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**THE VIABILITY OF INPUT ENHANCEMENT IN SECOND LANGUAGE
TEACHING: AN EXPLORATORY STUDY**

by

Thérèse Dufresne-Martini

A thesis submitted to the School of Graduate Studies in partial fulfillment of the requirement for
the degree of Master of Arts in Education

Ottawa, Canada, 1998

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For Dominic and Tanya
my soulmate and my kindred spirit respectively

To life

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Thérèse Dufresne-Martini
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ABSTRACT

The purpose of this thesis is to generate hypotheses pertaining to Input Enhancement as a pedagogical strategy or procedure by examining studies dealing with Input Enhancement and relating them to formal language learning environments. Input Enhancement (Sharwood Smith 1991, 1993) is the process by which language becomes salient on the basis of evidence presented to the learner. Its premise is that input can be manipulated so that ultimately there might be an improvement in the accuracy and overall effectiveness of second language learning in the formal environment of the classroom. There are numerous studies dealing with Input Enhancement. An analysis of these studies in a controlled setting should help in the specification of aspects that might be likely candidates for the formulation of hypotheses. In order to generate hypotheses, elements such as the following are considered: the morpho-syntactic focus targeted for Input Enhancement, the specific type of Input Enhancement offered to the learner, and the language skills that should benefit from this type of intervention. Aspects to be considered in the generation of hypotheses are the variables used in empirical studies dealing with Input Enhancement. Input Enhancement is defined in comparison to other focusing concepts like Focus on Meaning (Krashen 1981a, 1981b, 1982, 1985, 1994), Language Awareness (Hawkins 1981, 1984; Donmall 1991; Masny 1991), Focus on Form (Long 1988, 1991; Long & Crookes 1992; Long 1996), and Focus on Forms (Long 1991, 1996). Its empirical soundness is examined in an attempt to formulate hypotheses on the conditions of Input Enhancement feasibility. For this purpose, seven studies involving Input Enhancement have been selected. They are reported upon and analyzed following a set of well defined criteria designed for the purposes of this exploratory study. Subsequently, research questions concerning Input Enhancement are raised and hypotheses are formulated and generated. The final chapter contains a summary and conclusions dealing with suggestions for further research on Input Enhancement.

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CHAPTER 1 INTRODUCTION

1.1 PREAMBLE

In the past fifty years, the teaching of a second language (SLT) has relied heavily upon linguistic theory resulting from evidence arising from research conducted in naturalistic or experimental laboratory settings. The results, in turn, have become part of language teaching pedagogy in general. Larsen-Freeman (1995) reminds us that the aims of second language acquisition (SLA) theorists and second language educators are quite different. SLA theorists are concerned with specifying what is minimally necessary for acquisition to proceed while second language educators deal with maximizing effectiveness in order for language learning to take place. Input Enhancement (IE) which involves both SLA theory and the promotion of effective and accurate second language (L2) teaching has only been studied in controlled classroom settings. Consequently, it could be perceived by educators as a viable pedagogical strategy to use in the teaching of a L2.

Input Enhancement, a term coined by Sharwood Smith (1991, 1993), is a means by which language input becomes more salient to the learner by increasing, for example, the frequency of a specific linguistic form or by using something as simple as a short signal such as a warning gesture or facial expression when a mistake is made by the learner (Sharwood Smith, 1991, p. 119). IE is based upon SLA learnability theories in which input is viewed in terms of *linguistic evidence to the learner*. Linguistic evidence refers to primary linguistic data provided by speakers of the target language (TL). This linguistic input is used by the learner to formulate hypotheses and, in turn, to confirm or refute them. In its broadest definition, IE may be labeled as either positive evidence or negative evidence provided to the learner. Positive evidence

comes from exposure to the speech of speakers (Ellis, 1994, p. 434) and, therefore, represents what is possible in the target language. Negative evidence comes from oral or written feedback that shows what is ungrammatical in the learner's utterances, hence representing what is not possible in the target language. In all its diverse forms, most IE is not usually found in a naturalistic environment; whether it should be part of L2 pedagogy is the subject of this study.

Before IE is introduced into classroom practice, its theoretical foundations must be pinpointed and its empirical bases must be evaluated in order to formulate sound hypotheses pertaining to its implementation in a classroom setting. To attempt to formulate hypotheses on the conditions of IE feasibility, IE is defined in comparison to other *focusing* concepts like Focus on Meaning (Krashen 1981a, 1981b, 1982, 1985, 1994), Language Awareness (LA) (Hawkins 1981, 1984; Donmall 1991; Masny 1991), Focus on Form (Long 1988, 1991, 1996; Long & Crookes 1992) and Focus on Forms (Long 1991, 1996). Moreover, the theoretical bases of IE and the empirical soundness of related studies are examined in order to determine whether IE is an appropriate option in L2 teaching.

1.2 NATURE OF THE RESEARCH

The nature of the study is to generate hypotheses pertaining to the type of IE and the conditions of its implementation in a classroom setting. The means used to attain this end is through an analysis and synthesis of the information that is gathered on IE. The type of research adopted in this study is, therefore, exploratory. The main function of exploratory research is to generate hypotheses (De Ketele & Roegiers, 1996, p. 104; Sellitz, Wrightsman & Cook, 1977, pp. 91, 101).

In exploratory research, the main objective is not to see what is happening, what is true, or to prove something but rather it is to see what could be happening and what could be true.

Essentially, it is exploratory research that fuels experimental research (De Ketele & Roegiers, 1996, p. 101). The steps followed are considered valid if they allow this heuristic activity to take place effectively (De Ketele & Roegiers, 1996, p. 104). The generated hypotheses, in turn, can be submitted to empirical investigation in subsequent studies.

Exploratory research also differs from descriptive and speculative research. While the heuristic function may result from descriptive research, generating hypotheses is not its primary function. Rather, as the term indicates, its main purpose is to describe (De Ketele & Roegiers, 1996, pp.102, 130). Unlike exploratory research, the aim of speculative research is to construct new basic references (De Ketele & Roegiers, 1996, p. 104).

The studies that will form the nucleus of this exploratory research will be used to generate different hypotheses. Because of this central aim, a review of the literature in an exploratory study differs from the critical focus of the studies used in empirical research. In empirical research, the review of the literature allows for the soundness of the hypothesis to be evaluated: that is, it corroborates the hypothesis of the study (Madsen, 1983, p. 46). In exploratory research, the most effective way of generating hypotheses is to try to apply the concepts and theories originating in different research contexts like SLA, for example, to the domain in which the work is being conducted such as SLT (De Ketele & Roegiers, 1991, p. 93). An exploratory study also has a review of the literature in which the concepts being studied are defined. It provides the study with a conceptual framework or a theory that engenders a frame of reference

for the problem, which, in turn, sheds light on the relationship that exists between concepts. The corpus of data consists of studies relating to the domain or subject of the study (SLT).

1.3 PURPOSE OF THE STUDY

The purpose of the study is to generate hypotheses pertaining to Input Enhancement as a pedagogical strategy or procedure by examining studies dealing with IE and relating these studies to formal language learning environment characteristics. A systematic analysis of studies on IE in a controlled setting should help formulate research hypotheses to be tested eventually in a formal language learning environment, i.e., a classroom setting. Aspects to be considered in the generation of hypotheses are the outcome of analyses of the hypotheses tested in a controlled setting. Factors such as the morpho-syntactic focus targeted for IE, the specific type of IE offered the learner, and the linguistic features¹ that could benefit from such an intervention will be considered. The variables used in empirical studies dealing with IE are the elements used in the generation and formulation of hypotheses within the scope of this exploratory study.

As part of forming a conceptual framework, IE is compared to other concepts that make the learner *focus* such as LA, Focus on Meaning, Focus on Form and Focus on Forms.

¹ In this thesis, the term, *linguistic feature* or *language feature*, is used in the same way as Spada, N. (1997) and refers to aspects of a second language that have been targeted by implicit/explicit form-focused instruction and error correction, for example, such as questions, adverbs, verb tenses, and possessive determiners.

1.4 IMPORTANCE OF THE STUDY

Input Enhancement might have serious implications for the development of accuracy in an immersion model of language teaching², for example. It might enable students to reach a similar level of fluency and proficiency in written and spoken production as native speakers who are at the same educational level. Moreover, IE might contribute to a greater understanding of the process of L2 learning in the classroom by pinpointing what linguistic features respond to enhancement and by discovering the conditions under which they do so. Before implementing IE in SLT, there is a need to know the type of IE that has been targeted and the language features pertinent to its use. The importance of this study is highlighted by the fact that IE is at the center of a debate focusing on its contribution to the teaching of language features specific to the development of a L2 in a formal language environment. The specific debate that is the focal point of this section sheds light on the strengths and weaknesses of research done on IE. It deals with the various positions on the place of formal instruction in developing accuracy in a L2.

The theoretical premise set forth by researchers such as Krashen (1981a, 1981b, 1982, 1985, 1994) and Schwartz (1986, 1988, 1993) is that there is no difference between the learning of a first language (L1) and that of a L2 since SLA proceeds in much the same way as L1 acquisition. This is commonly known as the L1=L2 hypothesis. These researchers believe that the

² In an immersion model, subject matter is taught in the TL. Therefore, the content of the courses is the subject matter. The objectives, then, are to teach the subject matter as well as the TL.

underlying system of a L2 is developed through simple exposure to primary linguistic data or input in the target language.

Within this paradigm where the focus is on meaning, neither formal language instruction nor error correction play any significant function. A language teaching pedagogy based solely on communication is, therefore, adequate for building linguistic competence. In this framework the teaching of grammar is viewed as being of no use. If a child acquiring a L1 does not need to know the formal rules of a TL, neither does the L2 learner. Exposure is sufficient. The acquisition device (LAD)³ will do the rest as long as there is an abundance of comprehensible input. On a pedagogical level the L1=L2 hypothesis has been translated into an explicit approach to L2 teaching where the emphasis is on what Hammerly (1987) has called the communicationist/ acquisitionist/ naturalistic theory whereas Long (1988, 1996) has referred to it as Focus on Meaning. Immersion models are considered by Krashen (1985, 1994) as being effective language learning /teaching programs because they provide students with comprehensible input by using subject matter that they understand and focusing upon meaning rather than form.

While overall results are impressive in that these learners attain a high degree of fluency and proficiency in their L2, Swain (1992) states that these students remain well behind those of native speakers at the same level of education with respect to written and spoken production in

³ LAD: an acronym that refers to the Language Acquisition Device (Chomsky 1965). A human is biologically programmed with the ability to learn language. The LAD is only one component of the total system of intellectual structures that can be applied to problem solving and concept formation. In other words, the *faculté de langage* is only one of the faculties of the mind.

spite of having received many years of comprehensible input. Input Enhancement might make it possible for students to reach a level of proficiency in written and spoken production similar to that of native speakers who are at the same educational level.

Moreover, there is a body of empirical evidence that demonstrates that these students are not using the L2 with a high degree of accuracy and that their written and/or spoken production contains incorrect grammatical and syntactical forms which seem to have *fossilized* and are extremely difficult to correct and eradicate (Hammerly 1987; Day & Shapson 1991). Input Enhancement might enable students to attain the accuracy and native-like competence that now seems lacking in these types of programs.

Empirical studies reviewed by Ellis (1990) and Long (1988) strongly suggest that formal instruction is of benefit in order to advance further levels of L2 learning. Harley (1989) and Day & Shapson (1991) have talked about the need to develop immersion programs where the aim would be to develop more grammatical accuracy with a specific focus on the formal features of language in using meaning oriented pedagogical activities. Consequently, there is a need to reexamine the role that formal instruction might play in order to reach higher degrees of accuracy in a L2. It is also important to examine the research done on Input Enhancement to find out what types of IE are effective and on what language features IE produces the best results.

For example, one type of IE deals with increasing salience through frequency. The use of this type of IE might prove to be of benefit to certain types of learners and not to others. It is

important that this problem be addressed by studying IE so that more is learned about L2 acquisition, in general, thereby improving SLT in particular.

Another type of IE provides feedback. Does providing feedback have an overt effect on L2 learning? If so, what is the effect? What kinds of feedback are useful and what are its uses? What is the end result of this feedback? Is it retained longitudinally? It is important that these questions concerning IE be addressed in order to direct SLT.

Along the same lines but with no specific mention of IE, Long (1991) talks about the need to compare different programs by means of controlled or experimental studies that focus on forms with programs with no overt focus on form. Therefore, there is a need to ascertain whether some language components can be acquired on the basis of positive evidence alone and, if so, what these elements might be. In addition to this, there is the need to find out whether overt negative evidence is necessary for successful mastery of some components and given that this is the case, what these components might be.

Still another type of IE sets tasks such as pattern recognition, which require an analysis of different language features. What tasks are the most effective in recognizing patterns? What features can be targeted? Which learners receive the most benefit? An examination of studies dealing with IE might help provide clues to these important quandaries.

Wesche (1994) refers to IE activities, which focus on the same grammatical principle as a promising development, which should lead to significant progress in our understanding of

relationships between linguistic data and SLA. It is important to discover what that focus should be and an examination of research on IE should provide some sort of answer.

Speculating on the potential benefits that can be achieved by IE and not by input provided by meaningful interaction alone, White, Spada, Lightbown and Ranta (1991) state that the ways in which IE may supplement naturalistic positive evidence are numerous. IE may draw the learner's attention explicitly to the formal properties of the L2, which have not been perceived in naturalistic input even though exposed to certain structures. In this way, IE might provide a more salient type of positive evidence, which may help sensitize the learner to aspects of the L2, which would otherwise go unnoticed. They suggest that IE may help learners *unlearn* incorrect analyses of the L2 by supplying negative evidence, that is, supplying information about forms that are not possible in the TL.

A study that delves into the research that has been done on IE to date is important to further our understanding of how language is learned in a classroom, how a learner can learn to use the TL with a greater degree of accuracy, and what practices can be used in SLT to reach this objective.

1.5 THESIS ORGANIZATION

An essential first step taken in Chapter 2 of the thesis is a scrutiny of the role input plays in L2 development. The possibility that input can be enhanced cannot be discussed if this examination is not done. Looking at the nature of IE and its working definitions then follows.

Input Enhancement is situated within the conceptual framework of other *focusing concepts* like LA (Hawkins 1981, 1984; Donmall 1991; Masny 1991), Focus on Meaning (Krashen 1981a, 1981b, 1982, 1985, 1994), Focus on Form (Long 1988, 1991, 1996; Long & Crookes 1992), and Focus on Forms (Long 1991, 1996). This is a necessary step because there is a need to clarify the IE position with respect to focusing, the raising of student awareness, and the different definitions involved in other concepts so that IE can be compared to others along utilitarian, theoretical and philosophical lines.

Chapter 3 centers upon the methodology used for this study. Presented in a way that can be replicated, it focuses upon the criteria used in selecting the samples of the published studies, the instrument employed for reporting the studies that have been retained as well as the instrument or analytical grid adopted in analyzing them.

In line with the purpose of this exploratory study, the analysis that will serve to generate hypotheses is found in Chapter 4. The transposition and application to SLT and the hypotheses themselves are the crux of Chapter 5. The final chapter contains a summary and conclusions dealing with suggestions for further research on IE.

CHAPTER 2

INPUT ENHANCEMENT IN SECOND LANGUAGE ACQUISITION RESEARCH

2.1 PREAMBLE

Chapter 2 presents the conceptual framework for Input Enhancement. The role of input in the development and learning of a L2 is defined and examined. The introduction of a theoretical dimension is a necessary first stage before looking at the pedagogical concept of IE. Once this has been accomplished, the nature of IE and its definition are studied. A comparison of IE to other focusing concepts like LANGUAGE AWARENESS, FOCUS ON MEANING, FOCUS ON FORMS, and FOCUS ON FORM, which may be confused with it, follows. The evolution of the concept of IE is, thereby, thoroughly examined thus providing the reader with the framework on which this study is based.

2.2 ROLE OF INPUT IN SECOND LANGUAGE ACQUISITION

The role of any theory of SLA must acknowledge some sort of function for input in the development of a learner's internalized grammar (Long 1991). Input is a unifying principle in all theories governing the acquisition of a L2 for, in order for acquisition to take place, there must be input. Input is a necessary element in all language acquisition. While there is no disagreement concerning the necessity to expose the learner to input or primary linguistic data in order for language acquisition to take place, input does not play a central role in all SLA theories. The very definition of input is linked to the theory of SLA that is being expounded.

There is a divergence of opinion concerning the role played by input in Universal Grammar⁴ (UG) driven research and SLA theories. Consequently, the various positions taken by researchers are explained with the aim of pinpointing the doors that are left open for Input Enhancement. The three positions being considered are the **DIRECT ACCESS** position, the **NO ACCESS** position, and the **INDIRECT ACCESS** position.

In the **DIRECT ACCESS** position, it is proposed that L2 acquisition proceeds in exactly the same way as first language acquisition. Theorists adhering to this position do not advocate the use of IE because input or exposure to primary linguistic data is not an important part of the bullet in SLA. It is believed that L2 theory that is based on general learning mechanisms is doomed to fail because the interlanguage of the L2 learner is not determined by the input (Flynn 1993).

The **DIRECT ACCESS** position (Flynn 1991, 1993; Schwartz & Gubala-Ryzak 1992; Schwartz 1986, 1988, 1992, 1993) maintains that input is raw data and, as such, it is a mere triggering device. It is the LAD made up of innate UG as well as the ability to use this UG to process linguistic input that enables the learner to build a theory of the target language of which input is but a sample. Within this framework, IE as negative evidence to the learner cannot give rise to knowledge; rather only positive evidence can effect the construction of an *interlanguage grammar* that is comparable to the knowledge system that characterizes the result

⁴ Universal Grammar (UG): refers to a set of principles and parameters governing all human languages. Chomsky (1981b) refers to UG as the properties that are inherent in the human mind. It is task specific. Its principles are usable only for language learning and are not reducible to any higher principles of learning and cognition (Eckman, 1996, p. 400). Because of this, O'Grady (1996) characterizes a theory that accounts for language acquisition using UG as being part of specific nativism.

of L1 acquisition (Schwartz, 1993, p. 147). Sharwood Smith (1988) calls this a *recreative process* since the learner ignores the L1 and has to recreate the grammar of the L2 in much the same way as was done for the L1.

The other extreme is the **NO ACCESS** position (Clahsen & Muysken 1986, Schachter 1988, 1989, 1990). It states that UG is no longer available to the learner. It is the L1 and its settings that guide L2 learning in what Sharwood Smith (1988) refers to as a *parasitic* relationship. The role of input is very important in this position. Input and innate learning mechanisms that are not necessarily specific to language cause SLA and must be examined in order to account for SLA. This position, then, belongs to general nativist theory ⁵.

In the **NO ACCESS** position, SLA relies on input since it typically involves learning in the traditional sense (Meisel, 1991, p. 236). IE definitely has a place within it. In this position, the expectations are that learner output might contain certain aspects or features that are not present in the L1. Moreover, certain output expectations arising from the L1 may not manifest themselves at all in the learner output of the L2.

Input also plays an important role in the **INDIRECT ACCESS** position for it is input that helps set and reset parameters. According to this theory, parameters already have a value by being set to the L1 mode.

⁵ General nativist approaches to language acquisition are characterized by the fact that they posit innate learning mechanisms that are used not only for language acquisition but also for other types of learning (Eckmann 1996; O'Grady 1996).

White (1985, 1989) refers to two possibilities concerning UG and SLA with respect to the **INDIRECT ACCESS** position. First, when access to UG is mediated through the L1, it is believed that UG is inaccessible but any aspect of it available in the L1 continues to be available in the L2. The second possibility is that UG is available but that it does not work in the same way as it does in L1 acquisition. Consequently, there is a possibility that L1 and L2 have the same parameter settings in certain instances.

White (1985, 1988) proposes that in addition, there are the following logical possibilities. A particular parameter in L1 might be at a different setting from that of the L2. Secondly, there might be a parameter that exists in the L1 that does not exist in the L2. Finally, a parameter might be available in the L2 that does not exist in the L1.

Input, then, would play a much larger part within these positions than that of a mere trigger. Like the **NO ACCESS** position, this view leaves the door open for IE. Sharwood Smith (1988) refers to this position as being *reconstructive*. It involves three parts. Apperceived input serves as the basis and guides the learner to apply L1 settings to the L2. Then, there is the *recreative* application of UG based on primary linguistic evidence. It occurs when either there has been no parameter setting in the L1 or the parameter is inoperational in the L1. Lastly, L1 settings are mapped onto the L2 and *reorganization* takes place on the basis of positive evidence. The principles of UG constrain the operation.

There is an important distinction to be made between the **INDIRECT ACCESS** position and the **NO ACCESS** position. The **INDIRECT ACCESS** position does not belong to general nativist

theory as does the **NO ACCESS** position. Like the **DIRECT ACCESS** position, the **INDIRECT ACCESS** position is a variety of specific nativist theories in that it tries to account for language acquisition in terms of principles that are specific to language learning and to no other areas of cognition.

In short, there is a controversy concerning input and its role in the literature. If language learning is attributed to an innate language learning mechanism that is specific to language and serves no other function, there is the possibility that input can play a minor role in SLA. With those theories that are based upon a more general account of the language learning mechanism, there can be greater emphasis on factors that are outside the learner. Hence, input can play a more important role in acquiring a L2.

Since different theories and positions within theories of SLA treat the importance and function of input in divergent ways, it is inevitable that there also be a controversy concerning different types of input. In other words, what has developed is that not all input has been *created equally*. Krashen (1981a, 1981b, 1982, 1985, 1994) has been one of the most famous proponents of this concept through the introduction of the term *comprehensible input*.

Psychologically, Krashen's theory assumes that both L1 and L2 acquirers are guided by the same innate mechanisms that enable them to formulate hypotheses consistent with the input of the language data to which they are exposed. Linguistically, the theory is developed within a traditional generative theory of language. This, however, is true only to the extent that the theory

incorporates general notions of universality and innateness as well as a creative language component into its framework (Flynn, 1987, pp. 20-21).

According to Krashen (1985; 1994), the internalization of increasingly complex grammatical structures will take place when a learner receives comprehensible input and the affective filter is on low or down. It is input that is just a step ahead of the learner's present level of linguistic competence which is referred to as the *i + 1 level*. As long as the learner continues to receive input that is at a level beyond complete understanding, acquisition of structure will take place. Learners can also self-generate input by supplying their own input when lacking a native speaker model. Exposure to the TL or primary linguistic data, then, does not necessarily entail exposure to comprehensible input according to Krashen. If primary linguistic data entails comprehensible input then proficiency will occur. If there is no such equation between the data and comprehensible input, there will be no development of language proficiency.

One last positional theory concerning input must be examined before moving into the possibility of its *enhancement*. Some researchers like Long (1988, 1991, 1996) believe that the acquisition of language is the result of interaction between the learner's mental abilities and the linguistic environment. The learners' processing mechanisms determine and are determined by the nature of the input. Similarly, the quality of the input affects and is affected by the nature of the internal mechanisms. Contrary to the two preceding models which have ignored communicative interaction altogether, the premise which forms the basis of this theory is that language learning evolves out of learning how to converse so that syntactic constructions develop out of conversations. Given this, input and output are inseparable. Input is a crucial part of

interactionist theory but just as important is the interactive situation in which this input is generated for this approach to language learning emphasizes both input and interaction as the necessary ingredients to success.

There is no claim made that the theories and positions presented in the previous paragraphs are exhaustive and that they represent the entire spectrum of SLA hypotheses concerning input and its role in SLA. They were chosen because they are the most often cited and they are all conducted within the nativist framework. Moreover, most of the studies involving IE deal with these implicitly or explicitly inasmuch as the definition of input and its importance in SLA are intrinsically interwoven with L2 theory.

2.3 NATURE OF INPUT ENHANCEMENT

Input enhancement (Sharwood Smith 1991, 1993) is a process by which input becomes more salient to the learner. Under this classification, IE is a more finely tuned term referring to the deliberate focus on the formal properties of language than was the previous term *consciousness raising* (Sharwood Smith 1988; Rutherford & Sharwood Smith 1985; Rutherford 1987) which led to believe that the learner's mental state was somehow altered and changed by the input. In this way all input could have been considered as being intake.

Input Enhancement can be defined in terms of *evidence to the learner*. The three major types of linguistic evidence dealt with in studies in SLA are: positive evidence, direct negative evidence, and indirect negative evidence. Positive evidence comes from exposure to the speech of

speakers (Ellis, 1994, p. 434) and, therefore, represents what is possible in the target language.

Negative evidence refers to what is not possible in the language being learned. Direct negative evidence comes from feedback that shows what is ungrammatical in the learner's production output, hence representing what is deviant in reference to the norms of the target language.

Indirect negative evidence (Chomsky 1981a) involves the learner noticing that certain structures or rules that are predicted as occurring in the learner's current grammar fail to be exemplified in the input. Noticing the absence of such structures can incite the learner to reach the conclusion that they are not well-formed thus causing a reorganization of the learner's grammar (Lakshmanan, 1995, p. 317).

IE, then, is an all-encompassing term that allows not only for positive evidence but also for negative evidence. Moreover, it allows feedback in the forms of correction and form-focused explanations of the grammatical phenomenon and/or principle under study. The type of IE being considered is, by nature and definition, that which is confined to the classroom setting which is more or less a formal instructional setting depending upon the method or approach being used to teach the L2.

The aim of IE is to create verifiable input salience and hence facilitate the development of L2 knowledge. Its theoretical premise is that input can be enhanced or manipulated or made more apparent so that the learner becomes more aware of the linguistic evidence.

IE is classified as an approach to *noticing* along with Consciousness Raising, Focus on Forms, and Focus on Form by Long (1996). A comparison of IE with other popular focusing concepts is the subject of the section that follows.

2.4 COMPARISON OF INPUT ENHANCEMENT WITH OTHER FOCUSING CONCEPTS

In an exploratory study like this one, a comparison between Input Enhancement and other focusing concepts helps provide it with a conceptual framework. In this way, IE can be better defined so that the distinctions and/or similarities between IE and other focusing concepts becomes more apparent. LANGUAGE AWARENESS, FOCUS ON MEANING, FOCUS ON FORMS, and FOCUS ON FORM will be used for this end.

The focus of attention in LA is different from that of Input Enhancement. The definition of LA issued by the National Congress in Languages in Education (NCLE) in England defines LA as a person's sensitivity to and conscious perception of language and its role in human life. The teaching of LA in schools involves both the making explicit and conscious the knowledge and skills pupils have themselves built in the course of their experience with language in their immediate environment and more widely in the world (Donmall, 1991, p. 108). Hence the focus is on language use, explicit expression and production of utterances (Masny, 1991, p. 290). In IE, the focus is on making input more salient to the learner.

When the FOCUS is on MEANING (Krashen 1981a, 1981b, 1982, 1985, 1994), it is believed that a L2 is acquired with exposure to comprehensible input that is slightly beyond the learner's level. Krashen refers to this as the (i+1 level). The definition of *evidence to the learner* differs greatly from that used in IE where *linguistic evidence to the learner* refers to primary linguistic

data provided by speakers of the TL. This, in turn, is used by the learner to formulate hypotheses and to confirm or refute them.

In reference to the distinction between LA in SLA and FOCUS ON MEANING, Masny (1991) stipulates that through LA, a learner's implicit knowledge of the target language can be drawn upon to reflect on language. This is not true of Krashen's model where it is proposed that learners rely on explicit knowledge and, specifically, conscious representation of the rules of grammar to monitor, edit, and correct L2 performance. While IE and FOCUS ON MEANING are quite distinct in respect to focus, Zobl (1995) points out that recent studies that postdate Krashen's theory and that examine the effects of certain types of IE, namely the effects of explicit positive evidence in formal language situations, provide an important test for the FOCUS ON MEANING theory. Results of these studies are not inconsistent with the FOCUS ON MEANING theory and actually seem to elucidate several aspects of the researcher's findings such as the claim that there is a distinction between acquisition and learning⁶. This point is further examined in Chapter 4 when selected empirical studies are presented and analyzed.

When isolated linguistic structures are made the central focus and content of a foreign language course, there is FOCUS ON FORMS (Long, 1991, p. 43). This essentially means that focusing on one linguistic item at a time attains proficiency in a L2. The theoretical foundations behind this focus are entirely different from those that make up the basis of IE. The focus in IE is on

⁶ According to Krashen (1981a, 1981b, 1982, 1985, 1994), there is no interface between the two systems (acquisition/learning) recognized with respects to L2 knowledge. Acquisition involves algorithmic processes which should manifest themselves in greater uniformity. It is the acquisition system that processes for comprehension and results in implicit, intuitive knowledge through its use of memorization and problem solving tactics and, being associated with the heuristic processes, its outcomes will exhibit more variability (Zobl 1995).

both positive and negative evidence. Positive evidence is that which comes from the speech of speakers (Ellis, 1994, p. 434) representing what is possible in the target language; negative evidence, be it direct or indirect, is that which comes from feedback that shows what is not possible in the TL. The idea that language is acquired by presenting and focusing upon one item as distinct from a language corpus is not part of IE.

FOCUS ON FORM which is not to be confused with the aforementioned FOCUS ON FORMS focuses on the psycholinguistic relevant features of learning environments. Preferably these features capture a wide range of syllabus types, materials, tasks and tests. FOCUS ON FORM is a concept that reveals an underlying similarity of teaching methods, syllabus types and program types (Long 1988, 1991, 1996; Long & Crookes 1992). IE is not a design feature. It is a pedagogical strategy by which language input becomes more salient to the learner (Sharwood Smith 1991, 1993). For example, it could involve increasing the frequency of a specific linguistic form or using something as simple as a warning gesture or facial expression when a mistake is made by the learner (Sharwood Smith, 1991, p.19).

What Chapter 2 has attempted to do is to situate Input Enhancement within concepts that are sometimes confused with it so as to better define IE and do so as clearly as possible. It was a necessary step before moving into a critical analysis of empirical studies dealing with IE since the term as it is used within the scope of this exploratory research is so all encompassing.

CHAPTER 3 METHODOLOGY

3.1 PREAMBLE

Chapter 3 outlines the methodology used in this thesis. It is presented in such a way that it can be replicated. It states the unit of analysis and the selection criteria. It also provides the instruments and procedures used for reporting, analyzing, and interpreting the data.

3.2 SELECTION OF THE STUDIES DEALING WITH INPUT ENHANCEMENT

Out of all studies that deal with Input Enhancement as evidence to the learner, a sample of seven studies was retained (n=7). Studies were selected using the five criteria listed below.

3.2.1 SELECTION CRITERION 1

The first selection criterion deals with choosing only studies that examine IE within a truly communicative language teaching context such as the immersion model and intensive language programs or *language baths*. Like the immersion model, the intensive English second language (ESL) programs/language baths make use of a communicative approach that is non explicitly form-focused. The concept of communicative interaction has proven to be one of the most effective ways of learning a language to date (Krashen 1994; White, Spada, Lightbown & Ranta 1991). Therefore, if IE is to be applied to SLT for the purpose of generating hypotheses, it follows that it be placed within the most effective language learning framework known to date.

3.2.2 SELECTION CRITERION 2

It is the intent of this study to transpose aspects of IE to SLT in order to formulate hypotheses. Therefore, the selected studies that deal with IE are conducted within the classroom and not in a more formal laboratory setting.

3.2.3 SELECTION CRITERION 3

All studies retained in this analysis have been conducted in the 1990's where researchers analyze and discuss their findings within a nativist framework, a rather recent theoretical stance founded on theoretical and empirical work.

3.2.4 SELECTION CRITERION 4

With the exception of one study, Lyster & Ranta (1997), all work retained is quasi-experimental in nature. This is essential because it is the variables used in empirical studies dealing with IE that will be used in generating hypotheses in this thesis. The observational study is included because it sheds light on certain aspects of IE that had not surfaced upon closer examination of the empirical studies. Its inclusion is necessary in order to fill in the gaps left by the lack of certain controls in conducting these studies.

3.2.5 SELECTION CRITERION 5

All studies retained have a clear and precise definition of IE as negative evidence (n=4) or IE as positive evidence to the learner (n=3). Studies that are *quasi IE*⁷ are not selected because their interpretation of IE leads to confusion.

3.3 INSTRUMENTS

This section outlines the types of instruments used. Two types of instruments are employed. One is for reporting the selected studies; the other is utilized in their analysis. Each follows a set of criteria that are listed and defined according to their application and semantic connotation within the scope of the thesis. When the studies are reported, their methodology is usually presented in the form of a table.

3.3.1 INSTRUMENT FOR REPORTING THE STUDIES

The following checklist outlines the essential information to be gathered from the selected studies.

⁷ Quasi IE studies do not rigorously follow the operational definition of IE given in this thesis. For example, studies involving groups that receive overt explicit metalinguistic input in a non-communicative setting are classified as quasi IE studies.

CHECKLIST

Title of the study

Author(s)

Year of publication

Objective

Methodology that usually includes the following points is presented in a table:

- focus
- sample: n=instructed ; n=uninstructed (if applicable)
- assignment
- instructional time
- treatment
- measurement
- baseline data
- pretest
- posttest
- follow-up testing

Results

3.3.2 INSTRUMENT FOR ANALYZING THE STUDIES

The instrument for analyzing the studies is divided into three distinct parts. The first is the *objective* which includes two criteria: relevancy and clarity. The second is *methodology* which includes six criteria: quality of sampling, control of variables, quality of test instruments used, i.e., validity and reliability, effect of pretest and posttest(s), quality of instruction, and quality of the statistical analyses. The final part, entitled *results*, deals with three criteria: quality of results in terms of the study objective, quality of results in terms of methodology which includes the

validity and reliability of the data, and quality of results in terms of the purpose of study of this thesis.

3.4 PROCEDURE FOR DATA ANALYSIS AND INTERPRETATION

All selected studies are analyzed using the divisions and criteria listed in the previous section. These should help judge the *soundness* of the studies and the relative weight each will have on the formulation of hypotheses. If a study has a general lack of control of variables, for example, the resulting data and the conclusions drawn by researchers could prove to be questionable within the notion of *soundness*. It is this concept that guides the formulation and generation of hypotheses.

Within the scope of this study, a research objective is said to be conceptually relevant and clear if it meets the following conditions: concepts introduced must be precise and not left open to interpretation; vague and ambiguous terms with more than one connotation must have been avoided unless operational definitions are provided; value and moral judgements as well as subjective statements must not have been placed in the objective; comparisons and generalizations must not have been included so that the objective is pertinent to the subject with which it deals.

It is understood that full experimental control is lacking in the very nature of the quasi-experiments presented. Therefore, it becomes imperative that there be stringent control on what is controllable in the methodology along with an awareness of where a particular research design

fails concerning certain variables (Campbell & Stanley 1966). For these reasons, a definition of the six methodological criteria outlined in the *Instrument for Analyzing the Studies* is provided.

Quality of Sampling looks at factors such as whether student groups were randomly selected or whether they were preformed. If preformed intact groups were used, *quality of sampling* investigates whether the control/experimental conditions were randomly assigned to groups. The criterion also examines whether a pretest was administered to students prior to their participation in the study as an indicator of their linguistic achievement in the TL.

Control of Variables involves factors such as the use of native speakers in both the validation of teaching materials and in the tests used to determine linguistic ability in the L2. It also establishes uniformity among teaching materials provided teachers and ensures that teachers used them in the way they were intended. In addition to this, the type of corrective feedback given subjects is analyzed for uniformity.

Quality of Instruments Used looks at validity and reliability in an attempt at assuring and guaranteeing that the data collected are in line with the stated objective. For example, the instruments must be the same for all subjects. The degree of similarity involved in the testing situation with respect to teaching situations and approaches used is also part of this quality control. Another example is the contextualization of test items and testing time lines regarding classroom environment and teaching.

The *Effect of pretest and posttest* examines reliability with respect to the timeframes involved in repeated testing of subjects and focuses upon the degree to which these may have influenced test outcomes. For example, subjects may have been reacting to repeated testing and not to language items on the test itself.

Quality of Instruction looks at several factors. Among these is whether information is provided on teaching activities. Another is whether teachers involved were native speakers of the TL.

Quality of Statistical Analyses refers to factors such as the appropriateness of the types of statistics used in the study design, the data obtained, and the number of subjects involved in the study.

The reported research results are finally examined in three different ways regarding quality control. The first is the quality of results in terms of study objectives as stated by the researchers. Intrinsicly linked to the objective, the results must be reported as such and must not deviate or digress from the stated objective. Results are then revised in terms of methodology. The validity and reliability of the issuing data and types of statistical procedures used are scrutinized. Finally, the quality of results in terms of the purpose of study of the thesis is considered. The outcome of this in-depth examination provides the basis for the interpretation or judgement of the relative soundness of each study. Major questions or difficulties observed within the studies will be translated into various research hypotheses formulated in Chapter 5.

CHAPTER 4

REPORTING AND ANALYZING SELECTED STUDIES

4.1 PREAMBLE

A critical presentation of the seven studies on Input Enhancement in SLA is the nucleus of this chapter. The concepts and theories introduced in the selected studies based on SLA research and Input Enhancement are first presented and subsequently analyzed in order to determine their soundness according to the procedure outlined in the previous chapter. The choice of these studies is limited to a corpus consisting of research dealing with IE in relation to the domain or subject of this study that is the teaching of a L2. This is a necessary step since the results of different aspects of these empirical studies are transposed and applied to SLT in chapter 5 to form hypotheses.

First, following the checklist outlined in Chapter 3, the studies and their results are reported. Then, using the instrument for analyzing the studies as presented in Chapter 3, a critical analysis of the selected studies is given in an attempt to specify aspects considered likely choices for the generation of hypotheses.

4.2 REPORTING AND ANALYZING STUDIES INVOLVING INPUT ENHANCEMENT AS NEGATIVE EVIDENCE TO THE LEARNER

The studies in this section look at Input Enhancement as that which is not possible in the TL or, simply put, as negative evidence to the learner. The decision to begin with negative evidence instead of positive evidence to the learner is based on the fact that three of the studies dealing

with positive evidence⁸ are linked to and extensions of White et al. (1991) and White (1991) which deal with IE as negative evidence to the learner. Therefore, it is necessary to examine IE as negative evidence to the learner before moving on to research on IE as positive evidence.

The studies analyzed in this section are: White, Spada, Lightbown & Ranta (1991), White (1991), Spada & Lightbown (1993), and Lyster & Ranta (1997). The sample number is four (n=4). The first two studies interpret results with respect to the INDIRECT ACCESS position and UG whereas the last two do not explain results in a UG-driven framework. They report their findings and do not interpret them along linguistic lines.

4.2.1 REPORTING OF STUDY 1: PHASE 1

TITLE OF STUDY: Input Enhancement and L2 Question Formation

AUTHORS: White, L., Spada, N., Lightbown, P., & Ranta, L.

YEAR PUBLISHED: 1991

OBJECTIVE:

The objective of the study is to investigate the extent to which IE in the form of corrective feedback and instruction that is focused on form within a communicative L2 program can

⁸ The three studies that deal with positive evidence are Day & Shapson (1991), Trahey & White (1993), and Trahey (1996).

contribute to learner accuracy in forming English questions⁹.

METHODOLOGY:

TABLE 1: Summary of checklist for White, L., Spada, N., Lightbown, P. & Ranta, L. (1991): Input Enhancement and L2 Question Formation

Phase 1	A pilot test in an ongoing study in the development of questions in English.
Focus	IE as negative evidence to the learner.
Sample	Native French-speaking children (n=53: instructed); (n=76: uninstructed) 10-12 yr. olds in intensive English second language (ESL)* in Québec.
Assignment	No random selection: random assignment to instructed and uninstructed condition.
Instructional Time	Five hours for two consecutive weeks: 3 hours of explicit teaching of question formation the first week; 2 hours of follow-up activities the second week.
Treatment	The focus of the treatment was on question words: <i>what, where, why</i> and the auxiliaries: <i>can, be, do</i> ; explicit instruction & correction of subject placement, auxiliaries & wh-questions. Explicit teaching of a morpho-syntactic focus is not considered as being part of IE (refer to p. 20 of the thesis).
Baseline	Information not given in study.
Pretest	Not mentioned in the study.
Posttest	On the first day following treatment: a single written test consisting of 15 wh-questions which were decontextualized and presented either as scrambled word order, correct word order or without subject auxiliary inversion. Two tasks: to determine if wh-questions were correct; to put words in correct order if incorrectly formed.

*Intensive ESL is explained on p. 32.

RESULTS:

Instructed groups displayed more accuracy in their choice of responses than uninstructed groups leading researchers to conclude that instruction had positive effects on the accuracy of forming questions. Fifty eight percent of the uninstructed group's questions were formed without inversion and 24% of these were ungrammatical. In contrast, instructed groups gave a statistically significant lower proportion of questions without inversion (34%) and a correspondingly higher proportion of correctly formed questions (55%) (White et al., 1991, p. 422).

⁹ The study consisted of two parts or phases. The first phase was to serve as a control condition or as a comparison for a study on the effect of instruction of francophone learners' placement of adverbs (White 1991). Phase 1 was also to be used as a condition for a pilot study for Phase 2 of the present study (White et al., 1991, p. 421)

Intensive ESL programs like the one referred to in *Table 1* focus on 10-12 year old students who have received little or no prior instruction in English. These students experience what is known as a *bain linguistique* or linguistic bath by being exposed to the TL, English, for about five hours, five days a week for five months of a school year. This may take place either in the first or second part of the year. The teaching approach taken is communicative, and, under normal circumstances, little form-focused instruction is provided. The emphasis is on learning the TL through activities and tasks. Unlike the immersion program, there is no subject teaching in intensive ESL¹⁰.

4.2.2 ANALYSIS OF STUDY 1: PHASE 1

In the analysis sections, the questions raised are essential to the generation and formulation of hypotheses, which are the subject of Chapter 5.

4.2.2.1 OBJECTIVE:

The researchers state that Phase 1 was a pilot study for Phase 2 and was to serve as a control condition in another study on adverb placement and instruction. (Phase 1 students were taught questions in order to become experienced with materials used in an adverb placement study for which they were the control group.) In addition to this, the objective of this phase is not specified as being different from that of the overall study. The objectives are not delimited to phase 1 and become clearer in the procedures. What is inferred is that this phase will also investigate the extent to which form-focused instruction and IE in the form of corrective feedback provided within an intensive ESL program will contribute to learners' accuracy in

¹⁰ A detailed description of intensive ESL programs in Québec can be found in Spada & Lightbown (1989).

question formation. Consequently, such inferences make this part of the study rather difficult to follow.

4.2.2.2 METHODOLOGY:

QUALITY OF SAMPLING

Student groups were preformed. There was a control on the quality of sampling involved in as far as there was a random assignment of the instructed and uninstructed condition to the groups taking part in the study. However, there was no control on linguistic achievement in the targeted L2 because no pretest was administered. It was taken for granted that subjects were true beginners in learning the TL. Consequently, it is difficult to discuss subjects' progress. Group equivalency was not established.

CONTROL OF VARIABLES

Outside the use of the researchers themselves as native speakers, there do not seem to have been other native speakers involved in controlling the quality of the materials designed and used in teaching question formation. The same holds for the validation of test items, the corrective feedback given subjects, the establishment of uniformity for the teaching of materials provided by teachers, and the determination of whether these subjects are true beginners, as claimed, by administering a pretest. In terms of soundness, these variables might adversely affect both the teaching, the treatment and, consequently, the issuing data.

QUALITY OF TEST INSTRUMENTS USED

The researchers state that subjects were familiar with the test task from activities introduced during the instructional period. Students, however, were used to a communicative

contextualized interactive approach for three months prior to their five hours of instruction. The administration of a test using fifteen decontextualized questions could have led to unreliable results because the subjects involved might have been used to contextualization within their intensive ESL program. They might have needed to rely on linguistic context, interaction, and communicative approach (or any combination thereof). Moreover, presenting subjects with a test involving scrambled word order might impede on its validity and reliability since language input is usually not available to the learner in this way in any linguistic situation¹¹. Also, a timeline is not mentioned in the administration of the test. It could not be determined if students could take as long as they wanted to correct test items.

THE EFFECT OF PRETEST AND POSTTEST

This category does not apply. There was no pretest administered.

QUALITY OF INSTRUCTION

The quality of instruction cannot be ascertained due to lack of information. There is also a lack of information about whether or not the teachers were native speakers of the TL¹². Teachers corrected students. However, there are no additional details provided as to what was corrected, the kind of feedback given, how students were corrected, and whether correction was also given to students. It could be necessary to know the same details as when teachers were giving the feedback.

¹¹ A peer might give feedback involving no subject auxiliary inversion. However, some items were also presented in scrambled word order (Teachers do homework give?) which is completely unnatural in the students' regular learning situation since this type of input would not be available to them.

¹² White (1991) cites that using native speakers is an important factor in IE and adverb placement. The same might also be true in studying question formation in English given that this study pertains to input and its enhancement.

QUALITY OF STATISTICAL ANALYSES

Mean accuracy scores on the posttest between the instructed (n=53) and instructed (n=76) groups are well established using the F-statistic and corresponding *P*-values. The classes assigned to the instructed condition's *P*-value is 0.44 whereas the classes assigned to the uninstructed condition registered a *P*-value of 0.20. An analysis of variance (ANOVA) is used to determine whether the difference between the mean scores of the instructed and uninstructed groups is significant. (Researchers report that it was significant: $P < 0.001$ ¹³.) A distribution of responses (n=1931) is then analyzed using four categories: Grammatical (the sentence was fully grammatical), WHS (the sentence was grammatical except failure to invert subject and auxiliary), Scrambled (muddled word order), and Other (omissions, incompletes,...). Reported in a table, the distribution in responses is clearly given using percentages.

4.2.2.3 RESULTS:

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

From the quality of results obtained, it is difficult to determine the extent to which IE in the form of corrective feedback and instruction that is focused on form within a communicative program can contribute to learner accuracy in forming English questions. While the researchers claim their results suggest that instruction had positive effects on accuracy, it is difficult to follow this assertion because a pretest was not administered. Nothing can be said about IE and its effects

¹³ A significance level, α , such as 0.01 or 0.05 was not stipulated as being selected in the study prior to determining the *P*-values.

It is possible that the results obtained were intended to serve the purpose of a pilot study by trying out the fifteen-item test. The results thus obtained on the test could serve as indicators before its use within Phase 2 of the study. The results concerning the objective, however, were not explicitly reported. Since the test was not used in Phase 2, its relevance is difficult to establish.

When the researchers compared Phases 1 and 2 in the study, it is clear that Phase 1 was geared to giving subjects experience with materials that would be used in an adverb placement study. Nothing more is reported concerning their objective in their paper.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

In order to determine the effects of corrective feedback, a pretest was necessary. From the information provided on the results, the uninstructed subjects seem to have been successful at certain aspects of question formation. From an analysis of the results, it is difficult to ascertain what these specific aspects might be. The lack of a pretest makes an insight into this question difficult to establish.

QUALITY OF RESULTS IN TERMS OF PURPOSE OF THESIS

The purpose of this thesis is to generate hypotheses concerning IE as a pedagogical strategy or procedure. This is to be done by examining studies dealing with IE and relating them to formal language learning environment characteristics. There are unanswered questions in

Phase 1 of the study that can be used as material for the generation of hypotheses because they leave themselves open to speculation. Using some of the variables highlighted in this synthesis and analysis, it can be hypothesized, for example, that given a morpho-syntactic focus like Question formation in English in a context such as a *bain linguistique*, corrective feedback, in general, will alter performance in a non-contextualized task. True insight comes from knowing cause as well as effect. Phase 1 does not provide general information as to the effect of instruction with respect to the specific correction task, the type of IE used and the distribution of the different responses. Other types of hypotheses could deal with variables created by the lack of specific information in this phase of the study.

4.2.3 REPORTING OF STUDY 1: PHASE 2

OBJECTIVE:

The objective of the second phase of the study is to investigate the extent to which form-focused instruction and corrective feedback (i.e., Input Enhancement) provided within a primarily communicative program contribute to learners' accuracy in question formation (White et al., 1991, p. 416).

METHODOLOGY:

TABLE 2: Summary of checklist for White L., Spada, N., Lightbown, P., & Ranta, L. (1991): Input Enhancement and L2 Question Formation.

Phase 2	Also an ongoing study in the development of questions in English.
Focus	IE as negative evidence to the learner.
Sample	Native French-speaking children (n=79: instructed on question formation); (n=29; uninstructed control group by being instructed on adverb condition): 10-12 yr. olds in intensive ESL program in Québec.
Assignment	No random selection: assignment to instructed and uninstructed condition done on random basis; intact classes.
Instructional Time	Nine and one half hours for two consecutive weeks. Four and one half hours the first week; four hours the second week.
Treatment	The focus of the treatment was on question words: <i>what, where, why</i> and the auxiliaries: <i>can, be, do</i> . Corrective feedback on question-formation was provided at all times inside and outside specific instructional activities. Tightly prescribed teaching activities: same order, same manner, and same time allotment for all teachers.
Baseline	Pretest does not provide baseline for the oral communication test with regards to a native speaking control group.
Pretest	Administered the day before instruction began: two written tasks (cartoon task + preference task) + individual oral communication task where subjects asked questions looking at four sets of pictures.
Posttest	On the first day of school following the treatment, same tests as on the pretest administered in the same way (written + oral).
Follow-up test	Administered to instructed groups only. Time lapse: five weeks after posttest; same three tasks or tests and conditions as on the pretest and the posttest.

NOTE: Data is not provided concerning the uninstructed group and one of the instructed groups due to administration errors.

RESULTS:¹⁴

Pretest results were as follows. The cartoon task indicated no statistically significant differences between the three instructed groups as analyzed using an analysis of variance at an undetermined p-value. The instructed and uninstructed groups also showed no statistically significant differences on mean scores prior to treatment. There were no statistically significant differences between the three instructed groups on the preference task. The instructed and uninstructed groups also showed no statistically significant differences. There were administration errors in the oral communication task regarding one of the instructed groups and the uninstructed group as well. Therefore, results for the oral communication task were reported for only two of the instructed groups.

Posttest results and the cartoon test were not reported between the three instructed classes; instead, results were combined. Researchers reported that before instruction, there was no statistically significant difference between the mean scores (\bar{x}) of the instructed and uninstructed groups: $\bar{x}=1.32$ for the instructed group with a standard deviation (sd) of 3.25; $\bar{x}=1.55$ for the uninstructed group with a sd of 2.86. After instruction, gain scores for the instructed groups show marked improvement over those of the uninstructed group: $\bar{x}=15.87$ for the instructed group and

¹⁴ Results have been reported in detail because of the study's position in SLA literature. It is the first pivotal research done on IE within this decade. As such, it has served as a basis for many other studies on the same or earlier subjects. White et al. (1991) forms an integral part of the next chapter and is instrumental in the formulation and generation of hypotheses.

a sd of 2.94; \bar{x} =12.35 for the uninstructed group with a sd of 3.25. Despite improvement, native speaker accuracy was not achieved. The only improvement shown in the preference task involved the instructed group. There was a statistically significant difference between native speakers and all groups ($P < 0.001$). The oral communication task which targeted question formation involving two instructed groups ($n=53$) had not yet been tested on native English speakers so there is no comparison to be made with that group in the case of the oral communication test. Results showed a statistically significant difference between the pretest and posttest scores (post hoc Scheffé at the 0.01 level). Well-formed answers resulted in a sd of 26.01 and \bar{x} =40.66 on the pretest, \bar{x} =55.21 and $sd=25.37$ on the posttest, and \bar{x} =62.48 and $sd=21.52$ on the follow-up test. Researchers state that the results suggest that instruction had an effect on spontaneous oral tasks and on written tasks as well (White et al., 1991, p. 428).

The results of the follow up test administered to instructed groups suggests that the effects of teaching were lost over the five-week time lapse period. There was no statistically significant difference between the posttest and follow-up test results. The cartoon test mean was 15.87 with a sd of 2.94 whereas the follow-up test mean was 16.09 with a sd of 2.78. On the preference task, post hoc Scheffé tests revealed that the difference between posttest and follow-up test was not statistically significant. The oral communication test, administered to two of the instructed groups, showed that the difference between the posttest and the follow-up test was not statistically significant at the $P \geq 0.01$ level according to post hoc Scheffé tests.

4.2.4 ANALYSIS OF STUDY 1: PHASE 2

4.2.4.1 OBJECTIVE:

The research objective as stated in Phase 2 provides an operational definition for IE as negative evidence to the learner. According to the conditions stipulated in Chapter 3, this objective lacks conceptual clarity in that it can be interpreted in two ways. The first is that IE involves not only corrective feedback but also instruction that is focused on form within a communicative program. The second interpretation is that IE is defined only as corrective feedback and the study also wants to investigate the extent to which instruction that is focused on form within a communicative L2 program can contribute to learner's accuracy in L2 question formation. Because of these possibilities, the researchers leave the research objective open to interpretation.

4.2.4.2 METHODOLOGY:

QUALITY OF SAMPLING

The administration of a pretest attested to the fact that subjects (n=108 instructed + uninstructed) were, indeed, beginners and had no true prior knowledge of the target structures. Group equivalency was thus established by using pretest scores. Although groups were preformed, the designation of instructed and uninstructed was done on a random basis thus adding to a control in sampling quality.

CONTROL OF VARIABLES

An attempt had been made to use a group of native English speakers as a control group. This was successfully achieved in two of the three task procedures: the cartoon task and the

preference task, used in testing subjects. A detailed qualitative and quantitative analysis of the classroom input was underway at the time of publication. What researchers had in their possession were preliminary analyses of the audio tapes indicating that teachers had indeed covered the materials provided to them and had also worked within established guidelines. Students were familiar with types of test tasks before testing. Thus, test wiseness controlled for factors such as ignorance of testing procedures which might have influenced the general outcome of the results. Knowledge of question formation was established prior to the instruction period by means of a pretest thereby establishing a control of prior knowledge. Three tasks were administered in order to get data on question formation and establish control from different sources. As stated in Table 2, researchers controlled the reporting of oral communication test data so as not to skew their overall results. The oral communication task had not yet been administered to a native speaking group. It must be pointed out that White (1995) recognized the need to control for ordering effects by presenting different versions of a test. It is difficult to determine whether this control was present.

QUALITY OF TEST INSTRUMENTS USED

In this phase, items on the tests are contextualized. These instruments are more in line with the type of communicative contextualized interactive approach subjects had been used to over the three months of English instruction received prior to testing.

The timeline involved in the administration of the tests is of concern in this phase as well. The length of time subjects had to respond to each one of the tasks is not mentioned in the

administration of any of the tests. This information is relevant to ensure that it was uniform for all subjects.

EFFECT OF PRETEST AND POSTTEST

The timeframe, which is a total of seven weeks for the testing, is of great concern. It may very well have had an influence on test results and skewed subsequent data because subjects may have learned items from the tests. There was very little time between the tests: two weeks between pretest and posttest; five weeks between the posttest and follow-up test.

QUALITY OF INSTRUCTION

How well students were taught cannot be ascertained for two reasons. The audio recordings of the teaching had not been analyzed at the time of publication and researchers did not mention the quality of English spoken by teachers.

QUALITY OF STATISTICAL ANALYSES

Instructed group scores were combined and reported using the F-statistic and *P*-values so as to demonstrate by comparing pretest, posttest, and follow-up test mean scores that there were no statistically significant differences between the groups combined in this way. It is difficult to establish the specific effects of IE in any of the groups involved in White et al. (1991).

4.2.4.3 RESULTS:

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

The study seems to suggest that form-focused instruction and corrective feedback may have played a role in instructional gains of learning question formation. This is seen in the results of the cartoon task and to a lesser degree in the results of the preference test. White et al. (1991) state that results suggest instruction had an effect on spontaneous oral tasks as well as on the paper and pencil tasks, but it is difficult to assert this with any degree of accuracy because of administration errors in the oral task.

Whether the teachers were, indeed, native speakers or close to native speakers in their ability to teach English could have had an effect on quality of results in terms of determining the extent to which form-focused instruction and corrective feedback contributed to learner accuracy in question formation.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

Because a control group was not used in the oral task, it is difficult to talk about quality of results in its regard. The quality of other task results is well reported.

QUALITY OF RESULTS IN TERMS OF THE PURPOSE OF THESIS

In terms of being able to generate hypotheses concerning IE as a pedagogical strategy or procedure which is the stated purpose of this thesis, the information provided by the research data that was obtained by strict application of controls can be used for generating hypotheses.

For example, the results of the cartoon test and to a lesser degree the preference test seem to indicate that there was a statistically significant effect on learning question formation in English. However, it is impossible to determine what it was in the treatment that caused the increase in accuracy in the group gain scores. Questions on IE and the types of corrective feedback used as well as the frequency of occurrence and usage remain unanswered since teaching was not monitored. Because a uniformity in IE as negative evidence offered to the learner could not be established, hypotheses can be formulated as to the effects of different kinds of IE.

Contrary to other studies that will be presented, instructional gains were retained in the long run or at least for a period of five weeks after teaching¹⁵. Could the nature of the grammatical target¹⁶ play an important part in the role of remembering and forgetting (Zobl 1995)? Could IE in the form of direct negative evidence to the learner focused on a morpho-syntactic feature like question formation also have a role to play in the length of retention? Areas eliciting questions like these denoting a lack of information are useful for the general purpose of this thesis.

The next study presented looks at some of the questions that have been raised in Study 1. It too deals with IE as negative evidence to the learner.

4.2.5. REPORTING OF STUDY 2

TITLE OF STUDY: Adverb Placement in Second Language Acquisition: Some Effects of Positive and Negative Evidence in the Classroom

¹⁵ The five-month retesting of subjects is not reported in this study. The report can be found in White (1991).

¹⁶ The nature of the grammatical property may influence the length of retention. If the target structure lends itself to formulaic learning, it might be narrow enough in focus to represent a type of grammatical target that is more resistant to forgetting (Zobl, 1995, p.46).

AUTHOR: White, L.

YEAR PUBLISHED: 1991

OBJECTIVE:

The objective of the study is to investigate whether form-focused instruction, including negative evidence, given in the classroom is more effective in helping L2 learners arrive at the appropriate properties of English than positive evidence alone (White 1991:133)

METHODOLOGY:

TABLE 3: Summary of checklist for White, L. (1991): Adverb Placement in Second Language Acquisition: Some Effects of Positive and Negative Evidence in the Classroom.

Focus	IE as negative evidence to the learner and adverb (ADV) placement in English.
Sample	Native French-speaking children (n=82; instructed on adverb placement; n=56; instructed on question formation) 10-12 yrs. old: 2 grade 5 classes: average age 11; 3 grade 6 classes: average age 12. Subjects had already spent 3 months in intensive ESL program.
Assignment	Intact classes; no random sampling ; no information as to whether selection of classes was done on a random basis; ADV condition assigned to 1 grade 5 & 1 grade 6; Question condition assigned to 1 grade 5 & 1 grade 6.
Instructional Time	Eight hours for two consecutive weeks. Week 1: 6 hours; Week 2 : 2 hours; Question group is the one from Study 1 : White et al. (1991).
Treatment	The focus of the treatment was on adverbs of frequency and manner. Teaching emphasized the positions that could be taken by ADV in English ¹⁷ .
Baseline	Control group of 26 unilingual English students in grades 4 & 5.
Pretest	Three tests were used: grammatical judgment test (GJT), preference test, and sentence manipulation test centering on ADV of frequency and manner. No instruction for any groups in ADV placement.
Posttest #1	Administered immediately following two-week period of instruction. Use of the same three tests as on the pretest.
Posttest #2	Administered approximately 5 weeks after posttest #1; coincided with end intensive ESL program. Use of the same three tests as on the pretest and posttest #1.
Follow-up test	After a time delay of a year. Only subjects who were in grade 5 as part of ADV group retested on all three tasks as on pretest and the two posttests. Q group could not take part. An additional grade 6 class (n=26) was added. Group had received no special ADV instruction. It was also in intensive ESL, in grade 5, taught by the same teacher as ADV group in grade 5. All subjects had received 2x45 minutes instruction in English per week in regular ESL ¹⁸ after intensive ESL was completed.

¹⁷ A potential learning problem for a French speaker involves verb-raising with reference to ADV. French allows it to take place whereas English does not. For example, French allows ADV between a verb and its direct object whereas English does not.

¹⁸ Regular ESL is a program taught in elementary schools in Québec. The *ministère de l'éducation du Québec* suggests that 120 minutes per week be devoted to the teaching of English as a second language in grades 4,5, and 6 in regular non-intensive ESL programs. This is not a government regulation: the time devoted to the teaching of English could be more or less than the suggested 120 minutes.

RESULTS:

In the grammatical judgement test (GJT), White (1991) stated that post-hoc Scheffé tests ($P<0.05$) revealed there was no statistically significant difference between ADV-placement groups and question groups on the pretest. Both groups differed from the control group probability level. How they differed was not reported. Posttest GJT scores revealed that ADV group results were not significantly different from that of the control group. No further details were provided. There was a significant difference between ADV-placement and question formation groups: ($P=0.001$) in that SUBJECT+VERB+ADVERB+OBJECT (SVAO) error scores¹⁹ of ADV group showed a dramatic drop at the first posttest and stayed low in the second posttest. Also, question formation group error scores did not drop and the high incidence of error frequency in SVAO remained constant.

In the preference task, the pretest control group error score was 0.7 while the ADV and question formation groups' error score was 8. Post hoc Scheffé tests revealed no statistically significant difference between ADV and question formation groups: ($P<0.05$). Posttests of the ADV error scores dropped close to those of the control group scores: 1.5. After the first posttest, the control group and the ADV group had a strong preference for SUBJECT+ADV+ VERB (SAV) order with adverbs of frequency.

¹⁹ An example of SVAO is *John hits always his sister.

S V A O

*The sentence is ungrammatical in English.

This was not so for the question formation group. For adverbs of manner, the ADV group favored SAV while the control group liked both SUBJECT+ADVERB+VERB+X (SAVX) and SUBJECT+ VERB +ADVERB+X (SVAX)²⁰. Finally, the ADV group was no more accurate than the question formation group in arriving at the difference between what was permitted in transitive and intransitive sentences concerning ADV.

ADV and question formation groups favored SVAX in the pretest of the sentence manipulation task. The question formation group continued to favor SVAX in posttests although SAV was not totally rejected by all subjects. The control group favored SAV in posttests.

In the follow-up test, the ADV group had lost the benefits of instruction on ADV placement in English. However, for the manipulation task, there might have been some sort of effect resulting from the original teaching as far as grammatical SAV order. Learner use was higher than that which occurred prior to instruction. The choice of word order preference SAV to SVAX was maintained.

Concerning the report on the overall results of the study, the researcher concluded that the kind of IE used in the study gave only short-term effects on learner's knowledge of English.

4.2.6 ANALYSIS OF STUDY 2

4.2.6.1 OBJECTIVE:

As formulated by White (1991), the objective is unclear. Form-focused instruction is considered as being part of negative evidence to the learner. The wording as stated in the objective of the

²⁰ The X in SVAX refers to anything that can follow the verb other than a direct object (SVOA). For example, {X} could refer to a prepositional phrase: John walks slowly {down the street}.

study leads one to believe that there will be a comparison of form-focused instruction done. The objective must show what types of form-focused instruction are the focus of the research.

4.2.6.2 METHODOLOGY:

QUALITY OF SAMPLING

Groups were preformed for instruction on adverbs and questions. The administration of a pretest ensured quality of sampling regarding knowledge of adverb placement. White (1991, p. 143) states that, initially, it had been intended to assign subjects randomly to the different versions of the test session as was done in the manipulation task. In order to maintain quality in sampling, however, subjects were assigned to the same version of the test each time because the pilot test had indicated that there might be an effect for version ²¹.

CONTROL OF VARIABLES

It is difficult to establish what actually occurred in the classroom regarding teaching. There is no evidence that teachers were taped. White (1991) provided no information concerning teaching activities. Consequently, it is impossible to control feedback type, frequency, and pinpoint who gave feedback to the subjects. Data was based on a variety of sources from different tasks in order to control for quality. There was an attempt at controlling for ordering effects in the tests. For example, the same version of the preference and manipulation tests was not repeatedly administered. A comparison group was not used in the follow-up test with reference to the manipulation task.

²¹ The order of test items differed from test period to test period.

QUALITY OF TEST INSTRUMENTS USED

The control for repeated testing effects within a short time period ensured some quality in the reliability and validity in the resulting data. The exception was the sole version of the cartoon story. It is not at all clear whether subjects had been asked to deal with a GJT or an acceptability task in the form of a cartoon story even though White (1991) referred to the use of seven grammatical distracters in the task. Therefore, it has been taken for granted in this critical analysis that the clear distinction drawn between acceptability judgements and grammatical judgements (Birdsong 1989) has been respected and that the two terms have not been used interchangeably.

According to Birdsong (1989), a grammatical judgement involves sentences that are generated by the grammar of the TL whereas acceptability judgements consist of those sentences about which speakers believe have a sense of well-formedness about them. The use of the GJT as a valid measure has been disputed (Ellis 1991). However, it is generally accepted as a reliable indicator of linguistic competence (Gass 1994). Moreover, White (1991) has been very careful not to use the GJT as the only task demanded of the subjects thereby providing convergent evidence from different sources. The quality of the GJT was ensured because it used a cartoon format of a continuous story thus providing a context for the sentences that were to be judged. However, there were language errors in some test items which subjects were asked to correct. This might have affected the validity and reliability of the instrument given that language data is usually not presented to the learner in this way. This holds for the preference task which consisted of pairs of sentences one or both of which could be wrong.

All subjects were not exposed to the same testing situation. Consequently, the attempt to reduce ordering effects in the administration of the preference task made it difficult to ensure quality of the instrument because all subjects would not have been exposed to a similar testing situation. The same version of the test was assigned to the subject but the items were not presented in the same order during the different testing sessions. Similarly, there were two different versions of the manipulation task.

Another obstacle to the reliability and validity of the instruments used was the fact that only eight adverbs were tested, four of manner (quickly, slowly, quietly, carefully) and four of frequency (often, always, sometimes, usually). Moreover, the adverbs were a subset of those included in the teaching materials, i.e., they had been taught. A timeline was mentioned in the administration of the tests. White (1991) talked of subjects taking an average ten to fifteen minutes to complete each of the preference and judgements tasks. The manipulation task took five to ten minutes per individual subject. It is possible that these open timelines might be a factor affecting the reliability and validity of the instrument given that the timeline was not the same for all subjects even though the testing condition was the same for all groups.

EFFECT OF THE PRETEST AND THE POSTTEST

The administration of the GJT three times within a period of nine weeks might have affected test outcomes. The pretest was administered. This was followed by a period of two weeks that included teaching. Then the first posttest was immediately administered. Five weeks after this, the second posttest was given. It is possible that subjects might not have been reacting solely to items on the test but also to the repeated testing situations themselves.

QUALITY OF INSTRUCTION

Teachers were native English speakers. White (1991, p. 41) stated that this was crucial since the persistence of SVAO forms in the speech of native speakers of French who were otherwise very accurate bilinguals is well known. It was important that subjects not receive misleading input from their teachers and that the teachers should be able to notice any relevant errors. Two teaching packages were specifically prepared: one was for the ADV group; the other targeted the question (Q) group. For the ADV group, teaching focused on ADV placement using four adverbs of manner and four of frequency. The reality of what went on in the classroom cannot be determined.

QUALITY OF STATISTICAL ANALYSES

Analyses were conducted and reported on each of the individual tasks. They were also reported for all three groups (ADV, Q, and control) in pretest, first posttest, and second posttest concerning task error scores and the nature of these errors.

4.2.6.3 RESULTS:

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

White (1991) talked about results in terms of unconscious learning in this study and the fact that subjects seemed to have learned the distinction between adverbs of frequency and those of manner without having been taught it. It is possible that among the other explanations, subjects could have had a prior knowledge of the concepts of frequency and manner since the notions exist in French as well. It is also quite possible that the pretest did not pick this up. In any case,

the introduction of the concept of unconscious learning has not been defined within the scope of the study.

White (1991) gave no information as to what kind of negative IE subjects were given except that teachers were told to correct errors and to encourage subjects to correct themselves as well as others. There is a need to know this type of information given that the researcher's objective was, in part, to determine the effect negative evidence had in helping learners arrive at appropriate properties of English. It is difficult to make claims about the effects of negative IE without knowing their cause.

It would seem that the type of results reported might be a consequence of the theoretical orientation of the researcher. White is a specific nativist who adheres to the specific nativist **INDIRECT ACCESS** position concerning UG. Although factors outside the learner do have some importance within this theoretical stance, it was not deemed necessary, once again, to look at too many conditions outside the learners in order to account for learning. Hence, even when the researcher has specified that the focus of the study is IE as negative evidence to the learner, the emphasis is on the results, the reasons behind them and their interpretation in the UG mode. What caused these results to happen in terms of outside conditions and the stated objective are not part of the big picture and, therefore, not reported.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

In referring to White (1991), Schmidt (1994) states that the assumption that learning took place without teaching is unfounded because, in total, only eight adverbs were tested, four of manner

and four of frequency, and these were a subset of those included in the teaching materials. Given this, the learning may very well hold for lexical items rather than learning categories of ADV. The methodology revolving around the limited number of adverbs involved impedes on the quality of results.

QUALITY OF RESULTS IN TERMS OF STUDY PURPOSE OF THESIS

There is a lack of specifics concerning what elements in the teaching including negative feedback favor the development of questions. This leads to the formulation of hypotheses. For example, Fotos (1993) suggests that noticing the grammatical focus in the input might be a prerequisite to using it. Even interpreted in terms of UG, the results are useful in forming hypotheses. White (1991) found no evidence for UG still being available to the subjects. Knowledge of SAV did not trigger knowledge that SVAO was ungrammatical in English. The theoretical possibility that the parameter investigated in these studies was simply incorrectly formulated and that a revised version of the parameter may be supported by data from second language learners and IE in the future is in line with the generation of hypotheses. Even if there is an absence of clear supporting evidence from this study or from any other L2 study in the literature to date, hypotheses can be generated on the basis of Schmidt's statement about this study. Schmidt (1994, p. 192) maintained that it appears less and less likely that abstract parameters serve as the basis for a powerful kind of unconscious induction that goes far beyond evidence encountered in the input. This leaves the door open for the possibility of researching the role IE might play in the learning of a L2.

White's ADV group did not remember very much about ADV placement in the follow-up test one year after the study. A hypothesis can be generated on the basis that the length of retention can be affected by the nature of the grammatical focus, for example.

White (1992) is an offshoot of both White et al. (1991) and White (1991). Because it is a report where information is given about the question formation group mentioned in Study 1 and Study 2 of this thesis, it has not been included as a focus within it. Its importance lies in the declaration made by White (1992) concerning the production tests that were used in these two studies. It is claimed by the researcher that they were a measure of linguistic performance and that the tasks provided a means, albeit indirect, of obtaining insight into the linguistic competence of L2 learners. If so, the theory driving this statement is useful to the formulation of hypotheses as well.

Spada & Lightbown (1993) which follows is another spin-off of the initial White et al. (1991) study. It is presented because it clarifies certain questions that have been brought up. In this way, it provides a narrower focus on the formulation of hypotheses for this thesis.

4.2.7 REPORTING OF STUDY 3

TITLE OF STUDY: *Instruction and the development of questions in L2 classrooms*

AUTHORS: Spada, N. & Lightbown, P.

YEAR PUBLISHED: 1993

OBJECTIVE:

The objective of the study as stated by the researchers was to investigate the contributions of form-focused instruction and corrective feedback to the development of question formation in the oral performance of ESL students.

METHODOLOGY:

TABLE 4: Summary of checklist for Spada, N. & Lightbown, P. (1993): Instruction and the Development of Questions in L2 Classrooms.

Focus	IE as negative evidence to the learner and question-formation in English.
Sample	Native French-speaking children (n=56; instructed on question formation) ages 10-12 yrs.; 1 grade 5 class & 1 grade 6 class intensive ESL. Note: The comparison or control group which was not taught question formation is not the one from Study 1 (White et al. 1991) due to administration errors in oral production test of that study.
Assignment	Groups were previously formed; no random sampling.
Instructional Time	Nine hours for two consecutive weeks. Week 1: 5 hours; Week 2: 4 hours.
Treatment	The focus was on teaching question formation in English and giving overt negative feedback both inside & outside specific instructional activities given by the teacher aimed at learning question formation in English.
Baseline	No native English-speaking group of students is mentioned.
Pretest	Oral communication test: 3 sets of pictures administered on an individual basis the day before beginning treatment. Prompting by examiners allowed.
Posttest #1	Administered first day of school following treatment using the same oral communication test as on the pretest.
Posttest #2	Administered 5 weeks after treatment. Same oral communication test as on pretest and posttest # 1.
Follow-up test	Administered 6 months after treatment. Same oral communication test as on pretest, posttest # 1 and posttest # 2.

RESULTS:

Subjects were not at the same level of accuracy according to pretest results. The comparison or control group was more advanced than the two experimental groups. Learners in all groups produced a greater proportion of accurate questions on the posttest than on the pretest. There was further improvement on the posttests and the follow-up test for the experimental group. Spada & Lightbown (1993) concluded that the results supported the hypothesis that form-focused instruction and corrective feedback within the context of communicative interaction can contribute positively to L2 development in both the short and long term.

4.2.8 ANALYSIS OF STUDY 3

4.2.8.1 OBJECTIVE:

The objective is precise and little is left open to interpretation. What will be investigated is clearly stated: the contributions of form-focused instruction on one hand and the contributions of corrective feedback on the other hand. The target form is neither vague nor is it ambiguous: the study deals with the development of question-formation. The language focus is identified. It is the oral performance of ESL learners. Neither form-focused instruction nor corrective feedback is specifically defined so that clarity is lacking in terms of conceptual relevancy.

4.2.8.2 METHODOLOGY:

QUALITY OF SAMPLING

Groups were preformed. The assignment of experimental or control for the purposes of comparison seems to have been done randomly. The group used as a comparison affected the quality of sampling because of the type of instruction (focus on form) it had received for three months prior to the treatment. Group equivalence was established by means of a pretest.

CONTROL OF VARIABLES

The need to control and examine what went on in the classroom during treatment or lack thereof becomes apparent in reading this study. All teaching was audio taped during the two-week period. Recordings were transcribed and analyzed prior to publication. The control revealed that the control group used for comparison received teaching that focused on form with respect to the overt teaching of grammar. This could have involved formulaic learning. The use of the tapes

as a control enabled the researchers to detect this leading them to conclude that it was impossible to use the subjects in their study.

After having analyzed over three hundred hours of observational language data in forty classrooms prior to the investigation, Spada & Lightbown (1993) knew that the type of teaching received by the group was not typical of their observations of what generally took place in intensive ESL programs. In all cases, their analyses had revealed that the methodology used in intensive ESL classrooms was an interpretation of communicative language teaching in which the importance of meaning over form was considered of the utmost importance. The use of audio recordings as a control enabled researchers to establish the fact that the comparison group had received instruction and corrective feedback from their teacher over a five-month period. Since the type of instruction given this group was not the same as that of the experimental groups, it is impossible to talk about a specific treatment regarding the group used as a comparison for the purposes of this study.

There was no control for test effects since researchers made repetitive use of the same task in the communication test which was recorded and subsequently analyzed. It is impossible to establish whether subjects became familiar with the sets of pictures that were used repeatedly to obtain data. Because subjects were tested on a single task, there is the possibility that students were reacting to the test rather than IE as negative evidence to the learner.

After the instructional period, teachers returned to their usual routines. No attempt was made to monitor whether there was a focus on question formation over the next few weeks. Therefore, there was a lack of control concerning the second posttest that was administered five weeks after the first posttest.

QUALITY OF TEST INSTRUMENTS USED

The oral communication task was in line with the stated objective. It was developed so that oral questions could be elicited as naturally as possible. Four sets of pictures were involved in the task where subjects asked questions until they could match one of the four pictures with the one picture chosen from an identical set of pictures by the researcher. Three sets of pictures were used at each testing session. Whether these were the same for all students cannot be determined.

EFFECT OF PRETEST AND THE POSTTEST

Because the timeframe was of five weeks between pretest and final posttest, subjects might have been reacting to the test and not the treatment.

QUALITY OF INSTRUCTION

The form-focused instruction by the teacher of the comparison group differed from the type of instruction used by the other two teachers. The result is that the quality of instruction did not

correspond to the stated objective. The form-focused instruction interfered with the two week treatment and resulting empirical data.

The only information provided about the instructional materials was that they included exercises and activities that put an emphasis on question formation with: *what, where, and why* and the auxiliaries *can, be, and do* in the present tense. Activities involved the unscrambling of question sentences, guessing games, and preference tasks. The material was developed so as to allow teacher-centered as well as group or paired intervention.

QUALITY OF STATISTICAL ANALYSES

Spada & Lightbown (1993) analyzed the results both qualitatively and quantitatively. They reported on developmental stages of questions as well as accuracy where well-formedness meant correct placement of the who-word and of the auxiliary verb with respect to the subject. The analyses of individual subject's questions presented in summary tables of students' developmental stage behaviors provide good qualitative information on the number of students and the question-stage developmental category they had reached at each session. The information was then reported quantitatively. The total number of questions per hour per group was reported and separated into correct versus incorrect categories. They were subsequently analyzed in terms of the number and percentage of the different types of questions once again maintaining the two previously mentioned categories. The frequency of teacher responses to student errors was tabulated. The types of distribution of teacher feedback to learner errors were given in raw totals and percentages of total feedback types.

4.2.8.3 RESULTS:

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

In terms of the objective stated by Spada and Lightbown (1993), it is difficult establish what specifically is learned about the effect of instruction and corrective feedback on the development of question formation in the oral performance of ESL learners. The results lack clarity.

Having realized this, the researchers then looked at classroom interaction data which were transcriptions of the instructional treatment on question formation in the experimental classes and four hours of teaching involving the comparison group in order to gather information on question formation developmental stages. This is not in line with their stated objective.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

Methodological flaws affect validity of results. The control group that was used for the basis of comparison had previously received instruction and corrective feedback on the target structures. The pretest used to determine overall ability in English did not indicate this because it did not target question formation specifically. Researchers also took it for granted that the type of teaching usually given in intensive ESL or linguistic baths had followed the norm by being primarily meaning-based with little focus on any type of corrective feedback. Because this assumption proved to be erroneous, it affected results that might have been available concerning IE. Moreover instruction consisting of IE in the forms of overt correction and metalinguistic feedback had been given to the comparison group over a longer period of time than to the

experimental group. The result was that the comparison group could not fulfill its function in the study.

QUALITY OF RESULTS IN TERMS OF PURPOSE OF THESIS

For the purpose of this thesis which is to generate hypotheses, the quality of results issuing from Spada & Lightbown (1993) contributed to the formulation of hypotheses in the same way as did Study 1. Their morpho-syntactic focus and contexts are the same whereas the tasks required of subjects are similar. This information can be used in generating hypotheses.

One last study involving IE as negative evidence will be reported upon and analyzed before moving on to IE as positive evidence to the learner. Lyster & Ranta (1997) differs from the three studies already presented in that it is not quasi-experimental in nature; it is observational. *The nature of the research and its design make it necessary to modify the proposed checklist outlined in Chapter 3 of this thesis.*

4.2.9 REPORTING OF STUDY 4

TITLE OF STUDY: Corrective Feedback and Learner Uptake: Negotiation of Form in Communicative Classrooms.

AUTHORS: Lyster, R. & Ranta L.

YEAR PUBLISHED: 1997

OBJECTIVE:

The study wanted to determine how students and teachers engage in error correction during communicative interaction in an immersion program.

METHODOLOGY:

TABLE 5: Summary of checklist for Lyster, R. & Ranta, L. (1997): Corrective Feedback and Learner Uptake: Negotiation of Form in Communicative Classrooms.

Focus	IE as negative evidence to the learner.
Sample	Six French Immersion Classrooms which consisted of 4 classes of Grade 4 students including a split 4-5 group and 2 classes of Grade 6 students in two different school boards. Lyster & Ranta (1997) report on only the Grade 4 level and the split 4-5.
Instruction	French immersion programs where a communicative interactive approach is used.* One teacher came from the school board offering early immersion while the other three teachers came from the middle immersion school board. <i>All lessons that taught formal grammar were excluded for the purposes of the study.</i> The distribution was 7.8 hours or 13 art lessons and 10.5 hours or 14 other subject matter lessons.
Data Collection	By observation and through the use of audio recordings. All transcripts were double-bound being verified by a native or native-like speaker of French.

*Both school boards did not offer the same type of immersion. One taught early French immersion where students were taught in the TL, French, from Grade 1 on. One hour a day of English was offered. The other school board offered a middle immersion program starting in Grade 4. Before entering the program, student instruction had been limited to an hour a day of French. In this immersion program, students spent about 60% of their time learning subject matter in the TL and 40% learning subject matter in English in Grades 4 & 5.

RESULTS:

IE AS NEGATIVE EVIDENCE OR FEEDBACK

Six different types of feedback were used by the four teachers surfaced. Because the aim of this thesis is to generate hypotheses by applying the results of studies involving IE to SLT, it is mandatory that the feedback be explained. All explanations are taken directly from Lyster & Ranta (1997).

TYPE 1 feedback is explicit correction in which the teacher provides the student with the correct form. What the student has said is clearly indicated as being incorrect.

TYPE 2 feedback deals with recasts in which teachers reformulate all or part of a student utterance minus the error.

TYPE 3 is clarification requests where the teacher indicates to students either that the teacher has misunderstood an utterance or that the utterance is somehow badly formed. This tells the student that it is necessary to repeat what has been said or to reformulate.

TYPE 4 feedback is metalinguistic feedback containing either comments, information, or questions related to the well formedness of a student's utterance without explicitly proving the correct form.

TYPE 5 feedback refers to elicitation that involves directly eliciting a correct form from a student.

TYPE 6 feedback is the repetition in isolation of the student's erroneous utterance.

What the student did with the IE or feedback given was also of importance to Lyster & Ranta (1997). Student uptake²² can be subdivided. Uptake can result in repairing the focus, i.e., the correct reformulation of an error (Lyster & Ranta, 1997, p. 49), after feedback. Another consequence of uptake is that it can result in an utterance that needs repair²³.

Consequently the researchers were able to isolate and distinguish four types of repairs.

Type 1 repair refers to repetition of the teacher's feedback when the feedback contains the correct form. Type 2 repair is called incorporation and refers to a student's repetition of the correct form provided by the teacher, which is then incorporated into a longer utterance produced by the student (Lyster & Ranta, 1997, p. 50). Type 3 repair or self-repair is self-correction provided by the student in the absence of being given the correct form by the teacher. Type 4

²² Uptake refers to student's responses to feedback that is given that immediately follows the teacher's feedback and is a reaction to it.

²³ Repair refers to the correct reformulation of an error as uttered in a single student turn and not to the sequence of turns resulting in the correct reformulation; nor does it refer to self-initiated repair (Lyster & Ranta, 1997, p. 49).

repair is also called peer repair and is provided by a student who did not make the initial error responding to teacher feedback.

Recasts were the most widely used form of IE as negative evidence to the learner. Teachers used them 55% of the time compared to its closest rival, elicitation, which was used only 14% of the time. Recasts, however, resulted in the type of IE as negative evidence that was the least likely to lead to uptake. Elicitation led to uptake 100% of the time with other forms of IE as negative evidence to the learner scoring quite well: clarification requests led to uptake 88% of the time, metalinguistic feedback did so 86% of the time, and repetition followed with 76%. Recasts and explicit correction elicited only repetition and no other repairs. Elicitation and metalinguistic feedback were the most successful encouraging repairs involving more than the student's repetition of the teacher's utterance. Clarification requests and repetition followed this. In summary, the most used form of IE as negative evidence to the learner, recasts, were the least effective.

4.2.10 ANALYSIS OF STUDY 4

4.2.10.1 OBJECTIVE:

In terms of the research objective stated by Lyster & Ranta (1997), the study provides a very good insight into different types of IE as negative evidence to the learner. The observations are clear, relevant and pertinent to the objective.

4.2.10.2 RESULTS:

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

The results of the observations are well in line with the stated objective of the study. They provide an insight into what type of IE as negative evidence to the learner was available and how effective it happened to be within the specific context.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

Their observations enabled the researchers to control for quality in terms of methodology. An example of this is the use of audio recordings that were transcribed and verified twice by native or near-native speakers of French.

QUALITY OF RESULTS IN TERMS OF STUDY PURPOSE OF THESIS

What Lyster & Ranta (1997) suggest is that certain types of IE as negative evidence to the learner are more effective than others while some are totally ineffective. There is an indication that recasts become less used as a student's proficiency in the TL increase. Since this final observation only involved one teacher dealing with students who had started early immersion as reported, it is impossible to ascertain whether it would hold true with other teachers dealing with more proficient students. The information concerning types of IE as negative evidence to the learner, for example, becomes especially important in the formulation and generation of hypotheses because specificity of types has really not emerged from the other studies presented.

It is important to acknowledge that the researchers have answered some important questions

concerning the extent to which IE is used in a French immersion classroom and the results of its being used. There is evidence that Focus on Meaning alone is insufficient for successful accurate L2 learning and that certain types of negative evidence might indeed be necessary for this to take place. The question that must now be examined is that of positive evidence to the learner.

4.3 REPORTING AND ANALYZING STUDIES INVOLVING INPUT ENHANCEMENT AS POSITIVE EVIDENCE TO THE LEARNER

This section deals with the supplying of positive evidence to the learner with no direct or indirect negative evidence or feedback. While all negative evidence to the learner deals with what is not possible in the TL, direct negative evidence is feedback that represents what is deviant in reference to the norms of the TL. On the other hand, indirect negative evidence (Chomsky 1981 b) involves the noticing of certain structures or rules that are predicted as occurring in the learner's current grammar but that fail to be exemplified in the input. The sample (n=3) is: Day & Shapson (1991), Trahey & White (1993), and Trahey (1996). The last two studies are linked to White et al. (1991) and White (1991) reported upon and analyzed in section 4.2 of this thesis.

SELECTION CRITERIA

The three studies chosen deal with IE as positive evidence to the learner. The four selection criteria were respected and followed in their selection. In all studies, IE was examined within a communicative teaching context like that found in immersion or in intensive language programs like language baths. They were conducted in the classroom and not in a more formal laboratory setting. It was important that the selected studies be recently published so that researchers analyze the resulting data in light of a nativist stance. Finally, it was important that all the studies be quasi-experimental in nature.

PROCEDURE USED IN REPORTING THE STUDIES

Studies are reported following the checklist in Chapter 3 and used in the section dealing with IE as negative evidence to the learner. Where information is missing in the tables, it is discussed in the analysis of the study.

4.3.1 REPORTING OF STUDY 5

TITLE OF STUDY: Integrating Formal and Functional Approaches to Language Teaching in French Immersion: An Experimental Study.

AUTHORS: Day, E. & Shapson, S.

YEAR PUBLISHED: 1991

OBJECTIVES:

Day & Shapson (1991) state that their global objective was to evaluate the effect on French language proficiency of an integrated formal, analytic and functional, communicative approach to second language teaching in French immersion. Their specific objectives were to conduct an experimental study to determine whether Grade 7 immersion students' acquisition and use of the conditional in French could be improved, and to design curricular materials to effect this improvement (Day & Shapson, 1991, p. 27). The design objective of the materials was to provide students with opportunities to use the conditional in natural communicative situations, reinforce their learning with systematic linguistic games, and encourage their metalinguistic awareness.

METHODOLOGY:

TABLE 6: Summary of checklist for Day & Shapson (1991): Integrating Formal and Functional Approaches to Language Teaching in French Immersion: An Experimental Study.

Focus	IE as positive evidence to the learner and the conditional in French.
Sample	Native English-speaking children (n=315) 12-13 yrs. in early French immersion. Twelve classes in all: 2 classes from one district; 4 classes each from 2 other school districts.
Assignment	Quasi-random assignment of control and experimental conditions using pretest results and information given by the school districts: preformed groups.
Instructional Time	Three hours per day for 5-7 weeks.
Treatment	Teaching was designed so students would learn and use the conditional in communicative situations.
Baseline	The use of native speakers in any capacity is not mentioned.
Pretest	All groups were given a written and oral cloze test, a written composition, and an oral interview.
Posttest	Administered to all groups immediately following treatment. It consisted of a written and oral cloze test, a written composition, and an oral interview.
Follow-up test	Administered near end of the school year; eleven weeks after the posttest. It consisted of a written & oral cloze test, a written composition, and an oral interview.

RESULTS:

Results on the tests indicated that there was no statistically significant difference between the experimental classes and the control classes on the pretest or in speaking. On the written cloze test, for example, the mean for the experimental group on the pretest was $\bar{x}=16.6$ whereas it was $\bar{x}=18.3$ for the control group resulting in a t-value of 0.93. On the written composition on the pretest, there was also no statistically significant difference between the two groups. The mean for the experimental group was $\bar{x}=44.0$; the mean for the control group was $\bar{x}=45.8$. The same was true of the pretest oral interview that showed no statistically significant differences between groups. The experimental group's mean was $\bar{x}=31.6$ whereas that of the control group was $\bar{x}=35.3$. Using the class as the unit of analysis, the ANOVA showed a statistically significant group by time interaction on the written tests. The control group made lesser gains than the

experimental groups. Subsequently, using the individual subject as the unit of analysis, the ANOVA revealed that there was a significant group by time interaction only on the written test measures. There was an increase in the experimental groups' performance in writing in both the pretest and follow-up test. Although the same results were not found for oral production, an examination of individual class data revealed greater and more consistent growth in speaking (Day & Shapson, 1991, 26).

4.3.2 ANALYSIS OF STUDY 5:

4.3.2.1 OBJECTIVES:

Researchers intended to study instruction involving only positive evidence to the learner. A cooperative learning approach and group evaluation procedures were used. It is stated that they were designed to maximize student interaction and encourage conscious awareness of language use. All three types of objectives, global, specific, and design, were not left open to interpretation as far as intent is concerned. However, an operational definition used in stating the global objective (an integrated formal, analytic and functional communicative approach) had not been provided. This affects its clarity.

4.3.2.2 METHODOLOGY:

QUALITY OF SAMPLING

The assignment of experimental or control conditions was done on a random basis to preformed groups. Quality of sampling regarding knowledge of French was ensured by means of the administration of a pretest. Zobl (1995) in his critique of Day & Shapson (1991) mentioned that subjects in this study seemed to have knowledge of the TL and the researchers made no effort to

ensure that this was not so or, at least, they did not demonstrate this in a controlled way. One of the control classes seemed to have been dysfunctional despite the tight screening that took place. It too had made great strides in learning the conditional. In fact most of the gains in the posttest and follow-up test were attributed to this one class. The researchers concluded that the teacher had been teaching the conditional for a long time. Although the teaching had been done in not quite the same way as the teachers of the experimental groups, it did, nevertheless, resemble what they were doing.

CONTROL OF VARIABLES

Native speakers were not mentioned in any capacity either for the types of tests or in the validation of the teaching materials that were being tried out. Among other references made to the present study, Zobl (1995) states that one of the methodological problems in this study is that it is difficult to establish a uniformity among the use of the teaching materials even with the experimental groups because this aspect was not checked. Teaching was not monitored. The result is that it is also difficult to assert that learners received only positive evidence.

QUALITY OF TEST INSTRUMENTS USED

There were two forms for each of the three tests. Because these were randomly distributed in the pretesting with half the subjects in each class receiving one form and the other half the second form, and the distribution was reversed in the posttesting, validity and reliability of the

instruments was assured. In addition to this, a sample of eight randomly selected subjects per class received the oral interview in an attempt to elicit reliable data.

THE EFFECT OF PRETEST AND POSTTEST

Because of the controls involved in the random distribution of the test items and the different versions of the same test, the timeframe is not a factor that could have influenced test outcomes.

QUALITY OF INSTRUCTION

The researchers credited the improvement in subjects' oral and written skills to a curricular integrated intervention that combined formal, analytic with functional communicative approaches to language teaching. It is difficult to isolate the effects of the various instructional interventions. The researchers stated that the study could not separate the increased opportunities for comprehension provided by the materials from those that might have accrued from the increased opportunities for production. In addition to this, the study could not determine the effects of the various instructional features of the experimental materials that provided focused input, the cooperative learning approach that encouraged production, and the group and self evaluation procedures that encouraged conscious awareness of language use (Day & Shapson, 1991, p. 55). This information is necessary to determine which aspects of IE were beneficial to learners.

Moreover, what teachers actually did in the classroom situations was neither monitored nor reported so it is difficult to talk about instructional quality. There was also no information given

as to whether these teachers were, indeed, native or near native speakers of the TL.

QUALITY OF STATISTICAL ANALYSES

There were 315 subjects involved in the study overall. Experimental effects were revealed in the statistical analyses. ANOVA results using the class as the unit of analysis revealed a significant group-by-time interaction on the cloze test (F-ratio: group: 1.51 which is not significant; time: 26.79 which is significant at the $P \leq .001$ level; group x time: 4.49 which is significant at the $P \leq .020$ level). The same is true of the written composition test (F-ratio: group: 2.94 which is not significant; time: 19.86 which is significant at the $P \leq .001$ level; group x time: 5.40 which is significant at the $P \leq .010$ level). There was no significant group by time interaction on the oral interview (F-ratio: group: 0.25; time: 27.13 which is significant at the $P \leq .001$ level; group x time: 1.86 which is not significant). The ANOVA results using the student as the unit of analysis revealed a similar pattern with a significant group by time interaction on the written measures but not on the oral measures (Day & Shapson, 1991, p.42). Using the student as the unit of analysis as was done in this study is not recommended. The use of class versus student as a unit of analysis is inappropriate because students are nested within classes.

4.3.2.3 RESULTS:

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVES

The results do not isolate cause and effect in terms of the stated objectives. They digress from the objectives as stated.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

While the methodology was generally controlled, it was not a reliable indicator in isolating specifics like separating the effects of the various instructional features of the experimental materials from the approach, for example.

QUALITY OF RESULTS IN TERMS OF PURPOSE OF THESIS

The research provided by Day & Shapson (1991) is useful in generating hypotheses as far as questions raised as to what in the approach and educational materials caused the overall increase in writing and failure to achieve this in oral production. A possible hypothesis resulting from the study, for example, is that written production responds to IE as positive evidence to the learner whereas oral production does not.

It is hoped that the next two studies, Trahey & White (1993) and Trahey (1996) will yield similar results in terms of the study purpose of this thesis. The studies also deal with IE as positive evidence to the learner. IE is offered to learners in the form of a linguistic flood where data is focused on one particular grammatical structure namely the position of the adverb in English. Both studies are in keeping with a communicative approach as would be found in immersion programs or in intensive ESL programs in Québec.

In their study, Trahey & White (1993) provide subjects with an input flood of specifically prepared materials containing English adverbs that they state are used *naturalistically*. Their investigation is based on a parameter called *verb movement* from Pollack (1989) which the

researchers maintain effectively accounts for the difference in the occurrence of adverbs in French and English in relation to the verb ²⁴.

4.3.3 REPORTING OF STUDY 6

TITLE OF STUDY: Positive Evidence and Preemption in the Second Language Classroom.

AUTHORS: Trahey, M. and White, L.

YEAR PUBLISHED: 1993

OBJECTIVE:

The objective as stated by the researchers was to determine the effect on L2 subjects of supplying positive evidence in the second language classroom by means of an input flood.

²⁴ Based upon a specific UG view, the verb movement parameter of Pollack (1989) accounts for where adverbs can occur in relation to the verb in French and in English. In French, the verb raises past the adverb: SVAO is allowed but not SAV. (Nancy boit lentement son lait but * Nancy lentement boit.) In English, the verb does not raise: SAV is allowed whereas SVOA is not. (Nancy slowly drinks her milk as...but * Nancy drinks slowly her milk.)

METHODOLOGY:

TABLE 7: Summary of checklist for Trahey & White (1993): Positive Evidence and Preemption in the Second Language Classroom.

Focus	IE as positive evidence to the learner and ADV placement in English.
Sample	Native French-speaking children (n=54): average age 11 yrs. ²⁵
Assignment	Two intact classes, no random sampling.
Instructional Time	A total of ten hours: an hour a day for ten days.
Treatment	The treatment focused on exposure to adverbs in input flood in intensive ESL in Québec. Materials were developed and then provided to teachers by the researchers.
Baseline	The use of native English speakers is not mentioned in the study.
Pilot Test	Tests used were piloted with comparable group of intensive ESL learners*.
Pretest	Same types of tasks as White (1991) and a specifically designed oral production task <ul style="list-style-type: none"> • group written GJT & correction task; • group written preference task; • individual sentence manipulation task; • individual oral production task.
Posttest	Administered on day immediately following input flood activities: same tasks as on pretest.
Follow-up test	Administered three weeks after posttest: same tasks as on pretest and posttest.

*The information is available in White (1991) & Trahey (1996).

RESULTS:

On the grammatical judgment test, exposure to the input flood caused an increase in the acceptance of SAV or subject + adverb + verb. The input flood, however, did not cause subjects to discover that SVAO or subject + verb + adverb + object was ungrammatical. Subjects still accepted SVAO but acceptance of the structure was decreased. There was a statistically significant change between the pretest, posttest and follow-up test mean scores at the $P \leq 0.05$ level. SVAO pretest mean score was $\bar{x} = 3.37$; the posttest mean score was $\bar{x} = 2.10$; the follow-up test mean score was $\bar{x} = 2.04$. SAV pretest mean score was $\bar{x} = 3.15$; the posttest mean score was $\bar{x} = 5.84$ with $\bar{x} = 6.16$ on the follow-up test. There was no statistically significant change between the results of the posttest and the follow-up test. On the preference task, exposure to the input flood resulted in a high acceptance of SAV. The SVAO order was not affected.

²⁵ These were the same subjects as were used in White (1991). They were used for purposes of comparability between the two studies.

On the sentence manipulation task ²⁶, there was very little variation in SVAX test scores in all sessions. There were statistically significant differences on SAV scores from the pretest (average of 1.83 out of possible 4), posttest (3.08 average out of 4) and follow-up test means at the $P \leq .005$ level (3.12 average out of 4). There were no statistically significant differences between the posttest and follow-up test means. In the oral production task, exposure to the input flood caused an increase in the use of SAV. It did not cause the disappearance of SVAO. SVAO, however, was used far less frequently. Two out of the fifty four subjects who had started out using the SVAO order at the pretest at approximately the average levels reported in usage in the input flood group appeared to have learned that SVAO was impossible in English.

4.3.4 ANALYSIS OF STUDY 6:

4.3.4.1 OBJECTIVE:

The objective meets all the conditions for conceptual clarity as defined in this thesis. It is pertinent to the effect on L2 of supplying positive evidence in a second language classroom by means of an input flood.

4.3.4.2 METHODOLOGY:

QUALITY OF SAMPLING

Sampling was not done on a random basis. It involved working with students in preformed intact classes. There was no assignment of experimental or controlled condition to these groups.

²⁶ In the sentence manipulation task, one of the four sentences manipulated by subjects contained a prepositional phrase instead of a direct object. Trahey & White (1993), therefore, refer to it as the SVAX score rather than the SVAO score meaning that something other than a direct object could follow the adverb.

Both groups were exposed to the input flood and results were compared to an earlier study. The groups taking part in White (1991) served as the basis for comparison.

CONTROL OF VARIABLES

CONTROL OF VARIABLES

Both teachers were native English speakers. There was no attempt to control exposure to linguistic evidence that might have occurred outside the classroom and it is difficult to talk about validity with respect to this. Trahey & White (1993) controlled the use of direct negative IE in the classroom. Tape recordings were made of what happened in the classroom while the special teaching materials were being used. In their notes following the study, the researchers observed that in sixteen hours of taped material, one of the teachers reacted to an error in adverb placement in only one instance. The teacher, however, used repetition of the subject's sentence using a question intonation. Lyster & Ranta (1997) referred to this as Type 6 feedback which is repetition in isolation. The subject then self-corrected. The researchers labeled this repairing the focus as uptake.

Three of the tests used were the same as in White (1991). In that study, there was a control for repeated testing effects in that items on tests were scrambled as was the order of presentation. It is taken for granted in this analysis that the same administrative conditions existed in this study though Trahey & White (1993) do not specifically mention them. Since the time delay between the pretest and the follow-up test is only five weeks, testing effects are an important concern.

QUALITY OF TEST INSTRUMENTS USED

In referring to the White (1991), Trahey & White (1993) studies, Trahey (1996) states that administering several tasks at each test session would provide a clear picture of the subject's true

linguistic competence. It was hoped that performance across types of tasks for a single subject would be a more valid reflection of the learner's underlying linguistic competence.

Consequently, the criticism of White (1991) by Schmidt (1994) holds for this study as well. It is that theoretically motivated linguistic accounts may very well overestimate what learners *know* unconsciously. Once again the quality of the instruments is in question because only eight adverbs were used and these were a subset of those in the teaching material. In analyzing White (1991) in this thesis, there was a question as to whether open time-lines in the administration of tasks would be a factor affecting validity and reliability of the instruments. The details of test administration are not given in Trahey & White (1993). If the timeline was open as it was for the earlier study, then the same argument holds.

THE EFFECT OF PRETEST AND POSTTEST

In White (1991), there was a control of repeated test effects. Researchers used three of the four instruments in that study in their 1993 research. It is difficult to establish whether this type of control was present in this study. Given the short timeframe involved in Trahey & White (1993), the absence of this type of control would most likely have affected the outcome of the first post-test administered immediately after the two-week input flood. The same can be said about the administration of the follow-up test administered only three weeks after the first posttest.

QUALITY OF INSTRUCTION

The use of two teachers who were native English speakers ensures a control of quality in guaranteeing input where verbs would not raise in relation to adverbs. Trahey & White (1993) ensured that all adverbs were heard in context when they were used in specifically prepared

materials. In keeping with the type of communicative methodology used in intensive ESL programs, they included activities such as games, stories and exercises to teach the meaning of adverbs.

QUALITY OF STATISTICAL ANALYSES

Mean test scores are given for each of the tasks. The posttest and follow-up test scores are reported and compared for each of the tasks as well. As already reported in the result section of this study in this thesis, the statistical analyses provided are detailed for each of the tasks in each of the test sessions. In an attempt to establish a control of quality of statistical results and validity in comparing the flood group results with the two experimental groups and the native speaker control group in White (1991), repeated ANOVA's of subject's mean test scores in the adverb, question and flood groups who took all three tests were run. Where significant differences were found, post hoc Scheffé procedures were used to establish the source of these differences at 0.01 level.

4.3.4.3 RESULTS

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

Results provide information as to what happens when subjects are exposed to an input flood. Even if there could have been exposure to English outside the classroom, this aspect would still have been in line with their intention of exposing subjects to English adverbs in what should consist of relatively positive evidence only (Trahey & White, 1993, p.186). This is also in line with their stated objective.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

The concepts of frequency and manner in adverbs exist in French as well. It is difficult to ascertain whether that prior knowledge might have played a role in both Trahey & White (1993) and their comparison study, White (1991). The methodology used included the testing of a very limited number of adverbs. This might have involved the learning of lexical items rather than adverbs and their position in an English sentence (Schmidt 1994). Because of this, for example, it is difficult to establish the reliability of the data.

QUALITY OF RESULTS IN TERMS OF STUDY PURPOSE OF THE THESIS

The results do not answer the question as to the role played by IE as positive evidence to the learner and preemption in a L2. Because subjects in the input flood were using both SAV and SVAO, after exposure, it would appear that they, indeed, reacted to the flood. These facts constitute an excellent basis for the generation and formulation of hypotheses. For example, an input flood can cause a correct morpho-syntactic form to appear but it is insufficient to cause preemption.

One final study remains to be presented. It was conducted as a follow-up to Trahey & White (1993).

4.3.5 REPORTING OF STUDY 7

TITLE OF STUDY: Positive Evidence in Second Language Acquisition: Some Long-term Effects

AUTHOR: Trahey, M.

YEAR PUBLISHED: 1996

OBJECTIVE:

As stated by the researcher, the objective was to determine whether the increase in the use of the preverbal adverb position as established in Trahey & White (1993) was maintained at least a year after the input flood thereby truly reflecting a change in the learner’s underlying unconscious knowledge about the L2.

METHODOLOGY:

TABLE 8: Summary of checklist for Trahey (1996): Positive Evidence in Second Language Acquisition: Some Long-term Effects.

Focus	IE as positive evidence to the learner and adverb placement in English
Sample	Native French -speaking children (n=52); average age 12 yrs. All subjects participated in Trahey & White (1993) but are a year older (4 original subjects were excluded) and in regular ESL.
Assignment	Two intact classes; no random selection: refer to summary checklist : Trahey & White (1993)
Instructional Time	Instruction was given the previous year at a rate of an hour a day for 10 days: refer to Trahey & White (1993).
Treatment	The treatment was focused on exposure to adverbs in input. Materials were developed by the researchers and then given to the teachers. Refer to summary checklist: Trahey & White (1993)
Baseline	A control group of 26 unilingual English students in grades 4&5 had been used in White (1991).
Pretest	Administered immediately following instructional period. Same tasks or tests were used. Refer to summary checklist: Trahey & White (1993)
Posttest	Administered one year after the input flood referred to in Trahey & White (1993). Same tasks or tests as previously used in White (1991); Trahey & White (1993).

RESULTS:

On the GJT, changes found immediately after the period of intensive exposure to the input flood were maintained. There were no statistically significant changes in scores between the posttest and follow-up test administered in Trahey & White (1993) and those in Trahey (1996). There were significant differences measured on the posttests in 1993. These were maintained in the results of this study as well. While standard deviations are not provided, Trahey (1996) states that the SAV mean score for the flood group in the follow-up was \bar{x} =6.64 (41.5%). It was up

from mean scores at all previous sessions: \bar{x} = 3.07 (19.2%) on the pretest; \bar{x} = 5.86 (36.6%) on the first posttest and \bar{x} =6.05 (37.8%) on the follow-up test in 1993. The results of the ANOVA showed that there was a significant effect for test session ($P=0.0001$) for these scores. Post hoc Scheffé test ($P<0.05$) revealed that while the follow-up mean scores differed significantly from those of the pretest, there was no statistically significant difference between both the first and second posttests and the follow-up tests.

In the preference test, results indicated that there was no significant change in SAV and SVOA orders between the posttest and follow-up test administered in 1993 and the 1996 testing. The lapse of a year did not seem to have affected subjects' knowledge. SAV scores were maintained in the long run. Results in the sentence manipulation task suggest that subjects' knowledge of adverb placement derived from the input flood a year earlier had not changed significantly. The oral production test indicated that there were no significant differences between the results obtained in 1993 and the ones in this study conducted a year later.

An overall summary of the results can be stated as follows: exposure to an input flood of positive evidence on adverb placement in English appears to have caused subjects to learn that SAV is a grammatical order in English and retain that knowledge a year later. The input flood did not cause an increase in the use of grammatical adverbial orders. It also did not cause subjects to learn that SVAO is an ungrammatical order in English. Subjects still used SVAO in much the same way as they did immediately following the input flood in 1993, a year earlier.

4.3.6 ANALYSIS OF STUDY 7

4.3.6.1 OBJECTIVE:

The objective of Trahey (1996) was to determine the long term effects on L2 subjects of supplying IE as positive evidence concerning adverbs in the second language classroom by means of an input flood that took place a year earlier. The points brought up for Trahey & White (1993) concerning the relevancy of the focus of the study holds in this case as well. Since the objective is geared to determining the long term effects of the input flood which subjects were exposed to the previous year, it is especially relevant to ascertain and define the *level of exposure* to English concerning adverbs during this interval. It is difficult to determine what subjects were specifically exposed to during the time lapse. Consequently, that stating of the objective is left open to interpretation.

4.3.6.2 METHODOLOGY

QUALITY OF SAMPLING

For purposes of the study and its objective, it was important to work with the same intact groups as Trahey & White (1993). However, it was this very attempt to control sampling quality that inevitably led to the inability to control for exposure to the focus of the study.

CONTROL OF VARIABLES

Given that this study deals with IE as positive evidence to the learner, the time lapse of one year between the input flood and this study, makes it impossible to control for exposure to the focus of the study which is the placement of adverbs in an English sentence.

QUALITY OF TEST INSTRUMENTS USED

Two different versions of the sentence manipulation test and oral production test were available. This provided quality control for possible comparison among subjects given that these tests were individually administered but, once again, the test session was not the same for all subjects. The preference test had a control on quality for possible effects of version and order.

THE EFFECT OF PRETEST AND POSTTEST

Given the time delay of a year, this is not a factor.

QUALITY OF INSTRUCTION

It is impossible to determine specifically what instruction subjects were given in ESL concerning adverb placement during the lapse of a year.

QUALITY OF STATISTICAL ANALYSES

Supplying a comparison of class mean scores for each of the tests ensures the quality of statistical analysis. This, in turn, is compared to the subjects' results from the previous year in the pretest, posttest and follow-up test.

4.3.6.3 RESULTS

QUALITY OF RESULTS IN TERMS OF STUDY OBJECTIVE

In terms of the study objective, the results are of questionable quality because it was impossible to control for exposure to the TL during the lapse of time between the two studies. It is, therefore, difficult to talk about and determine the long-term effects of the input flood given a year earlier.

QUALITY OF RESULTS IN TERMS OF METHODOLOGY

In terms of methodology, it was impossible under the circumstances to control for exposure to the TL. Given this, the validity and reliability of the issuing data affects its quality. The dependability of the data is left open to question because of the methodology. Another example of this is the comparison of subjects in this study to the ADV group in the 1991 study, the flood group in 1993, and another group of grade six students who had participated in the intensive ESL program in grade five but who had not received the ADV input flood. This uninstructed group is taken to represent learners who have received similar instruction as the other two groups but who have not received special exposure to ADV at all. These subjects served as a second comparison group for the study but were not pretested on previous knowledge of ADV placement. The reasons given for administering several tasks at each test session in 1991 and in 1993 seem to hold true in this study as well. However, there is an indication that not all groups were tested on all tasks. In terms of methodological results, there was no uniformity in test administration to all groups.

QUALITY OF RESULTS IN TERMS OF STUDY PURPOSE OF THESIS

The study can be used to generate hypotheses on the longitudinal effect of IE as positive input to the learner concerning adverb placement.

4.4 CHAPTER SUMMARY

This chapter has addressed the central question of the thesis by examining studies dealing with IE as both negative and positive evidence to the learner by reporting and analyzing them in terms of the stated objective, the methodology used and their usefulness in terms of the stated purpose of study of this thesis.

Before moving on to the next chapter where specific research questions arising from the seven studies on IE will be asked in order to generate hypotheses, a summary of this chapter is presented in table form beginning on the next page. Its purpose is to summarize the information given in this chapter so as to isolate features to be discussed in Chapter 5.

TABLE 9: Summary of information and variables presented in Study 1, Phase 1, of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	White et al. (1991): <u>Input Enhancement and L2 Question Formation.</u>
Objective	To investigate the extent to which IE in the form of corrective feedback and instruction that is focused on form within a communicative program can contribute to learner accuracy in forming English questions.
Morpho-syntactic focus	Question formation in English.
Communicative language teaching context	Linguistic bath.
Type of IE	IE as negative evidence to the learner: exact type of corrective feedback (Lyster & Ranta 1997) is unspecified.
Modes	Recognition and production.
Types of tasks	Non-contextualized.

TABLE 10: Summary of information and variables presented in Study 1, Phase 2, of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	White et al. (1991): <u>Input Enhancement and L2 Question Formation.</u>
Objective	To investigate the extent to which IE in the form of corrective feedback and instruction that is focused on form within a communicative program can contribute to learner accuracy in forming English questions.
Morpho-syntactic focus	Question formation in English.
Communicative language teaching context	Linguistic bath.
Type of IE	IE as negative evidence to the learner: exact type of corrective feedback (Lyster & Ranta 1997) is unspecified.
Modes	Spontaneous production; production.
Types of tasks	Contextualized.

TABLE 11: Summary of information and variables presented in Study 2 of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	White (1991): <u>Adverb Placement in Second Language Acquisition: Some Effects of Positive and Negative Evidence in the Classroom.</u>
Objective	To investigate whether form-focused instruction, including negative evidence, given in the classroom is more effective in helping L2 learners arrive at the appropriate properties of English than positive evidence alone.
Morpho-syntactic focus	Adverb placement in English.
Communicative language teaching context	Linguistic bath.
Type of IE	IE as negative evidence to the learner: exact type of corrective feedback (Lyster & Ranta 1997) is unspecified.
Modes	Recognition; production.
Types of tasks	Non-contextualized; contextualized.

TABLE 12: Summary of information and variables presented in Study 3 of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	Spada & Lightbown (1993): <u>Instruction and the Development of Questions in L2 Classrooms.</u>
Objective	To investigate the contributions of form-focused instruction and corrective feedback to the development of question formation in the oral performance of ESL students.
Morpho-syntactic focus	Question formation in English.
Communicative language teaching context	Linguistic bath.
Type of IE	IE as negative evidence to the learner: exact type of corrective feedback (Lyster & Ranta 1997) is unspecified.
Modes	Spontaneous production.
Types of tasks	Contextualized.

TABLE 13: Summary of information and variables presented in Study 4 of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	Lyster & Ranta (1997): <u>Corrective Feedback and Learner Uptake: Negotiation of Form in Communicative Classrooms.</u>
Objective	To determine how students and teachers engage in error correction during communicative interaction in an immersion program.
Morpho-syntactic focus	Unspecified.
Communicative language teaching context	Immersion.
Type of IE	IE as negative evidence to the learner: explicit correction, recasts, clarification requests, feedback, elicitation, repetition.
Modes	Spontaneous production, production.
Types of tasks	Contextualized.

TABLE 14: Summary of information and variables presented in Study 5 of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	Day and Shapson (1991): <u>Integrating Formal and Functional Approaches to Language Teaching in French Immersion: an Experimental Study</u>
Objective	Global objective: to evaluate the effect on French language proficiency of an integrated formal, analytic and functional, communicative approach to L2 learning in French immersion. Specific objectives: to determine whether Grade 7 immersion students' acquisition and use of the conditional in French could be improved and to design curricular materials to make this occur. Design objective of the materials: to provide students with opportunities to use the conditional in natural communicative situations, reinforce their learning with systematic linguistic games, and encourage their metalinguistic awareness.
Morpho-syntactic focus	Conditional in French.
Communicative language teaching context	Immersion.
Type of IE	IE as positive evidence to the learner.
Modes	Recognition; spontaneous production; production.
Types of tasks	Contextualized.

TABLE 15: Summary of information and variables presented in Study 6 of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	Trahey & White (1993): <u>Positive Evidence and Preemption in the Second Language Classroom.</u>
Objective	To determine the effect on L2 subjects of supplying positive evidence in the L2 classroom by means of an input flood.
Morpho-syntactic focus	Adverb placement in English.
Communicative language teaching context	Linguistic bath.
Type of IE	IE as positive evidence to the learner in terms of an input flood.
Modes	Recognition; spontaneous production; production.
Types of tasks	Non-contextualized; contextualized.

TABLE 16: Summary of information and variables presented in Study 7 of Chapter 4 and necessary to the formulation and generation of hypotheses in Chapter 5.

Study Identification	Trahey (1996): <u>Positive Evidence in Second Language Acquisition: Some Long-term Effects.</u>
Objective	To determine whether the increase in the use of the preverbal adverb position as established by Trahey & White (1993) was maintained at least a year after the input flood thereby truly reflecting a change in the learner's underlying unconscious knowledge about the L2.
Morpho-syntactic focus	Adverb placement in English.
Communicative language teaching context	Linguistic bath.
Type of IE	IE as positive evidence to the learner in term of an input flood.
Modes	Recognition; spontaneous production; production.
Types of tasks	Non-contextualized; contextualized.

CHAPTER 5 RESEARCH QUESTIONS AND HYPOTHESES

5.1 PREAMBLE

In the conclusion of Chapter 4, the summary tables outlined and focused upon the variables stemming from the seven studies that were analyzed and synthesized within the corpus of the chapter. It is from these variables that hypotheses are generated within Chapter 5. Research questions arising from each of the studies are presented as a first step. Then hypotheses are presented systematically adhering to the pattern established in the preceding chapter. Research questions and hypotheses dealing with IE as positive evidence to the learner follow research questions and hypotheses dealing with IE as negative evidence to the learner. All hypotheses are posited using the results and variables involved in the seven studies. When a quasi-experimental study focuses on IE as negative evidence to the learner, Lyster & Ranta (1997) feedback types have been used as variables. The hypotheses thus generated have been stated in terms that strongly suggest the methods and research designs that could be used to test them.

5.2 RESEARCH QUESTIONS AND HYPOTHESES DEALING WITH INPUT ENHANCEMENT AS NEGATIVE EVIDENCE TO THE LEARNER

Research questions will be stated using the parameters and pattern that follow. While many questions could be formulated, only a few examples will be given.

RESEARCH QUESTIONS

Given a morpho-syntactic focus on

- question formation in English
- adverb placement in English

- adverb placement in English

in a communicative language teaching context (Spada 1997) like

- a linguistic bath
- immersion

questions like the following issue from the two studies:

-What effect does IE as negative evidence to the learner in terms of

- explicit correction
- recasts
- clarification requests
- metalinguistic feedback
- elicitation
- repetition

have in the following modes

- recognition
- spontaneous production
- production

in the following types of tasks

- a non-contextualized task?
- a contextualized task?

Following the established parameters, some examples of possible research questions are:

- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as negative evidence to the learner in terms of **explicit correction** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as negative evidence to the learner in terms of **explicit correction** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as negative evidence to the learner in terms of **explicit correction** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as negative evidence to the learner in terms of **explicit correction** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as negative evidence to the learner in terms of **recasts** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as

negative evidence to the learner in terms of **recasts** have on recognition in a **non-contextualized task**?

- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as negative evidence to the learner in terms of **recasts** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as negative evidence to the learner in terms of **recasts** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as negative evidence to the learner in terms of **clarification requests** have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as negative evidence to the learner in terms of **clarification requests** have on **recognition** in a **non-contextualized task**?

HYPOTHESES

These research questions can generate many hypotheses. Only a few examples will be given. The following parameters will be used when stating hypotheses.

Given a morpho-syntactic focus such as question formation in English or adverb placement in English in a communicative language teaching context (Spada 1997) like a

- linguistic bath
- immersion

IE as negative evidence to the learner in terms of

- explicit correction
- recasts
- clarification requests
- metalinguistic feedback
- elicitation
- repetition

in the following types of tasks

- a non-contextualized task
- a contextualized task

will not alter performance in

- a recognition task involving that structure.
- a spontaneous production task involving that structure.
- a production task involving that structure.

Examples of hypotheses that can be generated using the above template are:

- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as negative evidence to the

learner in terms of **explicit correction** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.

- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as negative evidence to the learner in terms of **explicit correction** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as negative evidence to the learner in terms of **explicit correction** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as negative evidence to the learner in terms of **explicit correction** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as negative evidence to the learner in terms of **recasts** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as negative evidence to the learner in terms of **recasts** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.

- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as negative evidence to the learner in terms of **recasts** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as negative evidence to the learner in terms of **recasts** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as negative evidence to the learner in terms of **clarification requests** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as negative evidence to the learner in terms of **clarification requests** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **question formation in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as negative evidence to the learner in terms of **clarification requests** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as negative evidence to the

learner in terms of **clarification requests** in a **non-contextualized task** will not alter performance in a **recognition task** involving that structure.

5.3 RESEARCH QUESTIONS AND HYPOTHESES DEALING WITH INPUT ENHANCEMENT AS POSITIVE EVIDENCE TO THE LEARNER

Following a pattern similar to the one established in Section 5.2 of this thesis, research questions and hypotheses will follow the parameters given below. Once again, several exemplars of research questions will be supplied.

RESEARCH QUESTIONS

Given a morpho-syntactic focus on

- adverb placement in English
- conditional in French

in a communicative language teaching context (Spada 1997) like

- a linguistic bath
- immersion

what effect does IE as positive evidence to the learner in terms of

- an input flood

have in the following modes

- recognition
- spontaneous production
- production

in the following types of tasks

- a non-contextualized task?
- a contextualized task?

Following this template, examples of research questions that can be asked are:

- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as positive evidence to the learner in terms of an input flood have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on the **conditional in French** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as positive evidence to the learner in terms of an input flood have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as positive evidence to the learner in terms of an input flood have on **recognition** in a **non-contextualized task**?
- Given a morpho-syntactic focus on the **conditional in French** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as positive evidence to the learner in terms of an input flood have on **recognition** in a **non-contextualized task**?

- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as positive evidence to the learner in terms of an input flood have on **spontaneous production** in a **non-contextualized task**?
- Given a morpho-syntactic focus on the **conditional in French** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, what effect does IE as positive evidence to the learner in terms of an input flood have on **spontaneous production** in a **non-contextualized task**?
- Given a morpho-syntactic focus on **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as positive evidence to the learner in terms of an input flood have on **spontaneous production** in a **non-contextualized task**?
- Given a morpho-syntactic focus on the **conditional in French** in a communicative language teaching context (Spada 1997) like **immersion**, what effect does IE as positive evidence to the learner in terms of an input flood have on **spontaneous production** in a **non-contextualized task**?

HYPOTHESES

Given a morpho-syntactic focus such as adverb placement in English or the use of the conditional in French in a communicative language teaching context (Spada 1997) such as

- a linguistic bath
- immersion

IE as positive evidence to the learner in terms of

- an input flood

in the following types of tasks

- a non-contextualized task
- a contextualized task

will not alter their performance in

- a recognition task involving that structure.
- a task involving spontaneous production of that structure.
- a task involving production of that structure.

Examples of hypotheses based on the research questions and on the proposed template are:

- Given a morpho-syntactic focus such as **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **recognition task involving that structure**.
- Given a morpho-syntactic focus such as the **conditional in French** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **recognition task involving that structure**.
- Given a morpho-syntactic focus such as **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **recognition task involving that structure**.

- Given a morpho-syntactic focus such as the **conditional in French** in a communicative language teaching context (Spada 1997) like **immersion**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **recognition task involving that structure**.
- Given a morpho-syntactic focus such as **adverb placement in English** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **task involving spontaneous production of that structure**.
- Given a morpho-syntactic focus such as the **conditional in French** in a communicative language teaching context (Spada 1997) like a **linguistic bath**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **task involving spontaneous production of that structure**.
- Given a morpho-syntactic focus such as **adverb placement in English** in a communicative language teaching context (Spada 1997) like **immersion**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **task involving spontaneous production of that structure**.
- Given a morpho-syntactic focus such as the **conditional in French** in a communicative language teaching context (Spada 1997) like **immersion**, IE as positive evidence to the learner in terms of an input flood in a **non-contextualized task** will not alter performance in a **task involving spontaneous production of that structure**.

There is no pretense or claim made that the research questions asked within the scope of this chapter and the hypotheses formulated and generated on the basis of the analyses and syntheses of

the studies selected for this thesis represent the entire spectrum of possibilities. They are, nevertheless, among the most evident. Moreover, it must be pointed out that some aspects of the hypotheses presented have been tested and/or previously studied²⁷. The studies, however, did not include all the variables presented in the hypotheses. It is in the next chapter that the contents of this thesis are summarized and a conclusion is presented.

²⁷ For more extensive information on these aspects, refer to Spada (1997).

CHAPTER 6

SUMMARY AND CONCLUSIONS

6.1 PREAMBLE

The aim of Chapter 5 was to take the reporting and analyses of the seven selected studies and to generate and formulate hypotheses in relation to the research questions emanating from them. It is posited that these can be verified in subsequent studies and can stimulate other research on IE. At that point, factors that might affect the confirmation or rejection of the proposed hypotheses can be discussed.

The aim of this chapter is to present both the summary and conclusions of the thesis. It is designed to present the summary so that the problem is restated briefly, and to review the main methodological features and the findings that resulted from the body of the thesis. Following the summary are comments on the hypotheses generated in Chapter 5 with the aim of providing a framework for stating conclusions inferred from the results of this exploratory study. The conclusions deal directly with the implications of the findings by pointing out areas that will need to be further studied with respect to Input Enhancement before its introduction into the classroom.

6.2 SUMMARY

The thesis initially dealt with IE and whether it could be used as a viable tool in the classroom. In order to do this, six classroom-based quasi-experimental studies and one classroom-based observational study dealing with Input Enhancement were selected. These studies were first

reported in a table according to a specified predetermined checklist. Results of the individual studies were subsequently reported. Each study was then analyzed using an instrument that was specifically designed for this exploratory study. It included an analysis of the objective of each study, the methodology used within each quasi-experimental study in terms of quality of sampling, control of variables, quality of test instruments used, the effect of the pretest and posttest test, where applicable, the quality of instruction and the quality of statistical analyses used. Results were analyzed for quality in terms of the study objective as stated in the selected studies, the methodology used and the purpose of the thesis.

Following this, in line with the stated aim of this exploratory study, hypotheses were generated using predetermined parameters as well as information and variables issuing from the studies. The process of forming hypotheses was facilitated because the selected studies revealed very little about the specific causes of language learning with respect to IE and its effects in terms of being used in classroom-based research. For instance, there was no information on the specific types of corrective feedback given the learner with regards to IE as negative evidence to the learner. In other words, we do not know what specific type of IE works when it does and conversely, we do not know what causes it to fail. Secondly, the procedure used within the thesis revealed that in the selected studies, many of which are considered as pivotal in SLA research, certain aspects that could be controlled were not. While researchers acknowledged certain experimental lapses, others were left out. This also enabled hypotheses to be generated in terms of the projected modes, for example.

6.3 CONCLUSIONS

The studies selected for the thesis did not provide information on what kind of a morpho-syntactic focus can be enhanced and what specific kinds of IE would be most effective on the targeted focus, for example. After synthesizing and analyzing the studies, the conclusion is that more research is needed on this subject so that the hypotheses generated from the studies that deal with morpho-syntactic focuses like question formation and adverb placement in English, for instance, can be tested. In addition, research conducted on IE, like all research in SLA, must follow stringent research design rules so as to ascertain the accuracy of the issuing data. To do otherwise hinders not only research on IE but also our knowledge of the L2 learning process in general. While an underlying theory driving the research might be erroneous, it is important that the hypothesis to be tested within a study not be rejected because of failures to use quality control procedures and adequate methodology.

More specifically, when dealing with hypotheses that result from IE as positive evidence to the learner, the conclusion is that further studies dealing with this type of Input Enhancement must provide information as to what in the enhancement caused the change, if indeed this was the case. Information on the input flood, for example, would have to be recorded along with any modification in language behavior. This is an essential step before IE can be used in the classroom.

Before IE as negative evidence to the learner can be effectively used in the classroom, the effects of different types of negative evidence as outlined by Lyster & Ranta (1997) have on the learner on specific morpho-syntactic targets in communicative language teaching contexts, for example, are necessary prerequisites to its application. Moreover, there is a need for more studies that identify corrective feedback in communicative contexts like the linguistic bath, for example, to ascertain that as many different types of IE as negative evidence to the learner as possible have been discovered. This is a necessary step so that the effects of different types of IE as negative evidence to the learner can subsequently be studied in different modes using different tasks.

Finally, a conclusion that can be drawn is that the studies selected provide no information as to learner conditions for the use of direct negative evidence to the learner regarding IE as form-focused instruction. Before IE can be considered as a pedagogical tool, this information is absolutely necessary.

Analyses and syntheses of the selected studies as well as the research questions and hypotheses generated in this exploratory study indicate that research on IE is in its infancy. Spada (1997) summarizes IE studies, in general, and deals with specificity of types of IE under the umbrella of explicit/explicit nomenclature. We are led to believe that much is known about IE when in fact we know little.

If the teaching of a L2 is going to become more efficient and effective, it is important that the hypotheses thus formulated and generated within the scope of this thesis be tested. In doing so, it

is critical that research be conducted and undertaken in as controlled a way as possible. Well-developed research designs are essential if they are to contribute to knowledge and generate new insights into language learning. Coupled with observational studies these should lead to a greater understanding of the L2 learning process.

It would seem important, therefore, that theoretical research like that done in SLA which might be applied to teaching a L2 be examined very closely along stringent lines so as not to lead teachers and students who are ultimately meant to benefit from the research down the garden path. The dichotomy that exists between the two fields is as distinct as that which exists between research conducted in biochemistry and medicine. Some findings can be applied while others cannot. One might fuel the other but the primary aim of SLA, like biochemistry, is a quest for knowledge whereas teaching a L2 like medicine applies relevant applicable findings. SLA research might be applicable to L2 teaching whereas it might not. In any case, research on IE has to be tightened up before there can be any talk of application whatsoever. After exploring the question within the scope of this thesis, it would seem that the logical conclusion to reach concerning SLA research on Input Enhancement is that it is not yet applicable to L2 pedagogy and whether it ever will be will remain a quandary until more research is done on the question.

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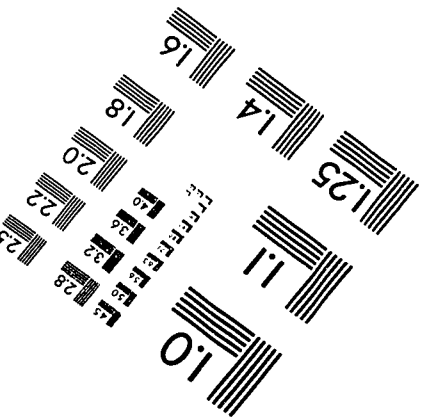
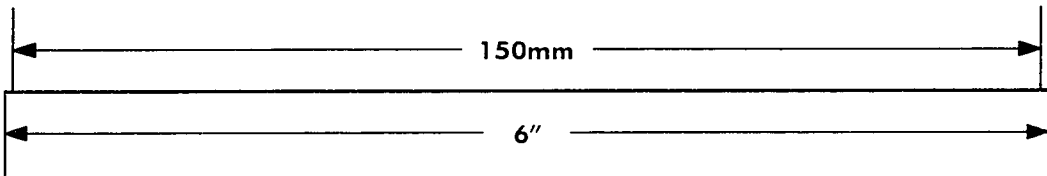
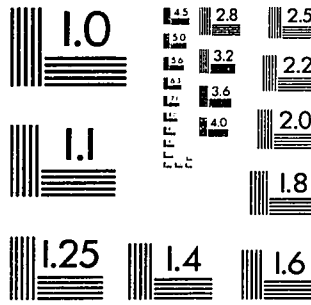
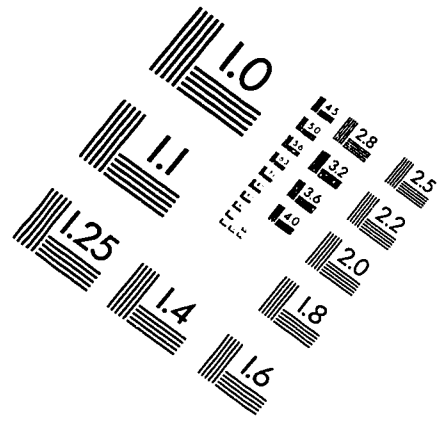
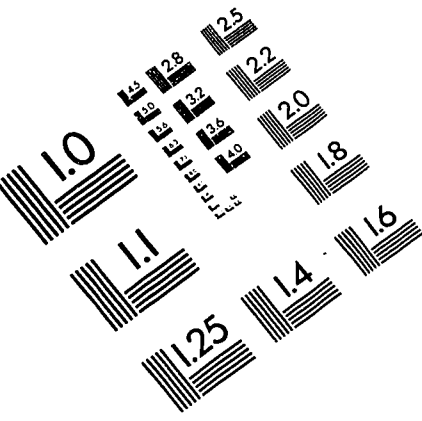
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