

## THE EFFECT OF INPUT ENHANCEMENT IN ELT

Öğr. Gör. Yonca Özkan  
Çukurova Üniversitesi  
Eğitim Fakültesi  
İngilizce Öğretmenliği Bölümü

## ABSTRACT

Since the 1990s, the revival of grammar instruction has been observed in the field of foreign/second language (here after L2) teaching/learning. Recent studies have been conducted to examine the effect of form-focused instruction in ELT classrooms. One of the form-focused instructions which has been proposed by Sharwood-Smith (1994), called Input enhancement Method (consciousness-raising) highlights specific target features in class to highlight parametric differences between L1 and L2. Some of the studies are conducted to see whether input enhancement would work in ELT classes show that such techniques may result in noticing, attention and awareness of L2 learners. In this respect our study tries to find out the answers to the following questions:

-Do the Input Enhancement techniques help the L2 learner in overcoming the learning difficulty stemming from the parametric clash as far as the Binding Principle A, in which an anaphor's binding domain varies in Turkish and English, is concerned? If so, how can we observe such an effect?

This experimental study comprised a treatment group and a control group chosen by cluster sampling from Çukurova University. The posttest analysis indicated that there was a statistically difference between our control and the experimental groups. Basically, the experimental group's scores were significantly higher than the control group. In other words, the subjects in the input enhancement group could overcome the learning difficulty stemming from the parametric clash concerning Binding Principle A. The delayed posttest revealed that the experimental group could keep the targeted forms in their long term memory.

## Key Words

Form-focused instruction, Grammar teaching, Input enhancement Method, Consciousness-raising), Parametric differences between L1 and L2, Binding Theory

## ÖZET

1990lı yıllardan itibaren yabancı dil öğretiminde gramer anlatımı üzerine çalışmalar yapılmaktadır. Yapılan son çalışmalar, İngiliz öğretimi yapılan sınıflarda gramer öğretiminin etkisini araştırmaktadır. Bu çalışmalardan bir tanesi Sharwood-Smith tarafından bilinç uyandırma metodu olarak adlandırılmıştır ve bu metod anadil ve ikinci dil arasındaki dilbilgisel farklılıkların sınıf ortamındaki işlenişine dikkat çekmektedir. Bu doğrultuda yapılan çalışmalar, bu anılan metoden ve benzerlerinin yabancı/ikinci dil öğrenimine katkısı araştırmaktadır. İşte bu çalışmada aşağıda verilen şu sorulara yanıt aramaktadır:

-Bilinç uyandırma metodu, İngilizce öğrenen Türk öğrencilere, Bağlama Kuramını içerisinde yer alan A İlkesi konusunda anadilden kaynaklanan dilbilgisel farklılıkları gidermede etkili olabilmekte midir?

Bu çalışmada araştırma sorularına deneysel desen içerisinde yanıt aranmaktadır. Çalışma, deneysel ve kontrol olmak üzere iki grup içermektedir. Bu gruplar Çukurova Üniversitesinin İngiliz Dili Eğitimi Anabilim Dalında küme sınıflandırma yöntemiyle oluşturulmuştur. Uygulama döneminin ardından iki grubun performansı, uygulama öncesi ve sonrası verilen testlerin yanıtları doğrultusunda incelenmiştir. Temelinde, deneysel grubun kontrol grubunu istatistiksel bakımdan farklı olarak aşığı gözlemlenmiştir. Diğer bir deyişle, deney grubundaki öğrenciler, Bağlama Kuramını anlama aşamasında anadilden kaynaklanan dilbilgisel çalışmaların üstesinde gelebildiğini göstermiştir. 6 ay sonrasında uygulanan ertelenmiş testte ise, deneysel grubun öğrenilen gramer konusunu uzun süreli belleklerinde saklayabildiğini göstermiştir.

## Anahtar Sözcükler

Bilinç Uyandırma Metodu, Bağlama Kuramı, Anadil ve Hedef Dil Arasındaki Dilbilgisel Farklılıklar, Yapı Odaklı Anlatım, Gramer Anlatımı

## BACKGROUND OF THE STUDY

In recent years there has been a substantial increase of empirical studies in the second/foreign language (L2) classroom setting. A review of many of these studies has tried to determine whether second language teachers can draw learners' attention to target linguistic forms in L2 data. Such research includes input flooding, input enhancement (Sharwood Smith, 1993), implicit/explicit conditions (Bialystok, 1979), classroom-based tasks, and so forth. Their theoretical implication of this research is that some form of attention or awareness is crucial for L2 learning to take place but the ways to attain this awareness have not been explained methodologically in many of these studies. Moreover, these various responses of

the learner (noticing, attention, awareness, etc) have not been distinguished clearly in much of this research. For this very reason, our study aims to combine the theoretical premise of with the methodology in the L2 classrooms and analyze the effects of these methodologies in classes. In sum, the role of conscious, analytic learning, which is characteristic of many other types of learning, has so far shown itself to be not influential in the acquisition of new grammatical systems.

What is striking now in the SLA research is the challenge to see if formal instruction leads to high performance in L2 learning. In order to see this effect, some studies have been conducted to compare formal instruction (classroom setting) to informal learning (acquisition in natural setting).

The research mentioned so far has attempted to answer the questions such as whether *formal instruction enhances L2 learners' proficiency in the target language and what kind of formal instruction works best* (Ellis, 1994). There have been attempts in the field to find out answers to these questions. One answer comes from Long (1991), who makes a differentiation between *focus on forms* vs. *focus on form*. According to him, *focus-on forms* emphasizes only linguistic forms in isolation in a structural syllabus. On the contrary, *focus on form* pays attention on specific linguistic properties within communicative atmosphere in a task-based syllabus. When compared, focus on form results in faster learning and higher levels of proficiency.

Another attempt to find the answer for the effective kind of instruction belongs to Reber (1976) and Ellis (1991), who divided teaching into two divisions of instruction: *explicit* and *implicit* instruction. Reber found out that the simple materials could be learned easier with explicit instruction while complex ones cannot. Ellis came up with the fact that learners when taught explicitly can learn the rules but cannot judge the items when asked after the instruction. Implicitly taught learners, on the other hand, cannot come up with the rules easily.

The other division of instruction-*interpretation* vs. *practice* tested by VanPatten and Cadierno (1993) focus on the *interpretation* type which works more efficiently since it includes both noticing the presence of a specific feature and comprehending the meaning of that feature in the target language. However, *practice* only emphasizes only developing implicit knowledge of the rule. They studied learners of Spanish at university level and the learners under interpretation training about Spanish word order rules performed better in comprehension tests than the other students under production training.

The most recent comparison is practice vs. consciousness-raising, which is the focus of this particular study. Formal instruction may take the form of consciousness raising that differs from practice that aims to develop implicit knowledge of the rule. Consciousness-raising (C-R) is a kind of explicit instruction by focusing on universal concerns. It is a pedagogic activity where the learners are provided with L2 data in some form and required to perform some operation on or with it, the purpose of which is to arrive at an explicit understanding of some linguistic property or

properties of the target language. It may be used as a synonym for formal instruction since it eases teaching formal grammar to students (Sharwood-Smith 1981). C-R comprises a system of grammatical explanation that would be more real to the students because it would follow the type of grammar that they already have unconsciously in their minds based on the theory of Universal Grammar. By focusing more on universal concerns rather than surface errors, consciousness-raising is kind of an *explicit instruction*, and it is a *pedagogic activity* where the learners are provided with L2 data in some form and required to perform some operation on or with it. The purpose is to arrive at an explicit understanding of some linguistic property or properties of the target language (Sharwood-Smith, 1995). Rutherford (1988) also claims that consciousness-raising provides a logical way of avoiding many of the pedagogical problems that arise from the *teachability hypothesis* (Pienemann, 1986), which underlines the necessity of L2 learners' *readiness* in order to acquire target structures.

A C-R task may include the following principal operations such as identification, judgment, completion, modification, sorting, matching, and rule provision (Ellis, 1998). Fotos (1993) conducted a study to investigate the role of C-R in language teaching. In this study, 160 Japanese university EFL learners were asked to complete a number of consciousness-raising tasks directed at three grammatical structures: adverb placement, dative alternation, relative clauses. One week after completing each task, they were given a listening and a dictation exercise, the texts of which contained examples of the target structures under investigation. After completing these tasks, they were given the full texts in writing and asked to underline any special use of English, which they had noticed. These results showed that the participants who had undergone the consciousness raising reported noticing all three structures in the input to a significantly greater extent than those in the control group. Fotos also conducted the follow-up test two weeks afterwards to see whether the gains were immediate or not and suggested that this noticing helped retention of the structures. Based on these findings, one may conclude that C-R directed at specific structures can result in noticing and retention of the structures, which may lead to higher proficiency among the learners.

Fotos (1994) also claims that explicit knowledge can help learners to *notice* features in the input that would otherwise be ignored and

that it may facilitate the process of noticing-the-gap between the input and output derived from their current interlanguage grammars.

The most striking figure studying C-R in the SLA research is Sharwood-Smith (1981). His position on C-R is reflected in his Pedagogical Grammar Hypothesis:

Instructional strategies which draw the attention of the learner to specifically structural regularities of the language, as distinct from message content, will under certain conditions significantly increase the rate of acquisition over and above the rate expected from learners acquiring the language under natural circumstances where attention to form may be minimal and sporadic (1985, p. 275).

In his later article (1993), Sharwood-Smith suggested another term instead of C-R: *input enhancement* (here after IE) that means the effects of the instruction or input that cannot be known by the instructor. He points that the difference between consciousness-raising and input enhancement is related to the input/intake dichotomy. *Consciousness-raising* implies that the learner's mental state is altered by the input; that is, *all input becomes intake*. Input enhancement, on the other hand, implies only that certain features of language input can be made salient to learners, but it makes no further assumptions about the consequences of such salience on the learners (1993).

The IE method proposes the logic of input processing should be examined within a theoretical and interdisciplinary framework since nearly all these studies do not yield sufficient data to explain the relationship between learners' behaviors and awareness. Within IE method, L1 plays a vital role in determining L2 learners' language problems stemming from L1 interference. Using L1 is believed to increase salience in classroom setting (Sharwood-Smith (1994).

To make input salient, Sharwood-Smith (1994) proposes a set of consciousness raising activities that do not involve teaching rules and grammatical paradigms explicitly but highlight the relevant aspects of the input in L2. In order to fulfill his proposal, he suggests that the language teacher uses extra stress, exaggerated intonation or colored presentation of the target structure. In other words, it is expected that the teacher provide the students with the metalinguistic awareness of relevant input. This kind of minimal consciousness-raising, in his terms "input salience enhancement" (Sharwood-Smith 1994, p.179), could be beneficial in ELT classrooms. In applying his method, the person highlighting the relevant input plays a crucial

role. First of all, the teacher and/or the researcher as a highlighter is expected to draw the attention of the learner to the forms by making them salient or tapping non-native equivalents as wrong. Secondly, the teacher is expected to distinguish input enhancement from -noticing, attention, awareness- Input enhancement comprises various ways the teacher attempts to make L2 forms salient for learner. Noticing, attention and awareness, however, originate from L2 learners that are different from the content of the input enhancement.

Since our focus is to study IE and its effects, our first step should be to point out the grammatical item to be enhanced in the L2 setting. Theoretical implication of related research is that some form of attention or awareness is crucial for L2 learning to take place but the ways to attain this awareness have not been explained methodologically in many of these studies. Our main goal is to find out how grammar or formal instruction is influential through practices in the EFL classrooms. More specifically, this study tries to examine whether consciousness raising or input enhancement (by the lecturer/researcher) will facilitate learning by raising learners' awareness on specific L2 forms.

For this, we have to consider the parametric clashes between L1 and L2 that create difficulty in the L2 learning process. In order to figure out parametric clashes between L1 and L2, the question of how Universal Grammar (UG) relates to second language acquisition (SLA) also becomes one of our concerns. More specifically, we try to build IE techniques on the parametric clashes to eliminate L1 influence and to maintain more proficient L2 learners in English; we believe it is necessary to point out the relationship between UG and SLA. In this research, we will focus specifically on *governing category parameter* (GCP) within the limits of the Binding Theory in the framework of Principles and Parameters Approach of Chomsky (1981). The existence of parametric variation and its influence on adult Turkish learners of English has been put forward by some researchers: Bulut (1996), Can (2000), Çaylaklı (2001) among the others. The results of their studies have indicated that there is an indirect access - L1 transfer- to UG concerning various parameters. Other research in the field also supports their findings (e.g. Berent & Samar, 1990; Hirakawa, 1990; Thomas, 1989).

## The Binding Theory

The Binding Theory deals with the interpretation of, and relationship between, different kinds of noun phrases (NPs) in the sentence. There are three principles of the Binding theory. *Principle A* concerns with anaphors, namely, reflexives and reciprocals; *Principle B* covers pronominals (pronouns); and lastly *Principle C* deals with R-expressions namely lexical NPs such as Mary, the book, a car, etc.

Principle A states that an *anaphor* should have its antecedent in a certain range of the syntactic domain of the sentence (governing category) since they lack their own reference; they need to depend on antecedents. For a language such as English, Principle A requires the anaphor to have its antecedent in a local domain -*himself* refers to Jack not to Tom - as seen in the example.

Tom<sub>h</sub> said that Jack<sub>i</sub> pinched himself<sub>i</sub>.

In such sentences in English *himself* cannot refer to Tom since it is outside the local domain. In other words, the anaphor in English should have the local NP as its antecedent.

However such relationship is not valid for all languages. For instance, in a language such as Turkish, *himself* can refer to either Tom or Jack. In other words, there occurs an ambiguity in such sentences in Turkish since two meanings can be deduced. Tosun (1990) proposes that reflexive word should immediately follow its antecedent to avoid this ambiguity. The difference between the two languages may show us that the choice of the governing category is subject to parametric choice across languages. For instance, in Turkish, as Özsoy (1987, 1990) states, the domain of the binding conditions is defined by the agreement (AGR). For this reason, it can be stated that binding domains range from English-like languages, representative of *the most restrictive domain*, and Turkish-like languages, representative of *the widest binding domain*.

In addition to this difference in antecedent mapping across languages, languages also differ in another way with respect to binding the syntactic function of the antecedent. For example, the antecedent of a reflexive in English may be the *subject* (John<sub>i</sub> hurt himself<sub>i</sub>) or another NP such as *direct object* of the verb (John<sub>i</sub> asked Bill<sub>j</sub> about himself<sub>j/i</sub>). Other languages such as Japanese require that the antecedent be the *subject* of the clause. Their selection of the proper antecedent based on its syntactic function has been proposed as an additional parametric variation

related to binding, the *Proper Antecedent Parameter* (Wexler and Manzini, 1987). Thus, it is obvious that Binding Theory constrains nominal reference in a number of ways: type of nominal (noun, pronoun, reflexive pronoun), type of syntactic domain (local versus long distance), syntactic function of antecedents (subject versus object), and the internal morphological structure of the nominal (one morpheme vs more than one).

To account for this cross-linguistic variation, Wexler and Manzini (1987) propose the Governing Category Parameter (GCP) for anaphors and pronominals. According to Wexler and Manzini, this formulation has the effect of providing five different binding domains, any one of which can be associated with a member of the class of anaphors found across languages. Five different domains are given in order below:

- Japanese/Turkish (e)
- Icelandic (d)
- Russian (c)
- Italian (b)
- English (a)

According to these domains, languages such as Japanese or Turkish are the most permissive in accepting antecedents in one clause. Languages that contain anaphors found along the hierarchy are English for type (a), Italian for type (b), Russian for type (c), Icelandic for type (d), and Japanese and Turkish for type (e). *e-type* language is the largest, but *a-type* language like English is, on the other hand, has the least restrictive one of all language types. Upon considering the focus of this study (Principle A), the least permissive language within this domain is a-type language –English.

To illustrate this fact, the examples below can be examined to see how reflexives may take different antecedents in two different languages.

Lori<sub>h</sub> said that Mary<sub>i</sub> pinched herself<sub>i\*h</sub>.

Lori<sub>i</sub> Mary<sub>j</sub>'nin kendini <sub>i/j</sub> çimdikleđiđini söyledi.

As mentioned above, we have the prerequisite information that do show us Turkish learners have access to UG via their L1 (Bulut, 1996), and this is our starting point. Also in the literature, some other research is compatible with our data (e.g. Cook, 1990; Finer, 1991). An overall conclusion of these studies shows that L2 learners fail to exhibit the correct judgments with the target language.

Instead, their interpretation consists of a larger or a superset grammar, which is triggered by their L1.

This study comprises the following questions:

1. Does the Input Enhancement method help the L2 learner overcome the learning difficulty stemming from the parametric clash concerning Binding Principle A?
2. Does IE method lead to retention of the instructed item(s)?
3. Do the participants transfer their L1 parametric value of reflexives within Principle A over into L2 while producing the target language?

## METHODOLOGY

### Subjects

For the purpose of the study, 96 Turkish adults studying English at the ELT Department at Çukurova University were *randomly* chosen. The study comprises one *experimental* and one

*control* groups each formed by *cluster sampling*. The subjects were all above the critical age period aged between 19-22 (to eliminate the Maturity effect on UG principles). The ones whose mother tongues were different from Turkish were excluded from the study to avoid any interference, which might stem from parametric similarity between these languages and English.

In this study, the experimenter manipulates the learner's input in order to direct the learner's attention to the target feature (in our case anaphora) with the aim of provoking development by deliberately engaging *awareness* and attempting to raise their *consciousness*.

Since the nature of this study is experimental, two groups were included in the study. One served as the control the other as the experimental group for the study. The experimental group consisted of 49 subjects while the control group had 47 subjects. This specific study also included pretest and posttest conditions shown below (in Table 1):

Table 1. Experimental Design of the Study

Steps	G1 Exp.	G2 Cont.
1	Random assignment	Random assignment
2	Pretest	Pretest
3	Treatment	-----
4	Posttest I	Posttest I
5	Posttest II	Posttest II

As seen in Table 1, both groups in the study were pre-tested in order to measure their knowledge on the Principles A of the Binding Theory. The experimental group was exposed to the treatment (input enhancement techniques), and the other group was taken as the control group. The treatment period lasted for two months, and the researcher taught the two groups two hours a week. At the end of this treatment period, both groups were post-tested. After five months from the posttest, to measure the retention Posttest II (delayed posttest) was conducted to find out whether the treatment has long learning effects or not.

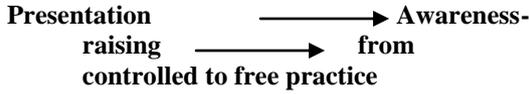
### Instrumentation and Administration

In this study, the pre-test comprised two different tasks: the *comprehension* and the

*translation* task. Our aim was to measure comprehension and production skills in L2 learning. Comprehension task included three parts: Part A in multiple choices, Part B in preference format and Part C in open-ended format. These tests were handled as a part of their original lesson, and the class teacher administered all the three tasks to the subjects. All the students were tested on the same day, and the three tasks were administered in one class hour (approximately 60 minutes). The subjects were provided with the meanings of all unknown lexical items in the two tasks to prevent any failure in their judgments originating from misunderstanding. The instructions in English for the tasks were orally translated to Turkish in order to clear any ambiguity regarding the administration of the task. Turkish names were utilized in the tasks

in order to avoid any gender misconception in the target language.

In these periods, the main focus was to raise our students' awareness on the target feature. The main flow of the activities created for the consciousness raising is stated below:



Consciousness raising techniques were utilized with the experimental group, and in the control group of the study, the current grammar teaching - presenting the grammar rules in accordance with the course book without pointing out parametric clashes between two languages- was carried on. At the end of the treatment period, the post-test was conducted to see the immediate effects of consciousness-raising in L2 classrooms. Apart from the immediate post-test, a delayed post-test was conducted after three or four weeks to see whether the input became *intake* or not.

**Comprehension Task**

Within this task, two different parts were used. In Part A, ten multiple choice questions were used, which served as assigning antecedents of reflexive pronouns (Principle A of the Binding theory). These ten statements included single and embedded clauses. Single clauses comprised of PP construction and embedded clauses comprised of NC, causative and infinitival constructions. Embedded clauses also included two dummy items.

Example for the Comprehension Task:  
 Circle the appropriate choice to which the underlined expression refers.

- Mine says that Ayşe will wash herself.  
 A. Mine  
 B. Ayşe  
 C. Either Mine or Ayşe

Unlike Part A, Part B comprised production type questions (fill-in-the-blank type) for the very aim of eliciting correct answers about antecedents.

Since Turkish and English do have different antecedent relations, the interpretation and comprehension of the participants were examined based on these parametric clashes, and the findings enabled the researcher to

analyze the results in relation to the experimental nature of the study.

**Translation Task**

In the second task, 20 translation items were used. Ten were from Turkish into English and the rest from English into Turkish related to Binding Principle. Within this task, the production of the subjects was measured. This type of task was included to reinforce and support the first task-comprehension task- by providing different kind of input on the same target feature (see Examples).

Mine Ayşe'nin kendini yıkayacağını söyledi.  
*(from Turkish into English)*

.....  
 Kemal talked about Ali to himself. *(from English in to Turkish)*

**DATA ANALYSIS**

**Pretest Analysis**

We conducted a pretest on Binding Principles A tested whether our subjects lacked related knowledge and needed formal instruction. Our results showed that both experimental and control groups in this study had approximately the same knowledge on these principles within five different parts of the instrument. This confirms the fact that there was no clear difference at the very beginning of the treatment. The descriptive statistics and t-test results of these tasks are presented in the tables below.

First of all, the analysis of Part A within comprehension task is presented in Table 2. This part includes 10 multiple-choice items related to Principle A. The items here try to make subjects guess the correct antecedent for reflexives within the items. Both the experimental and the control group of the study have got similar means: The Experimental Group has got a mean score 6.59 which is not statistically different from the one of the control group which is 6.68. Also the t- value for this difference is not statistically significant (.759). Since there is no difference, their standard deviation results are nearly the same: 1.48 for the experimental and 1.34 for the control group.

Table 2.  
Pretest Analysis Results of Part A in Comprehension Task (recognition)

	N	Mean	Sd	T	P
Exp.	49	6.59	1.48	.308	.759
Cont.	47	6.68	1.34		

Table 3 depicts both the descriptive and inferential statistics for Part B within Comprehension Task. This part includes 10 multiple choice items and tries to elicit answers

related to Principle B. Subjects were asked to recognize the correct antecedent for the pronominal given within items.

Table 3.  
Pretest Analysis Results of Part B in Comprehension Task (recognition)

	N	Mean	Sd	T	p
Exp.	49	2.14	2.41	-.342	.733
Cont.	47	1.97	2.27		

Part C –the last part of Comprehension Task- includes 10 production type questions five of which are related to Principle A and the

rest to Principle B. Subjects were required to write or produce the correct antecedent for the reflexives and pronominals in this part.

Table 4.  
Pretest Analysis Results of Part C in Comprehension Task (production)

	N	Mean	Sd	T	p
Exp.	49	3.85	1.20	1.250	.214
Cont.	47	4.19	1.40		

The other task of the study (translation task) has got two sections. The first part includes 10 translation questions from English into Turkish. The subjects were asked to translate 10 English statements into Turkish.

Moreover, subjects were required to show antecedent relations. Although the nature of this task is different, the descriptive statistics and t- value results are similar to the ones in the Comprehension Task.

Table 5.  
Pretest Analysis Results of Translation Task From English into Turkish (Eng-Tr)

	N	Mean	Sd	T	p
Exp.	49	15.67	.718	-.183	.855
Cont.	47	15.63	1.13		

The other part of the Translation task includes 10 questions. Subjects were required to translate Turkish statements into English. This part has got similar results with the other

part of the Translation Task's t-value score, which means that there is no statistically significant difference between the two groups (.967).

Table 6.  
Pretest Analysis Results of Translation Task From Turkish into English (Tr-Eng)

	N	Mean	Sd	T	p
Exp.	49	13.34	1.64	-.041	.967
Cont.	47	13.36	1.84		

The results of the pretests have showed that both groups are similar since the t-test obtained from these pretests is not statistically significant. Thus, we can claim that before the experimental study started, the groups were homogeneous. Based on this finding, we randomly assigned the experimental and control groups. Group 1 was taken as the experimental and Group 2 was as the control group.

#### Analysis of the Data from the Posttest

After the treatment period of the experimental group, we conducted a posttest to determine whether our treatment made a difference or not. In other words, we wanted to see how much knowledge they gained after the treatment on the Binding Principles A. Within different parts of the posttests, the difference between the scores of the experimental group and the control group are statistically significant.

First of all, according to Table 7 illustrating the descriptive statistics result and t-test value for Part A of the Comprehension Task, we can claim that the experimental group did far better than the control group (.000) which means our treatment on Principle A was successful. Our treatment included consciousness-raising (input enhancement) activities concerning this specific principle and the subjects were trained in order to be aware of the target form. Based on the findings, we can find a sound answer to our first research question: *Does the Input Enhancement method help the L2 learner overcome the learning difficulty stemming from the parametric clash concerning Binding Principle A?* The subjects in the experimental group could overcome the learning difficulty stemming from the parametric clash concerning Binding Principle A. The mean score of the experimental groups is 9.87 while the control group's is 5.76 and the difference between their standard deviation results is great which underlines the two groups are heterogeneous concerning this specific task.

Table 7.  
Posttest Analysis of Comprehension Task Part A (recognition)

	N	Mean	Sd	T	P
Exp.	49	9.87	.43	-22.44	.000
Cont.	47	5.76	1.20		

When we come to the last part -Part B in comprehension Task- the overall result is the same: there is a statistically significant difference between the two groups (.000) which refers to the positive impact of the treatment.

Consciousness raising method enabled subjects to grasp and produce the target item. Table 8 clearly presents the analysis results of Part C below:

Table 8.  
Posttest Analysis of Comprehension Task Part B (production)

	N	Mean	Sd	T	p
Exp.	49	8.44	1.32	-8.73	.000
Cont.	47	5.82	1.60		

The posttest analysis of the second task- Translation Task also depicts that there is a statistically significant difference between two groups. For this result, we can find an answer

to two research questions: *Do the participants transfer their L1 parametric value of reflexives within Principle A over into L2 while producing the target language?*

Table 9.  
Posttest Analysis of Translation Task from English into Turkish

	N	Mean	Sd	T	p
Exp.	49	19.87	.331	-15.80	.000
Cont.	47	13.97	2.59		

Table 10.  
Posttest Analysis of Translation Task from Turkish into English

	N	Mean	Sd	T	p
Exp.	49	19.20	1.13	-16.83	.000
Cont.	47	12.42	2.56		

Table 9 and Table 10 give an obvious answer to the first question related to Principle A. The subjects in the experimental group are more successful at assigning and producing target features in this case reflexives. The Experimental Group outperformed the Control Group in translating English utterances into Turkish. Also the answer to the second research question above lies in Table 4.9 and 4.10. In both sections of the Translation Task the experimental group outperformed the control group, which means that the experimental group was able to produce target features more accurately and assign the antecedent to the reflexives and pronominals more correctly than the control group of the study. What we can suggest here is that input enhancement method can ease translation in L2 learning process. Within two sections of the Translation Task, the experimental group's mean score is nearly 19 while the control group's is very much under the experimental group's, which is approximately 13. We will discuss the possible reasons of these findings in Section 4.5.

### Analysis of the Delayed Post Test

After conducting the posttest and realizing the impact of the treatment, the researcher doubted whether the treatment would have long term effects; in other words, whether retention would take place or not. In order to figure out the answer to this research question, a delayed posttest was conducted after five months of the treatment. Since the posttest results of the experimental and the control groups of the study were different, covariance scores were calculated for two tasks and their different sections.

As seen in Table 11, within Part A of the Comprehension Task, the estimated mean score of the experimental group is higher than the control group's and this difference is statistically significant (.035). We can claim that the subjects in the experimental group were able to maintain the knowledge in their long-term memory related to Binding Principle A.

Table 11.  
Delayed Posttest Analysis of Comprehension Task Part A (recognition)

	n	Mean	Estimated mean	Sig.
Exp.	49	9.87	8.13	.035
Cont.	47	5.85	7.67	

Within Part B, also there is a statistically significant difference between the experimental and the control group (.002). The estimated means score for the experimental group is 7.94; whereas, the score for the control group is 6.78.

Since Part C includes both Principle A and B items, we made an analysis to understand which type of items created this difference. Table 12 presents the analysis for Part B.

Table 12.  
Delayed Posttest Analysis of Comprehension Task Part B (production)

	n	Mean	Estimated mean	Sig.
Exp.	49	8.65	7.94	.002
Cont.	47	6.04	6.78	

Within the Translation Task and in its first part (from English into Turkish), there is a difference between experimental and control group but this difference is not statistically significant. The

estimated mean score for the experimental group is 16.75 while it is 15.48 for the control group.

Table 13.  
Delayed Posttest Analysis of Translation Task from English into Turkish

	N	Mean	Estimated mean	Sig.
Exp.	49	19.10	16.75	.064
Cont.	47	13.10	15.48	

In the second part of the Translation Task, we have come to a similar conclusion: There is a difference between experimental and control group but this difference is not

statistically significant. This finding has led us to suggest that the retention in translation items are harder to retain when compared to the items in the Comprehension Task.

Table 14.  
Delayed Posttest Analysis of Translation Task from Turkish into English

	N	Mean	Estimated mean	Sig.
Exp.	49	19.69	17.45	.336
Cont.	47	14.53	16.86	

### An overall look at the data

When we examine overall results for Part A in the Comprehension Task, we see that there is a statistically significant increase from Pretest to Posttest result: from 6.59 to 9.87. This gap indicates that treatment has worked efficiently. The Delayed posttest result also reveals that this treatment has long lasting effects, which is demonstrated by the mean score of 9.87. For

Part B in Comprehension Task the result look very similar to Part A. There is a large increase from Pretest to Posttest of the experimental group's mean score. The Delayed post test results reveal that the experimental group is able to remember what they have learned. Part C that is the production type of task has also similar result as in Part A and B (see Table 15).

Table 15. Pretest, posttest and delayed posttest frequency results of the experimental and the control group

Tasks	pretest exp mean	pretest cont. mean	posttest exp mean	posttest cont. mean	delayed posttest exp mean	delayed posttest cont. mean
Comp ta P A	<b>6.59</b>	6.68	<b>9.87</b>	5.76	<b>9.87</b>	5.85
Comp T P B	<b>2.14</b>	1.97	<b>7.32</b>	5.29	<b>7.73</b>	5.63
Comp T P C	<b>3.85</b>	4.19	<b>8.44</b>	5.82	<b>8.65</b>	6.04
TR T fr Eng-Tr	<b>15.67</b>	15.63	<b>19.87</b>	13.97	<b>19.10</b>	13.10
Tr T frTr-Eng	<b>13.34</b>	13.36	<b>19.20</b>	12.42	<b>19.69</b>	14.53

### Evaluating research questions

**Research question 1:** Does the Input Enhancement method help the L2 learner overcome the learning difficulty stemming from the parametric clash concerning Binding Principle A?

We answer this question exactly yes since there is a statistically significant difference between posttests based on their pretest analysis. L1 traces are ved in the control group; whereas there is no such trace in the experimental group.

**Research question 2:** Does the Input Enhancement method lead to retention of the instructed item(s)?

The experimental group of the study was able to retain what they have learned; specifically, reflexives within Principles A in the long term.

**Research question 3:** Do the participants transfer their L1 parametric value of reflexives within Principle A over into L2 while producing the target language?

The translation tasks will be the answer for this research question. In the student productions we can clearly see Turkish parametric value concerning reflexives. They assign long distance antecedent for reflexives. They are known to reset the correct parameter as their level increases in L2 (Bulut, 1996).

### Evaluating Input Enhancement

Different input enhancement techniques have been very fruitful in ELT classrooms (ex. Lightbown & Spada, 1990; DeKeyser, R.1994). This study has continued this chain but with a different grammatical focus. It has indicated that IE can be effective in eliminating learning difficulty stemming from parametric variation between Turkish and English concerning the Binding Principles A and B. Also C-R or input

enhancement has led our students retain the instructed items in their long-tem memory.

In summary, from the point of view of acquisition, the learning of grammar is enhanced when the learner attends to linguistic form in some way. From the position of view of instruction, the learner's control of grammar increases when the teacher can direct the learner's attention to linguistic form. In both instances, attention is required. As Anderson (1983) and Kihlstrom (1987) claim, there are two key ideas behind the attentional system:

-There is a limitation to the amount the human mind can handle at a given time.

-Information is selected by the attention system because of the processing limitations of the human mind.

By means of consciousness raising or input enhancement, this study has achieved to eliminate L1 effect in grammar teaching specifically reflexives and pronominals. However, this is just a piece in the grammar syllabus. Teachers and textbook writers should direct the learner's attention in particular directions to some other aspects of the target language.

Textual enhancement seems to be beneficial in this specific targeted item: Binding Principle. Students exposed to textual enhancement in the treatment group have both more grammatical answers and positive opinions about the classroom than the control group of the study.

Reflection as a part of input enhancement in the experimental group in the process of learning grammar raised students' awareness of the Binding Principles and helped them understand the strategies involved in successful completion of these L2 grammar tasks (see Appendix 6). This provided them with

knowledge to better guide their understanding of grammar in L2 and to a lesser extent, awareness of themselves as learners. L2 learners in the experimental group managed to report about their metacognitive knowledge which enabled these students

- a) To take on the responsibility for planning, monitoring and evaluating their own learning.
- b) To motivate students through success that makes them feel good about themselves and their abilities (Sharwood-Smith, 1995; Ellis, 2002).

This research has raised some important issues that need to be discussed and resolved in future research so that the true effects of consciousness raising in other grammatical features can be found and students can learn more and acquire more in their second language classroom.

## IMPLICATIONS

### Implications Linked to The Literature

Rutherford's (1987) four items should be included in ELT grammar classes: universal principle, language specific departure, a learning guide or rule and grammatical CR.

Translation tasks seem to be effective for ELT learners especially in acquiring L2 parametric values as in the study of Duff (1989) and Cook (1999).

### Implications of The Study

In the domain of English Language Teaching methodology, UG's role has been largely neglected. Most of the scholars in ELT methodology has considered UG as a first language theory only, ignoring the Poverty of Stimulus Argument which has been the central focus of language philosophy since Plato (see Chomsky, 2000 for a recent discussion of Plato's problem). For this very reason, most of the methodological approaches available today do not utilize the findings of the studies of SLA from the generative grammar framework. In this study, we aimed to combine the generative principles with ELT methodology. We have utilized IE techniques proposed by Sharwood-Smith (1994) within generative perspective. However, these techniques are only available for Principle A and B within the Binding Theory. For further research, different parametric variations can be chosen and

enhanced by means of IE techniques in ELT classrooms.

Another thing we suggest is material adaptation and development for IE. In our country, most of the coursebooks are written by native authors. Therefore, parametric variations between L1 and L2 are excluded most of the time. However, on condition that Turkish writers prepare such books these parametric clashes can be handled meticulously. Based on my experience during this thesis, L2 grammar cannot be taught without reference to L1 since L2 learners have already language grammar beforehand.

Finally, translation techniques should not be avoided in grammar classes.

### Limitations of The Study

First of all, this study only included reflexives and pronominals within the Binding Theory. For this reason, our comments about IE are related to these grammatical units. For a better generalization, these grammatical points can be enhanced. Other grammatical patterns which cause difficulty due to parametric variation between L1 and L2 can be chosen. Awareness about a language is not limited simply to raising a learner's consciousness of language's form. We should be able to bring about language awareness also through the focus on use, specifically, a focus on pragmatics. By bringing about an awareness of pragmatics principles in a language, which will allow for some amount of useful generalization, language teachers can move away from the idea that language awareness can only be fostered through a focus on form.

Secondly, syntax is only the concern in this study. Some possible additions in phonology, lexis, pragmatics or in morphology may have been examined within input enhancement techniques.

### Suggestions for Further Research

Primary and secondary school subjects can be chosen as subjects as well as adult subjects to see the effects of the treatment of input enhancement different age groups.

Another study can focus on distinguishing implicit and explicit memory used in cognitive psychology; moreover, noticing, awareness and attention in relation to L2 classroom can be dealt in further studies.

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