction targeted planned and unplanned use of the simple past and the conditional past. In the oral reports, the subjects in the *FonF* group (21 in number) achieved a significant increase in the use of the forms under study. Non-target-like forms, in their turn, got increasingly scarce on the ground in an especially significant way. As for the control group (13 subjects in number), no improvement took place.

Day and Shapson (2001) investigated the instructional effectiveness of *FonF* in Canadian French immersion programmes. They conducted an experiment on the use of the conditional. The study yielded findings indicating that the participants of the experimental group bettered their performance, and their gains were maintained in the post-tests. Again, this is consonant with the hypothesis that formal instruction affects positively L2 acquisition in general and learners' production accuracy in particular. As such, Day and Shapson confirmed that instruction does make a difference. They concluded that instruction which combines formal analytic with functional and communicative approaches, i.e. *FonF* instruction, is, indeed, optimal.

Processing instruction (PI), in its turn, is hypothesized to be conducive to L2 acquisition. The crux of the matter is that, when L2 learners process input, there is room for 'explicit intervention' in the processes and strategies they use (Cadierno, 1995: 190). Cadierno investigated the way L2 learners use and recognize the Spanish past tense by comparing PI (which attempts to alter the way learners process L2 input) to traditional instruction (i.e. the approach used in previous research, which involves the explanation and subsequent output manipulation and practice of grammatical forms) and to no focused instruction. Such an input-oriented approach to grammar instruction draws upon Terrell's (1991) *Natural Approach* which is an input-based communicative approach. In the study of

Cadierno, sixty one basic university Spanish L2 course learners were allocated to nine classes. Subjects exposed to PI dealt with past tense endings and were required to understand present and past sentences with no production being performed. Those working under traditional instruction were shown the regular past tense pattern and then the stem-changing past tense pattern, both followed with appropriate oral practice. The subjects of both conditions were instructed along two consecutive days. As concluded by Cadierno (1995: 190): "*instruction seems to be more beneficial when it is directed at altering how learners process input rather than when it is directed at altering how learners produce output.*" PI, therefore, helped learners, in the absence of past time adverbials, identify the past tense in context. According to Cadierno (*ibid.*), her findings are an indication that formal instruction is conducive to L2 acquisition and this holds especially for PI. Pedagogically speaking, and for reminder purposes, she pointed out that this is an implication to attempt to consider what type of formal instruction is more effective instead of attempting the question of whether formal instruction *per se* makes a difference at all.

Interaction in small groups is another area of L2 *FonF* research that has, so far, attracted considerable pedagogic interest. According to the *Interaction Hypothesis* (Long, 1996), negotiation of meaning, which results from communication breakdown, is optimal for acquisition. Interaction is said to foster acquisition for the reason that meaning negotiation will prompt linguistic modifications through *restructuring* (i.e. learners' modification or reorganization of their cognitive internal representations, or say their IL systems; see McLaughlin, 1987, 1990a) and, therefore, fill in the gaps in learners' IL; it will also provide language learners with the input they need. In negotiating meaning for comprehension, that is, learners are likely to *notice* L2 features and thus bring some change to their IL. This is in line with Schmidt's (1990) *Noticing Hypothesis* (see chapter 3), according to which awareness of specific L2 features in the input is a prerequisite for acquisition to take place. For noticing to occur, some researchers (e.g., Muranoi, 2000) focused on form through *interaction*

enhancement, a communicative instructional technique where interaction is enhanced through teacher feedback. Interaction enhancement is defined as:

a treatment that guides learners to focus on form by providing interactional modifications and leads learners to produce modified output within a problem-solving task (strategic interaction).

(Muranoi, 2000: 617)

The aim, then, is to develop in learners the strategy of noticing the mismatch between their IL and the L2 grammar, restructuring their hypotheses, and thus their IL system, and modifying the incorrect output. Muranoi sought to demonstrate the effect of such a pedagogical technique on L2 proficiency, namely the acquisition of English articles. The study showed positive effects on the learning of articles, and Muranoi pointed out that this lent strong support to previous claims about the efficacy of *FonF* instruction.

Ellis, Basturkmen, and Loewen (2001) studied learner *uptake*, a reactive response to the teacher's feedback, in incidental and transitory *FonF* within a communicative ESL context. This study demonstrated that the level of uptake was considerable in reactive *FonF* and when learners asked their own questions about form than when the focus was teacher-initiated (this is very much in keeping with Williams', 1999, who investigated learner-generated attention to form – see above). All this can take place without disturbing the classroom communicative flow.

To summarize, it has been demonstrated, all throughout the present sub-section, that recent research on instructed SLA has provided diverse examples of the positive influence that *FonF* instruction has on the development of learners' IL. Reviewing the research literature on the effects of *FonF* instruction on the acquisition of implicit knowledge, Ellis (2002), on his part, reported that seven out of eleven studies showed that it proved positive in both immediate and delayed post-tests. However, the results also suggested that the effect was not inevitable and that it was subject to a number of factors (see factors below). Our literature survey and that of Ellis seem, therefore, to meet with regard to the positive role of explicit

instruction. The positive role of implicit instruction, however, remains to be proved empirically. This is so because research has, apparently, failed to prove it (Ellis, 1993; White, 1998). Ellis (1993), for example, showed that extensive amounts of implicit instruction did not positively effect changes on the acquisition of some rules in Welsh. Ellis (2002: 234) pointed out that:

It seems reasonable to conclude that it is easier to teach explicit knowledge than implicit knowledge..... another and possibly more tenable route to implicit knowledge might be to use FFI to develop an explicit understanding of how problematic structures work and then allow the human categorization ability to build implicit knowledge through the input made available in unfocused tasks and naturalistic exposure. Perhaps we do not have to bother with trying to teach implicit knowledge directly.

It should be emphasized, nevertheless, that grammar explanation provided to the learner with no *practice* being made may yield relatively poor performance (VanPatten and Cadierno, 1993a & b; see also Chapter 7 ahead for recommendations, and Chapter 8 for an account on practice). It is our contention, thus, that activities promoting language practice (see Chapter 8 for an account on practice) are necessary for explicit input (knowledge) to become (implicit) intake (knowledge), and therefore for *stabilized* IL to *destabilize* and keep away from being *fossilized*. Still, there remain a great many issues to be investigated, namely how and why formal instruction in a communicative context impacts upon IL development (Muranoi, 2000).

5.5.4. Factors Interacting with FonF

It seems by now that the theoretical underpinnings of *FonF* are cognitive models of L2 acquisition (DeKeyser, 1998; R. Ellis, 1997; Gass, 1988; McLaughlin, 1987, 1990b; Schmidt, 1990; Skehan, 1998). Teacher *FonF* or feedback are said to help the learner notice the IL / L2 mismatch (Gass, 1997; Schmidt, 1990; Swain, 1985, 1995), the thing that triggers a cognitive parallel (Ellis, 1997) and, therefore, a modification of the current IL system along with the

production of modified output for hypothesis testing (Gass, 1988, 1997; Swain, 1985, 1995; Swain and Lapkin, 1995).

Be that as it may, and as the saying goes, language learners are not all of a kind; this chapter, however, might have given, so far, the reverse impression – the impression that they are. In spite of evidence to the contrary, several studies dealt with learners as one body in that they paid little attention to individual differences (see the studies reported by Williams, 1999). The present section sheds some light on such research interest: The way *FonF* instruction interacts with various other variables, namely developmental readiness (or, say, internal status of a learner's IL), the nature and complexity of target structures, age, aptitude, attitude, learning styles. Ellis (2002) maintained that it is difficult to bring the discussion on the variables that have an impact on success to a consensus; in spite of this, his analysis of the eleven studies, he assured, is suggestive of what these factors might be. The following are some of the most important variables believed – given the bulk of research data so far – to be at work in *FonF* instruction.

5.5.4.1. Developmental Readiness and Natural Orders of Acquisition

For reminder purposes, the weak interface position holds that learner L2 explicit knowledge can be converted to implicit. For conversion to hold, instruction should be properly *timed* for input features that are *developmentally constrained*. This is very much explained in the light of observation (see, for example, Krashen, 1981; Pienemann, 1988) showing that learners develop a L2 while following a *natural order* of acquisition. Particular features of a L2, that is, develop according to such order which is subject to psychological constraints rooted in Universal Grammar.

Krashen (1981) pointed out that there is a *natural order* in SLA just as there is a sequence in the way children acquire their L1, with certain grammatical morphemes being

acquired before others. Krashen (*ibid.*: 59) presented the following average order of morpheme acquisition.

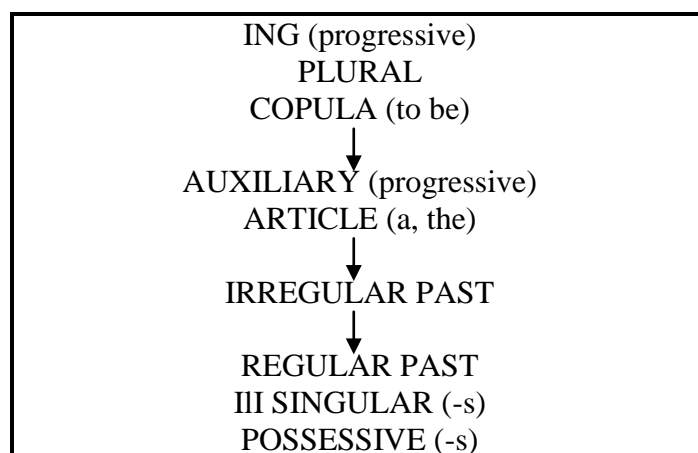


Figure 5.1: Proposed Average Order of Acquisition of Grammatical Morphemes for English as a Second Language (Children and Adults)

Pienemann (1988) held that *FonF* instruction is effective provided it matches the learner's stage of linguistic development. That developmentally constrained structures have to match the learner's stage of acquisition was also stressed by Ellis (1994a) who claimed that only those structures that are free from developmental constraints can be successfully taught. Given that this is so, it follows that *timing* instruction is likely to be optimal; *timed instruction* may foster the acquisition process whereas the reverse situation may well obstruct the contribution of explicit knowledge to such process. The latter situation, in the spirit of the present work, may even invite *fossilization* to centre stage.

In fact, the notion of *developmental readiness* is very frequent in the interface debate, and its importance has been acknowledged in many *FonF* studies (see Mackey and Philp, 1998; Spada and Lightbown, 1993). *Developmental readiness*, seen in learner proficiency level, is one of the main differences among L2 learners. Research work dealing with negotiation, feedback, pushed output or else should, therefore, relate them in a way or another to the proficiency variable (see Williams, 1999).

One factor that may be effective in calling learner attention to form then may well be *developmental readiness* (see VanPatten, 1994; Williams, 1999). Nevertheless, VanPatten pointed out that only if learners do not exhaust their attentional focus in referential meaning processing – which after all is said to take place before syntactic processing (Gass, 1997) – will they be able to attend to form.

The above may be understood as the lighter side of the present factor in the way it interacts with *FonF* instruction; turning our attention now to the darker side, it is worthwhile noting that natural orders of acquisition may lessen if not limit the value of *FonF* instruction unless the learner is responsive to it. Responsiveness does not take place, according to Krashen (1981), if the input is not made comprehensible: This is to say simply missing the learner's stage of development. For Krashen, if a learner is at stage "i", providing him with comprehensible input in the form of "i+1" will lead to acquisition. It follows that the input must be continuously organised, responding to learner language needs and the respective order attained. *FonF* instruction might, then, be effective if the teacher comes to know 'when' to teach 'what' and in which order, according to *developmental readiness* manifest in learner proficiency level.

Be that as it may, not much, in fact, is known about the language forms which develop in a fixed order (Ellis, 1997; DeKeyser, 1998). Besides, DeKeyser underestimated the effect of *developmental readiness* by contesting the methodology of studies on natural orders. In such studies, there is, more often than not, no control group, and the operationalization of the instruction is put into doubt. Besides, instead of psychological constraints being the cause of natural orders, his contention as well as that of his co-author (Goldschneider and DeKeyser, 2001) was that it is rather frequency, salience and other factors in the input which define those orders of acquisition. The implication may be that instruction is only effective if it handles the input in such a way (maybe in terms of such causal variables as frequency, salience and other types of *FonF*) that L2 learners can acquire it.

Pedagogically speaking, Ellis is keen on the idea of designing a structural syllabus which "consists of a list of grammatical items, usually arranged in the order in which they are to be taught" (1997: 135). He believed that this is a good tool for raising learners' grammar consciousness and facilitating acquisition. At the same time, however, Ellis acknowledged the fact that a structural syllabus is still suffering from the same problems as those discussed in the 1970's and 1980's. Krashen, contrariwise, is against the idea of wasting time teaching grammar or matching the learner's exact stage of language development for, according to him, the mismatch is highly probable. Individual learners may go through the stages more or less quickly, and indeed some will never reach the final stage (think of fossilization where the learner makes no further progress). In this perspective, any further investment in teaching the L2 will not pay off. Instead, and for reminder purposes, Krashen (1981) insisted that teacher input be comprehensible and that learners be exposed both intensively and extensively to rich input that is not away from their current stage of language development (Krashen, 1985). Of course, Krashen's claim has been put on the offensive; how do we know whether or not a form has been acquired? A learner might happen to use a specific grammatical form without really having acquired it. In fact, Krashen himself hinted to this point.

5.5.4.2. The type of target structure

The type of target grammar structures is likely to be a potentially hindering or fostering factor for effective *FonF* instruction. Ellis (2002: 231) pointed out that:

FFI would seem to have a better chance of success if it is directed at simple morphological features (e.g., verb forms, articles, or formulaic items) than at more complex syntactic structures involving permutations of word order (e.g., word order involving Spanish clitic pronouns and passive sentences). Perhaps FFI succeeds for simple morphological features because it makes such forms salient to the learner and because they can be processed; it is less successful in the case of complex syntactic features because these require more complex processing operations that can only be mastered sequentially over a long period of time, as proposed by Pienemann (1989).

He extended the factor of type of target grammar structure, which is perhaps of equal importance, to the availability of the target structure in non-instructional input and the length of the treatment. However, Muranoi (2000) and Mackey (1999) suggested results pointing to the reverse situation – a situation where *FonF* proved successful in spite of the limited treatment and the complexity of the structure in question. Still, Ellis (2002) suggested that the secret behind such success may be explained in terms of the availability of the target complex structures in non-instructional input i.e. outside *FonF* settings.

It might well be the case that the effectiveness of explicit knowledge in the development of its implicit counterpart varies in degree depending on the grammar structures under study. It is not clear yet which aspects of a rule of grammar would cause such differences. Be that as it may, a number of variables are said to possibly impact on the learnability of a given structure. As afore-mentioned, developmental readiness is very much likely to be at play. Second, research (see those reviewed by Ellis, 2002) suggests that the effectiveness of instruction correlates with the degree of structure complexity. Complexity is especially discussed by Krashen (1981) who claimed that complex structures can only be learned implicitly, contrary to simple rules that can be taught explicitly.

The discussion of complexity brings us to discussion of its types; in fact, it is said to be twofold: Formal and functional. *Formally* complex structures bear upon complex processing operations whereas *functionally* complex structures are those whose form-function relationship is opaque (DeKeyser, 1998). DeKeyser, however, acknowledged that this is not all that clear-cut. As a good case in point, whereas Krashen held that the third person singular ("-s") is *formally* simple, Ellis claimed the reverse because of subject-verb agreement in number – an operation that is complex in processing. The same example is also *functionally* complex according to DeKeyser because this same morpheme can express different semantic concepts when put in different contexts; these are, namely, the present tense, the singular and the third person.

Another variable possibly impacting on structure learnability, and hence the effectiveness of *FonF* instruction, may be the contrast between the learner's L1 and the L2 to be learned. It seems that there are two types of transfer (see Chapter 1 in the present work): When positive there is facilitation of learning, yet when negative there is interference resulting in errors. For reminder purposes, positive transfer takes place when L1 *matches* with L2. As such, instruction is likely to be successful. Negative transfer occurs where there is a *mismatch* between the mother tongue and the target language. That is to say, structurally different areas of the two languages would result, as claimed by the Contrastive Analysis Hypothesis (see Chapter 1), in interference. In such a situation, L2 instruction might be less effective, resulting therefore in a difficulty of the L2 structure. In the same vein, VanPatten (1996) urged the need to instruct learners about possible mismatches between their default processing strategies, more often than not based on their L1, and those strategies needed to process L2 input effectively; this implies instructing them about when these match too.

In brief, we may bring our discussion of target structure type to its conclusion by pointing out that different researchers do not, in fact, agree on what exactly makes a given structure complex. Besides, the effectiveness of *FonF* instruction seems not to hold universally to all areas of L2 grammar. There may be, therefore, an interface between explicit and implicit knowledge at least for some aspects of L2 grammar. This should not blind us, however, to consider other variables that are brought to bear on the effectiveness of *FonF* instruction.

5.5.4.3. Individual differences

Apart from the notion of developmental readiness and the nature of the input itself or the target structure to be taught, some factors related to learners' individual differences are believed to be of a certain effect. Some account seems therefore in order.

5.5.4.3.1. Age

It goes without saying that language learners learn in different ways, and as such *FonF*-type-of-instruction may be effective for some but not for others, much in the same way that it is believed that grammar instruction is rather workable for adults than for children. According to the Fundamental Difference Hypothesis (Bley-Vroman, 1988), whereas young learners can learn a L2 implicitly, adult learners may require explicit knowledge to be successful in the learning process. Dulay and Burt (1973) pointed out that children – contrary to adults – should not be taught grammar simply because a natural communicative environment is likely to activate their learning processes. Granting that this is indeed the case, it would seem that the learner's *age* is an important factor in the acquisition of explicit knowledge. Dulay and Burt, however, do not explain why such an environment may be effective for children in the exclusion of adults.

DeKeyser (2000) demonstrated that young learners learning a L2 outperformed adult learners. Older learners were equally successful only if they had high verbal aptitude. This led DeKeyser to point out that maturational change affects cognitive functioning, causing a loss of the ability to learn implicitly, or to an increased dependence on explicit learning abilities, or both.

Reviewing the research, Ellis (2002) demonstrated that *FonF* instruction is said to affect the acquisition of implicit knowledge in all four studies where young learners are involved. He maintained, though, that this may be due to other characteristics of the studies reported rather than the subjects' age. Ellis (2002: 231) noted that :

In all four studies the treatment provided was extensive, and in three of them the grammatical target was a relatively simple morphological feature. In the one study where the target structure was a complex syntactic feature (Day and Shapson, 1991), FFI had no effect on the learners' oral production.

Bialystok (1994a) maintained that learners can learn explicit knowledge at any age. Learners' ability to learn explicit knowledge is rather constrained by factors of a different

order; these may relate to individual differences in the analytical skills required for memorization, induction, or deduction processes. Careful instruction, nonetheless, might help learners learn explicit knowledge extensively, though some happen to be of a different mind (e.g., Krashen, 1982).

5.5.4.3.2. The affective filter

The causative variables in L2 acquisition, according to Krashen, are the amount of comprehensible input provided and the strength of the *affective filter* which facilitates or impedes intake i.e. how open is the acquirer to input? Krashen claimed that: "*All other factors thought to encourage or cause second language acquisition work only when they contribute to comprehensible input and/or a low affective filter*" (1985: 4).

For Krashen (1982), affective variables do bear on success or failure in language learning: (1) Generally speaking, motivated learners do better in language learning; (2) self-confident learners also tend to perform better; (3) low anxiety leads learners to learn more. According to him, these motivational and attitudinal factors bear directly on acquisition. Learners with positive attitudes to SLA will be open to the input and seek to obtain more of it, while having a lower or weaker filter.

In the spirit of the *Affective Filter Hypothesis*, the teacher should encourage low filters by seeking low anxiety among learners, and keeping them 'off the defensive' (1987). For this situation to obtain, he should focus on communication of ideas – whose defining characteristics are *interest* and *comprehensibility* – not form. Attempting to correct every error is a sure way of raising the affective filter. Error correction puts learners 'on the defensive'; it makes them develop avoidance strategies. Our attitudes towards errors may build, as well, anxiety; the cure for this is simply to try and lower the filter.

According to Krashen (1981), the effect of affect is strong. Motivational and attitudinal considerations precede linguistic considerations; as such, even when all requirements for

intake are met, acquisition is unlikely to occur if the affective filter is up: All or part of input is filtered out. This factor sheds some light on just why a learner receives a great quantity of comprehensible input yet *fossilizes* or stops well short of the native speaker competence. The affective filter, that is, is the principal source of individual differences in language acquisition.

5.5.4.3.3. The Monitor

Learners can use explicit metalinguistic knowledge when 'dysfluency' shows up; learners, that is, monitor their erroneous output when they have not yet acquired the implicit fluent knowledge (N. Ellis, 2005). That they may differ with respect to their ability to use explicit knowledge for acquiring implicit knowledge has not inspired the interface debate very much. However, Krashen addressed the issue explicitly (1981): He related individual variation in L2 performance to differences between learners in their ability to use consciously learned knowledge as a *Monitor*. He insisted on the need to encourage optimal Monitor use to raise accuracy if communication is safe. He pointed out that some language learners manage to monitor their output effectively and at appropriate moments, whereas others tend to overuse or underuse their explicit knowledge, depending on whether learners are 'self-conscious' or 'outgoing'. The trouble with the overuse of the *Monitor* is that it leads to a hesitant style of speaking and inattention to others' speech.

5.5.4.3.4. Aptitude

For Krashen, contrary to attitude which predicts acquisition – or, say, implicit knowledge – *aptitude* predicts learning – in the-so-far-used terms, explicit knowledge. A positive attitude helps lower learners' affective filter, giving room thus for the process of acquisition to take place. *Aptitude* rather taps the ability to learn explicitly. Explicit learning, it must be noted, is facilitated by such cognitive resources as memory, attention and processing speed (Robinson, 2002) which are said to underlie the construct of aptitude. In this

way, differences between individual learners are due to differences in their reliance on such resources. These cognitive resources may, also, affect attitude in that low aptitude may result in negative attitudes. However, it is informative to note that some of these resources may be subject to maturation.

There are, at least, four types of *aptitude*, as a construct, which bear upon different settings of L2 learning (Robinson, 2002): (1) aptitude for the ability to learn explicitly, (2) aptitude for *FonF* by way of recasts, (3) aptitude for incidental learning through oral content, and (4) aptitude for incidental learning via written passage. All of these draw, of course, on a number of cognitive resources.

Skehan (1998) discussed *aptitude* in relation to learning style. Such a construct is, then, better seen in the way learners make use of analysis and memory. Some learners, that is, have a natural tendency toward analytic processing, leading to rule-based representations of language; others tend rather to use memory resources, a tendency resulting in a large store of exemplars.

In a nutshell, some learners may be at an advantage in learning a L2 whereas some may be at a disadvantage. This is explained in the light of notions of natural orders, developmental readiness, structure complexity and a number of individual differences that are brought to bear on SLA in general and *FonF* instruction in particular.

Conclusion

Language teaching has long been subject to change especially because of the dissatisfaction with existing methods. The bulk of the research has, then, focused on finding alternative methods and techniques to integrate formal instruction within a communicative context, departing from the observation that some L2 forms never reach target-like accuracy in spite of years of purely communicative interaction. Being at the very heart of the debate in SLA, formal instruction, in point of fact, has long been subject to controversy and speculation

among researchers. So far, there seems to be no easy agreement but there is, as has been demonstrated all along the present chapter, ample evidence that instruction does make a difference in SLA (e.g., Long, 1983). This is very much important as a finding. Equally important is the finding that type of formal instruction is relatively effective.

The efficacy of L2 instruction addresses the issue of the interface. As has been documented, central to the interface debate is the organization of language knowledge into explicit and implicit and the possible conversions between the two types of L2 knowledge. Thus far, we have reviewed a number of experimental research studies covering different pedagogical techniques. Each research study investigated the effectiveness of *FonF* instruction, highlighting, thus, the type that is most effective. Indeed, research should go even so far as to move to the questions how and why L2 instruction coupled with communicative language use promote IL development (Muranoi 2000; Cadierno, 1995). Yet again, as Norris and Ortega (2000: 422) put it:

Before the field can begin to systematically address the complex interactions of this developing research agenda, it is imperative to evaluate the findings that have emerged from L2 type-of-instruction studies to date.

The practical import of explicit knowledge is determined by the organisation of knowledge together with the concomitant learning processes. Some learners are very likely to be advantageous over others in SLA, respectively; thus, the effect of *FonF* may be hindered or fostered. It has been demonstrated that IL development is affected by such factors as target structure complexity and natural orders of acquisition; in this way, instruction is optimal only when it meets the learners' stage of L2 development. Besides, there are individual differences between L2 learners, the thing that makes them differ in their actual exploitation of explicit knowledge. How these factors interact is, indeed, what future inquiry should be after and is, therefore, very much in order.

CHAPTER SIX:

The Effect of Focus-on-Form Instruction on the Learning of English Parallel Structures: The Experiment

Introduction

The goal of this chapter is to compare the value of different types of instruction and to find out how *type of instruction* (focus-on-form instruction, focus-on-meaning instruction, and No-Instruction) and *progress over time* (T0, T1, and T2, corresponding, respectively, to the pre-test, immediate post-test and delayed post-test) interact. In particular, the chapter aims, through the conducted experiment, to measure the extent to which intake of English parallel structures is affected by a *preemptive* and *reactive focus-on-form* treatment – that is to investigate the effect of focus-on-form treatment on the development of explicit knowledge in order to free *stabilized* forms and boost L2 acquisition. Progress in the use of the target structures is measured through the use of the *untimed grammaticality judgement task* – which is said to measure explicit knowledge – administered immediately after instruction and delayed two months thereafter.

The present study approaches L2 proficiency development from a cognitive perspective in a focus-on-form framework. It investigates the way in which presenting input under *enhancement* conditions along with the use of feedback could affect intake of target structures. Let it be recalled that it is our contention that directing learners' *attention* to formal aspects of the input, and promoting *noticing* through saliency of input aids acquisition thereof. In fact, a variety of input enhancement techniques whose aim is to affect intake by drawing learners' attention to L2 forms in the input are used in research (see, for example, Sharwood Smith 1993; Doughty, 1991, for textual enhancement; White, 1998, for frequency of the target form; Spada and Lightbown, 1993, for explicit / implicit error correction; Fotos, 1993, for metalinguistic explanation).

The chapter is outlined as follows. The research questions (along with the hypotheses) and the research design are presented below. In particular, account is made of the structures under study, the selected sample and the parent population, the instruction, the instruments utilized, the scoring procedure and the analysis. Then, the results are expounded together with a discussion. As for the implications and recommendations for future research, they are left for the subsequent chapter.

6.1. Research Questions

For reminder purposes, in order for us to determine the role of *focus-on-form* instruction in the acquisition of English parallel structures, five research questions are put forward:

1. Does instruction make a difference?
2. Do differences in the types of instructional conditions lead to differences in the short-term learning of English parallel structures?
3. Is *focus-on-form* instruction, both preemptive and reactive, through input enhancement and consciousness-raising more optimal than *focus-on-meaning* instruction in promoting L2 forms in the short term?
4. Do different types of instruction have different effects in the long run?
5. Will the *focus-on-form* short-term gains be maintained in the long term?

Having advanced the research questions, let us specify the comparisons to be conducted by translating the foregoing research questions into working hypotheses.

6.2. Hypotheses

This study aims to investigate whether a given type of instruction could impact on the development of L2 proficiency, as measured by explicit knowledge tests, and thus destabilize or free stabilized L2 forms to escape putative fossilization.

Hypothesis 1

I hypothesize that instruction would make a difference in that the *focus-on-form* and *focus-on-meaning* instructed groups would have differential effects on the short-term-learning of parallel structures i.e. the *focus-on-form* instructed subjects who receive a focused treatment and the *focus-on-meaning* subjects would outperform the uninstructed participants of the control group – those who receive no focused instructional treatment.

The *null hypothesis* is that instruction would not make a difference or that there would be no difference in the short-term learning of parallel grammar structures between the selected groups.

Hypothesis 2

I hypothesize that different types of instructional conditions would have differential effects on the short-term learning of parallel structures.

The *null hypothesis* is that different types of instructional conditions would not yield to different effects on the learning of parallel structures in the short-term, or if they do it would be due to pure chance factors.

Hypothesis 3

I hypothesize that in the short-term, the *focus-on-form* group who receive a form-focused treatment would outperform the *focus-on-meaning* group who receive a purely meaning-focused treatment i.e. raising learners' awareness of specific L2 forms would facilitate acquisition.

The *null hypothesis* is that the *focus-on-form* group would not be outperforming in the short-term learning of parallel grammar structures, or if it does it would not be due to the treatment itself, but the result of pure chance factors.

Hypothesis 4

I hypothesize that short-term gains would be maintained in the long-term and higher for the *focus-on-form* group than for the *focus-on-meaning* group.

The *null hypothesis* is that the gains of instruction would not be maintained in the long-term nor be higher for the *focus-on-form* group than for the *focus-on-meaning* group.

6.3. The Sample

The subject sample of this study consists of 78 third year LMD university English language learners from the University Centre of Mila, recruited all from the parent population – which itself consists of three groups overall; three intact classes, that is, are randomly assigned to different groups. Only the participants from the three classes who are present in all temporal phases of the experiment are accounted for. It may be informative to know also some background information about our sample, the fact that, on the whole, they are between 22 and 23 years of age, having completed 8 years of English study across the three educational cycles – namely, the middle school, the secondary school, and the university cycles. Of note, also, the participants are informed that the instruction is part of a research experiment.

Now, why third years *per se*? Because this is a study of stabilized – not to say putatively fossilized – forms, it is crucial that participants be familiar with the target structures, structures they already met, we know for sure, in the written expression module in their second year. That is, the participants are selected on the basis of having knowledge of the target structures; because of this, we have the impression that the test is within their reach. Notwithstanding, a small scale but intensive pilot study is first conducted in order to determine whether the selected structures are emerging or did indeed emerge in the interlanguage (IL, henceforth) of our sample.

Three groups are compared: two experimental groups and one control group. Two intact classes are randomly selected by the researcher as the experimental groups: A *focus-on-form* group and a *focus-on-meaning* group, respectively. Subjects in the former condition are exposed to focused input, targeting parallel grammatical structures; in the latter condition, subjects are given input whose mere focus is negotiation of meaning and communication.

To test whether or not instruction makes a difference, an intact class is randomly selected by the researcher as the control group. It is exposed to its normal instruction according to its prescribed syllabus. It does not receive any particular focused instructional treatment. It is used so as to find out whether L2 learners make their way to native-like grammatical knowledge without instruction specifically focused on the targeted structures. Given that this is so, the hypothetical differential effect of focused instruction is checked against unfocused instruction.

6.4. The Structures

The present study sets out to investigate whether *focus-on-form* instruction affects L2 learning of parallel grammatical structures. First, why targeting grammar, at all? We choose grammar because throughout the literature, it is clearly making a come back, or being more and more in vogue though in a different fashion; as the saying goes, 'there's a war against grammar', not to mention the fact that the debate over the nature of language and language teaching/learning has long centred around grammar, whether it should be taught or withheld, and how it should be taught at all. Besides, learners overwhelmingly choose to focus on lexical rather than grammatical properties of language (Williams, 1999), so we want to compensate for that.

Now, why parallelism? After 18 years, or so, of teaching written expression, it seems that the best of students, those who *rarely* show symptomatic properties of say *stabilized* IL, suffer still from this structural problem i.e. the *rarity* consists exactly of this seemingly easy

but unparallel structural practice. It should be worth our while to note that some structures are functionally simple and morphologic, while some are functionally complex and syntactic (see Ellis, 1997, for some elaboration).

Parallelism is taught for the subjects in their second year and practised both in a guided and a free way. Parallelism (also called parallel structures) may be defined as the repetition of a grammatical form within a sentence i.e. by making each compared item or construction in a sentence follow the same grammatical pattern one creates a *parallel* construction. To state it another way, the spirit of parallel constructions requires that expressions similar in content and function should be formally similar as well. If two or more ideas are parallel, they are easier to make sense of as long as they are parallel in grammatical form, for the likeness of grammar form helps the reader to notice more readily the likeness of content.

Parallelism is, of course, both important and necessary in one's writing. Among the advantages of parallel sentences, there is the fact that they serve coherence and grammaticality purposes. They also are impressive and pleasing to hear, let alone being economical i.e. using one item of a sentence to serve three or more others. Parallelism, in addition, foregrounds meaning by revealing connections between words in various constructions (Kane, 2000).

For a fair comparison to obtain with regard to our treatment groups, exposure to the target parallel structures should be kept equal. In this perspective, attempt is made to keep the amount and nature of the instructional input the same. That is, input in the experimental conditions is matched, such that the same texts are used in either instructional treatment. The only difference is in focus of the instruction and thus nature or type of the follow-up activities. This is so because *focus-on-form* instruction and *focus-on-meaning* instruction are very different in nature and should be developed differently.

6.5. The Instruction

The effect of different types of instruction is evaluated: these are respectively *focus-on-form* (henceforth, FonF) instruction and *focus-on-meaning* (FonM, henceforth) instruction (adding regular or no specific instruction); in this perspective, instruction is operationalized as a *three-level between-subjects factor*.

Instruction takes place right after the pre-test, in the same week. Subjects of both experimental groups receive four sessions of instructional treatment targeting parallel grammatical structures, with sixty-minutes each, over a period of time equalling four sequential weeks (i.e. a full month), on the same day in the regular class hours. It may be important to state that instruction is given by the researcher who happens to be their teacher. Progress or say the grammatical development of the participants is followed over a period of more than three months (see below), translating all in all to almost four months as such. Of note, the above-stated experimental treatments reflect, indeed, two approaches to teaching parallel grammatical structures with different foci. As regards the control group, it does not receive any treatment. Participants therein follow their regular syllabus with no additional input specifically focused on target forms.

6.5.1. The Focus-on-Form Instructed Group

Experimental treatments take place three days after the pre-test. Subjects in the *FonF* experimental group receive their treatment which consists of formal instruction on, and consciousness-raising of, the target linguistic structures. Positive evidence is made more salient (*preemptive FonF*), and essential negative evidence (*reactive FonF*) is provided.

In this instructed condition, the participants receive focused input rich in parallel forms, where instruction follows roughly the spirit of the PPP default model (i.e. the presentation, practice, and production stages). The *FonF* subjects are first presented with an overview of parallelism along with examples through formal instruction, followed with

practice activities. Then, in subsequent sessions, they receive a reading on three themes (*choosing a career, cloud types, and diet and exercise* – taken from Folse, Solomon, and Smith-Palinkas, 2008: 248-251; see Appendix I) with comprehension questions: They are required to answer the questions such that they use the forms under focus. All along the instruction, they are exposed to a *preemptive FonF* with intensive attention to preselected forms while processing input for meaning. Target forms are *enhanced* typographically, through the reading text, by way of underlining and the use of bold characters to draw learners' attention to both meaning and form at the same time. For reminder purposes, grammar consciousness-raising tasks in general and (*preemptive*) enhancement in particular are claimed to foster learners' *noticing* of targeted structures and to facilitate their acquisition. Insofar as the Noticing Hypothesis is concerned, noticing of specific linguistic forms in the input is the necessary and sufficient condition for language learning to occur (Schmidt, 1990).

The concomitant training activities include sentence correction, gap-filling, and sentence completion. The sentence correction activity includes a number of erroneous items where respondents are required to rewrite them by making them parallel in structure; the gap-filling task is meant to guide the subjects in the practice of parallelism by requiring them to provide the appropriate parallel item; the sentence completion task requires subjects to supply a missing parallel structure. The tasks are an attempt on the part of the researcher to focus the participants' attention on the use of parallelism in English. This is coupled with negotiation of meaning; indeed, learner's attention is drawn to the structures under study while negotiating meaning. Grammar instruction and meaning-based interaction merge through grammar consciousness-raising tasks. The researcher hopes that participants would develop knowledge and awareness of the target formal features for further communicative use.

Subjects are informed, right from the outset, to pay attention to the way parallel structures are used. All along the experimental training – where positive evidence is abundant – negative evidence for incorrect realizations of parallelism is provided for the subjects in the

form of (*reactive*) corrective feedback. That is, during the focused tasks, immediate feedback is provided to help learners *notice* the formal features of the target language – the use of parallel structures, respectively. For reminder purposes, where some researchers consider *noticing* to be an aid to L2 acquisition, some go even so far as to consider it as a necessary condition for language learning to bear (Schmidt, 1990). Feedback is often used explicitly (by restating the rule, for example) specially in beginning stages of the instruction, but in later stages the implicit type is also made use of in the form of recasts and clarification requests, notably (see Appendix I for the *FonF* lesson plan, and the accompanying reading passages as well as activities).

At this very stage, a terminological note might well be warranted. The terms *explicit instruction* and *implicit instruction* refer to two instructional approaches where focus on, or attention to, L2 form is made either overtly or covertly. *Explicit FonF instruction* takes place when there is explanation of rules or when learners are prompted to infer rules; in sharp contrast, when no reference is made to rules, *implicit FonF instruction* manifests (Norris and Ortega, 2000). As a good case in point, the technique of *input enhancement* through which L2 forms are highlighted by way of textual or, say, typographical enhancement whose purpose is to raise learners' consciousness of target forms goes under the umbrella of implicit *FonF* instruction; by contrast, traditional teacher-fronted rule explanation is exemplary of explicit instruction.

6.5.2. The Focus-on-Meaning Instructed Group

Insofar as the *FonM* group is concerned, instruction is essentially meaning-based in that focus is on communication of meaningful messages, so no particular attention is called for the forms used to negotiate meaning. Indeed, the same texts used in the first instructed condition are given to the *FonM* group, except that the *FonF* group receives an *enhanced* version. Stated otherwise, the second instructional condition is meant to direct the subjects to

process input along with its concomitant target structures for meaning and there is no apparent effort on the part of the researcher to put the inherent target forms under the subjects' focal attention or *noticing*; be that as it may, no mention of this, whatsoever, is made to the participants. In order for us to provide a certain balance between the two conditions, however, the same reading texts are used including abundantly the same target forms.

The lessons are centred around the same three themes as above (*choosing a career*, *cloud types*, and *diet and exercise* – see Appendix II) to ensure that the subjects process the same input with no privilege in favour of one treatment group or another, the only difference being in the instructional approach utilized i.e. in the input being form-focused or otherwise. The reading texts are followed with comprehension questions whose aim is negotiation of meaning and communication of ideas; it is ultimately hoped to find out whether the parallel forms inherent abundantly in the passages could be processed as intake by the subjects. The participants are, then, guided through a number of unfocused activities related mostly to the same theme. Here also, they are required to speak out their minds and negotiate meaning with no due or direct attention attributed to the forms present therein (see Appendix II for the *FonM* lesson plan and constituent activities).

As for feedback, it is provided by the instructor implicitly, only when necessary and in case of a communication breakdown, mainly in the form of recasts with no attempt on his part to draw attention to the rules underlying the erroneous forms or to give explanations of the mistakes.

6.5.3. The Control Group

To test whether or not instruction makes a difference, the present study uses a control group, receiving no particular instructional treatment. In this way, the test results of the control group would be compared to the *FonF* and *FonM* conditions so as to find out whether the subjects could develop L2 grammatical knowledge without instruction specifically

focused on, or including, the parallel forms. In this way too, the effect of receiving input, focused or unfocused, could be measured. For so doing, an intact class is randomly selected by the researcher as the control group – though it can be rightly argued that true randomization in classroom research studies is scarce on the ground (Norris and Ortega, 2000). This group follows its normal instruction according to its prescribed syllabus. It differs from the experimental groups in that no extra input is provided, meaning it does not receive any of the research treatments – be that form-focused or meaning-focused – yet all other conditions are kept equal, namely the tests administration.

6.6. Research Instruments

6.6.1. The Pilot Test

Ten days before administering the pre-test, a small scale but intensive pilot study is conducted on twelve students who are not included in the final study in order to assess the instruments utilized – namely, the three administered tests and to find out whether the selected structures are characteristic of learners' IL i.e. whether they are emerging or did indeed emerge in their IL system. The pilot test (see Appendix III) aims also at piloting the instructions given to the respective subjects. If the instructions are not clear, that is, the potential danger is the fact that the results may not be valid (Hatch, 1991). Some researchers happen to discuss findings *post hoc* only to see whether or not test-takers could have done the task accurately had they understood clearly the test directions. Pushing further on validity issues, the test is anonymous, but if it were otherwise and if respondents cared for anonymity, we could of right question the validity of the obtained data (Hatch, *ibid.*).

Upon analysis, nothing is apparently attractive, meaning that the test is both unambiguous and within the respondents' reach (see Appendix VII). Because the participants are selected on the basis of *having* background knowledge of the target structures, they seemingly are comfortable with the test items. Emergence of the forms under study is then,

relatively, the case with regard to our sample. However, it should be informative to caution the reader that given the insufficiency of the sample size and the exploratory nature of the pilot test, we are far from making causal claims at this stage (see Hatch, *ibid.*).

Three similar but in no way identical tests are constructed after conducting the pilot test; these make up the pre-test, the immediate post-test, and the delayed post-test. All administered tests consist of an untimed Grammaticality Judgement Test.

6.6.2. The Untimed Grammaticality Judgement Test

The development of L2 grammatical parallel structures is measured by means of a paper-and-pencil *untimed Grammaticality Judgement Test (GJT)*, targeting explicit knowledge of the structures under study (see Appendices III, IV, V & VI).

As a matter of fact, *GJTs* require the L2 learner to indicate whether a particular item is grammatically correct or incorrect. The test-takers are given a number of sentences containing correct and incorrect realizations of the target structure, while being instructed to identify which is which. Eight sentence items are correct and eight incorrect, giving a total of sixteen sentences. There is no time pressure, meaning the respondents do not complete the tests under time constraints; they work rather in their own time.

Why the *untimed GJT*? A number of considerations have motivated the choice for its use. One reason may be the fact that the *untimed GJT* is designed to measure explicit knowledge. Explicit knowledge tests, by definition, call on one's explicit knowledge of a particular rule of grammar, prompt its use as a monitor, allow the test-taker some processing time, and focus attention on form. A second reason is that comprehension usually takes place before production and the *GJT* requires more passive grammar knowledge in comparison with other tests. One may conjecture a guess: Why not test oral proficiency? The reason is that instruction is believed to affect written, before oral, proficiency; oral language use, being more time-constrained, requires higher degrees of automatization (Bialystok, 1989; 1979),

and where a linguistic form is susceptible to temporary stabilization or putative fossilization one needs a longitudinal research work, not an immediate study, to prove that *oral proficiency* is affected indeed and that an erroneous form is not due to time pressure or else. Truly, the *untimed GJT* is said to be the most widely used test to measure development of explicit knowledge in studies whose focus is on form.

The *GJT* is administered at three different temporal points all along the experiment: One before the treatment (Test/Time 0), a second immediately after the treatment (Test/Time 1), and a third delayed two months after the treatment (Test/Time 2). As such, the experiment stretches over a period of almost four months (including the pilot test). It may be worth our while to note that, so as to avoid the likelihood of subjects completing the post-tests while drawing on some memorized input, no test sentence bears any resemblance to the sentences included in the treatment condition.

6.6.3. The Pre-test

The *pre-test*, delivered in written form, consists of sixteen sentences, divided evenly between grammatical and ungrammatical and running hierarchically across different levels: The word, the phrase, and the clause levels, respectively. Test-takers are required to indicate in their own processing time whether each sentence was grammatical or ungrammatical by ticking where appropriate. The *pre-test* is meant to see if groups would reveal any statistically significant difference prior to instruction and to ensure that any possible comparative effects attributed to instruction would not be related to prior knowledge of any of the groups (see Appendix IV).

6.6.4. The Post-tests

For reminder purposes, the study sets out to investigate both immediate and delayed effects of instruction; in this way, two post-tests are conducted at two different points in time

right after instruction: one post-test administered *immediately* after instruction and another *delayed* two months after the instructional treatment.

6.6.4.1. The Immediate Post-test

Regarding the *immediate post-test*, it is administered to all three groups a week after instruction to investigate whether instruction in general, and *FonF* in particular, have different learning effects (see *hypothesis 1, 2 & 3*). It is similar to the pre-test but by no means identical. It also contains an *untimed GJT* with sixteen sentences, split evenly between grammatical and ungrammatical and running hierarchically across the same levels of construction, but the test items are different. The subjects are given the same test direction as in the pre-test (see Appendix V).

6.6.4.2. The Delayed Post-test

As regards the *delayed post-test*, it is administered to the subjects two months after the treatment so as to find out if the gains are maintained and if type of instruction has different long-term effects, in particular whether the *FonF* group outperforms the *FonM* group i.e. whether *FonF* instruction has long-term effects (see *hypothesis 4*). The test-takers complete the test in the same conditions as in the two previous tests: The *delayed post-test* is similar in content to the pre-test and the immediate post-test, but in no way identical. It also takes the form of a *GJT*, with sixteen different sentences, evenly divided and running across the word, the phrase, and the clause levels (see Appendix VI).

6.7. Scoring the GJT

Raw scores (see Appendix VII) are calculated for further use in the statistical analyses. It may be informative to note that the same scoring procedure is adopted in the pre-, post-, and delayed post-tests. Each test item is dichotomously responded to as grammatical or

ungrammatical, and scored on a 0 to 1 point scale. The participants are awarded a score of 1 if they judge a sentence correctly, giving a maximum possible score of 16 – all tests, that is, are worth at most sixteen points. Incorrect judgements are all scored 0. There are no failures, whatsoever, (for example, abstaining, forgetting, missing, etc.) on the part of the respondents to respond to a test item.

6.8. The Analysis

A three-level *between-subjects* variable is adopted to define instruction (namely, *FonF* Instruction, *FonM* Instruction and *No* Instruction), and a three-level *within-subjects* design (T0, T1, and T2) to operationalize *temporal* progress which includes the *pre-test* and the two *post-tests*: Both immediate and delayed. Raw scores are entered and calculated for further use in the statistical analyses using the *Statistical Package for the Social Sciences* (SPSS) software (version 17.0). In order to answer the five research questions, and thus put our four hypotheses to the test, the raw scores are submitted for the *untimed GJT* to an *Independent-Samples T-Test* (a between-subjects design for testing hypotheses 1, 2, 3 and the second part of hypothesis 4) and a *Paired-Samples T-Test* (a within-subjects design for testing the first part of hypothesis 4), using a probability level for rejection of $p < .05$. As such, whether *condition* (i.e. *FonF* instruction, *FonM* instruction and *No* instruction) or *time* (i.e. T1 and T2) have any effect can be determined upon analysis.

The analysis is based on three main grounds, namely the *effectiveness of the instruction* (i.e. whether or not instruction results in significantly greater gains in accurate use of the target parallel structure as opposed to no-instruction), *type of instruction* (i.e. *FonF* vs. *FonM*), and *time* (i.e. T0, T1, T2).

Now, why use the *T-Test*, at all? Well, the group size is less than 30, so the *T-Test* is appropriate to use with this small sample; besides, the study makes use of two variables as concerns *type of instruction* (i.e. *FonF* vs. *FonM*), and much the same for progress over time

(e.g., T1 and T2); in effect, this *duality of variables* is read more clearly from the set of our hypotheses. To put it otherwise, the *T-Test*, by definition, makes inferences about two means or variances, with sample sizes being small and/or the population distribution is unknown. It is appropriate in testing whether there is a significant difference between the means of two groups: significance here is statistical in nature, and significance testing begins with the Null Hypothesis.

Significance refers to the *probability* (p) of committing a *Type I error*. A typically acceptable probability value is $p < 0.05$, a 1 in 20 chance of committing a Type I error i.e. the probability of rejecting the null hypothesis, when in fact one should accept it (let us recall that researchers typically conduct their experiments in such a way that they do not directly test their hypothesis, but a null hypothesis). Calculating the t statistic and the p value gives the probability of committing a Type I error: if the obtained t value is equal to or higher than the required t value (c.f. Miller (1984), Hinton (2004), and Miles and Banyard (2007), for critical values of significance), and if $p < 0.05$ (c.f. Boslaugh and Watters, 2008:145), one rejects the null hypothesis, while providing support for the hypothesis; as long as the reverse holds true, then one would fail to reject the null hypothesis, providing thus evidence against the hypothesis.

Why use the *Independent-Samples T-Test*? This is used to compare means for groups of participants that are not related and that are independent from one another, that is to determine whether two sample means are significantly different; as such, the two samples can be used to implement a *between-subjects design*.

Why use the *Paired-Samples T-Test*? This test is sometimes called a *repeated measures design* where participants in the first group are the same as participants in the second group. It is used in the present study because the first part of the fourth hypothesis calls for the repeated measurement of the responses from the same individual. Data are collected on more than one occasion, that is, where subjects are followed over a period of

time and asked similar but not identical questions at different times, thus implementing a *within-subjects design* (i.e. comparing ‘before and after’ values, or say comparing subjects to themselves on different occasions). The requirement is that sample sizes be equal, which is not the case for the *Independent-Samples T-Test* which compares between two distinct groups that are likely to be different in number.

6.9. Results and Discussion

To start with, one should make sure that the compared groups have roughly the same point of linguistic departure and L2 knowledge. The *untimed GJT* is given to third year LMD university English language learners ($N = 78$). First, the *Independent-Samples T-Test* – a between-subjects design – conducted on the pre-test scores of the *FonF* group and the Control group ($N = 51$) reveals no statistically significant difference prior to instruction between *FonF* subjects ($M = 8.22$, $SD = 1.423$), and the control group ($M = 8.38$, $SD = 1.345$), $t(49) = -.393$, $p \leq .05$ (see Tables 6.1a & b). What does this mean? In Miller (1984), Hinton (2004), and Miles and Banyard (2007), the critical value of t required for significance, at 0.05 level of significance, with 49 degrees of freedom, is 2.00. Since the t obtained (-.393) is lower than the required t , it can be concluded that there is no significant difference between the means. Therefore, these results indicate that any comparative, or say differential, effects attributed to instruction as post-test gains will not be related to pre-existing differences, or say to prior knowledge of any of the groups.

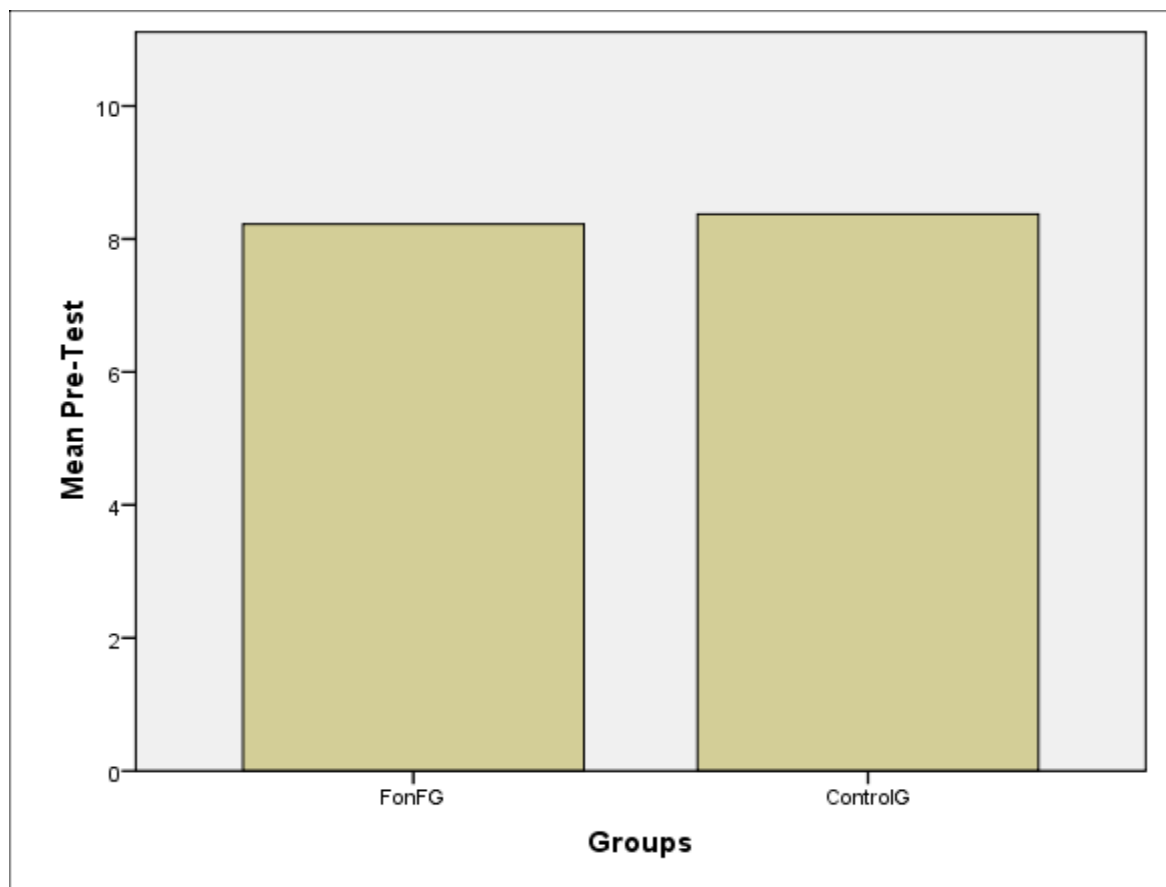
Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-Test	FonFG	27	8.22	1.423	.274
	ControlG	24	8.38	1.345	.275

Table 6.1a. Group Statistics

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference		
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pre-Test	Equal variances assumed	.114	.737	-.393	49	.696	-.153	.389	-.935	.629
	Equal variances not assumed			-.394	48.801	.695	-.153	.388	-.932	.627

Table 6.1b. Independent-Samples T-Test for Pre-test Scores of the FonF Group & the Control Group

Below is a *bar chart* which is a good graphical display, or visual representation, of the data, as the height of each bar is proportional to the knowledge score mean of each category.



Graph 6.1. Bar Chart for FonF & Control Pre-test Score Mean

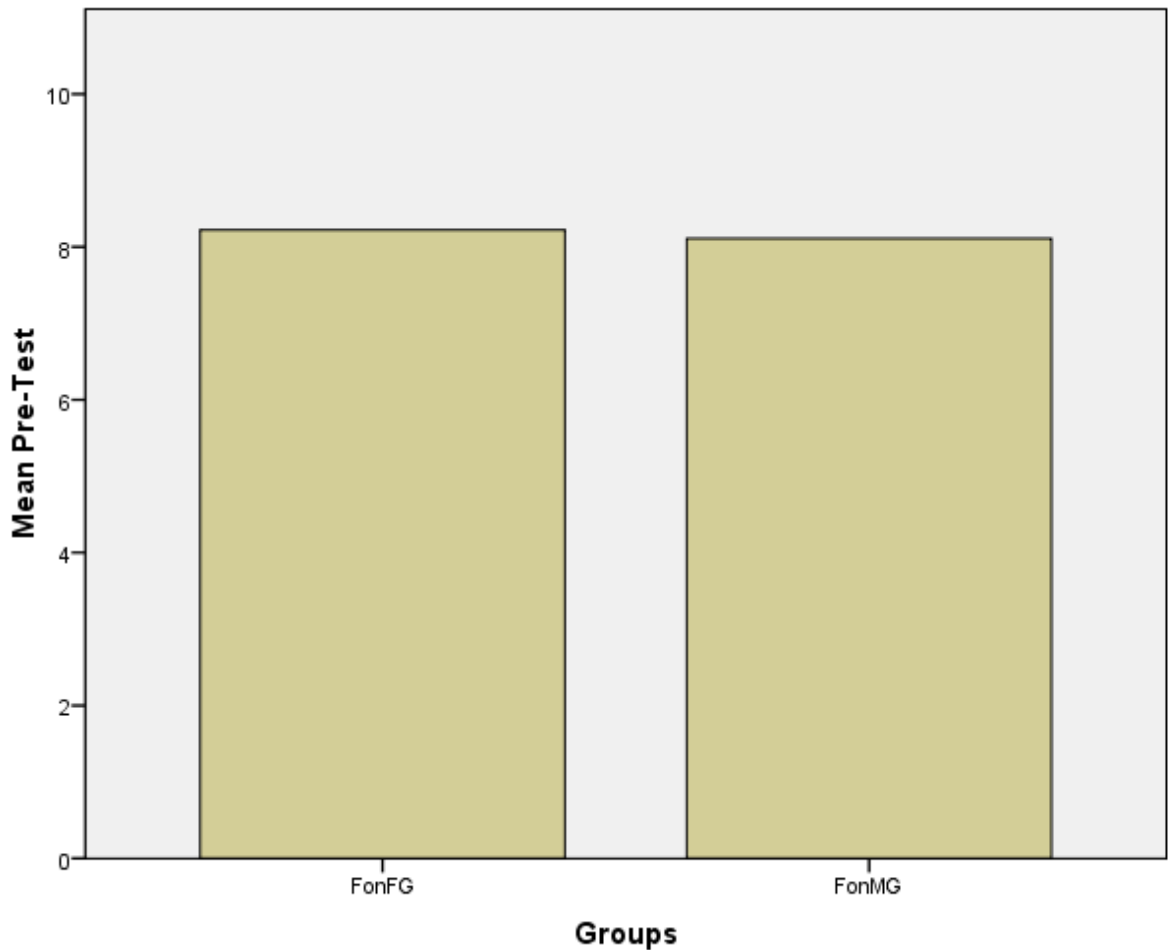
Second, the *Independent-Samples T-Test* conducted on the pre-test scores of the *FonF* group and the *FonM* group ($N = 54$) shows no statistically significant difference before instruction between subjects in the former group ($M = 8.22$, $SD = 1.423$), and subjects belonging to the latter group ($M = 8.11$, $SD = 1.888$), $t(52) = .244$, $p \leq .05$ (see Tables 6.2a & b). Again, the critical value of t required for significance, at 0.05 level of significance, with 52 degrees of freedom, is 2.00. Since the obtained t -value (.244) is lower than the required t -value, this suggests that there is no significant difference between the means. Therefore, these results indicate that any comparative effects attributed to instruction will not be related to prior knowledge of any of the two compared groups.

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-Test	FonFG	27	8.22	1.423	.274
	FonMG	27	8.11	1.888	.363

Table 6.2a. Group Statistics

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference		
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pre-Test	Equal variances assumed	3.582	.064	.244	52	.808	.111	.455	-.802	1.024
	Equal variances not assumed			.244	48.338	.808	.111	.455	-.804	1.026

Table 6.2b. Independent-Samples T-Test for Pre-test Scores of the *FonF* Group & the *FonM* Group



Graph 6.2. Bar Chart for FonF & FonM Pre-test Score Mean

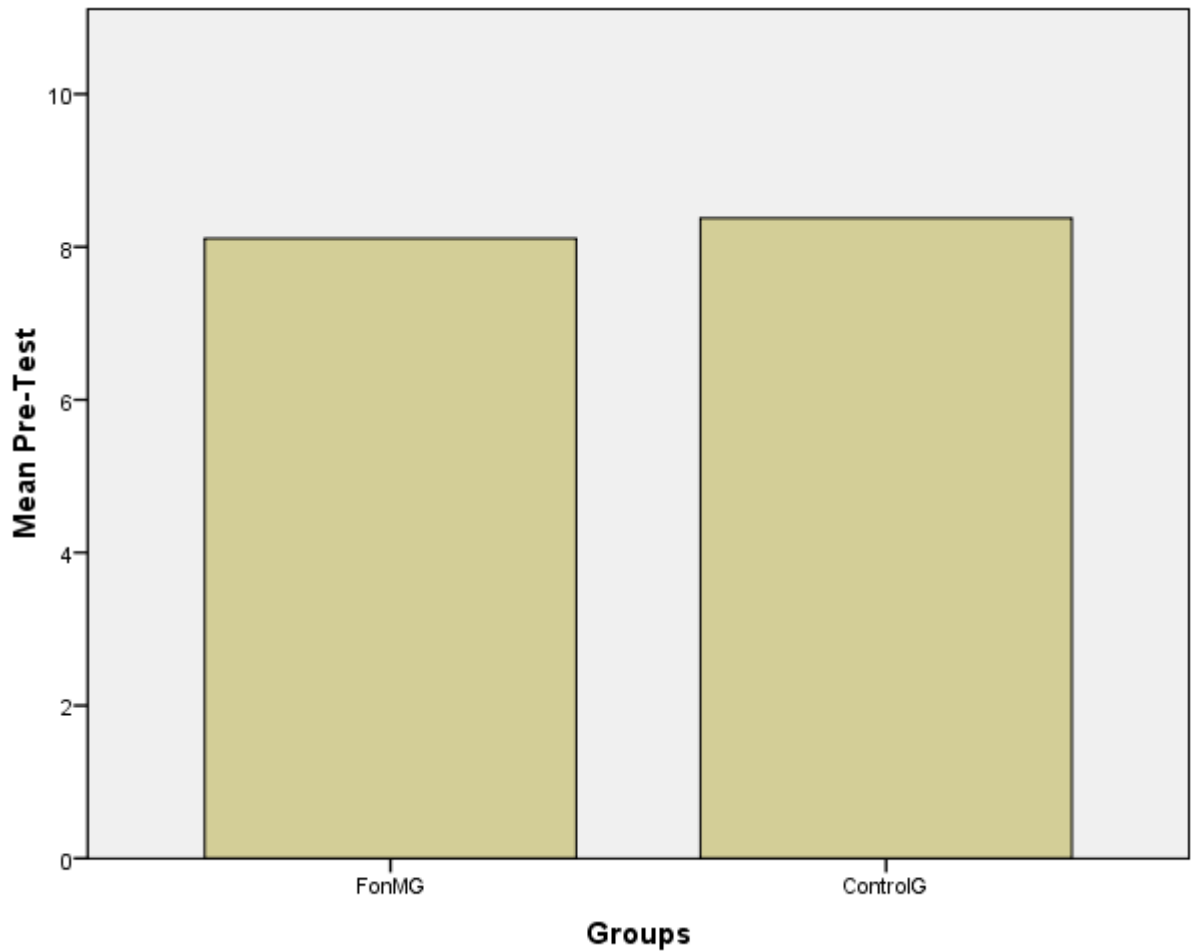
Third, the *Independent-Samples T-Test* conducted on the pre-test scores of the *FonM* group and the Control group ($N = 51$) reveals no statistically significant difference prior to instruction between *FonM* subjects ($M = 8.11$, $SD = 1.888$), and the Control group ($M = 8.38$, $SD = 1.345$), $t(49) = -.568$, $p \leq .05$ (see Tables 6.3a & b). The obtained t -value is $-.568$, meaning less than the critical value of t required for significance (i.e. 2.00); it can be concluded that there is no significant difference between the means. Therefore, these results suggest likewise that any differential effects attributed to instruction as post-test gains will not be related to pre-existing differences in any of the groups.

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-Test	FonMG	27	8.11	1.888	.363
	ControlG	24	8.38	1.345	.275

Table 6.3a. Group Statistics

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference		
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pre-Test	Equal variances assumed	4.658	.036	-.568	49	.572	-.264	.464	-1.197	.669
	Equal variances not assumed			-.579	46.892	.565	-.264	.455	-1.180	.652

Table 6.3b. Independent-Samples T-Test for Pre-test Scores of the FonM Group & the Control Group



Graph 6.3. Bar Chart for FonM & Control Pre-test Score Mean

All in all, *pre-test scores* suggest that there is no significant difference between the means, indicating therefore that any comparative, or say differential, effects attributed to instruction as post-test gains will not be related to pre-existing differences or to prior knowledge of any of the three groups.

Hypothesis 1.

I hypothesize that instructed groups (*FonF* and *FonM*) would outperform the uninstructed participants of the control group – those who receive no instructional treatment – in the short-term-learning of parallel structures i.e. instruction would make a difference.

Null Hypothesis 1.

Instruction would not make a difference i.e. there would be no difference in the short-term between the *FonF* and *FonM* instructed groups and the uninstructed group.

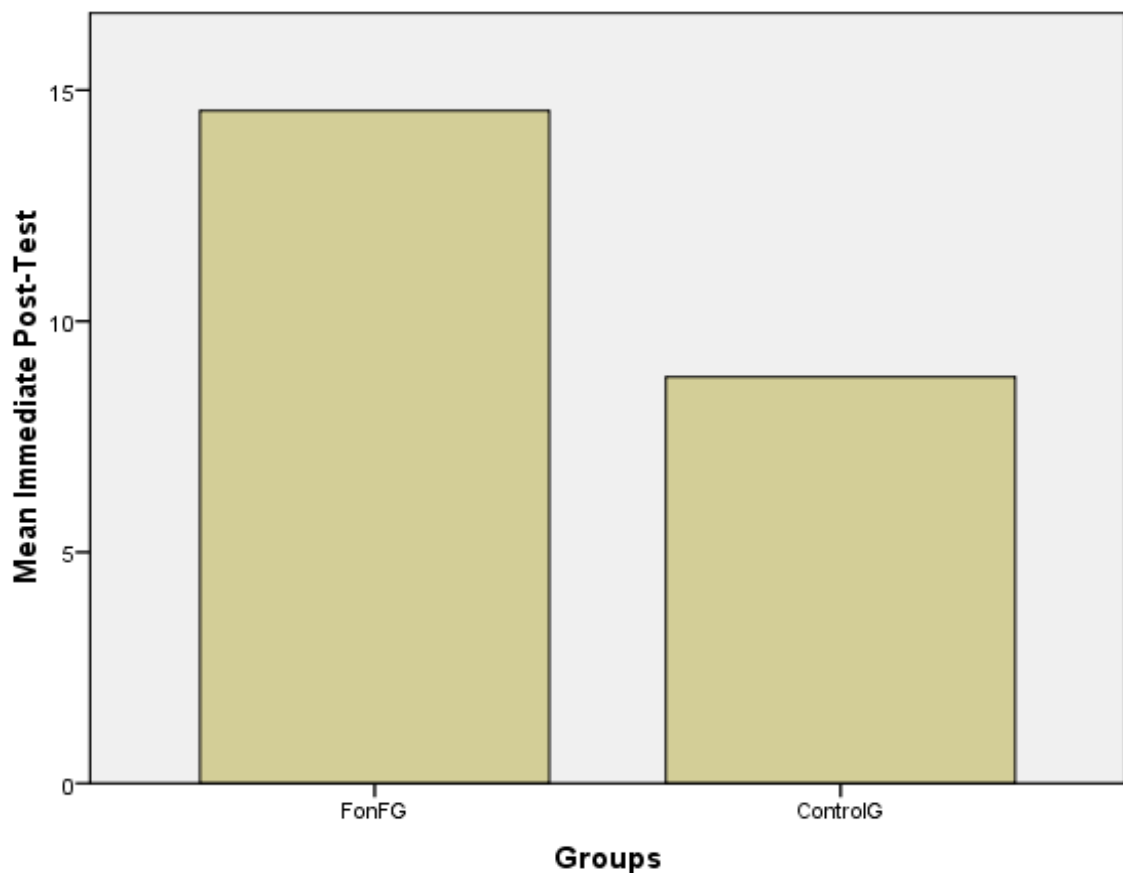
In pursuit of our aims, and in order for us to answer our first research question and therefore test the first hypothesis (and as such accept or reject the null hypothesis), the *Independent-Samples T-Test* is conducted on the immediate post-test scores showing a statistically significant difference due to instruction between the *FonF* training condition ($M = 14.56$, $SD = 1.340$) and the comparison group ($M = 8.79$, $SD = 1.444$), $t(49) = 14.785$, $p \leq .05$ (see Tables 6.4a & b). What does this mean? In Miller (1984), Hinton (2004), and Miles and Banyard (2007), the critical value of t required for significance, at 0.05 level of significance, with 49 degrees of freedom, is 2.00. Since the t obtained (14.785) is higher than the required t , the results are significant, suggesting that there is a significant difference between the means. Therefore, we reject the *null hypothesis* that instruction would not make a difference or that there would be no difference in the short-term learning of parallel structures between the first instructed group (here, *FonF*) and the uninstructed group. Put another way, this indicates that the null is incorrect, that there is a relationship between instruction and the learning of parallel grammar structures, and that the difference is not likely to be a result of chance.

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Immediate Post-Test	FonFG	27	14.56	1.340	.258
	ControlG	24	8.79	1.444	.295

Table 6.4a. Group Statistics

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Immediate Post-Test	Equal variances assumed	.290	.593	14.785	49	.000	5.764	.390	4.980	6.547
	Equal variances not assumed			14.718	47.211	.000	5.764	.392	4.976	6.552

Table 6.4b. Independent-Samples T-Test for Immediate Post-test Scores of the FonF Group & the Control Group



Graph 6.4. Bar Chart for FonF & Control Immediate Post-test Score Mean

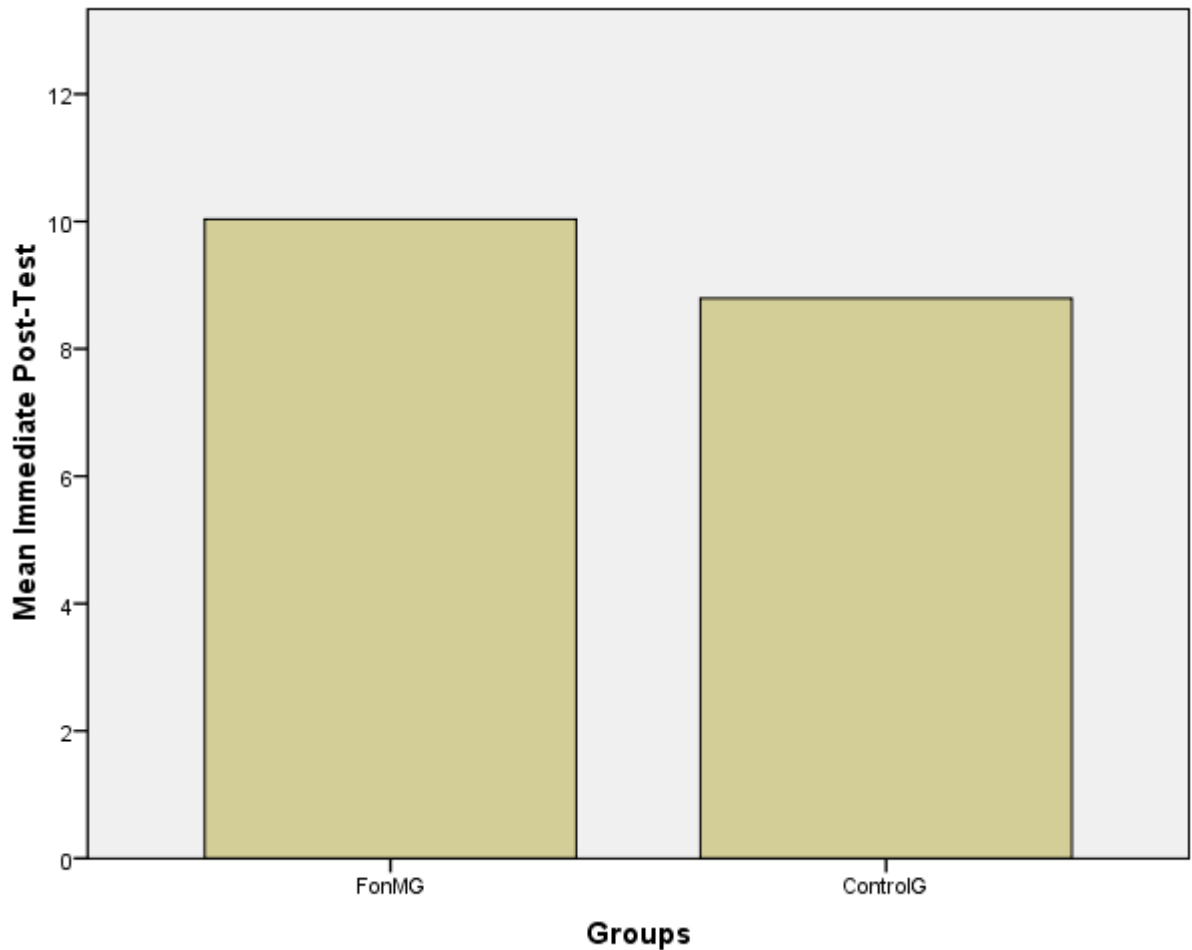
Pushing further on this line, and considering the second instructed group to answer still the first research question, the *Independent-Samples T-Test* is conducted on the immediate post-test scores of the second instructed group and the uninstructed group showing a statistically significant difference due to instruction – though of a different type – between the former condition (M = 10.04, SD = 1.951) and the latter (M = 8.79, SD = 1.444), $t(49) = 2.564$, $p \leq .05$ (see Tables 6.5a & b). Again, since the t obtained (2.564) is higher than the t required for significance (2.00), this indicates that there is a significant difference between the means. Therefore, we reject the *null hypothesis* that instruction would not make a difference (between the second instructed group – here, *FonM* – and the uninstructed group). Stated otherwise, this is indicative that the null is incorrect, that there is a relationship between instruction – no matter what type – and the learning of L2 forms, and that the difference is unlikely to be a result of chance.

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Immediate Post-Test	FonMG	27	10.04	1.951	.375
	ControlG	24	8.79	1.444	.295

Table 6.5a. Group Statistics

	Levene's Test for Equality of Variances		t-test for Equality of Means							
								95% Confidence Interval of the Difference		
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Immediate Post-Test	Equal variances assumed	3.998	.051	2.564	49	.013	1.245	.486	.269	2.222
	Equal variances not assumed			2.609	47.520	.012	1.245	.477	.285	2.205

Table 6.5b. Independent-Samples T-Test for Immediate Post-test Scores of the *FonM* Group & the *Control* Group



Graph 6.5. Bar Chart for FonM & Control Immediate Post-test Score Mean

Hypothesis 2.

I hypothesize that different types of instructional conditions would have differential effects on the short-term-learning of parallel structures.

Null Hypothesis 2.

Type of instruction would not make a difference i.e. there would be no difference in the short-term learning of parallel grammar structures between the two instructed groups.

In pursuit of our aims, and in order for us to answer the second research question and therefore test the second hypothesis, the *Independent-Samples T-Test* is conducted on the immediate post-test scores showing a statistically significant difference due to type of

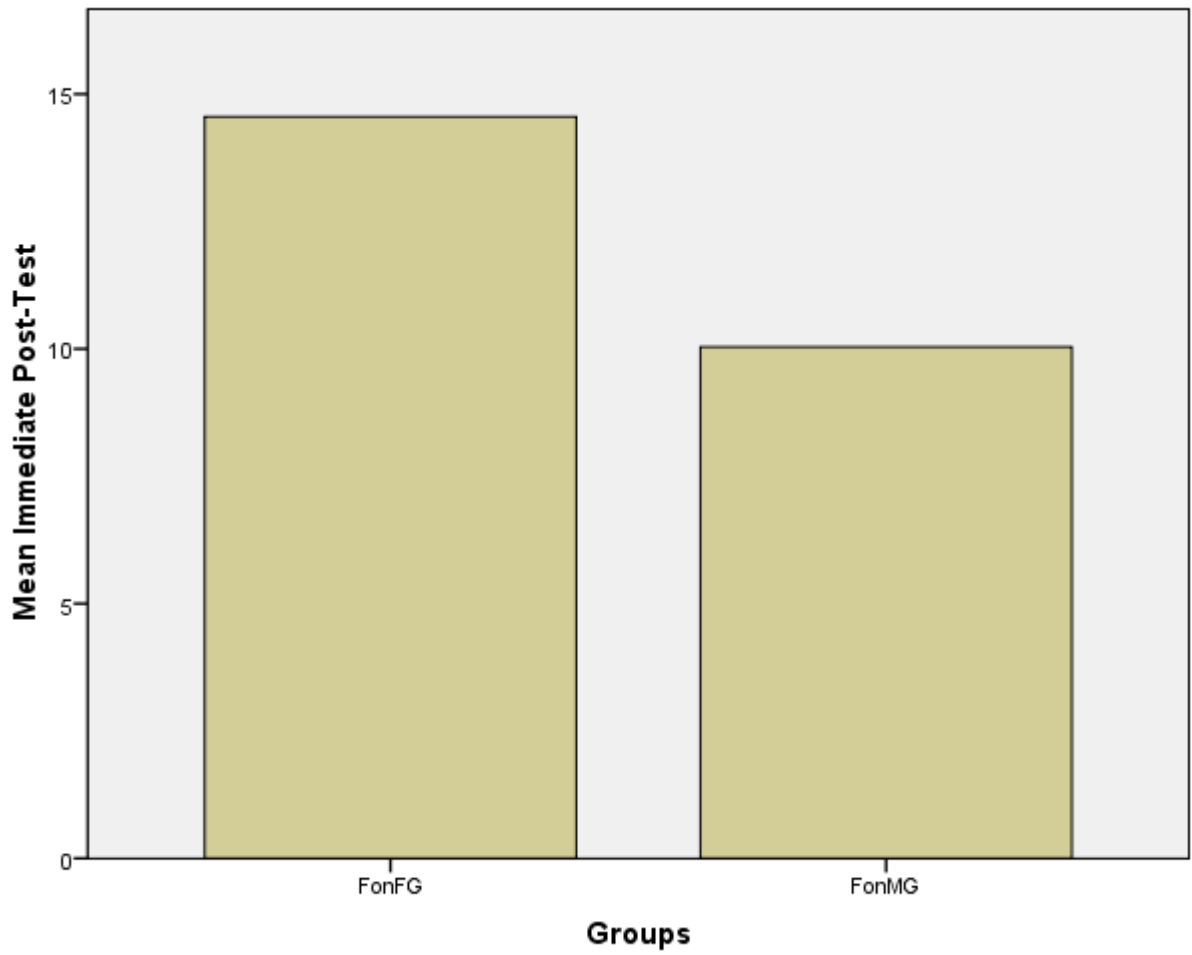
instruction between the *FonF* training condition (M = 14.56, SD = 1.340) and the *FonM* training group (M = 10.04, SD = 1.951), $t(52) = 9.921, p \leq .05$ (see Tables 6.6a & b below). What does this mean? As a reminder, the critical value of t required for significance, at 0.05 level of significance, with 52 degrees of freedom, is 2.00. Since the t obtained (9.921) is higher than the t required for significance, this suggests that there is a significant difference between the means. Given this statistical difference, we reject the *null hypothesis* that type of instruction would not make a difference or that there would be no difference in the short term learning of parallel grammar structures between the two groups. Put another way, this indicates: 1) that the null is incorrect, 2) that different types of instruction yield to different effects on the short-term learning of parallel grammar structures i.e. the *FonF* instructed participants are significantly more accurate or, say, have higher mean accuracy, and 3) that the difference is not likely to be a result of chance.

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Immediate Post-Test	FonFG	27	14.56	1.340	.258
	FonMG	27	10.04	1.951	.375

Table 6.6a. Group Statistics

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference		
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Immediate Post-Test	Equal variances assumed	6.647	.013	9.921	52	.000	4.519	.455	3.605	5.432
	Equal variances not assumed			9.921	46.060	.000	4.519	.455	3.602	5.435

Table 6.6b. Independent-Samples T-Test for Immediate Post-test Scores of the *FonF* Group & the *FonM* Group



Graph 6.6. Bar Chart for FonF & FonM Immediate Post-test Score Mean

Hypothesis 3.

I hypothesize that in the short-term, the *focus-on-form* group who receive a form-focused treatment would outperform the *focus-on-meaning* group who receive a purely meaning-focused treatment.

Null Hypothesis 3.

The *focus-on-form* group would not be outperforming in the short-term learning of parallel grammar structures.

In order to answer the third research question and therefore test the third hypothesis, the *Independent-Samples T-Test* is conducted on the immediate post-test scores, showing – as stated above – a statistically significant difference due to type of instruction between the *FonF* training condition (M = 14.56, SD = 1.340) and the *FonM* training group (M = 10.04, SD = 1.951), $t(52) = 9.921$, $p \leq .05$ (see Tables 6.6a & b above). Given that the t obtained (9.921) is higher than the critical t required for significance (2.00), it follows that there is a significant difference between the means. As such, we reject the *null hypothesis* that the *FonF* group would not outperform the other groups in the short term learning of parallel grammar structures. Precisely, this indicates: 1) that the null is incorrect, 2) that the *FonF* type of instruction is more optimal in promoting L2 grammar forms, and 3) that the difference is unlikely to be a result of chance.

Hypothesis 4.

I hypothesize that short-term gains would be (a) *maintained* in the long-term and (b) *higher* for the *FonF* group than for the *FonM* group.

Null Hypothesis 4.

The gains of instruction would not be maintained nor will they be higher in the long-term for the *FonF* group.

So as to answer the fourth and fifth research questions, test the fourth hypothesis and confirm or disconfirm the null hypothesis, this time the *Paired-Samples T-Test* – a within-subjects design – is conducted on the post-tests scores of the *FonF* group, comparing the immediate post-test scores (M = 14.56, SD = 1.340) and those of the delayed post-test (M = 14.00, SD = 1.271), $t(26) = 5.701$, $p \leq .05$ (see Tables 6.7a, b & c). To test the second part of the hypothesis, namely whether the long-term effect is higher for the *FonF* group than for the *FonM* group, an *Independent-Samples T-Test* – a between-subjects design – is conducted on

the delayed post-tests scores of the *FonF* training condition ($M = 14.00$, $SD = 1.271$) and the *FonM* training group ($M = 8.89$, $SD = 1.826$), $t(52) = 11.939$, $p \leq .05$ (see Tables 6.8a & b). In Miller (1984) and Hinton (2004), the critical value of t required for significance, at 0.05 level of significance, is 2.056 with 26 degrees of freedom, and 2.00 with 52 degrees of freedom. Since the t obtained in both t -tests (5.701 and 11.939) is higher than the required t , we can conclude, as hypothesized, that, on the one hand, there are statistically significant gains in the *FonF* delayed post-test comparable to those of the immediate post-test (i.e. a slight regression in mean scores from 14.56 ± 1.34 points to 14.00 ± 1.27 points (see Table 6.7a below), but a statistically significant improvement in comparison with mean scores of the *FonF* group displayed in Table 6.1a above), and that, on the other hand, the long-term effect is higher in the *FonF* condition than in the *FonM* condition (see mean scores in Table 6.8a below); therefore, we can reject the *null hypothesis* that the gains of instruction would not be maintained nor higher in the long-term for the *FonF* group. Stated otherwise, given that the effect is lasting for the *FonF* experimental group who has not lost ground, this is indicative that the *null* does not stand, that there is a relationship between *FonF* type of instruction and long-term effect on the learning of the target structures, and that the result is not likely to be due to chance. Table (6.7b) below presents the data on the extent to which the two variables are similar or correlated. As expected, there is a high correlation between the two variables.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	FonF Immediate Post-Test	14.56	27	1.340	.258
	FonF Delayed Post-Test	14.00	27	1.271	.245

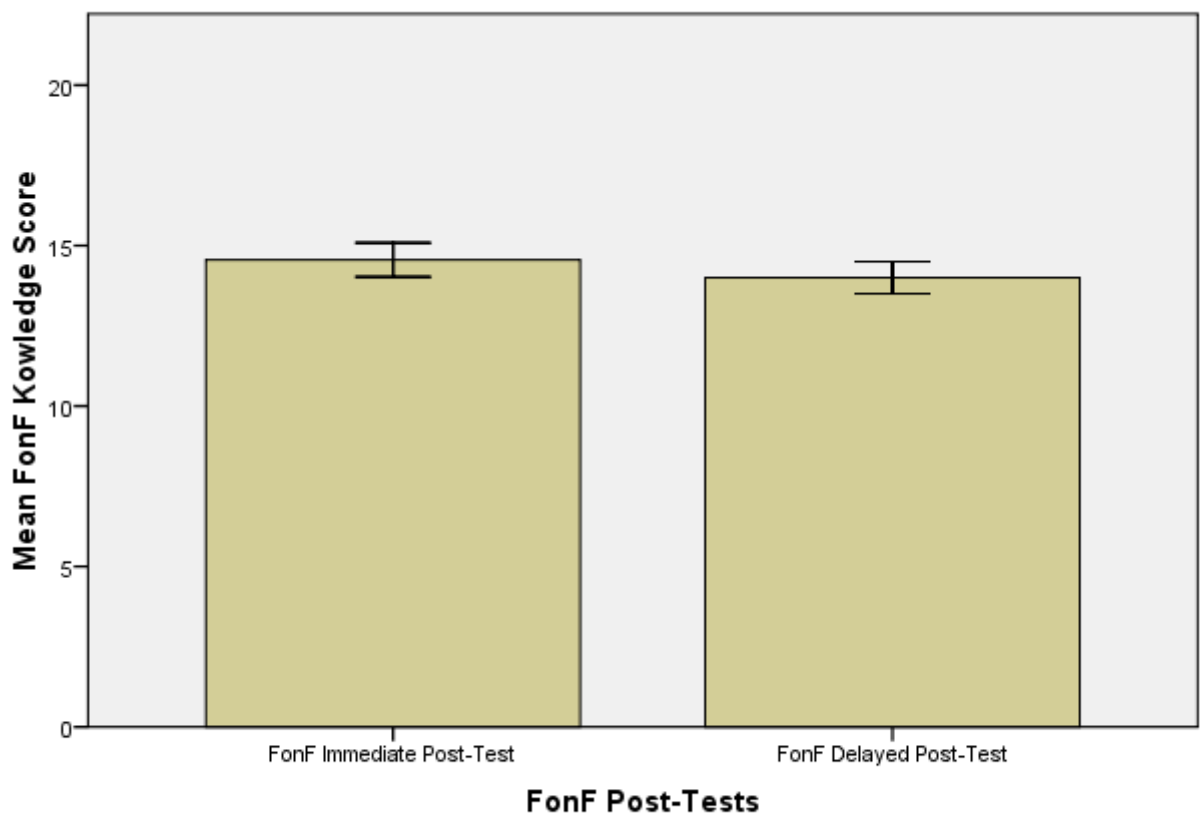
Table 6.7a.Pair 1. Paired Samples Statistics

		N	Correlation	Sig.
Pair 1	FonF Immediate Post-Test & FonF Delayed Post-Test	27	.926	.000

Table 6.7b.Pair 1. Paired Samples Correlations

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 FonF Immediate Post-Test – FonF Delayed Post-Test	.556	.506	.097	.355	.756	5.701	26	.000

Table 6.7c. Pair 1. Paired-Samples T-Test for Immediate & Delayed Post-test Scores of FonF Group



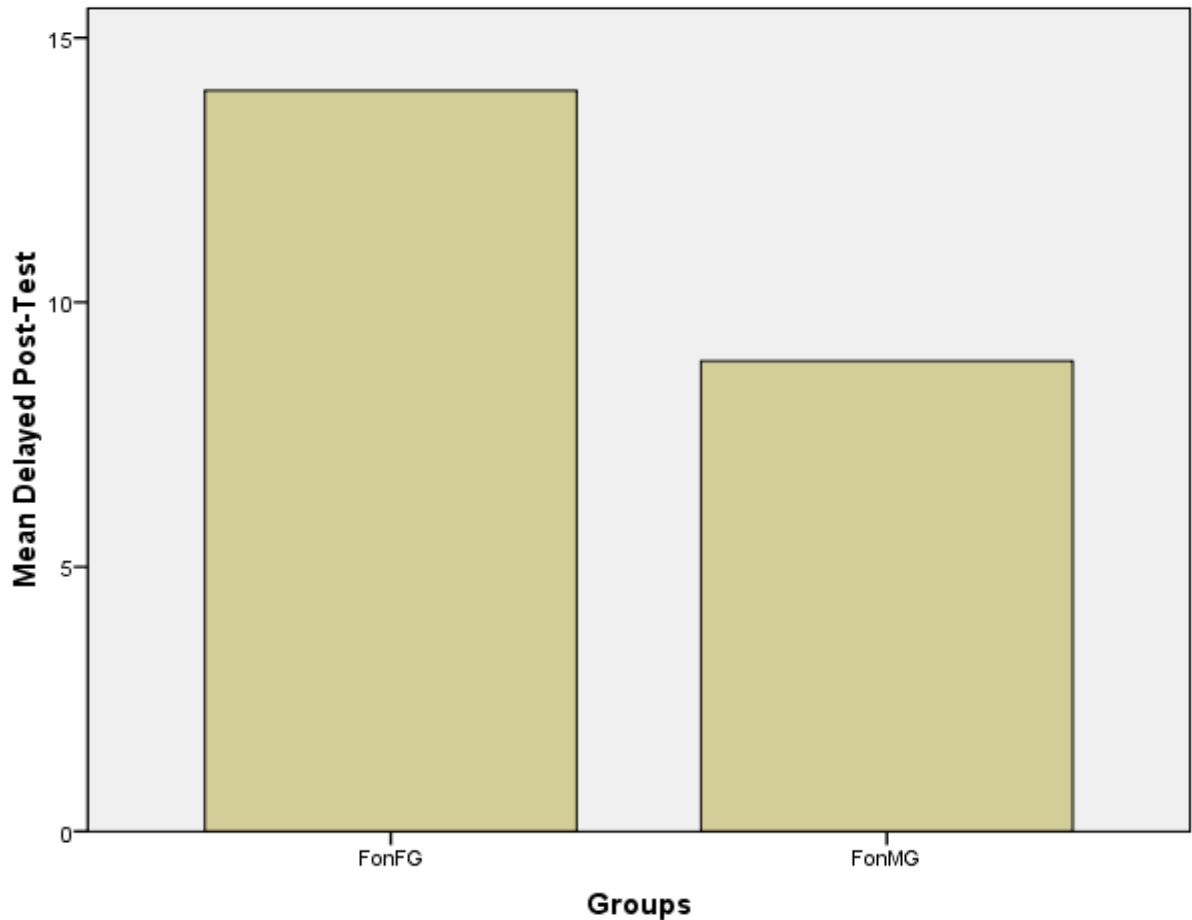
Graph 6.7. Bar Chart for FonF Immediate & Delayed Post-test Score Mean

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Delayed Post-Test	FonFG	27	14.00	1.271	.245
	FonMG	27	8.89	1.826	.351

Table 6.8a. Group Statistics

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Delayed Post-Test	Equal variances assumed	7.388	.009	11.939	52	.000	5.111	.428	4.252	5.970
	Equal variances not assumed			11.939	46.407	.000	5.111	.428	4.250	5.973

Table 6.8b. Independent-Samples T-Test for Delayed Post-tests Scores of the FonF Group & the FonM Group



Graph 6.8. Bar Chart for FonF & FonM Delayed Post-test Score Mean

In comparison, a *Paired-Samples T-Test* – a within-subjects design – is likewise run for the *FonM* group, for both immediate post-test scores ($M = 10.04$, $SD = 1.951$) and delayed post-test scores ($M = 8.89$, $SD = 1.826$), $t(26) = 9.007$, $p \leq .05$ (see Tables 6.9a,b & c). Given the t -value of 9.007 which is higher than the critical t -value required for significance (2.056), it can be concluded that there is a statistically significant difference between the two sets of scores i.e. there is a noticeable regression in mean scores from 10.04 ± 1.95 points to 8.89 ± 1.82 points; compared to *FonF* scores, this time the *FonM* delayed post-test scores are contrariwise not comparable to those of the immediate post-test, notwithstanding a very slight improvement which is not statistically significant in comparison with mean scores displayed (in Table 6.2a) above. Yet again, we can conclude that the effect of instruction is lasting for the *FonF* experimental group who has maintained gains, but this is not true for *FonM* instruction – an indication that there is a relationship between *FonF* instruction and long-term effect on learning of target structures.

	Mean	N	Std. Deviation	Std. Error Mean
Pair 2 FonM Immediate Post-Test	10.04	27	1.951	.375
FonM Delayed Post-Test	8.89	27	1.826	.351

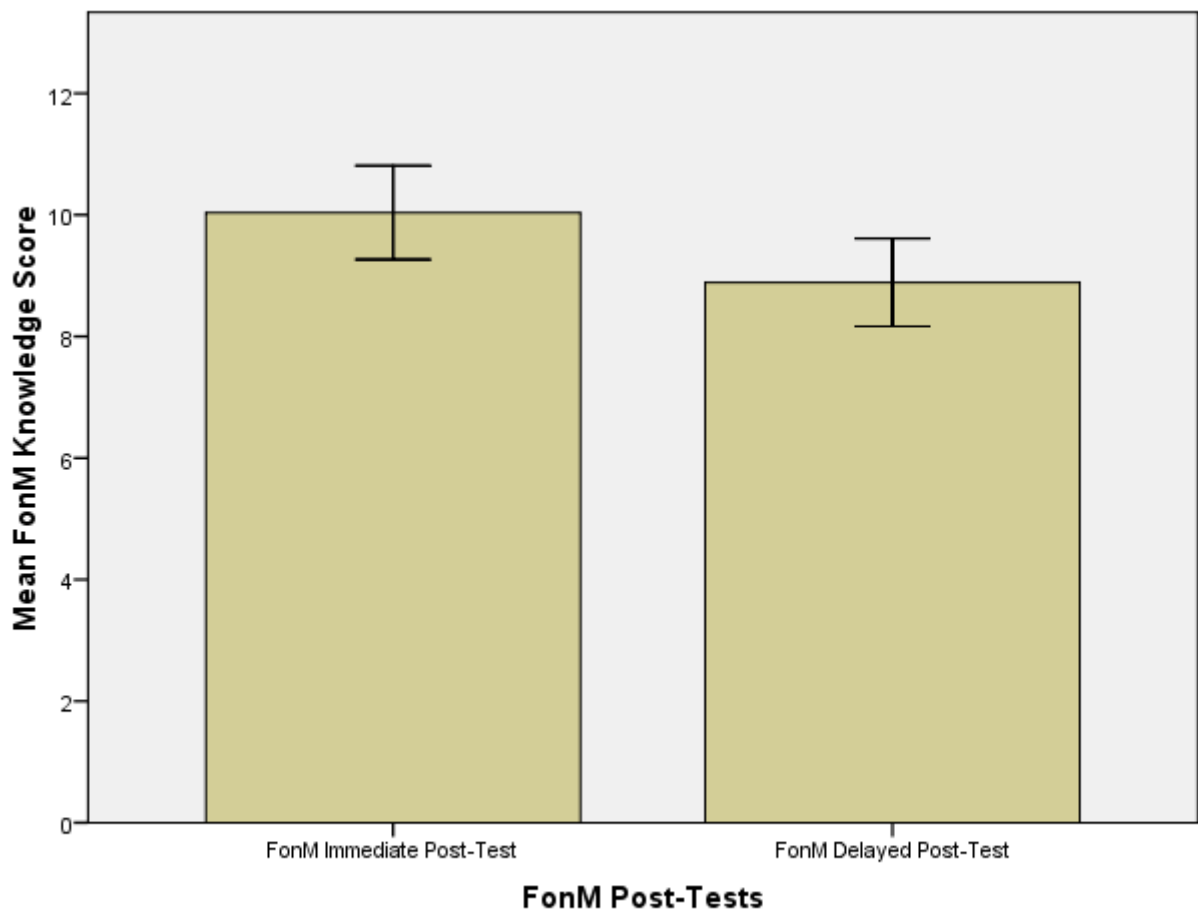
Table 6.9a.Pair 2. Paired Samples Statistics

		N	Correlation	Sig.
Pair 2	FonM Immediate Post-Test & FonM Delayed Post-Test	27	.941	.000

Table 6.9b.Pair 2. Paired Samples Correlations

	Paired Differences					T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 2 FonM Immediate Post-Test – FonM Delayed Post-Test	1.148	.662	.127	.886	1.410	9.007	26	.000

Table 6.9c.Pair 2. Paired-Samples T-Test for Immediate & Delayed Post-test Scores of FonM Group

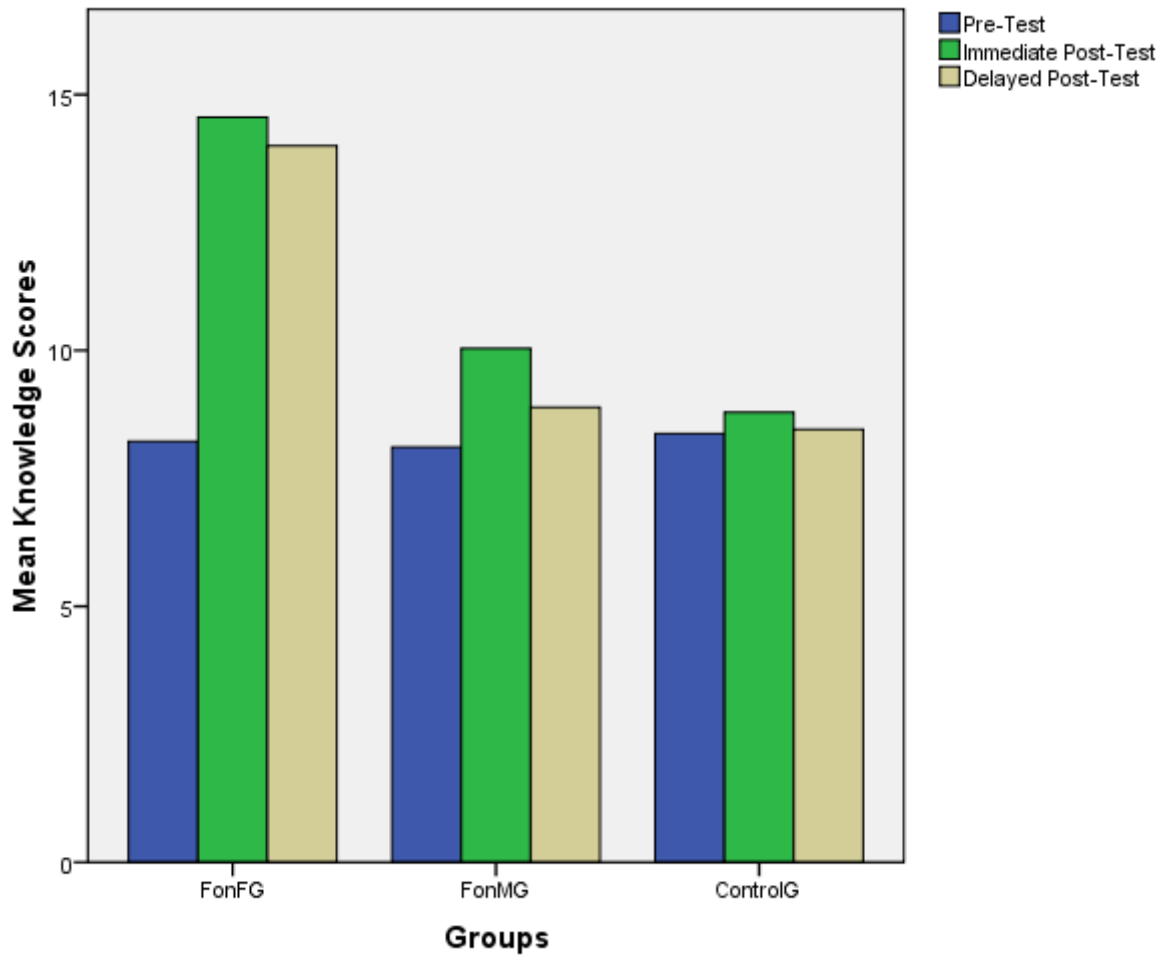


Graph 6.9. Bar Chart for FonM Immediate & Delayed Post-test Score Mean

To conclude, the above analyses aim to find out how *type of instruction* (FonF, FonM and No-Instruction) and *progress over time* (T0, T1, and T2 which correspond to the pre-test, immediate post-test and delayed post-test, respectively) interact. Progress in the use of the target structures is measured through the use of the *untimed grammaticality judgement task* which by definition is said to measure explicit knowledge. Significant overall progress is especially noticed in the *FonF* instructed group, as hypothesized. Mean accuracy scores for the three groups at different test times are summarized comparatively *between* and *within* subjects (see Table 6.10 and the concomitant Graph 6.10 below) revealing that the mean scores have increased from the pre-test to the immediate post-test for the *FonF* and *FonM* groups; however, while the *FonF* group has maintained its gains in the delayed post-test, this is not the case for the *FonM* group. Not surprisingly, the Control group has not bettered its gains all through the different administered grammaticality judgement tests. In effect, the bar chart below clearly speaks for itself.

Groups \ Tests		Pre-Test	Immediate Post-Test	Delayed Post-Test	Total
FonFG	Mean	8.22	14.56	14.00	12.26
	N	27	27	27	27
	Std. Deviation	1.423	1.340	1.271	1.344
FonMG	Mean	8.11	10.04	8,89	9.01
	N	27	27	27	27
	Std. Deviation	1.888	1.951	1.826	1.888
ControlG	Mean	8.38	8.79	8.46	8.54
	N	24	24	24	24
	Std. Deviation	1.345	1.444	1.382	1.390
Total	Mean	8.23	11.22	10.53	
	N	78	78	78	
	Std. Deviation	1.562	2.957	2.957	

Table 6.10. Summary of Global Means for Pre-test, Immediate & Delayed Post-test Scores of FonF, FonM, and Control Group



Graph 6.10. Summary Bar Chart of Global Means for Pre-test, Immediate & Delayed Post-test Scores of FonF, FonM, and Control Group

Conclusion

We are drawing to the close of this chapter and so far have discussed the role of different types of instruction – *FonF* and *FonM*, respectively – in the development of L2 grammatical structures, namely *parallel structures*. In particular, the goal of the conducted experiment is to investigate the value of *FonF* treatment or to measure its effect on the development of explicit knowledge so as to free *stabilized* forms and boost L2 acquisition. Intake of target forms is measured through the use of an *untimed grammaticality judgement test* administered immediately after instruction and delayed two months thereafter.

Upon analyses, the results of the present study seem very telling: (1) instruction makes a difference, (2) different types of instruction produce different results, (3) *FonF* instruction is more optimal in triggering *noticing* of L2 formal properties and intake thereof, and (4) *FonF* treatments have lasting effects. It is to implications, limitations, and recommendations that we now turn.

CHAPTER SEVEN:

Implications, Limitations and Recommendations

Introduction

The goal of the conducted experiment is, in part, to compare the value of different types of instruction – precisely, to what extent intake of English parallel structures is affected by a *preemptive* and *reactive focus-on-form* treatment. Agreeing with VanPatten (1990), though in a different fashion, it is our contention that *intake* is that part of the input that is initially perceived (i.e. *noticed*), cognitively processed, and ultimately made available to the learners' developing interlanguage (IL) system. The obtained results have important pedagogical and research implications, but they also raise a number of questions that look for answers before implications become hopefully applications.

7.1. Implications

The results obtained upon running the statistical analyses reveal a complex picture. Pedagogically speaking, the *implications* we may derive from the foregoing results are a reiteration of the claim that *focus-on-form* instruction which is incorporated into meaning-based communicative tasks promotes L2 learning. If such is the case, then pedagogical textbooks employing *consciousness-raising tasks* through *enhancement of input* should keep going, especially in an era where they are becoming strongly in vogue (more will be said below and in Chapter 8). This is in opposition with the famous claim that an abundantly rich comprehensible input is the essential condition and necessary key to L2 acquisition.

The findings also run counter to the claim – advocated by pure communicatively-oriented researchers – that learner errors should not be corrected, for they equally suggest a reassurance for teachers to use corrective *feedback* or negative evidence so as to orient

learners' focal attention to targeted linguistic forms while the primary focus remains on negotiation of meaning and communication of ideas. Teacher *focus-on-form* through feedback is said to help the learner *notice* the IL/L2 mismatch (see also *noticing the gap* below), the thing that is likely to trigger a cognitive process resulting in a modification of the IL system.

This is not to claim that measuring attention or noticing is one of the aims we are after – we merely manipulate conditions to help trigger it. In fact, most of the studies which found support for the crucial role of attention, and most of those which did not, used only indirect measures in that measurement took place by means of offline post-exposure tasks i.e. after the event, such as grammaticality judgement tasks, filling-in the blanks, and retrospective measures like post-exposure questionnaires. Clearly, these only constitute indirect evidence for the mere reason that attention was assessed *post hoc*, not *during* exposure to L2 input.

Of relevance to teacher corrective feedback is learner *uptake* – a reactive response to feedback – which can make an interesting direction for future inquiry, an issue that falls out of the scope of this study, of course. It is interesting, that is, to investigate the extent to which learners are responsive to feedback on the part of the teacher, and the extent to which the teacher is successful in eliciting student-generated repair – be it within a focus-on-form or a focus-on-meaning perspective, or a comparison of the merits of both. This may require documenting the frequency of teacher feedback moves and learner uptake rate and showing whether a given teaching approach does mediate between feedback, uptake, and L2 acquisition.

The cognitive claims, advanced earlier on, about L2 acquisition are already a reality and are backed up by the foregoing findings. It stands to reason that the activation of cognitive processes in terms of *noticing*, attention and the possible concomitant processes, as a result of *input enhancement* and *negative evidence*, would lead to *restructuring* of learners' IL (McLaughlin, 1987, 1990a) i.e. effecting a transitional change through a modification of cognitive internal representations on the learners' part. If such is the case, it implies that the

theoretical bases of focus-on-form are cognitive models of L2 acquisition, that fossilization is hardly inevitable, and that stabilization is rather curable.

Insofar as *research* practices are concerned, it is controversial what untimed grammaticality judgement tests measure: Learners are likely to draw on their explicit as well as their implicit knowledge, that is. As such, explicit knowledge tests are, on the whole, not always as valid as they might seem. It is observed that a few subjects hit the record of judging the grammaticality of the sixteen test-items strikingly well before their classmates, as if they work against time even without time pressure. This might imply that they rely on their automatic implicit knowledge; it might as well imply they fail to develop explicit knowledge. This is very important and rather telling for research.

7.2. Limitations and Recommendations

Let us volunteer noting that the present research work is not without *limitations* and can be attacked on several grounds. Let us volunteer noting as well that making up for these so-called limitations will not make of this study delimited and narrowed-down as it is customary, but rather a broad work. To start with, it is commonplace to think that *differences between individuals* may explain why a given type of instruction is effective. Such is not pursued in any way in the present study. Indeed, this is also true of much of the research conducted on the effect of different types of instruction. Such individual differences as developmental readiness, personality traits, L1 similarity or the lack thereof, proficiency level, age, aptitude, attitude and others, we recommend, should be brought to bear urgently in future research to provide a coherent picture of the factors interacting with focus-on-form instruction.

To take developmental readiness, for example, this might well explain why at times the role of focus-on-form instruction is not at all visible. The value of explicit knowledge, that is, may not be immediately brought to bear and may remain *latent* if the learner is not

developmentally ready and, as such, the effect of instruction may be delayed (Ellis, 1997). When he reaches the appropriate developmental stage, however, such knowledge may emerge and therefore facilitate acquisition. This is an important piece of information, and research should be designed accordingly. A word of clarity may be necessary, at this stage. The foregoing may not apply with regard to the study at hand simply because the selected sample can be categorized as being advanced, theoretically at least, let alone the fact that the subjects encountered parallelism in past years, and as such they qualify for developmental readiness – on the whole.

To take a second variable, whereas young learners can learn a L2 implicitly, adult learners may require explicit knowledge to be successful in the learning process. Granting that this is indeed the case, it would follow that the learner's *age* is a determining factor in the acquisition of explicit knowledge. An important question is why age is facilitative for children in the exclusion of adults. One might explain this in terms of maturational change which is known to affect cognitive functioning, causing a loss of the ability to learn implicitly, or an increased dependence on explicit knowledge. Explicit learning, it must be noted, is facilitated by such cognitive resources as memory, attention and variables of the like which are said to underlie the construct of aptitude. In this way, differences between individual learners are due to differences in their reliance on such resources.

A second possible *limitation* that meets the eye is methodological i.e. the fact that the second post-test used in this study is delayed only two months after instruction. This is so because it is a small scale study; a longitudinal work would have required time and even funding not affordable for the present research. Therefore, researchers should be mindful of test duration, and future research should investigate the role of different types of instruction for a longer period of time. We believe, however, that the pedagogical provision of grammar instruction with no *practice* on the learners' part might very well fall short of native-like accuracy. Therefore, using tasks which promote language practice are very much warranted

for input to translate into intake, and for stabilized IL to break free and keep away from being permanently fossilized.

Another noticeable *limitation* may be the fact that use is only made of *comprehension*-based tests. This has already been justified in that comprehension is said to occur usually before production. Besides, to use, for instance, oral tests which are by definition more time-pressured, it would require from learners higher degrees of automatization; let it be recalled that the effects of instruction – be it explicit or implicit, form-focused or meaning-focused – are expected to affect passive, receptive knowledge before they affect productive ability in general and oral proficiency in particular. Productive ability may take time, that is, and it is therefore *recommended* to try other tests that are production-based in future research or in replicating the present research for more telling findings, the thing that might inform pedagogy, assessment and research practices. Such research might well inform practitioners about the way L2 learners move from not using a particular structure to incorrect use and then again to correct use.

It is argued under the 'implications section' above that it is controversial what untimed grammaticality judgement tests measure. Pushing further on validity lines, in judging items for their grammaticality or the lack thereof, it is not clear whether subjects do judge the structures targeted by the researcher. At best, they do; at worst they judge some other aspects of the test-items (see for example Ellis, 2004). In using such tests, it is *recommended* that grammatical and ungrammatical items be examined separately for, in all likelihood, these are said to measure different knowledge types; as a case in point, ungrammatical items are believed to provide a stronger measure of explicit knowledge (see Ellis, 2005, 2006).

To make up for the lack of validity therein, it is recommended that future research give students time for issuing a judgement, ask them to indicate their degree of *certainty* about a particular judgement and to tell if their judgement is *intuitive* (i.e. use of implicit knowledge, which is often the case) or stems from some explicit *knowledge* (to which they

have recourse only when they have sufficient time and when a linguistic item proves problematic). This is a call for a clear theoretical need for valid and reliable measures of explicit knowledge.

Why not a *timed* grammaticality judgement test, as well? As a matter of fact, limiting the time learners have to respond would be intended to encourage the use of implicit knowledge. The timed grammaticality judgement test requires learners to process language online and it is not clear on what basis the *time limit* for processing each test-item should be established, knowing that there are slow L2 processing learners and fast ones and as such the processing time will be highly *variable* (for a discussion, see Ellis, 2004).

In this way, how to operationalize timed judgements – i.e. deciding on what length of time for making a judgement to adopt – is difficult to bring to a consensus. It stands to reason that the difficulty is especially aggravated when we bear in mind that some of our test-items are short (e.g., containing parallel *words*) while others are relatively very long (e.g., containing *clauses*), hence the awkwardness of allocating the same length of time to test-items varying in length and possibly structural complexity. One might hazard the suggestion of using computer software; granting this is practically possible and most of all reliable, it is not affordable for conducting such a low scale research work. Our suggestion may be that, for this to work, test-items should be of the same length and subjects of the same processing speed. The question that remains would be: to what extent is this workable?

Pushing still on the non-use of a timed grammaticality judgement test, and in order to put our choice of test type off the offensive, it suffices to say that the present modest research does not set out to measure implicit knowledge, nor does it aim to investigate how explicit knowledge converts into implicit knowledge, in any way; such would be to pursue the investigation of whether there is or not an *interface*. Be that as it may, joining DeKeyser (2003), using a timed grammaticality judgement test by having subjects work under time constraints does not itself guarantee a measure of implicit knowledge.

So far, so well. Still, at this stage, an operational definition may be recommended. In order to design tests for the measurement of explicit and implicit knowledge, that is, the two constructs must be operationally defined. The reader is referred to R. Ellis (2005) who suggested to distinguish between them in terms of seven criteria, drawing upon the degree of awareness involved and conditions of use: *degree of awareness* (i.e. of learners' linguistic knowledge: whether learners make use of feel or rule when responding to a task), *time available* (i.e. whether there is time-pressure to perform a task online or whether there is opportunity to plan a response), *focus of attention* (i.e. whether focus is on fluency and message or accuracy and form), *systematicity* (i.e. whether learners are consistent – especially when focus is on their implicit knowledge – or variable in their response to a task), *certainty* (i.e. the extent to which learners are certain of their output), *metalinguage* (i.e. learners' knowledge of metalingual terms relates to their explicit, not implicit, knowledge), and *learnability* (the conditions – e.g., instruction – and the age – e.g., child/adult – at which knowledge can be internalized by learners), respectively.

Perhaps, a *strength* of the present research is that it investigates the effect of different instructional approaches on the development of *various* L2 parallel structures. Investigating just one structure deters us from being able to claim with some degree of certainty generalizability of the findings. This is not to say, however, that a comparison of some sort took place. In this perspective, research should be oriented towards investigating comparatively different language areas, including vocabulary, so as to get a general and coherent picture of the matter at hand.

Pushing further on these lines of thought, we recommend that future inquiry study the merits of focus-on-form instruction in relation to the *simplicity-complexity* continuum along which the targeted structures stand. This is not to acknowledge that our study does not incorporate different grammar structures; on the contrary, again it is our contention that all of our tests, at different points in time, do contain simple and complex structures. The point is

that it is not our intention to test the relative value of focus-on-form instruction as regards structure complexity or otherwise. As afore-mentioned, all of our administered tests run hierarchically across different sentence construction levels: the word, the phrase, and the clause levels, respectively, so test items varied accordingly.

It might be telling to note that simple rules are claimed to be very much in keeping with explicit instruction whereas complex rules bear upon implicit instructional treatments (Krashen, 1981; 1982). This is not always agreed upon, however; for Robinson (1995a, 1996a), it is the reverse situation which held. At any rate, this is still controversial, and there is also controversy whether a given L2 structure embodies a simple or a complex rule.

To elaborate further on this particular issue, it might be noteworthy that it is rather controversial what makes a structure simple or complex (DeKeyser, 1998; Hulstijn, 1995; Robinson, 1996a). Structures can be either *formally* or *functionally* simple/complex. While the former stands for the number of operations one has to go through for correct use of a rule, the latter refers to the straightforwardness of form-meaning relationship – it all depends then on where a given structure stands on the simplicity-complexity continuum.

7.3. The Interface Debate

It goes without saying that the *interface* debate stands at the very heart of SLA concerns. Granting that focus-on-form and explicit types of instruction can prove to be optimal for the development of L2 proficiency and implicit use, it follows that this can be considered proof enough for an interface between explicit and implicit knowledge. This is not the case, however. Focus-on-form research has not as yet adequately tackled the interface issue; most of the research therein used explicit measures of L2 knowledge, yet those which used implicit measures more often than not failed to compare between explicit and implicit approaches to grammar instruction. Of note, an important requirement for implicit

grammatical knowledge measures is that they test the ability to use L2 forms in spontaneous, unplanned or incidental situations of language use.

Likewise, it should go without saying that the interface concern is in no way an immediate concern of the present humble research work. Be that as it may, this study does appraise indirectly work on the presence or absence of an interface between explicit and implicit representations of knowledge. Future research should be directed at exploring and ultimately measuring the extent of an interface between explicit and implicit knowledge in order to find out whether focus-on-form instruction is superior to other types. This is so for, as demonstrated by Ellis (2005), studies which demonstrated a *relationship* were not tests of the interface position, and were especially not intended to test it; such a relationship, that is, did not show that explicit knowledge subsequently transformed into its counterpart knowledge. Of course, a demonstration of a relationship as such is not likely without a number of research design consequences, for as he put it,

[It] would necessitate an experimental study in which learners were first taught a specific rule explicitly, subsequently developed explicit knowledge of this rule, and, ultimately, developed implicit knowledge of it as a result of opportunities to practice. Again, such a study is only possible if valid and reliable means of measuring explicit and implicit knowledge are available.

(Ellis, *ibid.*: 146)

To push further, for an evidence to obtain with regard to an interface between explicit and implicit knowledge representations, one should compare between explicit and implicit instructional conditions and measure progress while keeping the amount of exposure to the target structure equal. This way, the findings must be indicative enough that any comparative, or say differential, effects attributed to different types of instruction as post-test gains would not be related to exposure differences. As a reminder, this very requirement is met in this study; what the study lacks *legitimately* and of right may be the fact that the instrument used for measurement was not coupled with a type of test (say, a timed grammaticality judgement test, for example) that measures implicit knowledge. Only if such a requirement were met,

and progress in both conditions were measured in the spirit of a within-subjects design could we obtain evidence for the interface issue. This is clearly a magnitude of a task, let alone the fact that our study does not set out to investigate such a promising conundrum; it merely attempts to measure whether a given type of instruction could impact on the development of L2 proficiency, as measured by explicit knowledge tests, and thus destabilize or free a stabilized L2 form to escape putative fossilization.

7.4. Some Elaborated After-thoughts

7.4.1. Consciousness-Raising...Noticing

It is evident that the role of *noticing* in SLA has gained currency and has been the subject of some attention over the years. The importance of *noticing* in particular, and consciousness in general, lies in their role as an *interface* in SLA and cognitive psychology, a *gateway* to learning (Batstone, 1994, 1996; Baars, 1997; N. Ellis, 2005), facilitating access to essentially any area in the nervous system. *Consciousness-raising* is suggested to be the process that precedes *noticing* (Fotos, 1993). It customarily refers to the teacher's (or textbook designer's) drawing of learners' attention to L2 formal properties.

Consciousness-raising tasks, being an effective means of teaching grammar, are believed to be conducive to *noticing*; the obtained results of the present study are an indication of that. Here is a word of warning, however: *Noticing* is a complex process and consciousness-raising efforts may fail to bring target forms above the threshold of noticing if learners are not provided with *frequent* opportunities to notice, while *varying* noticing tasks. There is also the danger that the level of noticing may be affected by variables including attention being directed elsewhere. Provided we make up for such constraints, there is the likelihood that what has been initially recognized in the input works its way through final internalization.

In using consciousness-raising tasks during the focus-on-form treatment, we pursue the development of *explicit knowledge*, the kind of knowledge which proves effective given the reported results. This is an invitation for teachers to have a try at developing it while feeling free of any dogmas. The teaching of explicit knowledge, through consciousness-raising tasks, can take different forms: One example form may be *direct explicit grammar instruction* in which the rules are formally explained and examples provided; its counterpart is *indirect grammar teaching* where learners are supplied with data and encouraged to discover grammar rules for themselves. The former is commonly known as *deductive* consciousness-raising tasks while the latter is referred to as *inductive*.

While favouring one form of grammar instruction rather than the other is already commonplace – an issue falling outside the scope of the present research – suffice it to say that some argued that inductive consciousness-raising tasks are just as effective as deductive tasks (Mohamed, 2004). It is our contention that teachers should stop asking which method is the best and come to embrace the view that there is not one absolute instructional type: The best method should be the one that produces good results, especially in the light of all the differences that learners bring with them to the classroom. Whether we use the one or the other, the crux of the matter is the promotion of *noticing*, after all, which is said to be conducive to learning, a gateway to acquisition. Deductive/inductive tasks are not exhaustive of all tasks; they are rather exemplary of others.

Granting that consciousness-raising and noticing are not *necessary*, it stands to reason that they do *facilitate* L2 learning and intake in that, as already mentioned, they allow learners to *notice the gap* between their IL system and that underlying the L2 input. The perception of a gap or a mismatch may, in turn, lead to IL restructuring. We contend that the issue of whether awareness is essential for subsequent processing to take place, and which remains unsolved, needs further exploration, with research design triangulating data collection procedures, namely online measures so as to ascertain what learners actually attend to or are

aware of, or both, while exposed to L2 input. Finding ways to measure and operationalize the complete absence of awareness in SLA is equally very much in order.

7.4.2. Internal vs. External Consciousness-raising Techniques

The present research uses *focus-on-form instruction* through consciousness-raising or typographical (textual/visual) *input enhancement* which is among the pedagogical approaches to drawing learners' otherwise evasive attention to form – an instructional practice which has received considerable attention in SLA research. The treatment is an attempt on the experimenter's part to orient learners' attention to targeted problematic features in the input so as to make them available for intake. This is in keeping with Sharwood Smith (1993), for whom *input enhancement* is a means of highlighting targeted language areas for learners so as to draw their attention to those areas.

For clarification purposes, *enhanced input* is arguably an *external* attention-drawing technique (see Izumi, 2002) which promotes *noticing* and induces attention via external means such as highlighting targeted L2 forms, as opposed to learners' *output*. In the spirit of learner-centeredness (see also 'Section 7.4.6.' below), teachers in their classrooms and researchers in their future inquiries are required to try out output as a technique, inviting learners to decide by themselves what they find problematic in their output and what they pay attention to in the input; in this way, attention arises *internally* through production processes. Still, apart from output, Sharwood Smith (*ibid.*) indicated that input enhancement itself can be driven either *internally* (learners use their own devices when they themselves attend to a language form because of its frequency, for example) or *externally* (e.g., teacher's use of a structured task or an overt explanation to draw attention to a particular L2 form).

7.4.3. Interactional Feedback...Noticing

In using focus-on-form instruction as a treatment, it is observed that various sorts of *interactions* took place. Needless to reiterate the view (Long, 1983) that interactional processes facilitate L2 learning, given the role of interaction in mediating between L2 input, internal learner processes such as selective attention, and output in productive ways. *Interactional processes* include, among others, the negotiation of meaning, modified output, and corrective feedback.

It is noticed during the treatment that the provision of *feedback*, as a case in point, during conversational interaction promotes *noticing*, *negotiating*, and *understanding* of L2 targeted input forms. The association between interactional feedback and L2 learning is, as a matter of fact, hardly new; it has been backed up by a number of experimental studies (e.g., Mackey, 2006). Actually, we adhere to the claim that interactional feedback is related to L2 development, a claim motivated by the belief that feedback directs learners' attention and induces them to *notice* L2 forms. Perhaps, the only problem here, as far as our study is concerned, is the fact that attempt is not made to isolate the construct and test it for its own merits so as to claim with some certainty that the learning effects could be attributed to feedback alone. Research in this area is, therefore, warranted.

7.4.4. Training Noticing

It should not fail, now, to meet the eye that while consciousness-raising is identified as *teacher-driven*, noticing is said to be *learner-initiated*. However, securing opportunities for noticing alone, in terms of pedagogical approaches, consciousness-raising tasks and factors controlling noticeability (see 'Section 7.4.5.' below), does not suffice; that is to say, it is very much likely for learners not to notice items in the input, or not to notice items missing in their output. This is consonant with the saying that goes: 'There is more to observation than meets the eye' and with the proverb: 'You can lead a horse to the river but you can't make it drink.'

In this way, for noticeability to take place, learners need to be equipped with the necessary learning/noticing strategies and use them to their advantage (see Thornbury, 1997). At this stage, a question may loom on the horizon: is noticeability teachable?

Noticing is theoretically accessible to training and development given that it is a conscious cognitive process (see Thornbury, *ibid.*). The metacognitive categories labeled by O'Malley and Chamot (1990) as 'selective attention' (including '*attending to specific aspects of language input during task execution*') and 'self-evaluation' (involving '*checking the outcomes of one's own language performance against an internal measure of completeness and accuracy*' (*ibid.*: 137)) seem to share some of the defining characteristics of the two kinds of noticing (i.e. *noticing* and *noticing the gap*), although the authors did not specifically identify them as learning strategies in their review. We share the view suggested by Thornbury that if learning strategies are teachable and amenable to development, as O'Malley and Chamot claimed, it would follow that the two kinds of noticing are also accessible for training and can be used to aid learning.

The very job of the teacher, then, is not so much to teach L2 forms as to develop noticing strategies in learners that make them independent and autonomous learners. The classroom presentation of language may take either an explicit form (e.g., by providing overt metalinguistic explanations) or an implicit one (e.g., by marking a target form in a different colour in the text); both are said to be potential ways for facilitating the noticing of language properties. Learners, thus, make the most of the target language which enters their working systems and feeds into the learning process.

7.4.5. Noticeability... Inducing Noticing

The idea of promoting noticing in L2 learning is by no means new: According to Schmidt (1990), *noticing* is a necessary condition for acquisition. Consciousness is claimed to take place in short-term memory (Robinson, 1995) and is triggered by different *influences* on

noticing (Schmidt, *ibid.*; Ellis, 1997). Granting that this is so, asking what precisely controls what is noticed seems justified. That *noticeability* is governed by a number of factors simply means that L2 learners do not notice whatever and whenever they want; selective attention (e.g., to form or to meaning) may be voluntary, but learners are not completely free in experiencing it. Now, how does the presentation of input induce the noticing of a particular L2 form?

7.4.5.1. Instruction

Formal instruction is at the very heart of the debate in SLA (Long, 1983; Ellis, 2001). It has been subject to controversy and speculation among researchers for years. Part of the controversy is undertaken by the present study: Whether L2 instruction is, at all, effective (as opposed to simple exposure or meaning-oriented communication), and if so an attempt is made to determine the relative effectiveness of different types of instruction. The study sets out to investigate the impact of *focus-on-form* instruction, or the lack thereof, on learner IL development and thus L2 learning i.e. whether a cognitive and *focus-on-form* treatment would help learners develop explicit knowledge of the targeted forms, the thing that, we expect, frees stabilized erroneous forms and hopefully prevents fossilization.

In this study, through *focus-on-form instruction*, the experimenter attempts to intervene directly in the process of IL construction, providing samples of specific features for learning, thus room for fostering noticeability and ultimately the cognitive process of noticing, by focusing attention on and promoting awareness of targeted language features. Nonetheless, a word of caution is needed: As Schmidt (1990), accounting for his acquisition of Brazilian Portuguese, pointed out, it is no guarantee that a particular L2 form would appear in output once it has been taught. Be that as it may, the importance of teacher intervention, or say instruction, cannot in any way be denied; the type of instruction provided to our subjects, we argue, secures provision of input that is not available otherwise or, say, not salient; it

provides an environment for focus-on-form (c.f. Bardovi-Harlig, 2000), both preemptive (i.e. positive evidence) and reactive (i.e. negative evidence).

In trying to promote *noticing* via *focus-on-form*, i.e. how the classroom presentation of language induces the noticing of particular L2 forms, instruction follows two perspectives: *Explicitness* and *implicitness*. The experimenter wishes to make target features explicit to learners, by providing overt metalinguistic explanations, in the first place. Subsequently, he uses another dimension, namely making the feature implicit, by simply increasing its perceptual salience via combinations of various formatting techniques such as bolding, underlining. The experimenter places himself at either ends of the continuum, that is, and the results show that such practice is optimal for our subjects. It is advisable that teachers differentiate instruction by moving along the explicit-implicit continuum and alternating between the pedagogical choices, for learners are not all of *a* kind; they rather bring with them a variety of differences, one of which is learning styles. It is reminding to note that when *teaching style* and *learning style* match, intake is very likely to take place; when a mismatch is the option, in all likelihood acquisition is jeopardized. When alternation between the two options takes place, the teacher should be kept assured that he is not getting out of the usual, that he is not falling out of the scope of *focus-on-form* instruction, for *form* can be *focused on* either *explicitly* or *implicitly*.

7.4.5.2. Salience

We share the position that communicative instruction should draw learners' attention to linguistic forms so as to build a well-balanced communicative competence, albeit focus remains on meaning negotiation. We share also the claim, which we put to the test of experiment, that the more perceptually *salient* an item, the more likely it will be noticed in input; the reverse situation holds true as well in our viewpoint, a viewpoint we put as well to experimental manipulation with respect to the *focus-on-meaning* training condition.

It seems that *focus-on-form* – being an instructional type very much in keeping with L2 theories of the role of consciousness and attention (Schmidt, 1990, 1993a, 1994, 2001; Sharwood Smith, 1981, 1993; Long, 1991, 1997) – is one plausible candidate to promote input processing mechanisms, let alone *noticeability* which is said to ultimately induce *noticing*. Through the focus-on-form treatment, we attempt to investigate the value of shortly shifting the learner's focal attention to form while using the L2 for communicative purposes. This is done by working on input typographically to render it perceptually salient and hopefully amenable to noticing, the thing which proves optimal for our subjects. In raising L2 learners' consciousness through salience of targeted features of the input, it seems that their becoming intake is facilitated to a great extent. The obtained findings are, then, consonant with the view that salient input helps promote noticing, and the lack thereof may hinder noticeability to hold.

7.4.5.3. Frequency

Another variable that is likely to foster or hinder *noticing* might well be *frequency*. When an item appears more *frequently* in the input, it is likely that it will be noticed, further processed and subsequently *intaken* to be part of the IL system, especially when knowing that learners' attentional resources are limited and a form may go unnoticed, albeit salient – think of learner-driven attention, for example.

Methodologically, one might conjecture a guess that if the experimenter made the target parallel forms more *frequent*, the results could have been more striking. Clearly, we want to isolate the two variables, different as they are, and assess the relative value of *salience* and enhancement of structures; we do not seek to couple enhanced input with frequency nor do we wish to see how they compare – though we acknowledge that this would have been promising and very telling. This, we recommend, should be investigated in future research agendas.

Pedagogically, suffice it to point out that noticing is a complex process in that it takes time for learners to work their way through initial recognition of a L2 form to actual internalization of the underlying rule. As such, and because one noticing task is by no means likely to be sufficient, learners need to be provided with recurring opportunities for them to eventually come to notice.

7.4.5.4. Noticing the Gap

It should be pointed out that *noticing* alone may not suffice. Teachers should train learners to consciously *notice the gap* or recognize that new L2 features are different from their current IL so that the features in question become part of their developing IL system. That is, L2 learners are required to draw cognitive comparisons between input and their own output (see Ellis, 1995, 1997) by thinking of what is noticed, attempting to make sense of it. Such is not pursued in our context, but we look forward to see such practice a reality both in pedagogy and in research.

7.4.5.5. Practice

Practice is another factor that may shake the so-called robustness of noticing. Practice develops *automatic* processing ability (see Chapter 8) i.e. the extent to which L2 learners can automatize structures included in input. This is not possible, however, without the learners' *readiness* to notice new forms in the input and then practise them. At any rate, for automatization to take place at all, we believe the teacher should secure grounds for regular *practice* of the taught language forms. In respect of the focus-on-form treatment group, in the present study, though the gains are maintained in follow-up delayed tests, the subjects are arguably at risk of losing their merits in the absence of some follow-up exposure to and practice of the gained L2 forms, we believe.

7.4.5.6. Task Demands

It is already a fact that *task demands* determine what is noticed (see Schmidt, 1990; Fotos, 1993; Robinson, 1995a; Ellis, 1997), by triggering different types of further cognitive processing. By task demands, it is meant how a given task forces the material to be noticed, or say pushes learners to notice particular L2 features required to carry out the task in question. The very way the task is designed is, thus, one way to force learners to process L2 input.

In this way, and given that learners happen at times to complete a task without attending to the target form, it is of importance, both for teachers and researchers, to consider how a particular task encourages learners to engage with the input. With respect to our experiment, the very activities used engage learners in the negotiation of different areas of the target language: meaning negotiation for the focus-on-meaning group and negotiation of both meaning and form for the focus-on-form group, respectively.

At this point, we should strike a word of warning. Given that different kinds of task might trigger the noticing of different L2 areas, the learners' attentional system may be *overloaded* if tasks require simultaneous processing of form and meaning, the thing that affects intake rather negatively. In modern pedagogy, it is argued that meaning should be processed before form. This may suggest for teachers to distinguish tasks demanding simply the noticing of grammatical meaning from tasks designed for making sense of form/meaning connections, while being wary when proceeding with the latter.

Pedagogically speaking, there is a parallel with regard to the status of grammar. Our position is that grammar is the backbone of language, and language teaching cannot do without especially for an important proportion of learners. Without missing the objective of modern language pedagogy, the language teacher should secure ways which foster, and not hinder, the learning of a L2 while securing grounds in both meaning and form, for language is a *whole* that holds together.

7.4.6. Learner-Initiated Attention to Form

In parallel with the growing concern, among theorists, researchers and practitioners, for *focus-on-form*, concern has also grown considerably with respect to developing learner *centeredness* in the process of learning – his role in drawing attention to form. We believe teaching should follow the ways the learners learn: their needs, difficulties, dis/abilites; thus, when instruction matches with learning, or when the noticing of L2 formal features is triggered by learners' need and/or volitional attention, there is the likelihood of more room for acquisition to take place.

This view is shared by a great many researchers such as Leow (1998), Williams (1999), Ellis, Basturkmen, and Loewen (2001), to name but a few. Ellis *et al.* (*ibid.*), for example, suggested that it is a more effective strategy to invite learners to ask their own questions about L2 form than to have teachers ask their students questions they believe to be problematic.

It seems by now that learners are said to have *a role* in drawing attention to form. This should even make a promising agenda for future inquiry. A word of caution is needed, however. Williams (*ibid.*) addressed the importance of knowing the role learners might play in developing awareness of form, but she also warned against the potential danger of completely sidestepping the teacher and encouraging the learner to assume the learning responsibility alone. The danger relates, namely, to the fact that he might unknowingly inevitably focus on what is categorized as *focus-on-forms*; that is, instead of its being *negotiation of meaning* following a communication breakdown, it might rather be *negotiation of form* alone for the sake of developing accuracy, which is after all not the objective of SLA.

When learners decide on what they want or need to focus on, they indicate their readiness to acquire a given form. When they make use of their IL features, they might become aware of gaps in their IL, leading them to effect changes in their output. In this way, it is our contention that if such is the teaching approach, learner IL is likely to escape being

stabilized and/or fossilized and, therefore, continues to work its way to native-like competence. The present study expounds significant results in favour of focus-on-form and its role in drawing attention through different techniques; the question remains: What if such attention were learner-generated? What if learner attention were allocated elsewhere? Should the results be informative otherwise? Future inquiry should think this over, we recommend.

Conclusion

We draw to a close now. In this chapter, an attempt is made to discuss a number of implications while drawing on the results obtained upon running the statistical analyses. A number of limitations and hence recommendations are then volunteered with some further elaboration.

It might well be the case that some learners may be at an advantage in learning a L2, compared to others. Such an advantage may be explained in the light of a number of individual differences that are brought to bear on SLA in general and *focus-on-form* instruction in particular. Some of these individual differences, especially the cognitive resources, may be subject to maturation.

Of note is that the value of focus-on-form instruction may vary depending on complexity of the grammar structure under study. At any rate, it can be claimed that the present study tests a variety of parallel constructions ranging from single words up to clauses, though it does not measure the difference therein specifically. Research studies targeting both simple and complex L2 forms are, therefore, much warranted.

In the light of this, the role of a *focus-on-form* instructionally-developed explicit knowledge in the promotion of particular L2 forms and how this varies between different grammar structures, along with other language areas such as vocabulary should be explored. Such a recommendation is motivated by the fact that no satisfactory finding has, as yet, emerged from the bulk of the research conducted; the role therein is rather controversial still

as the findings are rather in opposition one against the other. One should go even so far as to investigate structure complexity while using both explicit and implicit measures of grammatical knowledge, the thing that might provide invaluable insights.

To be fair, it is not easy to draw conclusions with certainty; our findings should not be viewed as conclusive either. A small number of replications have been made; many research methods, different as they are, have been tried; and some intervening variables have been insufficiently dealt with. *Focus-on-form* research may even be compromised to a considerable extent. In a way, measures of explicit knowledge have been used more than measures of implicit knowledge in the assessment of L2 acquisition. This implies that there must be a rethinking of those claims pertaining to the superiority of explicit types of instruction over implicit ones, though the results obtained from our experiment are a reiteration of such claims. Moreover, for a coherent picture of the role of *focus-on-form* to emerge, more research studies trying out other tests that are *production-based* are warranted.

Disagreement in views has especially touched the teaching of grammar. Actually, grammar has long been a war that never ended, even in today's classrooms. It is timely to rethink seriously the integration of grammar teaching into L2 textbooks and secure its implementation through consciousness-raising. Knowing how explicit knowledge is built and the way L2 learners process it might well inform material development and curriculum design. Be that as it may, we believe such cognitive provision of grammar instruction with no *practice* (see model course in Chapter 8) on the part of the learners is likely to result in non-target-like accuracy. Therefore, instructional tasks promoting language practice are much in order for input to translate into intake, for explicit knowledge to convert hopefully to its implicit counterpart, and for stabilized interlanguage to break free and keep away from being permanently fossilized.

CHAPTER EIGHT:

A Form-Focused Model Course

Introduction

There are opposing attitudes as regards the role of teacher input and learner output in L2 acquisition. Some view that learners should first develop *receptive* skills in the target language; an alternative position holds that learners need to practise in the language – which involves *production*, also termed *free practice*, as well.

Form-focused tasks (any intervention in which simultaneous attention is brought to bear on both meaning and how meaning is encoded) aim at drawing learners' attention to problematic linguistic forms. Potentially, they include both *presentation-based* tasks (like consciousness-raising and interpretation tasks, for example, in which there is no immediate need for production, in the strict sense of the term) and *practising-* or *production-based* tasks which require from learners to produce in the target language (practising tasks such as grammar practice activities and grammar exercises make this happen – see 'sub-section 8.7.2.' on types of used activities below). In their attempt to produce, L2 learners are brought to engage both intellectually and emotionally with the content of the task at hand; as such, there is a high level of *personal* involvement while learning (see 'sub-section 8.6.2.' below).

The present model course is destined roughly for upper-intermediate-level students. The target grammar forms selected for use in the course are *auxiliary verbs* which, like many other grammar items, can be taught over and over again without giving them due credit – each time, a lesson on modal verbs can be cloaked in different fashion, focused on new content. As a matter of fact, students of upper-intermediate level and above meet, all along their instruction, a fair amount of review and remedial instruction – especially in spiral teaching practices. As such, core grammar forms are believed to have been covered. What is

disappointing, maybe, is the fact that the learners in question show still symptoms of *inaccuracy* and lack of *fluency* or automaticity.

The example activities which make up the model course of instruction that follows draw mostly on Soar, Soar, Sayer, and May's (2005) *New Headway English Course*, Upper-Intermediate level; however, they differ in a number of respects – one of which is their sequence and another is their nature, but this need not be gone into further. The model course is *form-focused* in nature, and it follows the *PPP* (Presentation-Practice-Production) sequence: it starts with formal instruction and noticing-driven tasks (like consciousness-raising and interpretation tasks), inducing learners to explicitly and implicitly understand the target forms (i.e. the presentation stage), and then moves to practising stage(s).

The suggested course is followed by a discussion and an evaluation subject to some defining criteria. For critics of the *PPP default* model, we try to end up the present chapter with an attempt at both *varying* and *extending* the model's sequence patterns so as to take the *fault* off the default model and put it, thus, off the offensive.

Of note, the suggested course of instruction should not be viewed as a single lesson; on the contrary, it is a course or unit of instruction which can be given in separate lessons (see 'Section 8.7.' on general discussion below).

8.1. Input-Practice-Output

Three major constructs within SLA research are *input*, *practice*, and *output*, each with a role to play in acquisition. *Input* refers to language that learners are exposed to i.e. language presented in communicative contexts that learners either hear or read; in classroom contexts, input is what the teacher *presents* to his class, more often than not at the *presentation* stage. As for *practice*, it stands for specific activities whose goal is to help intake take place or, say, to develop knowledge of and skill in a L2. By *output*, it is meant the language that learners

produce for communication purposes and meaning negotiation, both in written and oral modes.

Over the years, there is controversy in respect of the relative roles of each of these constructs in promoting learning of formal features of a L2. Where most people agree that input is *necessary* for acquisition, there is less consensus on the role played by the remainder of the constructs, and whether they are necessary or just beneficial.

8.2. Presentation-Practice-Production (PPP)

The foregoing threefold structure is analogous to the PPP model. That is, PPP (Presentation, Practice, and Production) is a parallel three-way distinction that we shall adopt in the model course to unfold shortly, and where the target items are presented, then practised in a semi-controlled fashion, before ending up with being practised freely at the production stage. It is worth our while to note, however, that the foregoing does not imply that the constructs 'input, practice, and intake' equate the lesson stages 'presentation, practice, and production', but it does not exclude it either.

By now, to be off the offensive and on the defensive, a word of caution is indeed warranted. Traditionally, teaching followed the now-out-of-fashion *mechanical, meaningful, and communicative* drilling (MMC). Paulston (1970, 1972) made this three-way distinction based on the idea of *drilling* students, the very idea that has invited critique. Exemplary textbooks usually provide these types of grammar exercises. In *mechanical drills*, there is only one correct response, and students carry out the exercise without attending to meaning; indeed, they do not require any knowledge of the L2 nor do they need any understanding of the rule being practised. Mechanical drills are the least useful because they reflect little or no real communication.

Contrariwise, *meaningful drills* cannot be completed without fully understanding, both structurally and semantically, what is being said. That is to say, students make form-meaning

connections and develop understanding of how the grammar works in order to make sense of what is asked and to respond with an answer that is correct both in terms of form and in terms of the intended meaning. Because students have only one correct response, resemblance to real communication is limited.

In *communicative drills*, students are required to be aware of the relationships among form, meaning, and use. There is, however, still control over the structures used, but the immediate goal is actual exchange of information. Communicative drills differ from meaningful drills in that they require the L2 user to add new information about the real world.

In comparison, a parallel three-way distinction, outlined earlier on, between *presentation*, *practice*, and *production* (PPP) is made by Byrne (1986). Most teachers are familiar with the PPP paradigm, even the novice. A PPP lesson would proceed as follows. The teacher first *presents* the target form in a clear context so as to convey its meaning, through a dialogue, a text, a situation, to name but a few. He then takes the students a stage further, the *practice* stage, where they do a number of activities in a controlled way. The last stage is *production*, which is freer practice on the part of students. Here, they use language for communication purposes.

Again, the reader should not fall victim to the view which equates the two paradigms, making thus PPP guilty by association; as indicated by Dekeyser (2007: 11):

PPP is completely different from MMC: presentation precedes MMC, practice combines the mechanical and meaningful, and production includes but goes beyond the communicative in MMC (because it goes beyond drills).

As such, it remains our contention that where MMC appears out of vogue, PPP does not (see analysis of a number of contemporary ELT coursebooks by Nitta and Gardner, 2005, which shows that PPP is rather making a comeback).

8.3. Why Use PPP?

The PPP approach may be viewed as being traditional, and it really is, but it is by no means past or dead, nor is it old-fashioned. PPP is convenient, we believe, because it makes it possible for the teacher to develop a structured, graded and time-efficient lesson plan that presents for the students comprehensible language, and that moves from a more teacher-centered classroom to a more learner-centered one: The teacher will be more active in P1 (Presentation), but in P2 (Practice) and P3 (Production) he will teach less and observe more. It is important to stress the point that the PPP procedure proposed hereafter should not be equated to the traditional model of teaching which is behaviourist in approach, such as the Audio-Lingual Approach, that focuses heavily on drills. The type of procedure that is proposed here, and which is shared by many contemporary textbooks, focuses rather on meaningfulness made due through consciousness-raising and practice.

Another reason why use is made of the PPP structure is effected by the ELT coursebooks market. A great many contemporary coursebooks are *form-focused* and include grammar *consciousness-raising tasks*. Nitta and Gardner (*ibid.*) investigated the nature of tasks by examining nine ELT coursebooks. They concluded that these reflect a common view in ELT that grammar tasks are beneficial for learners. Notwithstanding the differences therein, the coursebooks all follow a *Presentation-Practice* approach to grammar teaching, where, on the whole, the *Presentation* stage follows both *inductive* and *deductive* approaches and the *Practice* stage moves from controlled to freer practice or *production*. Ellis (2002) also, upon analysis of grammar teaching materials, found that they are characterized by explicit presentation coupled with practice activities. This way, learners may be said to follow the PPP progression, though not necessarily in the strict sense of the term, for they 'examine' first the target grammar structures/rules and then are invited to 'apply' them. Judging from these, the PPP model still dominates grammar teaching to date.

8.4. The Presentation Stage

8.4.1. Introduction

By presentation, it is meant *that stage* of lesson development where L2 learners are presented with, or exposed to, input. Following Ur (1988), in the presentation stage, the teacher aims at getting learners to 'perceive', and hopefully notice, the L2 structure (both form and meaning) and send it to short-term memory. Teachers help learners approximate native-like proficiency through the provision of input which is believed to be a critical variable for acquisition as it is a major L2 source for the language learner. Most SLA theories, however different they are, claim it to be central to acquisition, with the exception of skill-based accounts.

For example, Universal Grammar acknowledges the essential role of input, but it puts emphasis on innate principles which bear on language and which are not necessarily visible in the input. That is, it is through the interaction of input features and these principles that L2 acquisition takes place. The connectionists, on their part, put more emphasis on input for anything the learner needs is contained therein. Processing what the input offers in terms of linguistic information results, then, in grammar acquisition. In point of fact, input is a central construct in major theories of SLA: take, for instance, focus-on-form type of instruction which builds learners' linguistic system by making formal features of the language salient through such pedagogical choices as input enhancement, consciousness-raising, and the like.

8.4.2. Types of Presentation

In a focus-on-form presentation stage, the teacher presents the new language in a meaningful context. He may focus on form by asking the students leading questions and on meaning by asking the students questions to check that they have understood the concepts.

Formal instruction, which is made use of in the presentation stage to unfold shortly, refers to any activity in which a language learner engages through focused work on the target

language properties. Despite the fact that the term *formal* refers to grammatical *form*, one should not lose sight of the primary focus which is on meaning. In effect, it is difficult to find purely formal and purely communicative classrooms. That is, some kind of formal instruction does take place in communicative classrooms; likewise, in formal-instruction-based classrooms, teachers happen to call attention to meaning, at least occasionally.

We believe a good explanation, or presentation (meaning, here, use of formal instruction), succeeds partly due to an understanding of the metalanguage and the rules underlying the forms on the learners' part. Its aim, then, is in part to review the terminology required, even though there is not much to tell about the terminology pertinent to the present course of instruction. The formal instruction provided here establishes an explicit comparison between the different modal verbs, with a view to *raising awareness* of the difference or similarity therein. There are, however, various other ways to present the new input.

Two main approaches to grammar teaching are: The deductive and the inductive approaches, respectively. A *deductive* approach takes place when the rule is presented first and the target language is produced next i.e. it is realized through grammar explanation. It is convenient for it is certainly time-saving and it may be suitable more for lower-level students.

An *inductive* approach is characterized by developing an understanding of the target forms via task manipulation i.e. when the students infer the rule through some form of guided discovery after working on the input presented. This way, the former approach is more teacher-centered while the latter is more learner-centered. The inductive approach is often more beneficial to students with acceptable proficiency as it allows them to work things out for themselves thanks to their existing knowledge. To compare the efficiency of the two approaches is far from being conclusive, for efficiency depends also on such covert variables as teacher skill and learner preferred learning style, to name but a few (see Thornbury, 1999).

Both inductive and deductive approaches to grammar presentation were identified in the ELT coursebooks analyzed by Nitta and Gardner (2005); this is attributed to the influence

of *focus-on-form* and *consciousness-raising* accounts. There is, however, a noticeable tendency in favour of inductive presentation. This is not true of Ellis's (2002) analysis of grammar teaching materials where deductive presentation was predominant.

Besides formal instruction, we also make use of input enhancement. Enhancement of input, being an externally-driven activity not originating from within the learner, is used to direct learners' attention to formal features of language with a simultaneous focus on meaning. In this way, it is a pedagogical option aimed to assist learners' development of target language forms. In the 'presentation stage', an effort is made to make the targeted formal features of the language more salient. The commonality between input enhancement and focus on form lies in the fact that both involve simultaneous attention to form and meaning in the input.

8.4.3. Presentation: The Course

The teacher starts setting the stage by giving formal instruction on the use of modal verbs in an explicit, deductive way; some metalanguage is thus used. This may be teacher-fronted as he may elicit contributions from students with the use of leading questions to make it more interactive, depending on students' level of proficiency.

Formal Instruction:

The teacher starts by giving some reminding notes on auxiliaries:

Auxiliary verbs, except *be*, *do* and *have*, are called modals. Unlike other auxiliary verbs, modals only exist in their helping form; they cannot act alone as the main verb in a sentence. The English modal verbs are used mostly to express modality (properties such as possibility, obligation, etc.). The principal modal verbs are: CAN, COULD, MAY, MIGHT, MUST, OUGHT TO, SHALL, SHOULD, WILL, WOULD.

The modals are listed below in present–past pairs where applicable:

- *can* and *could*
- *may* and *might*

- *shall* and *should*
- *will* and *would*
- *must* (no past)

Note: The past forms are not necessarily used to refer to past time, and in some cases they are near synonyms to the present forms.

Examples:

Modal Verb	Example	Uses
Can	They can control their own budgets.	<i>Ability / Possibility</i>
	We can't fix it.	<i>Inability / Impossibility</i>
	Can I smoke here?	<i>Asking for permission</i>
	Can you help me?	<i>Request</i>
Could	Could I borrow your dictionary?	<i>Asking for permission.</i>
	Could you say that again more slowly?	<i>Request</i>
	We could try to fix it ourselves.	<i>Suggestion</i>
	I think we could go to war again.	<i>Future possibility</i>
May	May I have another cup of coffee?	<i>Asking for permission</i>
	China may become a major economic power.	<i>Future possibility</i>
Might	We'd better phone tomorrow, they might be eating their dinner now.	<i>Present possibility</i>
	You never know, they might give us a 10% discount.	<i>Future possibility</i>
Must	We must say good-bye now.	<i>Necessity / Obligation</i>
	They mustn't disrupt the work more than necessary.	<i>Prohibition</i>
Ought to	We ought to employ a professional writer.	<i>Saying what's right or correct.</i>

Shall	Shall I help you with your luggage?	<i>Offer</i>
	Shall we say 2.30 then?	<i>Suggestion</i>
Should	We should sort out this problem at once.	<i>Saying what's right or ...</i>
	I think we should check everything again.	<i>Recommending action</i>
	You should check your posture when using the computer.	<i>Giving advice</i>
	Profits should increase next year.	<i>Uncertain prediction</i>
Will	I can't see any taxis so I'll walk.	<i>Instant decisions</i>
	I'll do that for you if you like.	<i>Offer</i>
	I'll get back to you first thing on Monday.	<i>Promise</i>
	Profits will increase next year.	<i>Certain prediction</i>
Would	Would you mind if I brought a friend with me?	<i>Asking for permission</i>
	Would you pass the salt please?	<i>Making a Request</i>
	Would you mind waiting a moment?	<i>Making a Request</i>
	Would three o'clock suit you?	<i>Making arrangements</i>
	Would you like to play golf this Friday?	<i>Invitation</i>
	Would you prefer tea or coffee?	<i>Stating Preferences</i>

1. Activity one: The teacher asks students to read dialogue 1, to tell who the speakers are, and what they are talking about. He, then, asks them to underline all the modal verbs and to say what meaning they convey. They do it first in writing then orally.

Dialogue 1:

A= Where d'you think you're going?

B= What'd you mean?

A= Well, you can't turn right here.

B= Who says I can't?

A= That sign does mate. 'No entry'. Can't you read?

B= I couldn't see it, could I?

A= You should get your eyes tested, you should. You're not fit to be on the roads.

Answer:

- **Speakers in dialogue:** Two car drivers. One is trying to turn illegally into a road with a 'No entry' sign. The other is angry.

- Dialogue 1

A= Where d'you think you're going?

B= What'd you mean?

A= Well, you can't turn right here. (**ability**)

B= Who says I can't? (**ability**)

A= That sign does mate. 'No entry'. Can't you read? (**ability**)

B= I couldn't see it, could I? (**ability in the past**)

A= You should get your eyes tested, you should. You're not fit to be on the roads. (**advice**).

N.B. *The teacher monitors students and gives feedback all along.*

2. Activity two: *The teacher asks students to read dialogue 2, to tell who the speakers are, and what they are talking about. He, then, asks them, to underline all the modal verbs and to answer the questions as an attempt to interpret the sentences.*

Dialogue 2:

A= You won't tell anyone, will you?

B= Of course I won't.

A= You really mustn't tell a soul.

B= Trust me. I won't say a word.

A= But I know you. I'm sure you'll tell someone.

B= Look. I really can keep a secret, you know. Oh, but can I tell David?

A= That's fine. He's invited too, of course. It's just that Ben and I want a really quiet affair.

Questions:

1. In B1, what meaning is the speaker trying to convey?
2. In A2, is the speaker expressing a prohibition or a degree of probability?
3. In B3, 'can' in the two sentences is used to express two meanings. Which is which?

Answer:

- **Speakers in dialogue:** There are two women chatting. One is telling the other a secret – that she is going to get married for the second time.

- Dialogue 2:

A= You won't tell anyone, will you?

B= Of course I won't.

A= You really mustn't tell a soul.

B= Trust me. I won't say a word.

A= But I know you. I'm sure you'll tell someone.

B= Look. I really can keep a secret, you know. Oh, but can I tell David?

A= That's fine. He's invited too, of course. It's just that Ben and I want a really quiet affair.

- Answer to questions:

1. In B1, the speaker is trying to give a promise.
2. In A2, the speaker is expressing a prohibition.
3. In B3, 'can1' expresses ability; 'can2' is about asking for permission.

N.B. The teacher monitors students and gives feedback all along.

3. Activity three: *The teacher reminds students that modal verbs have many meanings. He then asks them in pairs to underline the modals and to match the sentences in A with the meanings in B.*

A	B
1. He can ski.	
2. Can I go to the party?	
3. You must stop at the crossroads.	Ability
4. You must see the film.	Advice
5. He must be rich.	Obligation
6. I'll help you.	Permission
7. I won't help you.	Probability
8. You should stop smoking.	(un)willingness
9. It will be a good party.	
10. It might rain.	

Answers:

A	B
1. He can ski.	<i>Ability</i>
2. Can I go to the party?	<i>Permission</i>
3. You must stop at the crossroads.	<i>Obligation</i>
4. You must see the film.	<i>Advice</i>
5. He must be rich.	<i>Probability</i>
6. I' ll help you.	<i>Willingness</i>
7. I won't help you.	<i>Unwillingness</i>
8. You should stop smoking.	<i>Advice</i>
9. It will be a good party.	<i>Probability</i>
10. It might rain.	<i>Probability</i>

N.B. *The teacher monitors students and gives feedback all along.*

4. Activity four: *The teacher asks students which meanings in B above the related verbs below express.*

be able to – manage to – be allowed to – be bound to – be supposed to – promise to – refuse to – have (got) to – be required to – be likely to – had better – Why don't you...?

Answers:

be able to = *ability*
manage to = *ability*
be allowed to = *permission*
be bound to = *probability (certain)*
be supposed to = *advice/mild obligation*
promise to = *willingness*
refuse to = *unwillingness*
have (got) to = *obligation*
be required to = *obligation*
be likely to = *probability*
had better = *advice*
Why don't you...? = *advice*

N.B. *The teacher monitors students and gives feedback all along.*

5. Activity five: *To consolidate, the teacher asks students to read the sentences 1-10, and indicate what meaning the bolded modal verbs express. He, then, goes around monitoring.*

1. You **shouldn't** wear red, it doesn't suit you.
2. **May** I make a suggestion?
3. You **can** smoke in the designated area only.
4. I **can** take you to the airport.
5. You **must** obtain a visa to work in Australia.
6. You **should** always make an appointment.
7. You'll pass. Don't worry.
8. You **mustn't** walk on the grass.
9. I **couldn't** get through, the line was engaged.
10. I **won't** discuss the matter any further.

Answer:

1. Advice/opinion
2. Asking permission
3. Permission/prohibition
4. Suggestion/offer
5. Obligation/requirement
6. Advice
7. Certainty/prediction
8. Prohibition
9. Inability/impossibility
10. Instant decision

N.B. *The teacher gives correction and feedback.*

6. Activity six: *The teacher asks students in pairs to tick the sentences that express degrees of probability, and to (put a) cross (to) those which do not. He, then, asks them in their pairs to discuss what meanings they all convey.*

1. She **must** be very rich.
2. I **must** do my homework.
3. I **can't** sleep because of the noise.
4. They **can't** be in. There are no lights on.
5. I think that's Jane but I **might** be wrong.
6. You **should** see a doctor.
7. I **could** swim when I was five.
8. Cheer up! Things **could** be worse.
9. The train **may** be late due to bad weather.
10. **May** I make a suggestion?

Answer:

1. Prediction/probability
2. Necessity/obligation
3. Inability/impossibility
4. Prediction/probability
5. Prediction/probability

6. Advice
7. Ability in the past
8. Prediction/probability
9. Prediction/probability
10. Asking permission

N.B. *The teacher gives correction and feedback.*

7. Activity seven: *The teacher asks students in pairs to discuss differences in meaning.*

1. He must be on his way.

I must be on my way.

2. They must share a flat together.

We must share a flat together.

3. He can't be married.

We can't be married.

Answer:

1. A logical interpretation of events – perhaps the speaker has phoned him, and there is no answer, so logically...

- It expresses a personal obligation. The speaker is saying that they are obliged to leave, perhaps because they are late for something else.

2. It expresses a logical interpretation of events. The speaker has, perhaps, seen the two often coming out of the same building.

- It expresses a personal obligation. It is a way of saying that something would be a really good thing to do.

3. It is saying that there is evidence that this is not true.

- Perhaps because we are too young.

N.B. *The teacher gives correction and feedback.*

8.4.4. Discussion

Some hold that L2 learners should first develop *receptive* skills in the language through *consciousness-raising* and *interpretation tasks*, for example, in which there is no immediate need for production – in the strict sense of the term. Indeed, this is particularly our position (see the Presentation activities in the course box above). An alternative position holds that learners need to *practise* in the target language – which involves *production* as well. Practising tasks such as *grammar practice activities* and *grammar exercises* make this happen – indeed, we contend that presentation should be coupled with such practice activities (see the Practice activities in the course box below).

8.5. The Practice Stage

8.5.1. Introduction

We have been, thus far, elaborating on the *presentation* of grammar. The purpose of *practice* activities is to convert the presented body of knowledge into some proceduralized and why not automatized, readily available system. Bare knowledge of what to do, that is, does not entitle one to be able to do it (well) if one seeks to develop a *skill*. L2 learners who manage to balance between their knowledge and automatization of it in their performance must be successful language users. All along the practising activities, they also experience instances of developing an ability to reorganize or, to put it technically, *restructure* what they know already by integrating the new knowledge into a body of previous knowledge.

Practice is the second stage of the PPP structure. At this stage, the teacher hands over some control to the students and lets them experiment with the new material. They are given a set of tasks or activities and are prompted to use what they have learned in the presentation stage. They are supposed to do most of the talking – practising and discussing the new material. It is important that the activities be fairly controlled as the students have just met the new language input.

Practice is viewed, here, in a way different from the behaviourists' i.e. it does not imply the use of mechanical drills and rote repetition or learning that neglect meaning and the context of situation. Following Dekeyser (2007), practice is rather viewed as specific activities whose goal is to develop *knowledge* of and *skill* in the target language. This is very much in keeping with the well-known distinction between *declarative* and *procedural knowledge*. Within cognitive and skill theory, one learns first information (e.g., facts and rules) explicitly i.e. declarative knowledge which is developed through instruction, reading, observation, for example. Then, such knowledge is taken a step further when it gets *proceduralized* (procedural knowledge) i.e. when it converts into behavioural routines through controlled practice. The role of practice in transforming declarative (and explicit) knowledge into procedural (and implicit) knowledge is then undeniable for cognitive psychologists: rules that are incorporated into procedural knowledge and beyond can be used with relatively high speed and low error rate.

Moving through the whole process of knowledge change from initial presentation / learning of a rule in declarative form to spontaneous, effortless, fast, and error-free use of the rule ends with skill *automatization*. *Skill* entails the interaction of both *accuracy* (i.e. the ability to use a L2 form correctly) and *fluency* (i.e. the speed with which one can use the L2). In principle, the two can be worked independently of each other; in reality, however, research has shown that the two tend to develop simultaneously. Skill is said to develop with *appropriate practice*. This means one does from the *beginning* a task that is similar to what one is expected to do in the *end*. A good case in point may be the reading skill. When a learner reads aloud so as to develop speed or pronunciation, he does not develop his reading skill. This skill is believed to develop rather by reading for meaning, not by aiming at something else.

Dekeyser stroke a word of caution here. He pointed out that *automatized* knowledge should not be equated with *implicit* knowledge: Where absence of *awareness* is a requirement

for implicit knowledge that is, this is not true of automaticity. L2 knowledge can be implicit but not necessarily automatic when error rate is too high and speed is too low. That is to say, when implicit learning is rather incomplete, the learner shows uncertainty, hesitation, and inaccuracy. By the same token, a L2 learner's knowledge can be automatic but not implicit; this is when the learner demonstrates high speed and low error rate while being still conscious of rules (e.g., a language teacher, a linguist).

8.5.2. More on Accuracy and Fluency

The very essence of focus-on-form instruction, and practice activities, is to make learners' meaningful output as *accurate* as possible which cannot take place unless due *attention to form* is secured. Given that attentional resources are limited, for it is not easy to focus one's attention on two events at a time, say form and meaning, some compromise needs to obtain. Maybe familiarizing learners with, say, the meanings of the input to be presented and practised will free them somehow to allocate their attention, or part of it, to form. For accuracy of the practised form to obtain, learners need to be allowed time for processing and monitoring – to use Krashen's term (1979) – their output. Again, for accuracy to obtain, learners need to receive negative evidence or corrective feedback so as to situate their learning (i.e. intake visible in output) vis-à-vis the teacher's input (i.e. positive evidence).

As afore-mentioned, in order for skill to obtain, *fluency* becomes a goal. In its turn, for fluency to obtain, learners should come at a stage to automatize the learnt knowledge. In the event of targeting fluency, practice activities should meet certain criteria: Attention to meaning, authenticity, communicative purpose, chunking, and repetition, respectively. The point is that the forms under focus are but a means to a communicative end; therefore, it would be unwise for practice, as well as other, activities to tear apart, more than need be, form-meaning connections which constitute the reality of what language use is. Again, as long

as the framework is focus on form, there need to be some trade-off between form and meaning, or say accuracy and fluency.

8.5.3. Practice: The Course

This section practices modals and related verbs. The practice activities focus on meaning and use while the target forms are enhanced typographically in bold form.

The teacher asks students to read the two dialogues: one about a woman advising her friend to forgive her husband for the sake of the children, the other about a schoolboy explaining to a friend why he cannot come to football practice.

1. Activity one: *The teacher asks students to read dialogue 1, to tell who the speakers are, and what they are talking about. He, then, informs them that there is use of expressions, instead of modal verbs, which they are required to underline. In the feedback, he invites the students to build up a list of the expressions on the board and to replace them with the appropriate modal verb.*

Dialogue 1:

A= If I were you, I'd swallow my pride and forgive and forget.

B= Never! I refuse to.

A= You'll have no choice in the end. You won't be able to ignore each other forever.

B= Maybe I'll forgive him but I'll never be able to forget.

A= Surely it's possible to talk it over and work something out. You have to for the sake of the children.

B= Oh dear! I just don't know what to do for the best.

N.B. *Plus correction and feedback.*

Answer:

A= If I were you, I'd swallow my pride and forgive and forget.

B= Never! I refuse to.

A= You'll have no choice in the end. You won't be able to ignore each other forever.

B= Maybe I'll forgive him but I'll never be able to forget.

A= *Surely it's* possible to talk it over and work something out.

You have to for the sake of the children.

B= Oh dear! I just don't know what to do for the best.

2. Activity two: *The teacher asks students to read dialogue 2, to tell who the speakers are, and what they are talking about. He, then, informs them that there is use of expressions, instead of modal verbs, which they are required to underline. In the feedback, he invites the students to build up a list of the expressions on the board and to replace them with the appropriate modal verb.*

Dialogue 2:

A= I don't know if I'll be able to come this evening.

B= But you have to. You promised to.

A= Yeah, but I'm not supposed to go out on weekday evenings. My parents won't let me.

B= Why don't you tell them that you're coming over to my house to do homework?

A= Not possible. Somebody's bound to see me and tell them.

B= We have no choice but to cancel the match then. Lots of kids aren't able to come to practice in the term time.

N.B. *Plus correction and feedback.*

Answer:

A= I don't know if I'll be able to come this evening.

B= But you have to. You promised to.

A= Yeah, but I'm not supposed to go out on weekday evenings.
My parents won't let me.

B= Why don't you tell them that you're coming over to my house
to do homework?

A= Not possible. Somebody's bound to see me and tell them.

B= We have no choice but to cancel the match then. Lots of kids
aren't able to come to practice in the term time.

3. Activity three: *The teacher asks students to complete the lines a-j, which they saw in Activity four, in the Presentation stage, with their own ideas, and compare with a*

partner. He does the first as an example to get them started.

e.g., a. I'll be able to *come on Saturday after all*.

b. I didn't manage to...

c. You're bound to...

d. You are required to...

e. Is it OK if...?

f. You're allowed to...

g. If I were you...

h. I refuse to...

i. It's always a good idea to...

j. You aren't permitted to...

N.B. *Plus correction and feedback.*

4. Activity four: *The teacher asks students to supply the sentences with the appropriate modal verb.*

1. He always looks so stressed. He.....have a very demanding job.

2. You.....come with us next time. You'd love it.

3. I.....not hear you. The line's bad.

4. She.....change her mind if we keep on at her.

5. You.....borrow the car. I don't need it.

6. He.....read and he's only three.

N.B. *Plus correction and feedback.*

Answer:

1. must

2. should

3. can't

4. will

5. can/may

6. can

5. Activity five: *The teacher asks students in pairs to choose and learn a conversation by heart, then to act it out for the class. Learning by heart is a useful and fun way of practising and learning expressions.*

6. Activity six: *The teacher asks students to extend the sentences in Activity seven, in the Presentation stage, to illustrate the meaning. One is done to get students started.*

1. He must be on his way....

I must be on my way *because I'm late for class.*

2. They must share a flat together....

We must share a flat together....

3. He can't be married....

We can't be married....

N.B. *Plus correction and feedback.*

8.5.4. Discussion

In order for *practice* activities to be selected, designed, and evaluated, two key and defining criteria are: *Quantity* and *quality* (Thornbury, *ibid.*). Regarding the former, it is meant 'the more practice the better'. Insofar as the latter condition is concerned, practice activities are required to secure attention to form (i.e. accuracy) without losing sight of attention to meaning (i.e. fluency). This, we believe, is what we tried to take care of while selecting the constituent activities – the remainder remains the teacher's job.

For accuracy to hold, however, recourse should be made to provision of feedback, when need be. Feedback refers to the responsive reaction to what learners produce. It can take place explicitly or implicitly. The teacher may provide explicit feedback through such practice as overt correction or even comments on learners' contributions. Alternatively, he may use implicit feedback during more communicative interactions in the form of recasts i.e. rephrasing what the learner says without making any explicit statements. Whether it be the

one or the other, it is our contention that the teacher should make use of feedback (i.e. negative evidence) in practising activities, alternating between the two types if need be, in case consciousness-raising efforts at the presentation stage (i.e. positive evidence) fail to bring the learners to notice the target forms.

8.6. The Production Stage

8.6.1. Introduction

The field of SLA has placed too much emphasis on the role of input – and practice (see the presentation and practice stages). Such emphasis is certainly not without justification, but what is missing is perhaps *output* which refers to learners' communicative behaviour or the language they *produce* during interactions to negotiate meaning or express a message. Swain (1985) argued, in the Output Hypothesis, that learners need to be pushed to produce comprehensible output for acquisition to take place. She pointed out that pushed output moves learners to more concern with syntax (e.g., reliance on verb inflections to get tense) and less with semantics (e.g., reliance on adverbials such as 'yesterday' to refer to past tense). This way, their attention will be allocated not only to the message but to how the message is supposed to be expressed.

There are three positions with regard to the status of output: (1) output is necessary i.e. Swain's original position, (2) output is not necessary, or (3) output may be beneficial. Empirically, there is no evidence for the necessity of output; in effect, Swain herself moderated her claim since the mid-eighties. As for the second position, that output plays little or no role in acquisition, it is pioneered by Krashen. He pointed out that the learner cannot test out in production every single property of the language he is acquiring, let alone the fact that from the perspective of Universal Grammar, a large proportion of underlying competence cannot result from learner production, but from input interacting with the principles of Universal Grammar.

The third position is that interaction, which implies in part output, is optimal for acquisition, but it remains a weak position or claim about output. That is, production of output does not itself result in changes in learner interlanguage; instead, learner output causes modification in the input he receives *post hoc*. Learner output may also cause feedback to take place. Granting that this position is correct, it follows that interaction and negative evidence are likely to raise learner attention; in this way, output has only an indirect causal bearing on acquisition, where input remains central therein. Be that as it may, the picture is far from being uniform: From the perspective of skill acquisition (see the practice stage above), output would be essential for the development of fluent oral language ability. Still, this may be attacked on the grounds that skill-based accounts credit 'ability to do' which means that underlying competence is given little or no credit.

As mentioned earlier, Swain later moved from a strong position where output is *necessary* to a weaker position in which output *promotes* particular aspects of acquisition. She came to suggest that the role of learner output in L2 acquisition is threefold. Output invites more *noticing* of L2 properties. Second, learners are likely to *test hypotheses* about the language, hence incorporating it when correct, and rejecting it when not; testing hypotheses during communicative interactions becomes possible with the provision of feedback, both positive and negative. Output plays a third role in prompting the use of *metatalk* i.e. the use of language to talk about language.

Whether production of output (i.e. free practice) is viewed as being necessary or facilitative, in the teaching / learning process L2 learners should come at a stage where they engage in meaningful activities which offer the opportunity to practise the language more freely and produce it so as to situate their intake, or say interlanguage, vis-à-vis teacher's input or native-likeness. In the production stage, teacher talk-time is at its lowest and learners are prompted to be creative and develop their oral and written abilities, while monopolizing most of the class talk-time. Similar to the practice stage, the teacher can separate his class into pairs

or groups for production to construct dialogues, monologues, texts and so on. In this stage, like in the previous stage, it is important to monitor and attend to any errors so that feedback and error analysis can be used in class after the lesson. This way, the teacher may go even so far as to extend the default PPP stage to include a fourth stage for further remedial practice (see 'Section 8.8.' on extension of the default model below).

8.6.2. Production: The Course

1. Activity one: *Work in a group of four or six. Ask each about the things they can/can't, could/couldn't, must/mustn't, will/won't, should/shouldn't, may, might do. The teacher asks students to write the sentences first then practise them.*

Example:

A= Can you speak German fluently?

B= Well, I can't, but now I have to.

2. Activity two: *The teacher asks students to write 4-6 line dialogues using expressions from 1-10 in Activity 5, in the Presentation stage, and expressions from a-j in Activity 1, in the Practice stage. He, then, asks the pairs to act out their conversations for the class.*

Example:

A= May I make a suggestion?

B= Yes, of course, but I won't change my mind.

A= OK. That's fine. But if I were you, I really wouldn't wear that hat!

B= Oh! You must be jealous, then.

N.B. The teacher monitors students and gives feedback all along.

8.6.3. Discussion

L2 learners are tested by the end so as to demonstrate how well they have interiorized the targeted language forms. Free production, that is, is meant to provide feedback "without

which neither teacher nor learner would be able to progress very far" (Ur, 1988: 9-10).

Notwithstanding, the teacher needs to vary production activities to meet most of learners' potential and exploit it to the fullest. When differentiation takes place, needless to remind that learner learning style and teacher teaching style are likely to meet at the interface. The teacher may even add games, for example, to the above production activities, especially when dealing with learners at a younger age.

8.7. General Discussion and Evaluation

8.7.1. Discussion

The foregoing suggested course of instruction is form-focused with the aim of raising learners' consciousness of target features of the L2. It attempts to aid learners to notice the features and practise them themselves. The model used is the PPP structure.

When work in the different stages is done in the written form first then orally, it allows students some processing time because we believe the former mode is a better way for grammar focus. Some activities are contextualized, some are not. Students are allowed to work in pairs, but also individually.

The *presentation* stage aims to build awareness of the form and meaning of modal verbs. It starts with formal instruction on modal verbs to help set the stage. In the *practice* stage, both of the accuracy and fluency aspects of language use are controlled, but asking students to memorize some dialogue, to act it out, and providing them with feedback are promising ways to proceduralize their knowledge and work it towards becoming a skill. In fact, the activities are more or less communicatively oriented, securing thus both a focus on meaning and a focus on form. The *production* stage is the last in sequence and it serves as feedback on the part of the learner which in turn is supposed to receive feedback on the teacher's or peers' part.

Of note, this is the usual order of the stages, but this *default order* can be altered or manipulated in various ways, if need be (see below 'Section 8.8.' on varying the conventional PPP sequence). Besides, a stage might be used *recurrently* in a single lesson, thus bringing *variety* in the flow of the lesson. Moreover, one lesson may but need not necessarily include all the stages i.e. if the teaching objective is short-term not long-term, and specific not general such that it focuses on only one simple grammar item, for example, it is likely for the teacher to achieve it in a single lesson. At this point, it is important to stress the point that what we propose, here, is in no way a single lesson; rather, it is a whole course of instruction that can be taught in a number of successive lessons.

One might by now conjecture a question: What then is a lesson? What are its parts? In fact, any lesson usually goes through three main sections: The introductory section, the main body of the lesson, and the final recapitulation. This usually takes place within the span of sixty minutes or so i.e. a session. The first section is also called the 'warm-up'. Its purpose is to prepare the learners mentally for the new input, via the title, the objective(s) of the lesson, the plan, a story, asking leading questions, etc. The second section of a lesson refers to the activities that are presented, practised, or produced – or all of them in the event the objective is specific and short-term. The third and last section takes place at the end of the lesson/session in terms of, for example, a summary of the main points, or key questions to check understanding.

A course/lesson should be organized before 'delivery'. We organize a course so as to make it easy and quick to be learnt. Usually, three points need to be taken care of when organizing it: Sequence, the exact course, and revision. By *sequence*, it is meant the ordering of the new L2 features according to what is easy/old comes first and what is difficult/new comes next (i.e. the easiness/oldness vs. difficulty/newness principles). Giving the *exact course* means how much to teach, how much to expect from students – in light of time constraints, objectives, level, etc.). As for revision, the teacher should consider what items

need to be re-presented, re-practised. This way, instead of its being linear, instruction becomes *spiral*, a way involving the recycling of L2 forms to ensure that learners have repeated opportunities to learn them. This takes place when the number of the PPP stages is extended in such a way that a given stage is repeatedly used or when the previously learned knowledge is given a review, which tends to improve retention.

8.7.2. Types of Used Activities

It might be worthy reminding that all the activities used in the model course or unit of instruction are *form-focused* in nature, though they vary in type. Before this section unfolds information about the very types of activities employed, it is worth stating that they are named after Nitta and Gardner's (2005). How, then, are task types distributed across the stages? Clearly, what might catch attention after some thorough observation and analysis of the foregoing model course is that use is made of at least four different task types (if agreement is met on the appellations): namely, Grammar consciousness-raising tasks; Interpretation tasks; Grammar practice activities; and Grammar exercises.

Ellis characterized the first two task types as drawing upon the notion of consciousness-raising. The third type is communicative grammar practice, according to Ur (1988). Nitta and Gardner called the last type, grammar exercises, a traditional type of grammar task. Contrary to the first two tasks which are featured according to consciousness-raising lines, the last two types are seen as practising tasks. An account of each of these will shortly be outlined.

Analysis of the utilized type of task/activity reveals that, on the whole, both *grammar consciousness-raising tasks* and *interpretation tasks* recur at length in the presentation stage, with grammar exercises and grammar practice activities noticeably in the practice stage, but only grammar practice activities are used in the production stage (see summary Table 8.1 below). Grammar exercises are made use of in the presentation stage for we believe that a

given stage stretches over a continuum in that it starts being more teacher/presentation-based and ends up with being more learner/practice-oriented; as for the use of interpretation tasks in the practice stage, Ellis (1995) himself acknowledged that in such type there is room for production (i.e. guided practice, here).

Stages	Presentation	Practice	Production
Types of Task/Activity	- FI - GCR - IT - GE	- GE - IT - GPA	- GPA

Key: *FI = Formal instruction; GCR = Grammar consciousness-raising tasks; IT = Interpretation tasks; GE = Grammar exercises; GPA = Grammar practice activities*

Table 8.1: *Distribution of task/activity types*

8.7.2.1. Consciousness-raising Tasks

Consciousness-raising tasks are an effective means of teaching grammar, and are believed to be conducive to *noticing*. A consciousness-raising task is defined by Ellis (1997: 160) as:

a pedagogic activity where the learners are provided with L2 data in some form and required to perform some operation on or with it, the purpose of which is to arrive at an explicit understanding of some linguistic property or properties of the TL.

Consciousness-raising tasks are directed at the development of explicit understanding. The teaching of explicit knowledge is twofold: (1) direct explicit grammar instruction (i.e. the rules are formally explained with metalanguage and examples provided); (2) indirect grammar teaching (i.e. learners are supplied with data and encouraged to discover grammar rules for themselves). The former is commonly known as deductive consciousness-raising tasks while the latter is referred to as inductive consciousness-raising tasks.

Ellis pointed out that consciousness-raising tasks differ from other form-focused activities in that they do not give much credit to learner *production*. Added to that, they do not target the use of the correct forms in spontaneous language use immediately after task performance; instead, the aim is to form a conscious representation of the target L2 feature.

Most modern language teaching practices aim at developing in learners the ability to use the target language both accurately and fluently. Consciousness-raising tasks cannot do that alone. In point of fact, even the construct of noticing is a complex process and consciousness-raising efforts may fail if learners are not provided with frequent opportunities to notice (see Chapter 7). Varying noticing tasks seems then promising; the teacher can, therefore, vary consciousness-raising tasks, within the broader framework of focus-on-form instruction and consciousness-raising approaches, to make up for the limitations therein – namely, the provision of room for *practice* and *production* activities. Thereby, consciousness-raising grammar tasks are likely to: (1) direct learners' attention to grammar features they might not notice otherwise, (2) help learners establish form-meaning mappings, (3) help them acquire conscious knowledge with which they can understand input and monitor their output, and (4) make them more autonomous by developing their reflective and analytical ability. The following is, thus, another type of task that comes under the umbrella of consciousness-raising approaches.

8.7.2.2. Interpretation Tasks

Those consciousness-raising tasks that favour an aspect of interpretation are referred to as interpretation tasks. Ellis (1995) proposed what he termed *interpretation tasks*, an alternative approach to grammar teaching compatible as it is with how learners learn grammar, to replace traditional production tasks. Interpretation tasks are designed in a way that focuses learners' attention on a particular form in the input and that allows them to identify and comprehend its meaning(s). This approach is based on interpreting input for

comprehension rather than emphasizing output processing for production, a fact that is believed to influence more readily interlanguage development (i.e. by manipulating rather input than output).

Interpretation tasks have three goals; they induce learners to: (1) attend to, and thus notice, grammatical forms in the input that otherwise might not meet their eye, meaning that interpretation tasks aim to facilitate noticing by way of input enhancement, (2) identify and understand their meanings i.e. carrying out form-function mappings (note that the goal is grammar comprehension, not message comprehension – the latter can take place without ever attending to the grammatical form), and (3) compare the form-function mappings of the target language with those occurring in learner output (i.e. cognitive comparison, or noticing the gap), which reflect the interim stages of their respective interlanguage development. These three goals take the form of sequences of activities, each aiming at one of the three operations (see Ellis for the way interpretation tasks are designed).

When processing input for intake, learners use both top-down strategies (i.e. to make sense of the message content by making use of contextual cues) and bottom-up strategies (i.e. to attend to, and decode, particular L2 forms). Ellis claimed that bottom-up processing is necessary for L2 acquisition, meaning that if noticing is not done, acquisition is unlikely to occur. Contrary to grammar consciousness-raising tasks, given that the focus of interpretation tasks is on matching meaning to form, formulating explicit knowledge about the target grammar is not required i.e. there is little or no use of metalanguage. However, in general, Ellis also argued that having explicit knowledge of a particular L2 form enables learners to better engage in bottom-up processing, the thing that helps intake take place.

8.7.2.3. Grammar Practice Activities

According to Ur (1988), there are three types of *grammar practice*: Mechanical practice, Meaningful practice, and Communicative practice. *Grammar practice activities* are

of the third, communicative, type, in Ur's classification. They are used in language classrooms to create interaction where fluent use of form is developed. It is noteworthy that whereas the two consciousness-raising tasks above *typically* introduce the L2 form, practising tasks consolidate what is learnt of grammatical knowledge.

8.7.2.4. Grammar Exercises

The first two types of Ur's classification (mechanical and meaningful practice) are defined here as *grammar exercises*, which are familiar to many traditional language classrooms. They are controlled and characterized by rather 'emotionless' features, such as gap filling, matching, completion, rewriting. It is the second of these two that is made use of in the model course.

8.7.3. Evaluation

Given that focus, in the present research work, is on negotiation of meaning where form or grammar is an essential part, of the reality of language, to which learners' attention should be brought to bear, and given that classroom time is well limited, it would seem reasonable that no matter what grammar is to be instructed, its instruction should be highly efficient. According to Thornbury (1999), presentation and practice of grammar activities should be described and evaluated in terms of two major factors: (1) how *efficient* and (2) how *appropriate* they are. Efficiency is measured by determining the *economy* (i.e. the extent to which it is time-efficient: planning, resources, etc.), *ease* (i.e. the extent to which it is easy to set up: materials, resources, energy, etc.), and *efficacy* (i.e. the extent to which it is consistent with good learning principles: Will it work given the conditions of learning? If teachers cannot directly cause learning, they can create the conditions facilitative of it, that is) of an activity. The appropriacy of activities is checked against the learners' *needs* and *interests*, on the one hand, and their *attitudes* and *expectations*, on the other hand.

Taking the sub-factor of *efficacy* apart, in the present work, we argue for the role *noticing* plays in the promotion of learning. If such is correct, it follows then that a grammar activity is in part efficacious as long as it brings the presented/practised forms to the 'theatre of consciousness' i.e. to the learners' focal attention. *Orienting* learners' attention and bringing them to notice the target forms may be useless, however, if learners are not taken a step further, or in the words of Schmidt (1990) a level higher, to experience *understanding* (see Chapter 3). In part, then, efficacy equally draws upon the quality and quantity of the contextual features, the instructional explanation and the feedback the students receive. The same is true of practice, memory, and constructs of the like.

The second factor, *appropriacy*, is equally important when it comes to the evaluation of grammar activities. Learners are not all of *a* kind; they rather differ in important respects: Needs, interests, beliefs, attitudes, values, etc. A given grammar activity may happen to work for a group of learners, but not all; put otherwise, an activity is likely to be efficient, but it may remain inappropriate. In order for appropriateness to bear, one should give a second thought to the variables mentioned earlier on, besides others.

Let us evaluate the PPP model by judging from the foregoing criteria (namely, efficiency and appropriacy) of grammar instruction activities. First, according to Thornbury (*ibid.*), the PPP sequence is *easy* to use and apply i.e. it scores highly in usability but less so in *economy*. Economy is compromised partly because it is too easy for a teacher to extend P1 (i.e. presentation) at the cost of P2 and P3; the teacher will always find what to say about a grammar form or structure and some students may not quench their thirst and continue asking questions which do not really make the menu of the day. Perhaps, the *efficacy* of PPP is likely to be disputed because for it to unfold some comparison with other models needs to be made. At any rate, we can say that, on the whole, the PPP model is highly *efficient*.

Second, the logic of having a lesson move from knowledge to practice seems to be irrefutable for this reflects most of students' experience of classroom instruction.

Notwithstanding its *appropriacy*, PPP is perhaps not the most effective model; in point of fact, there are alternative models in use (see Conclusion below), albeit some may meet resistance on the part of the learners. Be that as it may, the reader is referred to the section on variation and extension of the default model below to judge its myriad options.

8.8. Varying and Extending the PPP Default Sequence

The PPP default sequence looks like this:

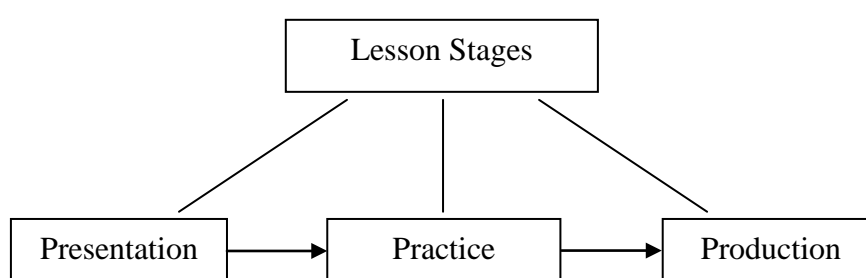


Figure 8.1: The PPP default sequence

Mainstream L2 theories tend to favour different 'Ps': Some favour presentation of input; some favour output or production; yet some happen to opt for the processing and practising mechanisms that are said to translate the presented input into some intake visible through learners' produced output. These, it should be noted, may all be met if use is made of the *different PPP sequence templates* which stem from the default sequence – *presentation-practice-production*, respectively. That is, teaching procedures should be flexible and can be accommodated by taking account of the myriad variations offered. Like this, the PPP default sequence can be put on the defensive and, therefore, off the offensive for it can be varied and extended in such a way as to meet potential teaching/learning requirements. The language teacher can, thus, use the framework to set a lesson that suits his purposes, but mostly those of his class as well as the principles of mainstream L2 theories to date.

The PPP default sequence can be changed, and stages can be advanced, delayed, interchanged, merged, and repeated – in a number of ways to suit both theory principles and classroom demands. This falls into one of the six basic template patterns outlined below (see Pincas, 2007).

Template Options	PPP Stages		
1	Presentation	Practice	Production
2	Presentation	Production	Practice
3	Practice	Presentation	Production
4	Practice	Production	Presentation
5	Production	Presentation	Practice
6	Production	Practice	Presentation

Table 8.2: The six basic template patterns

The order of the stages can be worked upon so as to obtain workable sequences, templates that can fit a well-known teaching pattern or approach. In this way, different sequences whose structure is arranged in such a way as to suit a given teaching event is likely to represent some familiar types of teaching and learning – be they originating from theory or individual classroom practice. The following table demonstrates this with some elaboration. Each template derivation is ascribed a name or type, thus relating to common teaching method practices.

Teaching/Learning Type		PPP Stages		
1	<u>Conventional</u>	Presentation	Practice	Production
<p>Default sequence/template: The teacher first presents the input, then arranges activities, before ending up with checking, in the form of assessing learners' feedback or output.</p> <p><i>i.e. Demonstrate - Control practice - Check free production</i></p>				
2	<u>Feedback responsive</u>	Presentation	Production	Practice
<p>Template option 2: The teacher first presents the input, then checks students' performance to determine what further practice is needed, ending up with arranging practice activities.</p> <p><i>i.e. Demonstrate - Check free exercises - More controlled exercises</i></p>				
3	<u>Resource/research based</u>	Practice	Presentation	Production
<p>Template option 3: The teacher first asks learners to consult sources of the content, summarizes the knowledge, then assesses output.</p> <p><i>i.e. Consult sources - Explain structure - Write/present a report</i></p>				
4	<u>Discovery based</u>	Practice	Production	Presentation
<p>Template option 4: The teacher first arranges activities through which learners process the knowledge for discovery purposes e.g., giving a focused communication task or a grammar practice activity, assesses output, then summarizes the content.</p> <p><i>i.e. Use and discover - Create exemplary output - Explanation</i></p>				

5	<u>Problem stimulus</u>	Production	Presentation	Practice
<p>Template option 5: Set a problem-solving situation for learners, check and present explanation, arrange further practice.</p> <p>i.e. <i>Problem to solve - Instruction - Practice activities</i></p>				
6	<u>Problem application</u>	Production	Practice	Presentation
<p>Template option 6: Set a problem for learners to solve, ask them to apply it, check and summarize the explanation.</p> <p>i.e. <i>Problem to solve - Practising problem-solving - Instruction</i></p>				

Table 8.3: *Elaboration of the six basic template options*

These sequences represent the major patterns in which a teacher makes choices about how to present input. On the whole, the difference between 1-2 and 3-6 lies in whether the content is presented to the learners from the outset, or whether the learners are set the task to discover by themselves, for example, by eliciting it through resources, problems, and the like. Put another way, while the former set is more teacher-fronted, the latter is rather viewed as being more learner-centered, relatively. These practices are already commonplace in most of the language classrooms, with varying degrees of usability. Perhaps, one should not ask oneself much which of the sequences is most optimal, for the secret in the success of the teaching/learning process is likely to lie in the short word *variety* which is a defining characteristic of the goodness of a method and which makes differentiated instruction at least partly happen.

To elaborate on the templates above, *conventional models* are said to follow by default the pattern *presentation-practice-production*, respectively. This is also referred to as the *transmission model*, which puts the teacher in the front. Second, *feedback models* are patterned as follows: *Presentation-production-practice*. Like the foregoing pattern, the lesson here starts with the presentation of the language forms, but differs significantly in that it is led

by learner output to guide the teacher in the selection of appropriate practising activities. The third model is *resource-based* which goes this way: *Practice-presentation- production*. This is quite different for it gets the interim stage, or the inside, out, meaning the learners start by working on the target language through consulting sources of knowledge, then they are invited to apply it in the classroom. As regards discovery models, they use the *practice-production-presentation* pattern. In this context, the learning process starts by learners being guided to discover target structures through research activity. *Problem-based (A) models* are the fifth type. This type takes the following sequence: *Production -presentation-practice*. It sets a language problem-solving situation for learners to solve; this may have more than one solution. The last template option is *problem-based (B) models*, which is structured as: *Production-practice -presentation*. Likewise, this sets, as a point of departure, a problem for learners to work out and then apply it in a context set by the teacher, who moves next to checking and presenting the worked-on input, as need be. It is the second of two problem-based teaching/learning scenarios. It differs from the previous model in the order of the subsequent stages.

One can obtain a myriad of other interesting variations *extended* by having as a starting point the foregoing six syntagmatic options; further practice can be added at the end of template 1, for example.

PRESENTATION	PRACTICE	PRODUCTION	PRACTICE
Present the input first	Set activities	Test/feedback	More practice if required given test results

Table 8.4: An example template extended

Conclusion

PPP is but one model for planning a lesson. There are other models such as EPP (Exposure-Presentation-Practice), TTT (Test-Teach-Test), OHE (Observe-Hypothesize-Experiment), APP (Analysis-Practice-Personalization), ARC (Authentic use-Restricted use-Clarification and focus), ESA (Engage-Study-Activate), to name but a few.

To take OHE, for example, it is claimed that students should be allowed to *observe* (i.e. read or listen to language) which will then push them to *hypothesize* about how the language works before moving to *experimenting* on the basis of their hypotheses. Let us take ARC, as a second example, in which communicative activities will demonstrate *authentic use*; elicited dialogues or guided writing will provoke *restricted use* of the target language by students; the stage of language *clarification and focus* is that where the teacher and students negotiate grammar, give examples, analyse errors, elicit or repeat structures. The last model to demonstrate is ESA. In this model, three components will usually be present in any teaching sequence, whether of fifteen, fifty or a hundred minutes. *E* stands for *Engage* – L2 learners have to be engaged emotionally and invest personally; *S* stands for *Study*; *A* stands for *Activate* – a stage at which students are encouraged to use any of the L2 knowledge they have interiorized.

A quick comment is warranted. It cannot fail to be noticed – though after analysis – that almost all of the foregoing alternative teaching models, different as they are, are embodied in one of the six PPP templates discussed above. Therefore, it seems that they are different appellations of the same discussed sequences. To state it another way, the myriad options of the PPP default model may serve most of the above, and the extended version of the PPP conventional model may serve most of the remainder of the templates. The templates, indeed, illustrate a wide range of potential teaching options with different sequences of content, activities and assessment. At any rate, suffice it to note that all models, whatsoever, have both advantages and disadvantages and the teacher is, therefore, required to *alternate*

between the models depending on such factors as the approach, objective of the lesson, proficiency level, learning styles and others to meet different learning potentials.

General Conclusion

We are drawing to the close of this thesis which touches upon some important aspects of L2 learning. It is already a fact that SLA and psychology share both the goal of behavioural change and a similar challenge i.e. the goal of making explicit knowledge impact on implicit habits, and the challenge of deep-rooted behaviours being resistant to change. We attempted to draw upon insights from cognitive psychology and work in the borderline and see how they bear on SLA issues.

Given the coming of age of *focus-on-form instruction* which has become a popular research topic throughout the years, we set out by hypothesizing a cognitive and focus-on-form route to learning, the thing that is likely to aid L2 learners to get free when they get stuck in their interlanguage approximation to target-like forms. In the spirit of the fundamental difference hypothesis in SLA – which postulates L2 learning to be the result of such general, non-language specific and cognitive processes as conscious learning, problem solving and hypothesis testing, unlike L1 acquisition being the result of Universal Grammar and associated principles – we believe that the application of cognitive and conscious processes to learning bears some resemblance to some aspects of L2 learning. Added to this, given the novelty L2 learners encounter in target language forms, conscious involvement on their part is required for successful learning (Baars, 1997a).

In order for us to test our hypotheses, we conducted an experimental study through which we evaluated the value of different types of instruction. In particular, through the administered grammaticality judgement test – which targeted third year LMD university English language learners – we attempted to measure the extent to which intake of English parallel structures is affected by *focus-on-form* instruction i.e. to investigate its effect on the development of explicit knowledge in order to destabilize *stabilized* interlanguage forms.

Our attempt speaks to a central concern, namely, the utility of explicit and implicit focus-on-form instruction for adult L2 acquisition. While drawing on recent research on the effects of L2 instruction, I attempted to show that instruction can positively affect the rate of language learning – an appeal for using a cognitive approach to remedy for the situation of stabilization.

The obtained results are a confirmation of our set hypotheses, and thus they reiterate the claims about the conscious process of learning and the optimal role of instruction in general and focus-on-form instruction – in preference to other types – in particular in promoting L2 development. The utility of focus-on-form is obvious; it should, therefore, find room in L2 textbooks that are meaning-oriented.

The foregoing has, certainly, consequences for language learning and instruction; according to Nation (2001), we should provide a balanced learning curriculum that secures opportunities for implicit and explicit language learning giving birth to different aspects of language proficiency. The reviewed research findings regarding the role of focus-on-form instruction inform a number of cognitive issues, namely the role of consciousness in learning. Language teachers should, as such, give their students *consciousness-raising tasks* to develop explicit knowledge, and trigger *noticing* and *attention* in order to develop, hopefully, implicit knowledge (c.f. Ellis, 1997). Indeed, it is timely to bring attentional research to bear upon work on SLA, a work that speaks to the relationship between consciousness and focus-on-form as a presumably theoretically grounded and pedagogically sound approach to intervention via instruction, especially in light of the challenge of stabilization and/or fossilization. This forms an exciting agenda for present and future inquiry.

Be that as it may, it should be informative to note that we should not lend ourselves blindly to the present findings. This study has certainly its limitations but it can serve as a basis for further research on instructional approaches and attentional processes in L2 learning. We believe that the extension of current and future research to test the applicability of the

findings to other age groups while using different research instruments is warranted; a diversity of stabilization/fossilization patterns, that is, may be found among older and younger learners, or say between secondary school and university students.

Besides, if the truth be told, a replication of the present research work is required – with a wider sample of learners tested over longer periods of time. Experimental studies, such as those reviewed in the earlier chapters, are clearly of limited duration. Experimental designs should include delayed post-tests if they were to address the question of whether the immediate gains of instruction are maintained in interlanguage for long-term use. This may be hindered, however, by the requirement that long-term observation of learners be determined by a researcher's access to students for *follow-up* testing.

In point of fact, we may be still a long way from being in a position to predict, with certainty and reliability, the way different factors that are at work contribute to the learning process. Certainly, there is room for attention and noticing in the ways learners learn; still, there might be other competing explanations which are equally telling. Take, for instance, one of the conundrums in the field of SLA: The issue of individual differences of which our understanding is far from complete. Besides, it is *de facto* difficult to investigate causes for differences in learning, especially if these relate to non-linguistic factors such as attentional processes. Learners' focal attention and how it affects the learning process and outcome is especially an acute problem for we do not have available convincing measures of operationalizing the construct (see critiques in Chapters 3 & 4). As such, it seems that our technology is quite primitive therein; joining Douglas (2001), research has failed to demonstrate the validity and reliability of the utilized testing instruments, the thing that has resulted in a major weakness in the discipline (Ellis, 2005).

Let us end reminding, while joining Cooper (1998) and Norris and Ortega (2000), that in the light of the cumulative nature of research findings, trustworthy past data are necessary for orderly knowledge to hold. This is a call to underscore the necessity to evaluate the

findings of L2 type-of-instruction studies before the discipline begins to address systematically the complex interactions of the multifaceted developing research agenda. Indeed, we believe that much work remains to be done in this area.

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	<p>(Note: You can use "to" before all the verbs in a sentence or only before the first one.)</p> <p>2. The cat <u>climbed over the fence, up the tree, and onto the roof</u> of the house. (3 prepositional phrases)</p> <p>3. They usually spend their weekends <u>entertaining their friends</u> or <u>fixing up their house</u>. (2 gerund phrases)</p>	
<p>3. Clauses.</p>	<p>1. <u>What she says</u> and <u>what she does</u> are very often two different things! (2 noun clauses)</p> <p>2. He is a person <u>who likes meeting with people</u> and <u>who gets along well with them</u>. (2 adjective clauses)</p> <p>3. Are you having a nap <u>because you are tired</u> or <u>because you have nothing to do</u>? (2 adverb clauses)</p>	
<p>PRACTICE: Exercise 1.</p>	<p><i>Which of the following is parallel in structure and which is not? Underline the structures and correct what is erroneous.</i></p> <p>1. Mary likes hiking, swimming, and to ride a bicycle.</p> <p>2. The production manager was asked to write his report quickly, accurately, and in a thorough manner.</p> <p>3. The student said that he was a poor student because he waited until the last minute to study for the exam, completed his lab problems in a careless manner, and lacked motivation.</p> <p>4. He likes neither chatting nor playing.</p>	<p>Students work and discuss in pairs.</p>
<p>Exercise 2.</p>	<p><i>Underline the parallel structures and correct what is not parallel.</i></p> <p>1. The coach told the players that they should get a lot of sleep, that they should not eat too much, and to do some warm-up exercises before the game.</p> <p>2. The coach told the players that they should get a lot of sleep, not eat too much, and do some warm-up exercises before the game.</p> <p>3. The dictionary can be used for these purposes: to find word meanings, pronunciations, correct spellings, and irregular verbs.</p> <p>4. The salesman expected that he would present his product at the meeting, that there would be time for him to show his slide presentation, and that questions would be asked by prospective buyers.</p>	
<p>Proofreading</p>	<ul style="list-style-type: none"> • Skim your paper, pausing at the words 'and' and 'or'. 	

Strategies to Try:

Check on each side of these words to see whether the items joined are parallel.

- If you have several items in a list, put them in a column to see if they are parallel.
- Listen to the sound of the items in a list or the items being compared. Do you hear the same kinds of sounds? For example, is there a series of "-ing" words beginning each item? Or do you hear a rhythm being repeated? If something is breaking that rhythm or repetition of sound, check to see if it needs to be made parallel.

SESSION 2:

WARM-UP:

- Teacher reminds students of the content of previous lesson and then asks briefly leading questions about choosing a career to set the stage.

Students volunteer answers.

READING:

Text 1.

Choosing a Career

Choosing a career is at the same time both **exciting and frightening**. On the one hand, it is exciting because there are so many **professions and fields** from which you can choose. On the other hand, it is frightening because if you **make a mistake, decide on the wrong career, and find yourself with a lousy job**, you may be **unhappy or frustrated** for your entire working life. Clearly, it is important to consider your options **completely and thoroughly** before making the final decision. To find the perfect job, you should both **research your field of interest and talk to a career counselor** to help make the correct choice. However, your ultimate career choice must be based on **personal, professional, and financial reasons** that make sense to

you. This life-altering decision matters so much because it will affect not only you but also your family.

Questions.

Read the text and answer the following questions:

1. How does the writer qualify the choice of a career?
2. Are the terms used for describing the choice parallel in structure? How?
3. In stating that career choice is frightening, the writer uses three conditions paralleling what element with what?
4. Change 'completely and thoroughly' with some other parallel structure while keeping the same meaning.
5. In talking about the perfect job, show whether similar ideas are expressed by similar grammatical forms.
6. In the 7 examples of parallel structure, identify the paralleled adjectives (3), adverbs (1), nouns (1), and verbs (2).
7. Does the text sound coherent/look cohesive? Why so?

Students read the text silently then aloud after teacher.

Students work and discuss in pairs.

**PRACTICE:
Activity 1.**

Sentence Correction:

Three of the five underlined phrases contain an error related to parallel structure. Can you explain why each of these underlined areas is or is not wrong?

Left-Hemisphere Dominance

Generally speaking, the left hemisphere in most people appears to be dominant or of prominence for language abilities: speaking, reading, and written. The left hemisphere also appears to be dominant for tasks requiring logical analysis, problem solving, and to compute mathematically.

Students identify the cause for faulty parallelism within a sentence and explain why the word is being misused in the sentence.

Activity 2.

Gap-filling:

Select the correct answer. Be prepared to explain your answers.

1. I tried to get in touch with Jessica by calling her cell phone on Monday and -----, but I was not able to reach her on each day.
(a) again on Tuesday (b) Tuesday again (c) I called again on Tuesday (d) I called again Tuesday
2. My communication preferences may be different from most people's, but my three favourite ways to communicate are -----.
(a) meeting face-to-face, sending e-mail, and to use

They fix the error, change the words in the series.

voicemail (b) to meet face-to-face, to send e-mail, and to use voicemail (c) to meet face-to-face, to send e-mail, and using voicemail (d) meeting face-to-face, sending e-mail, or using voicemail

Correction + Feedback: both explicit & implicit.

3. He has-----time, -----money, and-----technology to keep in touch with everyone, but he chooses not to do this.

(a) the...the...the (b) Ø... Ø...the (c) the... Ø...the (d) Ø...the... Ø

4. Everyone understands that staying in touch with family and ----- is important and -----.

(a) friends...comforting (b) touch with friends... comforts (c) staying in touch with friends... comforts (d) to stay in touch with friends... comforting

Activity 3.

Sentence Completion:

Complete the sentences below with the missing parallel construction.

1. Earlier in his life, he had been a painter, -----, -----, and -----.

2. She likes to paint, -----, -----, and-----.

3. The idea of parallel structure makes sense, and it's almost formulaic, -----, -----, -----, and -----.

4. They intended to purchase a book, -----, but not -----.

5. The dictionary can be used for these purposes: to find word meanings, -----, -----, and-----.

Students work and discuss in pairs.

REVIEW:

- Teacher gives a quick final recapitulation.

SESSION 3:

WARM-UP:

- Teacher reminds students of the content of previous lesson and then asks briefly leading questions about clouds to set the stage.

Students volunteer answers.

READING:

Cloud Types

Text 2.

How much do you know about the clouds you see in the sky every day? Clouds are defined by their general appearance and by their altitude in the atmosphere. Cloud types include cirrus, stratus, and cumulus. There are three basic cloud levels: under 10,000 feet, between 10,000 and 20,000 feet, and higher than 20,000 feet. Nimbus clouds produce precipitation and can tower up to 60,000 feet. Learning these few terms and to gaze at the sky are all that you will need to begin impressing your friends and family. Once you have learned the cloud classification system and the weather associated with specific cloud types, you can begin to predict the weather and matching skills with your local TV meteorologist.

Questions.

Read the text and answer the following questions:

1. How are clouds defined?
2. Name the three cloud levels. Make your answer parallel.
3. In talking about cloud types, show whether similar ideas are expressed by similar grammatical forms.
4. As you read the text, underline the seven parallel constructions. Then, locate and correct the three errors.
5. After correction is made in the 7 examples of parallel structure, name the paralleled items.
6. Does the text sound more coherent and better paralleled?

Students read the text silently then aloud after teacher.

**PRACTICE:
Activity 1.**

Sentence Correction:

Rewrite each sentence to eliminate faulty parallelism.

1. He was not only kind but also knew when to help people.
2. To read a paper book is more pleasant than reading its electronic version.
3. They knew that we had paid our bill and we had our receipt.
4. She wondered whether she should give her peer the answer or to show him how to answer.
3. Billy ate bacon in the morning and noon.
4. Spiders that bite, hissing snakes, and squealing rodents fill the aquariums in Desmond's basement.
5. The Spanish teacher spoke with warmth and in a humorous way.

Students work and discuss in pairs.

Activity 2.

Gap-filling:

Use the above text to help you fill in the gaps so as to make it parallel.

How much do you know about the clouds you see in the sky every day? Clouds are defined by their general appearance and by their altitude in the atmosphere. Cloud types include cirrus, stratus, and cumulus. There are three basic cloud levels: a level under 10,000 feet, -----, and ----- feet. Nimbus clouds produce precipitation and ----- up to 60,000 feet. ----- these few terms and ----- at the sky are all that you will need to begin impressing your friends and family. Once you have learned the cloud classification system and the weather associated with specific cloud types, you can begin ----- the weather and ----- skills with your local TV meteorologist.

Correction + Feedback: both explicit and implicit.

Activity 3.

Sentence Completion:

Complete the sentences to make them parallel.

1. Teachers advise preparing the lesson before each class and -----.
2. The instructor recommended several books for outside reading and-----.
3. She would rather starve to death than -----.
4. Sylvia asked to borrow -----, -----, or -----.
5. Sylvia needs to -----, -----, and -----.

REVIEW:

- Teacher gives a quick final recapitulation.

SESSION 4:

WARM-UP:

- Teacher reminds students of the content of previous lesson and then asks briefly leading questions about diet and exercise to set the stage.

Students volunteer answers.

READING:

Text 3.

Diet and Exercise

What people eat and how much they are exercising are

two factors that determine their overall health. Eating a diet of foods that supply inadequate nutrients and that contain high amounts of refined carbohydrates leads to weight gain and increased risk of heart disease, diabetes, and getting cancer. Thus, it is important to eat not only a wide variety of fresh fruit and vegetables every day but also grains, proteins, and so-called healthy fats. Many people also suffer poor health because they fail to exercise or to be active. Failing to exercise because they do not have enough time or that they find it boring is probably the biggest problem they face. However, time and being bored are not reasons to give up but hurdles that they have to overcome.

Questions.

Read the text and answer the following questions:

1. In which terms is health defined?
2. Why do many people fail to exercise?
3. As you read the text, study the underlined words, phrases, and clauses. Then locate and correct the five errors in parallel structure.
4. After correction is made, name the paralleled items in the examples of parallel structure i.e. what is compared with what?
5. Does the text sound more coherent and better paralleled now?

Students read the text silently then aloud after teacher.

PRACTICE: Activity.

Gap-filling:

Fill in the gaps so as to make the text parallel.

1. The Board of Education wants students to take more required courses and ----- (**a. passing, b. pass**) them before they can earn a diploma.
2. By a vote of 6 to 1, the board last night approved requirements beginning the freshman year and ----- (**a. extending, b. extend**) through the senior year.
3. The requirements include four years of English, two years of science and mathematics and ----- (**a. three, b. three years**) of a foreign language.
4. Board members expressed concern about the large numbers of high school graduates who failed college entrance exams and ----- (**a. are, b. were**) placed in

Students work and discuss in pairs.

remedial courses.

5. Too many graduates find they cannot read well, write properly or ----- (a. **logically think**, b. **think logically**), board members felt.

6. They agreed that it is easier----- (a. **preparing**, b. **to prepare**) students in high school than to have them spend money to take remedial college courses.

7. The lone dissenting vote was cast by Edwin Minter, who said that the action is punitive and ----- (a. **is**, b. **was**) bound to create turmoil in the high schools.

8. Minter also said the proposal would fall disproportionately on the foreign born, the late bloomers and ----- (a. **those who are**, b. **the**) poor.

9. Albert Swimmer disagreed. He said that providing students with a better education and ----- (a. **to give**, b. **giving**) them intellectual stimulation should be the aim of high school.

10. The majority agreed the proposal will require smaller classes, better teacher training and ----- (a. **money**, b. **more money**).

Correction + Feedback: both explicit and implicit.

PRODUCTION:

- Imagine you are running for a school office such as class president. Write a speech presenting your view of an issue or offering solutions to an issue important in your school. Examples of issues are increased tuition, large class sizes, limited parking, and the like. Before you begin, make a list of some parallel structures you want to include in the speech, underline the parallel structures you were able to use in your list. Exchange paragraphs with a partner and check each other's work.

Students may work and discuss in pairs.

Students read out and check.

Explicit Feedback.

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- Teacher and students recapitulate.

APPENDIX II: The FonM Lesson Plan and Constituent Activities

SESSION 1:

WARM-UP:

- Teacher asks briefly leading questions about choosing a career to set the stage.

Students volunteer answers.

READING:

Text 1.

Choosing a Career

Choosing a career is at the same time both exciting and frightening. On the one hand, it is exciting because there are so many professions and fields from which you can choose. On the other hand, it is frightening because if you make a mistake, decide on the wrong career, and find yourself with a lousy job, you may be unhappy or frustrated for your entire working life. Clearly, it is important to consider your options completely and thoroughly before making the final decision. To find the perfect job, you should both research your field of interest and talk to a career counselor to help make the correct choice. However, your ultimate career choice must be based on personal, professional, and financial reasons that make sense to you. This life-altering decision matters so much because it will affect not only you but also your family.

Questions.

Read the text and answer the following questions:

1. How does the writer qualify the choice of a career?
2. Why is choice exciting?
3. Why is it frightening?
4. How should you consider your career options?
5. What should you do to choose the appropriate career?
6. On what bases should your choice be made?
7. Does the text sound coherent? Why so?

Students read the text silently then aloud after teacher.

PRACTICE: Activity 1.

Dialogue Completion:

Complete the dialogue by using your own ideas.

Students

work and
discuss in
pairs.

A: Now that we graduated from university, have you thought of choosing a career?

B: Well, not really. I think it's.....

A: Oh! Why so?

B:

A: I see! But what should you do to make the final decision?

B:

A: Certainly, your ultimate choice should be based on some grounds.

B:

Activity 2.

Gap-filling:

Select the appropriate answer.

1. I tried to sit for an interview by calling the company on Monday and -----, but I was not able to get in touch.

(a) again on Tuesday (b) Tuesday again (c) I called again on Tuesday (d) I called again Tuesday

2. My communication preferences may be different from most people's, but my three favourite ways to communicate are -----.

(a) meeting face-to-face, sending e-mail, and to use voicemail (b) to meet face-to-face, to send e-mail, and to use voicemail (c) to meet face-to-face, to send e-mail, and using voicemail (d) meeting face-to-face, sending e-mail, or using voicemail

3. He has-----time, -----money, and-----technology to keep in touch with everyone, but he chooses not to do this.

(a) the...the...the (b) Ø... Ø...the (c) the... Ø...the (d) Ø...the... Ø

4. If you loved chemistry, you could look forward to a future career as a lab technician or.....

(a) teaching (b) teacher (c) pharmacy (d) a pharmacist

5. Everyone understands that staying in touch with family and ----- is important and -----.

(a) friends...comforting (b) touch with friends... comforts (c) staying in touch with friends... comforts (d) to stay in touch with friends... comforting

Correction
+ Implicit
Feedback

Activity 3.

Sentence Completion:

Complete the sentences below so that the text makes sense.

1. Earlier in his life, he had been a painter, -----, -----,

- and -----.
2. She likes to paint, -----, -----, and-----.
 3. The idea of getting a job makes sense, and it's almost, -----, -----, -----, and -----.
 4. They intended to work in----- or -----, but not -----.
 5. Google search can be used for your purposes: to find job offers, -----, -----, and-----.

REVIEW:

- Teacher gives a quick final recapitulation.

SESSION 2:

WARM-UP:

- Teacher asks briefly leading questions about clouds and their types to set the stage.

Students volunteer answers.

READING:

Text 2.

Cloud Types

How much do you know about the clouds you see in the sky every day? Clouds are defined by their general appearance and by their altitude in the atmosphere. Cloud types include cirrus, stratus, and cumulus. There are three basic cloud levels: under 10,000 feet, between 10,000 and 20,000 feet, and above than 20,000 feet. Nimbus clouds produce precipitation and tower up to 60,000 feet. Learning these few terms and gazing at the sky are all that you will need to begin impressing your friends and family. Once you have learned the cloud classification system and the weather associated with specific cloud types, you can begin to predict the weather and to match skills with your local TV meteorologist.

Questions.

Read the text and answer the following questions:

1. How are clouds defined?
2. Name the three cloud levels.
3. In order to be impressive, what do you need to do?
4. What will you be able to do when you learn the cloud

Students

classification system?

5. Does the text sound coherent? How?

read the text silently then aloud after teacher.

PRACTICE:
Activity 1.

Gap-filling:

Fill in the gaps with the words given below so as to make the text sensical.

large - cool - will - into - faster - cools - light - are - can - become

Clouds are made up of tiny water droplets and ice crystals that are so small they can float in the air. If the droplets become large enough, you ----- see them as cloud or fog. If they ----- even larger, they can fall as rain (or snow). The water in a glass might not look like it is moving at all, but the molecules that make up the water ----- always moving. When the water is warm, the molecules move ----- --. When the water is -----, the molecules move more slowly. Some of the molecules move fast enough that they escape into the air. When water molecules move from the glass ----- the air, the water evaporates. If we heat the water, more water molecules evaporate becoming water vapor. If the air -----, then water vapor molecules slow down and some cannot remain a vapor. They cluster in the air to form tiny liquid droplets. This is called condensation. In clouds, if the liquid droplets formed by condensation are small and ----- enough, they will stay in the air. If they grow ----- enough, they ----- fall to the ground as precipitation.

Students work and discuss in pairs.

Activity 2.

Sentence Formation:

Use the phrases below to write sentences containing comparisons.

1. Snow/sleet.
2. Falling snow/blowing wind.....feeling calm/nervous.
3. To live in the town/countryside.
4. Summer/winter.
5. Raining today/yesterday.

Correction + Implicit Feedback.

Activity 3.

Sentence Reformulation:

Rewrite the second sentence so that it means the same as the one given.

1. She likes it raining, snowing, and blowing.
- She likes it to.....
2. To complain of the weather, to murmur at the age we live in, and to lament the past are the common dispositions of the greatest part of mankind.
- Complaining.....

3. To apply for this job, you need to be knowledgeable, skilful, and witty.

- To apply for this job, you need to have.....

4. I learned to analyze the sky and to study the stars.

- I learned how.....

5. Mary wanted to make sure that she made her presentation on the weather creatively, effectively and persuasively.

- Mary wanted to make sure that her presentation on the weather was.....

REVIEW:

- Teacher gives a quick final recapitulation.

SESSION 3:

WARM-UP:

- Teacher asks briefly leading questions about health, diet, and exercise to set the stage.

Students volunteer answers.

READING:

Text 3.

Diet and Exercise

What people eat and how much they exercise are two factors that determine their overall health. Eating a diet of foods that supply inadequate nutrients and that contain high amounts of refined carbohydrates leads to weight gain and increased risk of heart disease, diabetes, and cancer. Thus, it is important to eat not only a wide variety of fresh fruit and vegetables every day but also grains, proteins, and so-called healthy fats. Many people also suffer poor health because they fail to exercise or to be active. Failing to exercise because they do not have enough time or because they find it boring is probably the biggest problem they face. However, time and boredom are not reasons to give up but hurdles to overcome.

Questions.

Read the text and answer the following questions:

1. In which terms is health defined?
2. How is an unhealthy diet of foods characterized?
3. Why do many people fail to exercise?
4. According to you, what is exercising used for?
5. Does the text sound coherent? How?

Students read the text silently then aloud after teacher.

PRACTICE:
Activity 1.

Dialogue Completion:

Complete the dialogue with your partner. Then, exchange roles.

A: Among the variety of foods available, what do you like eating?

B: Well, I,, and

A: Do you like eating pasta?

B: Oh, yes, but I dislike.....

A: What about fruits?

B: I, but I prefer and

A: Hum! What kind of meat do you prefer?

B: Actually, I'm vegetarian. Hey, what about you?

A: Well, I'm not much of an eater. I'm on a diet.

Students work and discuss in pairs.

Activity 2.

Gap-filling:

Fill in the gaps so as to make the text parallel.

The Board of Education wants students to take more required courses and ----- (**a. passing, b. pass**) them before they can earn a diploma. By a vote of 6 to 1, the board last night approved requirements beginning the freshman year and ----- (**a. extending, b. extend**) through the senior year. The requirements include four years of English, two years of science and mathematics and ----- (**a. three, b. three years**) of a foreign language. Board members expressed concern about the large numbers of high school graduates who failed college entrance exams and ----- (**a. are, b. were**) placed in remedial courses. Too many graduates find they cannot read well, write properly or ----- (**a. logically think, b. think logically**), board members felt. They agreed that it is easier----- (**a. preparing, b. to prepare**) students in high school than to have them spend money to take remedial college courses. The lone dissenting vote was cast by Edwin Minter, who said that the action is punitive and ----- (**a. is, b. was**) bound to create turmoil in the high schools. Minter also said the proposal would fall disproportionately on the foreign born, the late bloomers and ----- (**a. those who are, b. the**) poor. Albert Swimmer disagreed. He said that providing students with a better education and ----- (**a. to give, b.**

Correction + Implicit Feedback.

giving) them intellectual stimulation should be the aim of high school. The majority agreed the proposal will require smaller classes, better teacher training and ----- (**a. money, b. more money**).

Activity 3.

Sentence Reformulation:

Rewrite the second sentence so as it means the same as the first.

1. A particular diet may be chosen to get weight loss or to seek weight gain.

- A particular diet may be chosen for.....

2. Changing a subject's dietary intake or going on a diet can change the energy balance and increase or decrease the amount of fat stored by the body.

- To can change the energy balance and increase or decrease the amount of fat stored by the body.

3. Specific weight loss programs can be harmful to health, while others can be beneficial and can thus be coined as healthy diets.

- Specific weight loss programs are.....

4. Having a healthy diet is a way to prevent health problems, and to provide the body with the right balance of vitamins, minerals, and other nutrients.

- Having a healthy diet is good for.....

5. Health agencies recommend that people maintain a normal weight, eat plant-based food, limit red and processed meat, and limit alcohol.

- are the major recommendations of health agencies.

6. Physical exercise is performed for various reasons, including increasing growth and development, preventing aging, strengthening muscles and the cardiovascular system, honing athletic skills, and weight loss or maintenance+.

- Physical exercise is performed in order to

REVIEW:

- Final recapitulation about the topic.

SESSION 4

**PRODUCTION:
Activity.**

- Imagine you are running for a school office such as class president. Write a speech presenting your view of an issue or offering solutions to an issue important in your school. Examples of issues are increased tuition, large class sizes, limited parking, and the like. Exchange paragraphs with a partner and check each other's work.

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- Teacher guides students.

Students may work and discuss in pairs.

Students read out and check.

Implicit Feedback.

APPENDIX III: The Pilot test (The Untimed Grammaticality Judgement Test)

Which of the following sentences is grammatically parallel and which is nonparallel? Tick as appropriate.

Single words:

1. The ceremony was both long and tedious. [Grammatical..... / Ungrammatical.....]
2. It is a time not for words, but for action. [Grammatical..... / Ungrammatical.....]
3. You must either grant his request or incur his ill will. [Grammatical..... / Ungrammatical.....]
4. Susan is smart, diligent, and a hard worker. [Grammatical..... / Ungrammatical.....]
5. Ellen likes hiking, the rodeo, and to take afternoon naps. [Grammatical..... / Ungrammatical.....]
6. The obvious choices were to become a soldier or he could join the priesthood. [Grammatical..... / Ungrammatical.....]
7. My favourite subjects are: history, psychology, and math. [Grammatical..... / Ungrammatical.....]
8. To succeed in this job, you must both learn fast and work hard. [Grammatical..... / Ungrammatical.....]

Phrases:

9. Buying a car and beginning her job were the next steps in her life. [Grammatical..... / Ungrammatical.....]
10. In spring, in summer, or winter, they usually spend their weekends sleeping. [Grammatical..... / Ungrammatical.....]
11. His satisfaction lies not in his title but his daily work. [Grammatical..... / Ungrammatical.....]
12. I would rather pay for my education than receive financial aid. [Grammatical..... / Ungrammatical.....]
13. They can't decide whether to take a cruise or to go on a safari. [Grammatical..... / Ungrammatical.....]

Clauses:

14. The candidate believes that this country is ready for change, that the people are willing to sacrifice, and that there can be no change without sacrifice. [Grammatical..... / Ungrammatical.....]
15. His idea of a relaxing evening is either biking around the island or that he watches the sun set over the lake. [Grammatical..... / Ungrammatical.....]
16. The insurance clerk knew that we had paid our bill and we had our receipt. [Grammatical..... / Ungrammatical.....]

APPENDIX IV: The Pre-test (The Untimed Grammaticality Judgement Test)

Which of the following sentences is grammatically parallel and which is nonparallel? Tick as appropriate.

Single words:

1. Galileo studied, thought, and experimented. [Grammatical..... / Ungrammatical.....]
2. They waited four hours at the airport, reading and sleeping. [Grammatical..... / Ungrammatical.....]
3. The doctor recommended plenty of food, sleep and exercising. [Grammatical..... / Ungrammatical.....]
4. I am happier at my new job than I was at my old one. [Grammatical..... / Ungrammatical.....]
5. For the first time in his life he had a job, a home, and family. [Grammatical..... / Ungrammatical.....]
6. Syntax, morphology, and the area of phonology are the core areas of linguistics. [Grammatical..... / Ungrammatical.....]
7. I was happy and my parents happy too. [Grammatical..... / Ungrammatical.....]
8. Global warming affects humans, the environment, and is scary. [Grammatical..... / Ungrammatical.....]

Phrases:

9. Come to the meeting prepared to take notes and to ask questions. [Grammatical..... / Ungrammatical.....]
10. To chew carefully and eating slowly are necessary for good digestion. [Grammatical..... / Ungrammatical.....]
11. To swim in a lake is more pleasant than swimming at the seashore. [Grammatical..... / Ungrammatical.....]
12. The cat climbed over the fence, up the tree, and onto the roof of the house. [Grammatical..... / Ungrammatical.....]
13. The judge told her to take the stand and tell the truth. [Grammatical..... / Ungrammatical.....]

Clauses:

14. A father who spends time with his son and who thoughtfully answers his son's questions will be respected and loved. [Grammatical..... / Ungrammatical.....]
15. He appreciated neither what she said nor how she said it. [Grammatical..... / Ungrammatical.....]
16. She's asking not where he went but the time he went. [Grammatical..... / Ungrammatical.....]

APPENDIX V: The Immediate Post-test (GJT)

Which of the following sentences is grammatically parallel and which is nonparallel? Tick as appropriate.

Single words:

1. The young actor was tall, dark, and had a handsome face. [**Grammatical..... / Ungrammatical.....**]
2. He introduced aids to understanding such as paintings, recordings, pieces of sculpture, and guest lecturers. [**Grammatical..... / Ungrammatical.....**]
3. He was not only kind but also knew when to help people. [**Grammatical..... / Ungrammatical.....**]
4. Bill not only passed the test but also wrote the best paper in the class. [**Grammatical..... / Ungrammatical.....**]
5. He was a waiter, a tour guide, and taught at school. [**Grammatical..... / Ungrammatical.....**]
6. It's harder to do long divisions than dividing with a calculator. [**Grammatical..... / Ungrammatical.....**]
7. The dentist did not let me eat or drink anything for at least an hour. [**Grammatical..... / Ungrammatical.....**]
8. The ambassador spoke quietly and with force. [**Grammatical..... / Ungrammatical.....**]

Phrases:

9. To support his family and to put himself through college, he worked seven hours a day. [**Grammatical..... / Ungrammatical.....**]
10. I debated whether I should give the beggar money or to offer him food. [**Grammatical..... / Ungrammatical.....**]
11. I hope to vacation either in Spain or in Ireland. [**Grammatical..... / Ungrammatical.....**]
12. The instructor recommended several books for outside reading and that we should attend a play dealing with our subject. [**Grammatical..... / Ungrammatical.....**]
13. Going to a movie is more expensive than to rent a video. [**Grammatical..... / Ungrammatical.....**]

Clauses:

14. If you write or if you telephone, wait for two weeks until I return from Singapore. [**Grammatical..... / Ungrammatical.....**]
15. Unfortunately for all of us, what she says and she does are very often two different things! [**Grammatical..... / Ungrammatical.....**]
16. My employer informed me that I would be sent to Hong Kong and I should make arrangements to leave in about two weeks. [**Grammatical..... / Ungrammatical.....**]

APPENDIX VI: The Delayed Post-test (GMT)

Which of the following sentences is grammatically parallel and which is nonparallel? Tick as appropriate.

Single words:

1. Late for the dance, Jim dressed hastily and carelessly. [Grammatical..... / Ungrammatical.....]
2. He made learning more enjoyable and more lasting. [Grammatical..... / Ungrammatical.....]
3. The French, the Italians, Spanish, and Portuguese. [Grammatical..... / Ungrammatical.....]
4. They have space for a computer but not a cupboard. [Grammatical..... / Ungrammatical.....]
5. He told us that the novel was timely, informative, and could hold our interest. [Grammatical..... / Ungrammatical.....]
6. Both my plane ticket and my passport were lost. [Grammatical..... / Ungrammatical.....]
7. Now is the time to organize, plan, and to act. [Grammatical..... / Ungrammatical.....]
8. Their wedding day was beautiful, bright, and joyful. [Grammatical..... / Ungrammatical.....]

Phrases:

9. Jack passes his time doing crossword puzzles and building model airplanes. [Grammatical..... / Ungrammatical.....]
10. Carlos wasted his first year at college by not studying enough and spending too much time at parties. [Grammatical..... / Ungrammatical.....]
11. Dentists advise brushing the teeth after each meal and to avoid too much sugar in the diet. [Grammatical..... / Ungrammatical.....]
12. My dog likes not only to play fetch, but also to chase cars. [Grammatical..... / Ungrammatical.....]
13. Investing in his company is the same as to throw your money away. [Grammatical..... / Ungrammatical.....]

Clauses:

14. I forgot that my research paper was due on Tuesday and my teacher had said he would not accept late papers. [Grammatical..... / Ungrammatical.....]
15. Are you staying home because you are tired or because it is a school night? [Grammatical..... / Ungrammatical.....]
16. She is a person who works hard and gets along well with others. [Grammatical..... / Ungrammatical.....]

APPENDIX VII: The Scores

N°	Pilot Test	T0			T1			T2		
		FonF	FonM	Control	FonF	FonM	Control	FonF	FonM	Control
1	10	9	7	10	15	10	10	15	9	10
2	10	10	10	7	16	13	7	16	11	7
3	7	9	6	7	15	8	7	14	8	7
4	9	6	8	10	12	9	11	12	9	10
5	11	6	11	10	14	13	7	13	12	7
6	8	8	6	6	15	9	6	14	7	6
7	9	7	7	8	14	8	9	13	7	8
8	10	10	8	8	16	9	10	16	8	8
9	8	9	7	10	15	8	10	15	7	10
10	9	6	7	9	12	9	10	12	8	9
11	8	6	8	6	12	10	7	12	8	7
12	11	9	11	9	15	13	9	14	11	9
13	/	9	10	10	14	13	10	14	11	10
14	/	8	9	8	15	11	9	14	10	8
15	/	6	9	7	12	10	8	12	9	7
16	/	10	7	8	16	9	8	15	7	8
17	/	8	11	9	15	13	10	14	12	10
18	/	8	11	6	15	13	6	14	11	6
19	/	8	11	10	14	12	10	14	12	10
20	/	7	8	9	14	9	10	13	8	10
21	/	10	6	9	16	8	10	15	7	10
22	/	9	6	8	16	9	9	15	7	8
23	/	10	7	8	15	9	9	15	8	9
24	/	10	10	9	16	12	9	16	11	9
25	/	8	6	/	15	8	/	14	7	/
26	/	7	6	/	13	8	/	12	7	/
27	/	9	6	/	16	8	/	15	8	/

Résumé:

Le but ultime de l'enseignement / apprentissage des langues étrangères est de former des apprenants qui s'expriment spontanément dans la langue telle quelle se parle au quotidien, qui sont compétents sur le plan fonctionnel, et qui ne sont donc pas désavantagés sur le plan grammatical. Cependant, le fait de se concentrer indûment sur le sens ou les compétences communicatives au détriment des formes grammaticales entraîne chez les apprenants une cessation de se développer, une stagnation à un niveau de compétence grammaticalement loin de celui dont la langue parlée et écrite est sa langue maternelle. Les résultats de plusieurs études d'immersion suggèrent que, dans un contexte purement communicatif, certaines formes grammaticales de la langue cible ne se développent pas, de façon à atteindre une précision appréciable, malgré des années d'interaction communicatives. Cela justifie donc la motivation pour l'enseignement formel, c'est-à-dire l'inclusion de la grammaire, un sujet qui constitue la pierre angulaire du débat sans fin dans les méthodologies pédagogiques des langues étrangères: Devrions-nous, vraiment, enseigner la grammaire? Nous croyons que les approches centrées sur la forme et la prise de conscience devraient être adoptées comme médiatrices entre les pratiques extrêmes, et ce en enseignant les formes grammaticales dans des situations où l'accent est principalement mis sur le sens et la communication, une alternative qui a certainement des conséquences pour l'enseignement et l'apprentissage des langues. La présente étude suggère une approche cognitive centrée sur la forme à fin de libérer l'interlangue stabilisée des apprenants, éviter la fossilisation, et stimuler l'acquisition de la langue cible. En particulier, elle vise à étudier l'effet différentiel de différents types d'enseignement, à savoir la centration sur la forme, la centration sur le sens, et zéro-instruction. Afin de déterminer le rôle de la centration sur la forme dans l'acquisition de structures grammaticales parallèles Anglaises, cinq questions de recherche sont présentées, dont deux sont les plus marquantes: 1) L'instruction centrée sur la forme, à la fois préemptive et réactive, a-t-elle un effet différentiel sur l'interlangue de l'apprenant? 2) Les gains à court terme, le cas échéant, sont-ils maintenus à long terme? Soixante-dix-huit (78) étudiants de troisième année en LMD sont divisés en trois groupes: un groupe centré sur la forme (N = 27), un groupe centré sur le sens (N = 27) et un groupe témoin (N = 24). Un test de jugement de grammaticalité a été utilisé pour mesurer l'acquisition des formes parallèles cibles à court et à long terme; Trois tests similaires, mais non identiques, ont été administrés à trois périodes dans le temps: un pré-test, un post-test immédiat et un post-test différé. Les résultats de la présente étude montrent que la centration sur la forme a eu un effet différentiel dans l'apprentissage des langues à court et à long terme. Des recommandations pour la recherche et la pédagogie sont discutées, et un cours modèle est suggéré.

ملخص:

إن الهدف النهائي لتدريس و تعلم اللغات الأجنبية هو التمكين لاستعمال اللغة وظيفيا من غير أن يكون مستعملوها في نقص من المعدات النحوية. إلا أنه في الواقع نجد أن التركيز الزائد على المعنى أو المهارات التواصلية على حساب المعرفة النحوية أدى إلى تكوين متعلمين ذوو كفاءة نحوية متدنية أو بالأحرى متوقفة التطور. أدلة من دراسات عديدة تشير إلى أن الغمر في سياق تواصلية بحت و على الرغم من سنوات من التركيز على المعنى و استعمال اللغة حواريا إلا أن بعض الخصائص النحوية لدى كثير من المتعلمين تكف عن التطور و لا ترقى إلى خصائص اللغة الأجنبية المستهدفة. هذا يبرر التوجه للتعليم المنهجي للنحو. إن القضية التي تشكل جوهر النقاش الذي لا نهاية له في تعليمية اللغات الأجنبية هي: هل يجب أن نعلم النحو على الإطلاق؟ في رأينا، إن التعليم المنهجي من خلال تعزيز الوعي و التركيز على الشكل النحوي ينبغي أن يعتمد كوسيط بين الممارسات المتطرفة من خلال تعليم النحو في الحالات التي يكون فيها التركيز في المقام الأول على المعنى والاتصال، وهو البديل الذي لديه بالتأكيد عواقب في تعليمية اللغات. إن هذه الدراسة تقترح المقاربة المعرفية والتركيز على الشكل النحوي لدفع ما قد توقف عن التطور من خصائص لغوية لدى المتعلمين وتعزيز اكتساب اللغة الأجنبية. بالأخص، تمت مقارنة مقاربات مختلفة من التعليم، لاسيما التركيز على الشكل والتركيز على المعنى. من بين الخمس أسئلة البحثية، اثنتان منها تعد الأبرز: (1) هل للتركيز على الشكل تأثير متفاوت على اكتساب اللغة؟ (2) هل يمكن للمكاسب اللغوية المتحصل عليها في المدى القصير أن تحفظ على المدى الطويل؟ ثمانية وسبعون (78) طالب جامعي في السنة الثالثة، اختصاص لغة إنجليزية - ل.م.د - قسموا إلى ثلاث مجموعات: مجموعة التركيز على الشكل (N = 27)، مجموعة التركيز على المعنى (N = 27)، ومجموعة المقارنة (N = 24). تم استخدام اختبار (Grammaticality Judgement Test) لقياس دقة اللغة نحويا على المدى القصير و كذا المدى الطويل، بحيث قدمت ثلاث اختبارات مماثلة ولكنها غير متطابقة في ثلاث مراحل زمنية: الاختبار القبلي، الاختبار الفوري، و الاختبار البعدي. تظهر نتائج الدراسة الحالية أن مقارنة التركيز على الشكل لها تأثير إيجابي في تعلم اللغة في المدى القصير و كذا الطويل. على ضوء هذه النتائج، تمت مناقشة توصيات للبحث العلمي و لتعليمية اللغات، و تم كذلك اقتراح درس نموذجي.