

THE ACQUISITION OF ENGLISH ERGATIVE VERBS
BY TURKISH EFL STUDENTS

A THESIS
SUBMITTED TO THE FACULTY OF HUMANITIES AND LETTERS
AND THE INSTITUTE OF ECONOMICS AND SOCIAL SCIENCES
OF BILKENT UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS
IN THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE

BY
OPHELIA ABDULLAYEVA
AUGUST 1993

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Ophelia Abdullayeva
tarafından teĝişlanmıřtır.

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ABSTRACT

Title: The acquisition of English ergative verbs by Turkish EFL students
Author: Ophelia Abdullayeva
Thesis Chairperson: Dr. Dan J. Tannacito, Bilkent University,
MA TEFL Program
Thesis Committee Members: Dr. Linda Laube, Dr. Ruth A. Yontz,
Bilkent University, MA TEFL Program

The purpose of the study was to investigate the acquisition of English ergative verbs by Turkish EFL students. In contrast with transitive and intransitive verbs, these verbs can form both grammatically correct passive and intransitive ergative constructions. Generative grammar predicts that in the process of acquiring ergative verbs, learners will prefer to use passive constructions to intransitive ergative ones (Zobl, 1989).

The study investigated five research questions and tested nine hypotheses. The research questions considered the difference a) in the overall amount of incorrect judgments about ergative verbs; b) in the amount of incorrect judgments about ergative structures of ergative verbs; c) in the amount of incorrect judgments about ergative versus passive structures of ergative verbs; and d) in the amount of errors in the test sentences with ergative verbs, at three EFL proficiency levels. One more question studied in the present research was whether the Turkish learners would be able to discriminate between English ergative, intransitive, and transitive verbs.

This study is a descriptive study conducted in an experimental setting. Special research instruments were devised to elicit ergative data -- a grammaticality judgment task and a production task. The performance of subjects at experimental tasks was compared against language proficiency levels created in accordance with the results of two sections of the Michigan Test of English Language Proficiency. The results of the experimental tasks were analyzed using statistical procedures -- Kruskal-Wallis One Way Analysis of Variance and repeated-measures t -test.

Analyses showed significant differences between proficiency levels in the overall number of incorrect judgments about ergative verbs and about full ergative structure of ergative verbs (e.g., The window broke into small pieces). However, the difference in the number of incorrect judgments about cut ergative structure (e.g., The window broke) and in the

number of errors in the test sentences with ergative verbs was not statistically significant. The repeated-measures t -test indicated that at the low and mid levels the difference in the number of incorrect judgments about full ergative and passive structures of ergative verbs was statistically significant whereas at the high level this difference was not significant. The analysis of data also showed great variations in the acquisition of different verbal structures of acquisition of ergative, transitive, and intransitive verbs.

The results obtained in the present research confirmed the main findings reported in the literature on the acquisition of ergative verbs (Zobl, 1989), i.e., that the learners will overgeneralize the passive rule to ergatives.

BILKENT UNIVERSITY
INSTITUTE OF ECONOMICS AND SOCIAL SCIENCES
MA THESIS EXAMINATION RESULT FORM

August 31, 1993

The examining committee appointed by the
Institute of Economics and Social Sciences for the
thesis examination of the MA TEFL student

Ophelia Abdullayeva

has read the thesis of the student.
The committee has decided that the thesis
of the student is satisfactory.

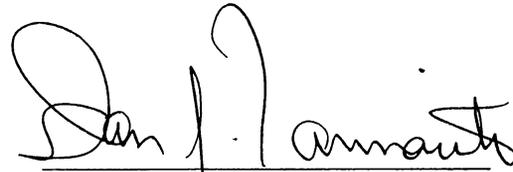
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Thesis Advisor : Dr. Dan J. Tannacito
Bilkent University, MA TEFL
Program

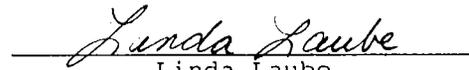
Committee Members : Dr. Linda Laube
Bilkent University, MA TEFL
Program

Dr. Ruth A. Yontz
Bilkent University, MA TEFL
Program

We certify that we have read this thesis and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts.



Dan J. Tannacito
(Advisor)



Linda Laube
(Committee Member)



Ruth A. Yontz
(Committee Member)

Approved for the
Institute of Economics and Social Sciences



Ali Karaosmanoğlu
Director
Institute of Economics and Social Sciences

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I would like to dedicate this thesis to my mother.

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CHAPTER 1 INTRODUCTION TO THE STUDY

Statement of the Problem

All studies in second language acquisition (SLA), no matter what particular methodology the researcher is using, are ultimately focused on one specific question: how do people learn second languages? It is not surprising that the answers which SLA researchers give to this question differ greatly, ranging from influence of the learner's mother tongue to providing comprehensible input to innate knowledge of linguistic universals.

The present study investigates the acquisition of English ergative verbs by Turkish foreign language (EFL) learners of English. A wide variety of syntactic data in the English language indicate a correlation between direct objects of transitive verbs and subjects of certain kinds of intransitive verbs (Crystal, 1991; Harris 1982; Huddleston, 1971). This class of verbs has been termed ergative. Consider:

1.0. John burst his soap bubble.

1.1. John's soap bubble burst.

The subject of the intransitive use of burst in 1.1 is the same as the object of its transitive use in 1.0. These verbs can also receive passive marking as in 1.2:

1.2. John's soap bubble was burst.

The problem stated in the present research is to examine how Turkish EFL students learn English ergative verbs, particularly whether they recognize and make distinctions between different constructions of ergative verbs, namely passive versus intransitive ones. To be more precise, our specific aim is to find out whether Turkish learners will treat both intransitive ergative and passive constructions as grammatically correct or they will show a preference for one of them.

This question is raised by the following considerations: although intransitive ergative and passive constructions fulfill distinct discourse functions, they have several identical aspects: the generative analysis of these constructions shows that both lack a logical subject and have a logical object in grammatical subject position (a detailed analysis of intransitive ergative and passive constructions is given in the Review of

Literature chapter). The prediction of this thesis is that passive will be preferred presumably since auxiliary be marks the change in grammatical relations, the perceptual advantage of such an overt signal being evident. This selection is conditioned by typological distinctions of the target (English) language and makes use of a rule "that is a canonical expression of the configurational mapping [of logical grammatical relations to surface structure] required by English." (Zobl, 1989, p. 210)

Unlike English, Turkish belongs to typologically nonconfigurational languages in which grammatical relations are expressed by means of case marking. Hence, the Turkish language does not have the class of ergative verbs analogous to the English one. The Turkish structures equivalent to English intransitive ergative ones are either intransitive constructions of basic intransitive verbs (3.1) or passive constructions derived from basic transitive (2.1) or derived transitive verbs (3.2) (Çağlar, 1977; Lewis, 1985; Underhill, 1990). Consider:

2.0. Adam kapıyı açtı. (The man opened the door.)

2.1. Kapı açıldı. (The door opened. or
The door was opened.)

3.0. Adam işi bitirdi (The man finished the job.)

3.1. İş bitti. (The job finished.)

3.2. İş bitirildi. (The job was finished.)

As is shown in these examples, the change in grammatical relations in the Turkish language (see examples 2.1, 3.0, and 3.2) is marked in the verb by means of suffixes in contrast with the English language which marks this change in terms of structural positions.

Thus, the difference in the typological characteristics of the English and Turkish languages could condition the specific route of acquisition of English ergative verbs by Turkish EFL learners.

The purpose of the present research is to study, using the data elicitation instruments, i.e., grammaticality judgment and production tasks, how the acquisition of English ergative verbs takes place. In other words, our primary aim is to find out which structures of English ergative verbs the Turkish learners will judge as grammatical in the grammaticality judgment task and which structures -- intransitive ergative or passive --

they will produce in the production task. Secondly, the present research seeks to investigate whether there will be any significant changes in the number of structures of ergative verbs preferred in the judgment task or produced in the production task as the level of the learners' EFL proficiency increases.

Hypotheses and Research Questions

Based on the generative analysis of ergative verbs, the present research investigates five research questions and tests nine hypotheses.

Research Question 1:

Will the learners produce more correct judgments about ergative verbs as the level of EFL proficiency increases?

In this research question two hypotheses were tested:

1. At the mid level learners produce significantly fewer incorrect judgments about ergative verbs than at the low level.
2. At the high level learners produce significantly fewer incorrect judgments about ergative verbs than at the mid level.

Research Question 2:

Will the learners judge more ergative constructions of ergative verbs as grammatically correct as the level of EFL proficiency increases?

In this research question the following hypotheses were tested:

3. Learners at the mid level judge significantly fewer ergative structures of ergative verbs as grammatically incorrect than at the low level.
4. Learners at the high level judge significantly fewer ergative structures of ergative verbs as grammatically incorrect than at the mid level.

Research Question 3:

Will the learners at each level of EFL proficiency judge more passive constructions of ergative verbs as grammatically correct in comparison with ergative constructions of ergative verbs?

In this research question the following hypotheses were tested:

5. Learners at the low level of EFL proficiency judge as grammatically incorrect significantly more ergative constructions of ergative verbs than passive constructions of ergative verbs.
6. Learners at the mid level of EFL proficiency judge as grammatically incorrect significantly more ergative constructions of ergative verbs than

passive constructions of ergative verbs.

7. Learners at the high level of EFL proficiency judge as grammatically incorrect significantly more ergative constructions of ergative verbs than passive constructions of ergative verbs.

Research Question 4:

Will the learners produce fewer errors involving the use of ergative verbs in Task 2 as the level of EFL proficiency increases?

In this research question the following hypotheses were tested:

8. Learners at the mid level produce significantly fewer errors in the test sentences with ergative verbs in comparison with the low level.

9. Learners at the high level produce significantly fewer errors in the test sentences with ergative verbs in comparison with the mid level.

Research Question 5:

Will the learners discriminate in their grammaticality judgments and productive performance between the ergative verbs, on the one hand, and intransitive and transitive verbs, on the other? That is, will there be any significant differences in the number of incorrect grammaticality judgments or errors in the test sentences with ergative, intransitive, and transitive verbs?

The investigation of the following problems can provide the answer to this research question:

1. What percentages of incorrect judgments are associated with ergative, intransitive, and transitive verbs at each proficiency level?

2. What percentages of errors are associated with ergative, intransitive, and transitive verbs at each proficiency level?

Limitations of the Study

The present study is limited mainly in that the criterion used for subject selection was a volunteer sampling. In an experimental design this principle of subject selection can be considered a serious limitation of the study. However, it should also be noted that the analogous studies (Flynn, 1987; Mazurkewich, 1988; White, 1988, etc.) do not mention the randomization of the population while selecting the subjects, from which we can infer that their studies employed nonprobability samples, i.e., samples of convenience or of volunteers.

One more limiting factor in the present research is the participation of a small number of students at one of the proficiency levels. This fact constrains the generalizability of the results of statistical analyses at this level.

This research is also limited in that it is a cross-sectional study investigating the process of acquisition of certain linguistic structures. Acquisition processes are usually investigated in longitudinal studies. Our primary aim, however, is to study different constructions of ergative verbs (e.g., intransitive ergative constructions, passive constructions, constructions with inverted word order, etc.) and to spot differences in the grammaticality judgments about these constructions and their production as the level of the learners' EFL proficiency increases. The present research does not seek to investigate the developmental sequences in the process of acquiring these verbs.

Carrying out of the experiment at several levels of EFL proficiency can be regarded as a delimitation of the study. Moreover, the significance of the present research is that it can provide the data for future longitudinal studies in the field that would study the developmental sequences of acquisition of different types of constructions with ergative verbs.

CHAPTER 2 REVIEW OF LITERATURE

Linguistic Background of the Problem

In the present study the constructions with ergative verbs will be analyzed in the framework of Chomsky's Government-Binding theory (Chomsky, 1981; Cook, 1988; Cowper, 1992; Cranmer, 1976; Haegeman, 1991; Jaeggli, 1986; Zobl, 1989). This theory recognizes different levels of linguistic representation. At the level of logical form, all languages make distinctions between external and internal arguments -- internal argument combines with the verb to form a predicate, and the external argument combines with the predicate to form a proposition. Languages differ in how these logical relations are translated into syntactic representations at deep structure (D-structure) and surface structure (S-structure). D-structure is a representation of thematic role assignment. In English, thematic roles are assigned positionally. The verb assigns the role theme to the position of logical object. Similarly, the predicate assigns the role agent to the position of the logical subject. Thus, the verb eat assigns the role of agent to its subject and the role of theme to its object. Consider:

4.0. Jane eats a cake. (Jane -- subject-agent; cake -- object-theme)

At S-structure level, syntactic cases are assigned. For example, transitive verbs assign the objective case to the post-verbal position. Nominative case is assigned to the position of the grammatical subject by the inflection node. Thus, English belongs to a linguistic type known as nominative-accusative where a canonical alignment between thematic roles and (logical) grammatical relations is subject-agent and object-theme (see example 4.0 given above). According to the manner in which grammatical relations are expressed, English relates to the language type known as configurational in which the distinction between the internal argument and external argument is preserved both at D-structure and S-structure level, i.e., logical subject and logical object as well as grammatical subject and grammatical object occupy structural positions. Configurational languages are opposed to nonconfigurational languages in which grammatical relations are expressed by means of case-marking.

The problem with the generation of well-formed ergative and passive sentences arises when mapping logical grammatical relations to surface

structure since both passive and intransitive ergative structures have analogous D-structure with an empty logical subject position [\bar{e} [V NP]], where \bar{e} refers to the empty category, and the direct mapping of this D-structure to the S-structure can lead to the formation of ill-formed sentences. Consider:

4.1. *Was eaten a cake.

To avoid this, the formation of passives and ergatives should take place in the following steps:

1. NP governed by V should not be assigned any Case;
2. NP in subject position should not receive a thematic role;
3. then the object subcategorization can move to subject position leaving a trace behind [NP_i [_{vp} V [_{t_i]]]]. The (_{t_i}) is indexed with the subject position and thereby confers the thematic role (theme) on the subject.}

The only difference in the processes of formation of passives and ergatives is that the generation of ergatives occurs within the lexicon whereas the passives formation takes place in syntax (Keyser and Roeper, 1984; Zobl, 1989). Keyser and Roeper (1984) claim also that the generation of intransitive ergative constructions differs from that of the so-called middle constructions. Both of them have nearly identical surface appearance. Cf., for example:

5.0. The sun melted. (ergative)

6.0. Bureaucrats bribe easily. (middle)

As can be seen from the examples, in both cases the logical object is in the grammatical subject position and there is no overt morphological marking in the verb. Keyser and Roeper (1984) claim that, in contrast to ergatives, middles are formed by syntactic move-NP as well as passives are. Fiengo (1980) (as cited by Keyser and Roeper, 1984) observes that

. . . in middles and passives there is a subject either stated or implied; in "the car was sold" it is implied that there was an agent of the sale, and in "foreign cars sell easily" the same is true. The sentences "the milk spilled" and "the milk was spilled," or "the tomato ripened" and "the tomato was ripened," seem to contrast in this respect, the "intransitives" implying no agent. (p.383)

The difference between these constructions also manifests itself in

their L1 acquisition. Keyser and Roeper argue that English-speaking children learn ergatives at age two but do not learn middles until age 6.

Studies in the L2 Acquisition of Ergatives

Zobl (1989) argues that two typological distinctions -- one between configurational and nonconfigurational languages, and the other between nominative-accusative and ergative languages -- shape the L2 acquisition of English ergatives. As generative analysis suggests, configurationality of English language is expressed through the structural assignment of logical/grammatical subject and object positions. Ergatives cannot be at all regarded as canonical typological structure of English -- theme bearing NP, the logical object, is not in its typical post-verbal position, lack of logical subject, etc. Besides, in order to conform to the configurational requirements of English ergatives should undergo move-NP. Zobl argues that these characteristics of ergatives as well as the fact that they share these distinctions with passive constructions should lead the learners to make the following provisional solutions:

1. the learners will leave the grammatical subject position empty that will lead to the production of sentences with nontypical for English verb-subject (VS) word-order -- this solution would mean that the learners try to map directly the D-structure with an empty logical subject position to the S-structure;
2. the learners will supply the dummy pronouns into the grammatical subject position;
3. the learners will select passive constructions on the hypothesis that they mark the change in grammatical relations.

Concerning the order of acquisition of ergative verbs, the following should be noted: though learners' solutions presented in Zobl's (1989) study are logically structured (first nonvisible and then dummy pronouns occupy the grammatical subject position thereby marking the lack of logical subject in the D-structure and at last the preference of passive constructions to ergatives) no specific claim was made that this order reflected the developmental sequences in the process of acquisition of ergative verbs. On the contrary, Zobl (1989) claims that "lexical move-NP must be the developmentally earlier rule" (p. 220), and the above described

solutions are caused by a more sophisticated reanalysis of English. It would be relevant to consider here the observation made by Keyser and Roeper (1984) with a reference to a "hypothesis chain" reported in Roeper, Bing, Lapointe, & Tavakolian (1981), in particular, that "the acquisition of passives could trigger the acquisition of middles" (p. 402). This claim cannot serve as a convincing argument contributing to our knowledge about acquisition of ergatives since, though ergatives and middles have seemingly similar surface structure, they are formed by different rules -- ergatives by lexical rule move-NP and middles by syntactic rule move-NP.

The literature also reports another phenomenon involved in the acquisition of English ergative verbs -- the avoidance of intransitive ergative constructions (Kellerman, 1978; Zobl, 1989). The nature of this phenomenon is not clear. Language transfer cannot be regarded as the relevant explanation here since, for example, in Kellerman's study the avoidance of intransitive ergative constructions and the use of agentless passive constructions instead of them were observed in a translation task accomplished by native speakers of Dutch, which has the equivalent ergative form. The use of ungrammatical transitive constructions instead of ergative ones was reported by Zobl (1989).

Promising Ways to Study the Problem

Rationale for Selecting the Research Instruments

Previous studies on the acquisition of ergatives (Zobl, 1989) analyzed data that had come from written productions of ESL students. Written production tasks have some advantages and disadvantages. One of the main disadvantages of production tasks is that learners might avoid structures that they find difficult due to some reason (see Seliger, 1989, on avoidance of passives; Zobl (1989) on the avoidance of ergatives).

The present study attempted to investigate the acquisition of ergative verbs using data elicitation instruments -- grammaticality judgment and production (completion) tasks. The selection of particular research instruments was conditioned by the purposes stated in the present study -- to elicit judgments about particular structures of ergative verbs and to obtain the information about the productive performance of the learners on this problem. Grammaticality judgment tasks are seen by many

researchers as one of the best instruments for investigating grammatical competence (Bley-Vroman, Felix, and Ioup, 1988; Kellerman, 1986) while production tasks inform about performance (Crookes, 1991).

Rationale for Selecting the Linguistic Material

The ergative class of verbs analyzed in Zobl's (1989) study comprised two subgroups -- verbs like open, burst, shatter, etc. having a transitive alternation and verbs like fall, come, happen, etc. without transitive counterparts. The verbs in both subgroups were characterized as the ones expressing no volitional control. The overgeneralization of passive rule was observed for both subgroups.

The present research is focused on the investigation of only the first subgroup of ergative verbs. The verbs from the second subgroup -- in the present study they will be referred to as intransitive verbs -- as well as transitive verbs are included in the experimental tasks as distractor items. Besides, the information about these verbs will be used in the analysis of one of the research questions. The separate analysis of these verb categories was conditioned by the following main consideration: ergative, intransitive, and transitive verbs are distinct in terms of the grammaticality of the verbal structures investigated in the present research; i.e., intransitive verbs cannot form grammatically correct passive structure whereas transitive verbs cannot form grammatical ergative constructions. Consider:

Ergative verbs:

- 7.0. Detective stories read quickly.
7.1. Detective stories are read quickly.

Intransitive verbs:

- 8.0. The bus came late.
8.1. *The bus was come late.

Transitive verbs:

- 9.0. *The fields damaged by the drought.
9.1. The fields were damaged by the drought.

In the present thesis we will refer to all the verbs capable of forming grammatical intransitive and transitive structures in which the object of the transitive structure correlates with the subject of intransi-

tive structure as ergative verbs. The intransitive structures of these verbs will be called ergative structures.

CHAPTER 3 METHODOLOGY

Research Design

The present study is experimental research on the acquisition of English verbs by Turkish EFL learners. Other studies using experimental design to describe acquisition of linguistic knowledge include Flynn, 1987; Liceras, 1988; Thomas, 1991; and White, 1988. The purpose of the present research design is to examine how Turkish learners comprehend and produce English ergative verbs. More exactly, we wish to know what kind of structures with ergative verbs are chosen as grammatical in the grammaticality judgment task (Task 1) and what errors will be made in the production task (Task 2). This research seeks to investigate performance of subjects from different levels of EFL proficiency. The levels of the learners' EFL proficiency are the independent variable in the experimental design. The dependent variable is the learners' performance on experimental tasks. In other words, the number of incorrect judgments in the grammaticality judgment task and the number of errors in the production task serve as dependent variables of the research design. The investigation of these structures at different levels is expected to point to the changes in the process of acquisition of ergative verbs as learners progress from one proficiency level to the next.

To measure ergative performance, the researcher created specific research instruments which were used to examine both the competence (grammaticality judgment task) and the performance (production part of Task 1 and production task) of the learners.

Subjects

The study relied on volunteer sampling, i.e., all those who volunteered could participate in the study. Information about the study, its subject -- acquisition of syntactic structures -- and general purposes was announced at the Bilkent University preparatory school, and in undergraduate and graduate classes at Bilkent University. A total of 97 students volunteered. Of them, 30 students took part in the pilot studies. See the information about the pilot studies below.

Table 1 presents background information about the subjects who participated in the main study.

Table 1

Background Information on Subjects

Level	Number of Ss	Age	Sex	Educ. Level	Formal Instruc.	Faculty			
						S	H	E	O
Low	35	20;00	F=23 M=12	p=24 u=11	5;10	4	11	11	9
Mid	27	19;02	F=11 M=16	p=3 u=23 g=1	8;00	15	3	6	3
High	5	21;04	F=2 M=3	u=4 g=1	10;02	2	1	2	0
Total	67	19;08	F=36 M=31	p=27 u=38 g=2	6;07	21	15	19	12

Note. p refers to preparatory school students; u refers to undergraduate students; g refers to graduate students; S refers to Faculty of Science; H refers to Faculty of Humanities and Letters; E refers to Faculty of Economics, Administrative and Social Sciences; O refers to other faculties.

As can be seen from Table 1, the main study included 67 subjects -- 27 preparatory school, 38 undergraduate and 2 graduate students -- who constituted the experimental group. Of the total number of subjects, 31 were males and 36 were females. Subjects ranged in age from 17;09 years to 26;09 years (mean age 19;08 years). There were 65 students whose native language was Turkish, one student was native Bulgarian and still another was a native Arabic speaker. According to the results of the standardized test, both non-Turkish students were assigned to the mid level. Formal English instruction ranged from 6 months to 17;07 years (mean years 6;07 years).

There were 21 students from the Faculty of Science, 15 students from Faculty of Humanities and Letters, 19 students from the Faculty of Econo-

mics, Administrative and Social Sciences, 12 students from other faculties (Business Administration, Tourism, etc.). Twenty-six students claimed different levels of proficiency in German, three students in French, one student in Arabic as second foreign languages. Thirty-seven students reported that they did not know any second foreign language.

Since only 2 students reported that they had stayed in an English-speaking country (USA or Great Britain) for different periods of time this item of the questionnaire was not analyzed. Another item of the questionnaire presented to the subjects -- What kind of high school did you finish? with the possible answers -- American, British, Turkish, Other -- was not analyzed either. This question proved to be confusing. Since many of the subjects appeared to graduate from English-medium government/private Turkish schools with the instruction based on American or British models of English, these students fell under two categories at the same time that made this item of the questionnaire unanalyzable. The complete text of the questionnaire offered to the students can be found in Appendix A.

Instruments

EFL Proficiency Test

To determine the learners' EFL proficiency and divide them into low, mid and high levels a standardized test -- the Michigan Test of English Language Proficiency -- was used. Since the units of analysis in the present study are syntactic structures -- intransitive ergative and passive constructions of ergative verbs -- the subjects were administered only two parts of the standardized EFL proficiency test -- the grammar part and the vocabulary part. Both subtests were administered in written form. The placement of subjects into different proficiency levels was determined based on the combined score of the two subtests. The range of scores for two subtests is 0-80 with 40 scores for each subtest. The cutoff distribution of scores used to form proficiency levels was determined as follows: Low level -- 20-39, Mid level -- 40-59, High level -- 60-80.

As can be seen from the distribution of levels given above, the researcher decided not to analyze the results obtained from 0-19 range of scores. This decision was conditioned by the consideration that grammaticality judgments, in general, and the judgments about such difficult

syntactic items as ergatives and passives, in particular, require that a certain level of sophistication of language knowledge should be achieved. To exclude the possibility of random incidental judgments, the subjects whose scores in the standardized EFL proficiency test were in the 0-19 range were not included into the study. This eliminated 3 students from the study.

The raw scores of the Michigan Test of English Language Proficiency (Form E) for each subject as well as the mean scores for the grammar/vocabulary subtests and combined mean scores are shown in Appendices B and C, respectively.

Experimental Tasks

The linguistic material.

The target items of the present research are different English constructions with ergative verbs, i.e., the verbs which can form both the grammatically correct intransitive ergative and passive structures. In total, 8 ergative verbs were investigated -- sell, turn, break, begin, move, grow, dry, and fill. Since one of the research questions was to find out whether the learners were aware of the differences between ergative verbs, on the one hand, and transitive and intransitive verbs, on the other, 5 transitive and 3 intransitive verbs were also included into the experimental tasks. Five transitive verbs -- study, destroy, send, visit, and learn -- can form grammatically correct passive constructions whereas intransitive constructions of these verbs are ungrammatical (e.g., *Turkey visits all year round). On the other hand, three intransitive verbs investigated in the study -- come, fall, and happen -- form grammatically correct intransitive constructions, but passive constructions of these verbs are ungrammatical (e.g., *A funny thing was happened yesterday).

The main criteria employed in selecting the test verbs were as follows:

1. The verbs should be familiar to the low level students participating in the study (see the frequency values for these verbs in Appendix D);
2. The verbs selected should be exemplary of the category they belong to, i.e., ergative, intransitive or transitive verb categories (see, e.g., the discussion of ergative verbs in Cranmer, 1976; Huddleston, 1971; etc.). In

this respect, it should be noted that the constructions with the verb sell were included into the experimental tasks to examine whether there would be any significant differences in subjects' responses to the ergative verbs, on the one hand, and middle verb -- sell -- on the other (see the discussion of ergative and middle constructions in Keyser and Roeper, 1984);

3. Since the main target items in the present research are intransitive ergative and passive constructions, i.e., verbal structures with logical object in grammatical subject position, the researcher's primary consideration in selecting the particular intransitive and transitive verbs for the experimental tasks was to make the test sentences containing these verbs sound plausible.

Grammaticality judgment task (Task 1).

The purpose of administering the task was to examine the learners' implicit competence through their performance on a task type widely accepted as a linguistic and acquisition measure (cf., Ellis, 1991; Liceras, 1988; Mazurkewich, 1988; White, 1988). A total of 80 sentences containing these verbs was presented to the subjects. They were required to judge the grammatical correctness of each item. Of the 80 sentence items, 32 sentences were correct, 48 were incorrect. Test sentences containing the same verb were placed in groups of five, each group being preceded by a context sentence (which did not have to be judged). The context sentence together with the test items showed the entire range of verbal structures possible with ergative verbs (see the use of context sentences in grammaticality judgment task in White, 1988).

The test sentences with ergative verbs and transitive verbs contained

- a) full intransitive structures with adverbial modifiers (such as, adverbs, e.g., His clothes dried easily or preposition phrases, e.g., The window broke into small pieces, etc.);
- b) cut intransitive structures without adverbial modifiers (e.g., The book sold out, etc.);
- c) passive structures (e.g., The key was turned in the lock, etc.);
- d) ungrammatical intransitive structures with by phrases expressing agent/cause (e.g., *Corn grows by the farmers, etc.), and
- e) structures with reversed verb-subject (hereafter VS) word order (e.g., *We waited until began the program, etc.).

The context sentence preceding this group was a transitive one. Since intransitive

verbs cannot form grammatical transitive structures, the context sentence preceding the group of sentences with intransitive verbs contained full intransitive sentences and transitive structures of these verbs were included into test sentences.

To make the task less monotonous, within the groups, the sentences were randomized. The purpose of randomizing the test items was also to make the comparison of analogous constructions with different verbs less apparent. At the same time, the group organization of test items gave the subjects the opportunity to compare different verbal structures of the same verb. The order of presentation of different types of verbs was as follows: 2 transitive verbs (study, destroy) + 4 ergative verbs (sell, turn, break, begin) + 1 intransitive verb (come) + 2 ergative verbs (move, grow) + 3 transitive verbs (send, visit, learn) + 2 ergative verbs (dry, fill) + 2 intransitive verbs (fall, happen). Taking into account the poor knowledge of English of the learners at the low level, the researcher tried to use only simple vocabulary when writing the test sentences.

The sentences with reversed word order served a double function. First, they were included in the task as distractor items and, secondly, even though they were not the main target items of the present research, they could provide some evidence for one of the solutions in the process of acquisition of ergative verbs suggested by Zobl (1989).

The subjects were given a tertiary choice ("grammatically correct"/ "not grammatically correct"/ "don't know"). They were required both to discriminate the test items and to correct the sentences they had judged as incorrect in the production part of the task. This gave the researcher the opportunity to find out whether it was the target items that made the subjects mark the sentences as incorrect.

The responses were timed. To complete both experimental tasks -- Task 1 and Task 2 -- the subjects were given a total of 30 minutes. Task 1 can be found in Appendix E.

Since the researcher had some concerns that the presence of a context sentence with grammatical subject expressing the agent of the clause and the group organization of test sentences could induce the subjects to choose only passive sentence as correct and to reject the ergative senten-

ce, she piloted a grammaticality judgment task containing the same sentences but in a different order of presentation. This task consisted only of two target items of the present research, i.e., intransitive ergative and passive structures. There were totally 32 sentences -- of which 24 sentences were correct and 8 were incorrect. The sentences were randomized, so that the subjects could not easily compare their judgments on sentences containing the same verb. There were no distractor items and context sentences. The subjects were given the same tertiary choice. The complete text of the second variant of Task 1 is given in Appendix F.

The analysis of the results obtained on administering both variants of Task 1 is presented in Chapter 4. The results of the pilot study allowed the researcher to leave the organization of test items in the experimental task -- grammaticality judgments task -- unchanged.

Production task (Task 2).

The purpose of administering this task was to examine the learners' explicit knowledge, i.e., productive performance of the target items -- intransitive ergative and passive structures of ergative verbs. Task 2 contained the same verbs as in Task 1. The order of presentation of verbs was also the same.

To examine whether the subjects will overgeneralize the passive rule in the production of ergatives, the test sentences included in the task required the use of only intransitive ergative constructions by their context. Thus the possibility of variation in the production of ergative verbs, i.e., the use of the ergative verbs with both passive marking and without it was excluded (see the discussion of the validation of experimental tasks by native speakers below).

Again, an attempt was made to use simple vocabulary when writing the test sentences. The learners were required to complete the sentences by using the correct form of the verbs given under the lines. The complete Task 2 can be found in Appendix G.

Validation of experimental tasks.

Both experimental tasks were given to 9 native speakers of American English for validation. There was a difference of opinions on some of the test items in Task 1. Two of the passive structures:

1. The program was begun with the news.

2. In summer the ice cap was moved down the slope of the hill.

were claimed by some of the native speakers to be ambiguous, i.e., they were judged as grammatically correct but semantically unacceptable.

However, the researcher decided to include these items in the task to find out how the learners from different proficiency levels would judge such ambiguous sentences, i.e., whether they would still prefer these ambiguous passive structures to intransitive ergative structures. In the analysis of data, the sentences were counted as correct.

Diverse judgments were obtained about the test sentences with VS word order containing the following verbs -- turn, grow, fill, and happen:

1. Suddenly turned the key in the lock and the door opened.

2. In the valley there grows corn.

3. Soon filled out the sails and the yachts started off.

4. Yesterday happened a funny thing.

They were argued by some of the native speakers to be grammatically incorrect but still acceptable, for example, in literary style. Since these verbal structures are not the main target structures of the study, the researcher decided to leave them in the experimental task. In the analysis of data, the researcher counted these items as incorrect. In Task 2 no variation in the production of verb forms was observed.

Pilot Studies

Pilot Study 1

Twenty-two preparatory school students were administered grammar and vocabulary sections of the standardized English language test to find out whether its degree of difficulty was acceptable for the beginning level students.

The students took 45-60 minutes to complete both parts. The scores of the students were in the 14-37 range, i.e., according to the distribution of scores accepted in the present study nearly all these students could be assigned to the low level.

Pilot Study 2

One preparatory school and one undergraduate student were administered experimental tasks to determine the time that both tasks could take.

The students were given no limitation in time. It took them about 20-30 minutes to complete both tasks.

Pilot Study 3

Six preparatory school and undergraduate students were administered both the standardized test and the experimental tasks (second variant of Task 1 and Task 2). The purpose of administering the experimental tasks was to examine whether the context sentence and the group organization of the test items could influence the subjects' judgments. The administration of the standardized test provided the comparability of the results (see Appendix B and C).

The analysis of the results of the pilot study is given in Chapter 4.

Experimental Session Procedures

The researcher met with the subjects twice. At the first session, they were administered the Michigan Test of English Language Proficiency, Form E. The results were used to divide the learners into different proficiency levels. At the second session, the subjects took the experimental tasks. The subjects were tested either individually or as a group but under equivalent conditions.

First Session

The subjects were administered two parts of the standardized test -- the grammar section and vocabulary section. There were 40 items in each section. Both sections were administered in written form. All subjects had copies of the answer sheets and a set of possible answers. To ensure anonymity of the results of the test, each subject received an identification number. The subjects were instructed to read the questions and answers and then to write their answers on the answer sheets. All the subjects were given one hour to complete the test. The subjects were informed about the results of the standardized test after the administration of the experimental tasks as a reward for participating.

Second Session

At the second session, the subjects were administered both experimental tasks. Before administering the tasks, the subjects were instructed about the grammaticality judgment task and the production task. The

instructions were: "Judge the sentences as grammatically correct/incorrect/don't know and write out each incorrect sentence correctly in the space provided" (grammaticality judgment task) and "Complete the sentences by using the words under the lines in the correct form" (production task). See Appendices E and G for each task, respectively. Both tasks were administered in written form. All subjects were given a total of 30 minutes to complete two tasks.

Statistical Procedures

The results of the standardized test as well as the data elicited from the experimental tasks have been analyzed using statistical procedures.

To test the research questions stated in the study, Kruskal-Wallis One Way Analysis of Variance and repeated-measures t -test were used. These statistical analyses allowed comparisons between groups and within groups on the grammaticality judgment task (Task 1) and the production task (Task 2). More specifically, for each of the research questions in this study, the following statistical procedures were employed:

Research Question 1 (Task 1)

Will the learners produce more correct judgments about ergative verbs as the level of EFL proficiency increases?

Experimental design: Kruskal-Wallis Analysis of Variance
Level x Incorrect Judgments about Ergative Verbs

Research Question 2 (Task 1)

Will the learners judge more ergative constructions of ergative verbs as grammatically correct as the level of EFL proficiency increases?

Experimental design: Kruskal-Wallis Analysis of Variance
Level x Incorrect Judgments about Full/Cut ergative construction

Research Question 3 (Task 1)

Will the learners at each level of EFL proficiency judge more passive constructions of ergative verbs as grammatically correct in comparison with ergative constructions of ergative verbs?

Experimental design: repeated-measures t -test
Level 1 (2 and 3) x Incorrect Judgments about Ergative and Passive constructions of Ergative Verbs

Research Question 4 (Task 2)

Will the learners produce fewer errors involving the use of ergative verbs in Task 2 as the level of EFL proficiency increases?

Experimental design: Kruskal-Wallis Analysis of Variance

Level x Errors with Ergative Verbs

Research Question 5 (Task 1 and 2)

Will the learners discriminate in their grammaticality judgments and productive performance between the ergative verbs, on the one hand, and intransitive and transitive verbs, on the other; i.e., whether there will be any significant differences in the number of incorrect grammaticality judgments or errors in the test sentences with ergative, intransitive, and transitive verbs?

Experimental design: distribution of incorrect judgments and errors for ergative, intransitive, and transitive verbs

CHAPTER 4 ANALYSIS OF DATA

Results for EFL Proficiency Test

The results of the Michigan Test of English Language Proficiency were used to determine the overall proficiency level of the subjects and to divide them into low, mid and high levels. The placement was done after administration of two subtests -- grammar and vocabulary -- of the standardized test on the basis of the combined mean scores: 35 subjects were placed into the low level, 27 into the mid level, and 5 into the high level. The combined proficiency mean scores are 31.51, 47.81, and 63.60, respectively. The raw scores for each subject on grammar and vocabulary subtests as well as the combined scores for each subject are reported in Appendix B. The mean scores for each subtest and the combined mean scores are shown in Appendix C.

Results for Experimental Tasks

The statistical tests for analyzing data in the present research were the Kruskal-Wallis Analysis of Variance (Kruskal-Wallis H is equivalent to Chi square) which was used for comparisons between levels and repeated-measures t-test for within-groups comparison of students' performance.

The data were analyzed in terms of research questions and hypotheses stated in Chapter 1 and 3. In the present research, the probability level of significance is assumed to be $p < .05$.

Research Question 1 (Task 1)

Will the learners produce more correct judgments about ergative verbs as the level of EFL proficiency increases?

In this research question two hypotheses were tested:

1. At the mid level learners produce significantly fewer incorrect judgments about ergative verbs than at the low level.
2. At the high level learners produce significantly fewer incorrect judgments about ergative verbs than at the mid level.

Table 2 presents overall mean numbers of incorrect judgments for different verb categories and results of the Kruskal-Wallis test.

The Kruskal-Wallis Analysis of Variance shows that the difference in the overall amount of incorrect judgments about ergative verbs among all three levels is significant ($H = 17.920$, $p = 0.000128$).

Table 2

Mean Number of Total Incorrect Judgments about Different Verb Categories

Verbs	Low	Mid	High	Low - Mid <u>H</u>	Mid - High <u>H</u>	Low-Mid-High <u>H</u>
Ergative						
<u>M</u>	16.94	12.85	6.60	7.948 ^{***}	7.898 ^{***}	17.920 ^{***}
<u>SD</u>	5.27	4.56	1.80			
Intransitive						
<u>M</u>	8.00	4.48	1.40	17.528 ^{***}	6.093 [*]	25.643 ^{***}
<u>SD</u>	3.03	2.74	1.34			
Transitive						
<u>M</u>	9.06	2.22	0.60	24.199 ^{***}	1.805	29.575 ^{***}
<u>SD</u>	5.12	2.91	0.89			
Total						
<u>M</u>	34.06	19.56	8.60	26.523 ^{***}	8.616 ^{***}	34.963 ^{***}
<u>SD</u>	9.67	8.17	1.95			

* $p < .025$. ** $p < .01$. *** $p < .001$.

The further analysis indicates that the difference for the low and mid levels ($\underline{H} = 7.948$, $p = 0.004815$) and mid and high levels ($\underline{H} = 7.898$, $p = 0.004949$) are also significant. Thus, the findings suggest that Language level is a significant factor for overall number of incorrect judgments about ergative verbs, and both the first hypothesis on the significant decrease of the number of incorrect judgments at the mid level in comparison with the low level and the second one on the significant decrease of the number of judgments at the high level in comparison with the mid level are upheld. Hence, we can conclude that as the level of the learners' EFL proficiency increases, the total number of incorrect judgments about ergatives decreases.

Language level is also a significant factor for intransitive and transitive verbs. The results of statistical analysis for the total amount

of incorrect judgments about intransitive and transitive verbs are as follows: Intransitive verbs -- $H = 25.643$, $p = 0.000003$; Transitive verbs -- $H = 29.575$, $p = 0.000000$). The Kruskal-Wallis test results for the total number of incorrect judgments in Task 1 also show statistically significant differences between levels: $H = 34.963$, $p = 0.000000$).

Research Question 2 (Task 1)

Will the learners judge more ergative constructions of ergative verbs as grammatically correct as the level of EFL proficiency increases?

In this research question the following hypotheses were tested:

3. Learners at the mid level judge significantly fewer ergative structures of ergative verbs as grammatically incorrect than at the low level.
4. Learners at the high level judge significantly fewer ergative structures of ergative verbs as grammatically incorrect than at the mid level.

Table 3 presents mean numbers of incorrect judgments for full and cut ergative structures and the results of the Kruskal-Wallis test.

Table 3

Mean Number of Incorrect Judgments about Full and Cut Ergative Structures of Ergative Verbs (Task 1, Variant 1 and 2)

Ergative structures	Low	Mid	High	Low - Mid H	Mid - High H	Low-Mid-High H
Full Structure (Variant 1)						
\underline{M}	4.11	4.07	1.40	0.001	5.413**	6.948*
\underline{SD}	2.03	2.35	1.34			
Cut Structure (Variant 1)						
\underline{M}	4.17	4.22	1.60	0.010	5.716**	5.294
\underline{SD}	2.60	2.28	1.34			
Full Structure (Variant 2)						
\underline{M}	5.80	4.00	-	1.455		
\underline{SD}	1.30	-	-			

* $p < .05$. ** $p < .025$.

The analysis shows that Language level is significant for full

ergative structure ($\underline{H} = 6.948$, $\underline{p} = 0.030985$) but is not significant for cut ergative one ($\underline{H} = 5.294$, $\underline{p} = 0.070863$). However, further testing indicates that for full ergative structure there is no significant difference between low and mid levels ($\underline{H} = 0.001$, $\underline{p} = 0.971425$) whereas for cut ergative structure there are statistically significant differences between mid and high levels ($\underline{H} = 5.716$, $\underline{p} = 0.016813$). Thus, the first hypothesis on the decrease of the total number of incorrect judgments about ergative structures at the mid level in comparison with the low level is rejected both for full and cut ergative structures. But the second hypothesis for both ergative structures is upheld.

Table 3 shows also mean values for incorrect judgments about ergative verbs in Task 1, Variant 2, i.e., the grammaticality judgment task with no context sentences containing only full ergative and passive structures. A comparison of findings for Variant 1 and 2 of Task 1 indicates an increase in the mean number of incorrect judgments about full ergative structures for the low level (compare: 4.11 vs. 5.80) and nearly the same means for mid level (compare: 4.07 vs. 4.00). The results obtained suggest that the presence of context sentence in the main grammaticality judgment task (Task 1, Variant 1) had no negative effect on the subjects' judgments about ergative verbs, i.e., the absence of context sentences did not result in the decrease in the number of incorrect judgments about ergative structure. In other words, it was not the presence of context sentences with agent/cause in the grammatical subject position that made the subjects show preference to passive structures in their judgments.

Research Question 3 (Task 1)

Will the learners at each level of EFL proficiency judge more passive constructions of ergative verbs as grammatically correct in comparison with ergative constructions of ergative verbs?

In this research question the following hypotheses were tested:

5. Learners at the low level of EFL proficiency judge as grammatically incorrect significantly more ergative structures of ergative verbs than passive structures of ergative verbs.
6. Learners at the mid level of EFL proficiency judge as grammatically incorrect significantly more ergative structures of ergative verbs than

passive structures of ergative verbs.

7. Learners at the high level of EFL proficiency judge as grammatically incorrect significantly more ergative structures of ergative verbs than passive structures of ergative verbs.

Table 4 presents results of statistical analysis for ergative and passive structures of ergative verbs. See also the means and standard deviations for different structures of ergative verbs in Appendix H.

Table 4

Comparison of Ergative and Passive Structures of Ergative Verbs

Verbal Structures	^a Low <u>t</u>	^b Mid <u>t</u>	^c High <u>t</u>
Full ergative - Passive	6.64*	6.20*	0.46
Cut ergative - Passive	5.77*	6.68*	0.69

Note. ^adf = 68. ^bdf = 52. ^cdf = 8.

*p<.001

The t-test shows that the difference in the mean number of incorrect judgments for both ergative versus passive structures for the low and mid levels is statistically significant. At the high level, however, this difference in incorrect judgments is not significant. Thus, the first two hypotheses are upheld. At the low and mid levels, learners mark as incorrect significantly more ergative structures of ergative verbs than passive structures of these verbs, i.e. they prefer passive structures to both full and cut ergative ones. The third hypothesis for the high level, however, is not significant. The lack of statistical difference at this level might be attributed to the fact that the subjects presumably have acquired these structures or to the fact that the sample size is too small.

Research Question 4 (Task 2)

Will the learners produce fewer errors involving the use of ergative verbs in Task 2 as the level of EFL proficiency increases?

In this research question the following hypotheses were tested:

8. Learners at the mid level produce significantly fewer errors in the test sentences with ergative verbs in comparison with the low level.

9. Learners at the high level produce significantly fewer errors in the test sentences with ergative verbs in comparison with the mid level.

Table 5

Mean Number of Errors for Different Verb Categories

Verbs	Low	Mid	High	Low - Mid <u>H</u>	Mid - High <u>H</u>	Low-Mid-High <u>H</u>
Ergative						
<u>M</u>	1.89	1.41	0.60	0.379	2.663	3.113
<u>SD</u>	1.88	1.12	0.55			
Intransitive						
<u>M</u>	0.40	0.07	0.00	5.979*	0.185	7.438*
<u>SD</u>	0.74	0.39	0.00			
Transitive						
<u>M</u>	1.06	0.07	0.00	15.256**	0.185	18.140**
<u>SD</u>	1.37	0.39	0.00			
Total						
<u>M</u>	3.34	1.56	0.60	14.169**	2.879	20.721**
<u>SD</u>	2.22	1.37	0.55			

* $p < .025$. ** $p < .001$.

Table 5 shows means of errors for different types of verbs and results of the Kruskal-Wallis test. The test indicates no significant differences in the number of errors in the test sentences with ergative verbs among the levels (Kruskal-Wallis $H = 3.113$, $p = 0.210847$). The findings for transitive verbs (Kruskal-Wallis $H = 18.140$, $p = 0.000115$), intransitive verbs (Kruskal-Wallis $H = 7.438$, $p = 0.024256$), and overall

number of errors for all 3 types of verbs (Kruskal-Wallis $H = 20.721$, $p = 0.000032$) are significant. Thus, both our hypotheses are not upheld, i.e., there are no significant differences in the productive performance of ergative verbs among the proficiency levels.

Research Question 5 (Task 1 and 2)

Will the learners discriminate in their grammaticality judgments and productive performance between the ergative verbs, on the one hand, and intransitive and transitive verbs, on the other, i.e., whether there will be any significant differences in the number of incorrect grammaticality judgments or errors in the test sentences with ergative, intransitive, and transitive verbs?

Since the experimental tasks contained unequal number of test verbs for each verb category and this number was very small -- only three intransitive and five transitive verbs were studied in the research -- the researcher decided not to use statistical tests for analyzing the data on different verb groups and to limit the research for this question only with low inferences. In order to answer this research question, the following problems were investigated:

1. What percentages of incorrect judgments are associated with ergative, intransitive, and transitive verbs at each proficiency level?
2. What percentages of errors are associated with ergative, intransitive, and transitive verbs at each proficiency level?

As can be seen from Appendices J-O, the analysis of the all subjects' performance at Tasks 1 and 2 across levels shows a clear decrease in the number of incorrect judgments and errors out of the total number of judgments in Task 1 and overall test verb occurrences in Task 2: for Task 1: Low level 43%, Mid level 24%, and High level 11%; for Task 2: Low level 21%, Mid level 10%, and High level 4%. However, the further analysis shows that different verb categories are not equally represented in the overall number of incorrect judgments and errors. At each proficiency level, ergative verbs tend to account for major proportion of incorrect judgments and errors.

Table 6 presents the distribution of incorrect judgments and errors among different verb groups out of the total number of incorrect judgments

and errors, i.e., this table shows the share of each verb category in the total amount of incorrect judgments and errors.

Table 6

Distribution of Incorrect Judgments/Errors among Different Verb Categories

Tasks	Verbs			Total
	Ergative	Intransitive	Transitive	
	High level			
Task 1	77%	16%	7%	100%
Task 2	100%	0%	0%	100%
	Mid level			
Task 1	66%	23%	11%	100%
Task 2	90%	5%	5%	100%
	Low level			
Task 1	50%	23%	27%	100%
Task 2	56%	12%	32%	100%

As shown in the table, there is a clear tendency observed both for Task 1 and 2 to the increase of the share of incorrect judgments about ergative verbs and errors in test sentences with ergatives as the level of EFL proficiency increases: Task 1: Low level 50%, Mid level 66%, and High level 77%; Task 2: Low level 56%, Mid level 90%, and High 100%. Conversely, as the level of EFL proficiency increases, the share of transitive verbs significantly decreases both for Tasks 1 and 2. The share of intransitive verbs in the total number of incorrect judgments remains constant at the low and mid levels (23%) and reduces at high level (16%).

One more interesting observation is related with the distribution of incorrect judgments presented in Table 6. At the low level, the distribution of incorrect judgments among different verb categories resembles the proportions each verb category occupies in the total number of judgments. The experimental task requires judgments for about eight ergative, three intransitive, and five transitive verbs, i.e., out of total number of

judgments, the judgments about ergative verbs should constitute 50%, the judgments about intransitive verbs 19%, and the judgments about transitive verbs 31%. Out of total number of incorrect judgments at the low level, the judgments about ergatives constituted 50%, intransitives 23%, and transitives 27%. Thus, we can conclude that the subjects at the low level judge incorrectly roughly the same amount of test sentences for each verb category.

Table 6 gives us only the idea of the share each verb category occupies in the total amount of incorrect judgments. We cannot infer from this table whether the learners produced equal numbers of incorrect judgments or errors per each verb category.

Table 7 presents the distribution of incorrect judgments and errors out of the total number of test sentences available for the corresponding verb categories.

Table 7

Distribution of Incorrect Judgments/Errors for Different Verb Categories

Tasks	Verbs		
	Ergative	Intransitive	Transitive
High level			
Task 1	17%	9%	2%
Task 2	7%	0%	0%
Mid level			
Task 1	32%	30%	9%
Task 2	17%	2%	1%
Low level			
Task 1	42%	53%	36%
Task 2	23%	13%	21%

Table 7 indicates a decrease in the number of incorrect judgments and errors for each verb category on both tasks as the level of the subjects' EFL proficiency increases. Thus, the subjects at the low level judged

incorrectly 42%, at the mid level 32%, and at the high level 17% of judgments about ergatives out of total number of judgments available for these verbs. The findings for other verb categories at the low level show that the subjects produce nearly the same percentage of incorrect judgments and errors for each category. A low percentage of intransitive errors (13%) and a high percentage of incorrect judgments about these verbs (53%) at the low level might be attributed to the fact that the subjects at this level might not have fully acquired passive structures, and consequently prefer the use of ergative ones. Nearly identical percentages of incorrect judgments about particular verb categories suggest that at the low level these verbs present presumably the same difficulty for the subjects.

From the findings presented above, we can conclude that, as the level of EFL proficiency increases, the percentages of incorrect judgments and errors with all verb categories decrease, and hence these verbs are being acquired by the learners. However, since the proportions of these verbs in the total number of incorrect judgments significantly differ -- ergative verbs increase their share while the percentage of transitive verbs decreases, and the percentage of intransitive verbs remains constant at the low and mid levels and then slightly decreases at the high level -- we can infer from this that the rate of acquisition of these verbs presumably differs significantly, with transitive verbs being acquired faster than intransitive and ergative ones. On the whole, we can conclude that different verb categories are associated with considerably differing numbers of incorrect judgments, especially at the mid and high levels. However, we cannot make stronger inferences about whether the learners discriminate between different verb categories unless we make a deeper analysis of incorrect judgments and consider the distribution of incorrect judgments among different verbal structures of ergative, intransitive, and transitive verbs.

The analysis of the distribution of incorrect judgments among main target items of the present research -- ergative and passive structures -- is presented below. Since by ergative structure was included in the task as a distractor item, and this structure cannot account for the differences existing among different verb categories, it will not be analyzed here.

VS structure was not the main unit of analysis in the present research either. But since the previous studies report specific patterns of acquisition of ergative verbs connected with this structure (Zobl, 1989), the findings concerning VS structure are also considered in this chapter.

Table 8 presents the distribution of incorrect judgments for different structures of all verb groups relative to the total number of judgments available for the verbal structures in each verb category. See also Appendix I for the distribution of incorrect judgments among different structures.

Table 8

Distribution of Incorrect Judgments among Different Verbal Structures

Verbs	Verbal Structures				
	^a S1	^b S2	^c S3	^d S4	^e S5
High level					
Ergative	18%	20%	13%	3%	30%
Intransitive	-	0%	7%	0%	33%
Transitive	0%	0%	0%	0%	12%
Mid level					
Ergative	51%	53%	13%	17%	28%
Intransitive	-	4%	42%	26%	48%
Transitive	5%	5%	0%	4%	30%
Low level					
Ergative	51%	52%	14%	44%	50%
Intransitive	-	22%	87%	49%	48%
Transitive	46%	42%	6%	46%	41%

Note. ^aS1 = Full ergative structure for ergative and transitive verbs and transitive structure for intransitive verbs; ^bS2 = Cut ergative structure; ^cS3 = Passive structure; ^dS4 = By ergative structure; ^eS5 = VS structure

As shown in Table 8, at the low level 51% of incorrect judgments refer to the wrongly rejected full ergative structures of ergative verbs,

as, for example, The window broke into small pieces. Also, 46% refer to the wrongly accepted full ergative structures of transitive verbs, as for example, Turkey visits all year round, i.e., the remaining 54% of judgments constitute the correctly rejected ergative structure of transitive verbs.

By and large, the analogous picture is observed for cut ergative and passive structures of ergative and transitive verbs. From this we can infer that the subjects at the low level judge ergative structures of ergative and transitive verbs more or less indiscriminately.

Table 9 shows the percentage of judgments about ergative and passive structures accepted as grammatically correct in Task 1.

Table 9

Percentages of Judgments about Verbal Structures Accepted as Grammatically Correct in Task 1

Verbs	Verbal Structures		
	Full Ergative ¹	Cut Ergative ¹	Passive ²
High level			
Ergative	82%	80%	87%
Intransitive	-	100%	7%
Transitive	0%	0%	100%
Mid level			
Ergative	49%	47%	87%
Intransitive	-	96%	42%
Transitive	5%	5%	100%
Low level			
Ergative	49%	48%	86%
Intransitive	-	78%	87%
Transitive	46%	42%	94%

Note. ¹For transitive verbs, these verbal structures are wrongly accepted as grammatically correct; ²For intransitive verbs, this verbal structure is wrongly accepted as grammatically correct.

The subjects at the low level are more accurate in judging the cut ergative structure of intransitive verbs, for example, The prices fell, than in judging the analogous structure of both ergative and transitive verbs, for example, The books sold out (ergative); The traffic rules learn (transitive). As shown in Table 9, 78% of judgments about cut ergative structure of intransitive verbs correctly accepted it as grammatical. Meanwhile, the grammaticality of this structure was correctly accepted in only 48% of judgments about ergative verbs and was wrongly accepted in 42% of judgments about transitive verbs.

The analysis of incorrect judgments about the passive structure of intransitive verbs (as, for example, His letter was come by post) shows that only 13% rejected the grammaticality of passive structure of these verbs. As shown in Table 9, at the low level this structure was accepted with nearly identical percentages for each group of verbs: ergatives 86%, intransitives 87%, and transitives 94%. This result only confirms the conclusion we arrived at earlier that at low level the subjects do not discriminate in their grammaticality judgments between ergative and transitive verbs and also, to some extent, between ergative and intransitive verbs.

At the mid and high levels, the passive structure is correctly accepted as grammatical in 87% of judgments about ergative verbs and in 100% of judgments about transitive verbs, and is wrongly accepted in 42% and 7%, respectively, of judgments about intransitive verbs. At the mid level, the full and cut ergative structures of ergative verbs are correctly accepted in 49% and 47% of judgments, respectively, whereas only 5% of judgments about transitive verbs accept these ungrammatical structures. This means that in 95% of judgments about transitive verbs these structures are correctly rejected. At the high level, full and cut ergative structures of ergative verbs are correctly accepted in 82% and 80% of judgments, respectively. Conversely, in 100% of judgments about transitive verbs these structures are correctly rejected.

The difference in judgments about cut ergative structure of intransitive and ergative verbs is also significant. At the mid level, 47% of judgments correctly accept cut ergative structure of ergative verbs versus

96% of judgments which also correctly accept the analogous structure of intransitive verbs. At the high level, these numbers are 80% versus 100%, respectively. Thus, we can infer that at mid and high levels the subjects do discriminate in their grammaticality judgments between different verb categories, i.e., ergative, intransitive, and transitive verbs. One more conclusion we can make here only confirms the one stated earlier, i.e., ergative verbs, in comparison with intransitive and transitive verbs, present the greater difficulty for the subjects at all proficiency levels. Thus, Table 8 shows essentially no changes in the amount of incorrect judgments about verbal structures of ergative verbs at the low and mid levels. And even at the high level, the number of incorrect judgments about different structures of ergative verbs is higher than that for intransitive and transitive verbs. Intransitive and transitive verbs are more subject to changes in this respect.

The distribution errors among different verb groups given in Tables 5 and 6 will not give us the real picture of relationships among these verbs until we state what an error for the particular verb group stands for. Thus, in Task 2, at the low level (see Table 7), 23% and 13% of errors in the sentences with ergatives and intransitives, respectively, refer to the use of passive structure where an ergative one is required. Conversely, 21% of errors in the sentences with transitives account for the wrongly produced ergative structure, i.e., in 79% of test sentences with transitives passive structure is correctly used. Thus, at the low level, intransitive ergative structure is correctly produced in 77% and 87% of sentences with ergative and intransitive verbs, respectively, and is wrongly produced in only 21% of sentences with transitive verbs. At the mid level, ergative structure is correctly produced in 83% and 98% of test sentences with ergative and intransitive verbs, respectively, and is wrongly produced in only 1% of test sentences with transitive verbs. At the high level, these percentages are 93% and 100% for ergative and intransitive verbs and 0% for transitive verbs. Hence, we can infer that subjects in their productive performance, at all levels of proficiency, use ergative and transitive verbs, to a greater extent, and ergative and intransitive verbs, to a lesser extent, as distinct ones.

Other Problems Considered in the Study

"Don't Know" Judgments at the Grammaticality Judgment Task

The subjects were given a tertiary choice at the grammaticality judgment task -- "grammatically correct/incorrect/don't know".

Table 9 presents the distribution of "Don't know" answers among different verb categories.

Table 10

Distribution of "Don't Know" Answers among Different Verb Categories

Verbs	Level		
	Low	Mid	High
Ergative	10%	4%	4%
Intransitive	10%	8%	0%
Transitive	8%	3%	0%

At the low level, about 10% of judgments out of the total number of judgments about ergative verbs were "don't know" answers. At both mid and high levels, these answers constituted about 4% for each level. If we compare the frequency of "don't know" answers for other verb categories, we have: Intransitive verbs: Low level 10%, Mid level 8%, High level 0%; Transitive verbs: Low level 8%, Mid level 3%, High level 0%. At each proficiency level, most of the "don't know" answers fell on VS structure and cut ergative structure of ergative verbs.

Other Structures of Ergative Verbs

The results of statistical analysis of difference in the number of incorrect judgments about full and cut ergative structures are given in the previous section. The Kruskal-Wallis test conducted on passive structures of ergative verbs shows that there is no significant difference among the levels ($H = 0.422$, $p = 0.809642$). The Kruskal-Wallis test also indicates that Language level was a significant factor for By ergative structure and VS structure of ergative verbs: By ergative structure: $H = 16.315$, $p = 0.000287$; VS structure: $H = 9.087$, $p = 0.010635$. However, further testing

shows that between mid and high levels there is no significant difference for the By ergative structure ($H = 1.748$, $p = 0.186100$) and also for the VS structure ($H = 0.517$, $p = 0.691533$). The means for all the above mentioned structures for the three proficiency levels are shown in Appendix H.

Concerning the VS structure, it should also be noted that, for example, at the high level the lowest acceptability rating on this structure was observed for the transitive verbs and the highest acceptability rating for intransitive and ergative verbs (See Table 7), as is expected from the previous studies (White, 1985; Zobl, 1989).

Production Part of the Grammaticality Judgment Task

The corrections made by the subjects in the production part of Task 1 showed whether it was the target items that made the subjects mark the sentences as incorrect. In this part of the task the most diverse corrections were observed for VS structure. Among the corrections made were the following:

1. The use of agent and the conversion of VS structure into SVO (subject-verb-object) structure:

I don't know when it broke the window. (The original test sentence was as follows: I don't know when broke the window.)

Yesterday Jerry happened a funny thing. (The original test sentence was as follows: Yesterday happened a funny thing.)

2. The change of verbal structure into nonverbal one:

Michael waited until dry of his clothes. (The original test sentence was as follows: Michael waited until his clothes dried.)

3. The use of passive structure with VS word order (See also Zobl, 1989):

Everybody is surprised at how quickly was the book sold out. (The original sentence was as follows: Everybody was surprised at how quickly sold out the book.)

Factors Influencing the Subjects Performance at Experimental Tasks

The main criterion chosen in the present study to divide the subjects into groups and compare their performance at experimental tasks was the Michigan Test of English Language Proficiency. The administration of the standardized test allowed to create groups of subjects divided on the principle of their language proficiency. As the results obtained on

conducting the statistical analyses of experimental data suggest, on the whole, this approach has proved valid.

However, the statistical analyses showed also high standard deviation values nearly for all parameters studied. This fact points to the involvement of other factors influencing the variation in the subjects' performance at experimental tasks. Thus, for example, the best results on Task 1 were obtained from a subject assigned according to the results of the standardized test to mid level. She is a native Bulgarian speaker, a student of the Faculty of Humanities and Letters. As the student writes in her questionnaire, except her native language -- Bulgarian -- she knows English, Turkish, Arabic, and a little French. In this case, we can predict many factors which might influence the results of the task, i.e., native language, knowledge of several foreign languages, or professional interest in English. Thus, native language of learners, the knowledge of foreign language(s), some individual differences among learners (see Meisel, Clahsen, & Pienemann, 1981; Pienemann, 1984), attitude to the study of English, or motivation in doing experimental tasks -- some students, though they agreed to take part in the study, performed the tasks rather reluctantly -- might presumably account for the high values of standard deviation observed.

Variations in the Performance of Particular Ergative Verbs

Table 11 presents the distribution of incorrect judgments and errors for different ergative verbs relative to the total number of judgments and test sentences available for the corresponding verbs.

As can be seen from the table, at all levels of EFL proficiency the most difficult verbs for the subjects to judge their grammaticality appeared to be sell, turn, move, grow, and fill, the least difficult verbs break, begin, and dry. For Task 2, in the most difficult group we could include only sell and fill, in the least difficult group turn, begin, and dry. One more interesting observation is that at mid level, in contrast with other verbs, the number of errors for sell and turn significantly increases, then again falls at the high level. Interestingly, that in the word frequency list given in Appendix D, sell and fill have the least frequency value whereas other verbs from the most difficult group -- turn

and move -- have the highest frequency in that list.

Table 11

Distribution of Incorrect Judgments and Errors for Different Ergative Verbs

Tasks	Verbs							
	sell	turn	break	begin	move	grow	dry	fill
Low level								
Task 1	47%	41%	38%	26%	49%	43%	39%	55%
Task 2	40%	17%	23%	11%	26%	20%	17%	34%
Mid level								
Task 1	43%	36%	38%	21%	30%	30%	16%	43%
Task 2	56%	0%	15%	4%	0%	11%	4%	52%
High level								
Task 1	24%	32%	8%	8%	16%	16%	8%	20%
Task 2	20%	0%	0%	0%	0%	0%	0%	40%

One more interesting observation is that at the high level, for example, some of the verbs having the highest acceptability rating in passive (begin and move) and VS (turn, grow, and fill) structures received diverse judgments during validation of the task by native speakers. At the low and mid levels, these verbs also have one of the highest acceptability ratings (See Appendices P-S).

CHAPTER 5 CONCLUSIONS

Summary

The present research investigated the acquisition of ergative verbs by Turkish EFL students. The purpose of the research was to find out which constructions of ergative verbs the learners from different levels of EFL proficiency judged as incorrect in the grammaticality judgment task and which constructions -- ergative or passive -- they produced in the production task. As predicted by generative grammar, in the process of acquisition of ergative verbs the learners will prefer to use passive constructions of ergative verbs to intransitive ergative ones.

The study investigated five research questions and tested nine hypotheses. It was found out that as the level of EFL proficiency increased, the learners made significantly fewer judgments about ergative verbs as grammatically incorrect. However, the difference in the number of incorrect judgments about ergative constructions of ergative verbs at the low and mid levels was not significant. At the same time, it was also shown that at the low and mid levels learners judged significantly more ergative constructions of ergative verbs as grammatically incorrect than passive constructions of these verbs.

The study investigated also the productive performance of the learners. It was found, however, that the production of ergative verbs did not differ significantly as the level of the learners' EFL proficiency increased.

An attempt was also made to examine whether the learners were aware of the differences existing between different verb categories in English, i.e., whether they could differentiate between ergative, intransitive, and transitive verbs. The analysis of distribution of incorrect judgments and errors among different verb categories showed that ergative, intransitive, and transitive verbs are associated with considerably differing percentages in the total number of incorrect judgments. Thus, the distribution patterns for ergative verbs revealed that these verbs presented great difficulty for the learners of English and that the rate of acquisition of these verbs was slower in comparison with intransitive and transitive verbs.

The study also analyzed the distribution of incorrect judgments among different verbal structures of ergative, intransitive, and transitive verbs. The findings indicate significant differences in the distribution of incorrect judgments among ergative and passive structures of different verb categories at the mid and high levels. At the low level, the learners judged the above-mentioned structures indiscriminately. However, the analysis of distribution of errors among different verb categories showed that at all levels of proficiency learners of English could discriminate among ergative, intransitive, and transitive verbs. This fact points to a clear discrepancy between the learners' competence studied by means of the grammaticality judgment task and productive performance examined in the production task. Some previous studies also reported about this difference between the results obtained from grammaticality judgment tasks and from production tasks (Ellis, 1991; Gass, 1983).

Implications for L2 Acquisition

It is difficult to interpret the findings of the present research unless we assume that the learners perceive ergative, intransitive, and transitive verbs as distinct. Even at the low proficiency level where the judgments about ergative verbs versus other verb categories are essentially identical, the productive performance indicates that the learners do differentiate among these verb categories.

Presumably, the acquisition of ergative verbs proceeds via overgeneralizing the passive rule. This holds true mainly for the low and mid proficiency levels. At the high level, the degree of acceptability -- in other words, preferability -- of ergative and passive structures of ergative verbs is nearly equal.

The findings also reveal the opposite process observed for transitive verbs at the low level, i.e., the attempts to accept as grammatically correct ergative structures with transitive verbs (more than 40% of wrongly accepted structures). However, at the mid and high levels, the percentage of wrongly accepted ergative structures of transitive verbs falls down first to 5% and then to 0%.

The acquisition of intransitive verbs follows nearly the same route as that of ergatives. At the low level, the learners prefer passive

structures to ergative ones, though, in comparison with ergative verbs, essentially lesser amount of judgments reject the ergative constructions of these verbs.

In comparison with other verb categories, the acquisition of ergative verbs proceeds slower, and even at the high level the percentage of incorrect judgments about ergative verbs is rather high.

The findings of the present research indicate the necessity of further studying this problem in terms of investigating the developmental sequences of acquisition of ergative verbs.

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APPENDIX A

Questionnaire

(Where necessary, check (V) the relevant answer)

Name _____ Surname _____

Age: years _____ months _____

Sex: male _____ female _____

Native language _____

What kind of high school did you finish?

American _____ Turkish _____

British _____ Other _____

Educational level: BUSEL _____

Freshman _____ Other _____

Department _____

Length of formal English instruction:

years _____ months _____

How many times have you been to an English-speaking country?

(USA, Great Britain, Canada, Australia, other countries)

USA: _____ Great Britain: _____

Other countries: (name) _____ : _____

For how long totally were you there?

years _____ months _____

What was the purpose of your stay there?

study _____ tourism _____

business _____ other _____

What other foreign languages do you know? _____

What is your proficiency level in those languages?

beginning _____

intermediate _____

advanced _____

APPENDIX B

Michigan Test Results for Each Subject: Scores on Grammar, Vocabulary
Sections, and Overall Proficiency Level

S#	Grammar	Vocabulary	Total	Overall Proficiency
Experimental Studies				
1	35	25	60	High
2	34	14	48	Mid
3	29	15	44	Mid
4	34	25	59	Mid
5	28	13	41	Mid
6	29	14	43	Mid
7	24	18	42	Mid
8	35	24	59	Mid
9	30	13	43	Mid
10	25	21	46	Mid
11	25	19	44	Mid
12	21	16	37	Low
13	31	22	53	Mid
14	37	30	67	High
15	26	15	41	Mid
16	25	25	50	Mid
17	29	30	59	Mid
18	26	18	44	Mid
19	26	23	49	Mid
20	18	11	29	Low
21	21	11	32	Low
22	24	17	41	Mid
23	23	24	47	Mid
24	23	13	36	Low
25	26	21	47	Mid

(table continues)

S#	Grammar	Vocabulary	Total	Overall Proficiency
26	19	9	28	Low
27	17	9	26	Low
28	22	16	38	Low
29	22	14	36	Low
30	20	14	34	Low
31	14	16	30	Low
32	19	11	30	Low
33	20	11	31	Low
34	18	12	30	Low
35	18	13	31	Low
36	14	13	27	Low
38	10	11	21	Low
39	16	8	24	Low
41	20	16	36	Low
43	13	14	27	Low
44	19	13	32	Low
45	19	13	32	Low
47	22	17	39	Low
48	25	16	41	Mid
49	20	13	33	Low
50	22	18	40	Mid
51	19	16	35	Low
52	18	15	33	Low
53	19	13	32	Low
54	17	12	29	Low
56	12	13	25	Low
57	21	13	34	Low
58	17	15	32	Low
59	21	17	38	Low

(table continues)

S#	Grammar	Vocabulary	Total	Overall Proficiency
60	21	13	34	Low
61	19	11	30	Low
62	33	22	55	Mid
63	17	17	34	Low
64	18	10	28	Low
66	32	23	55	Mid
67	21	20	41	Mid
68	38	27	65	High
69	35	24	59	Mid
70	28	14	42	Mid
71	35	31	66	High
72	33	27	60	High
73	33	25	58	Mid
Pilot study 3				
37	11	16	27	Low
40	18	12	30	Low
42	15	12	27	Low
46	30	9	39	Low
55	19	9	28	Low
65	28	16	44	Mid

APPENDIX C

Mean Scores for Grammar and Vocabulary Subtests, and Combined Mean Scores

Prof. level	Number of Subjects	Grammar Subtest	Vocabulary Subtest	Combined Mean Scores	Range
LOW LEVEL					
Experimental Group					
<u>M</u>	35	18.40	13.11	31.51	20-39
<u>SD</u>		2.97	2.40	4.20	
Pilot Group					
<u>M</u>	5	18.20	12.00	30.20	20-39
<u>SD</u>		7.40	3.08	5.07	
MID LEVEL					
Experimental group					
<u>M</u>	27	27.70	19.74	47.81	40-59
<u>SD</u>		4.13	4.57	6.78	
Pilot Group					
<u>M</u>	1	28.00	16.00	44.00	40-59
HIGH LEVEL					
Experimental Group					
<u>M</u>	5	35.60	28.00	63.60	60-80
<u>SD</u>		1.95	2.45	3.36	

APPENDIX D

Word Frequency Values (per million words in printed English school materials -- see Carroll, Davies, & Richman, 1971)

Verbs	N (per mil. words)
Ergative Verbs	
sell	78
turn	292
break	97
begin	174
move	292
grow	243
dry	176
fill	89
Intransitive Verbs	
come	837
fall	152
happen	84
Transitive Verbs	
study	392
destroy	19
send	88
visit	81
learn	313

APPENDIX E

Grammaticality Judgment Task (Task 1, Variant 1)

Read the following sentences. Put an **X** in the brackets next to any sentence that you think is not correct; put a **V** in the brackets next to any sentence that you think is grammatically correct; put a **?** next to any sentence you are not sure to be correct. Write out each incorrect sentence (i.e., the ones you have marked with **X**) correctly in the space provided.

Example: Mother bought her daughter a skirt.

(V) a. Mother bought me a skirt.

(V) b. Mother bought a skirt to me.

(X) c. Mother bought it me.

Mother bought it to me.

(?) d. Mother bought me it.

1. The committee studied the problem in detail.

() a. The problem studied in detail.

() b. The problem was studied in detail.

() c. The newspaper reports that there studied the problem.

() d. The problem studied by the committee.

() e. The problem studied.

2. The fire destroyed the houses in an hour.

() a. The houses were destroyed in an hour.

() b. The houses destroyed.

() c. The houses destroyed by the fire.

() d. The houses destroyed in an hour.

() e. In an hour destroyed the houses.

3. The shop sold out the book in a week.

() a. Everybody is surprised at how quickly sold out the book.

() b. The book sold out in a week.

() c. The book was sold out in a week.

() d. The book sold out.

() e. The book sold out by the shop.

4. Mary turned the key in the lock.

() a. The key turned in the lock.

() b. The key was turned in the lock.

() c. The key turned by Mary.

() d. Suddenly turned the key in the lock and the door opened.

() e. The key turned.

5. A strong wind broke the window into small pieces.

() a. I don't know when broke the window.

() b. The window broke by a strong wind.

() c. The window broke into small pieces.

- () d. The window was broken into small pieces.

- () e. The window broke.

6. The TV reporter began the program with news.
- () a. The program began with the news.

- () b. We waited until began the program.

- () c. The program began by the TV reporter.

- () d. The program began.

- () e. The program was begun with the news.

7. His letter came by post.
- () a. The postman came his letter.

- () b. His letter was come by post.

- () c. His letter came by the postman.

- () d. His letter came.

- () e. We knew that came his letter.

8. The hot summer moved the ice cap down the slope of the hill.
- () a. In summer moved the ice cap down the slope of the hill.

- () b. In summer the ice cap was moved down the slope of the hill.

- () c. In summer the ice cap moved down the slope of the hill.

() d. The ice cap moved down.

() e. The ice cap moved down by the hot summer.

9. The farmers grow corn in the valley.

() a. Corn grows in the valley.

() b. Corn is grown in the valley.

() c. In the valley there grows corn.

() d. Corn grows by the farmers.

() e. Corn grows.

10. The sailors send the letters easily to America.

() a. The letters send.

() b. The letters send easily to America.

() c. The letters are easily sent to America.

() d. Very often send the letters to America easily.

() e. The letters send by the sailors.

11. Tourists visit Turkey all year round.

() a. Turkey is visited all year round.

() b. All year round there visits Turkey.

() c. Turkey visits all year round.

() d. Turkey visits by tourists.

() e. Turkey visits.

12. The schoolchildren learn the traffic rules easily.

() a. The traffic rules learn.

() b. The traffic rules are learned easily.

() c. The traffic rules learn by the schoolchildren.

() d. The traffic rules learn easily.

() e. Usually easily learn the traffic rules.

13. Michael easily dried his clothes.

() a. His clothes dried by Michael.

() b. His clothes dried easily.

() c. Michael waited until dried his clothes.

() d. His clothes dried.

() e. His clothes were easily dried.

14. The wind filled out the sails.

() a. The sails were soon filled out.

() b. The sails filled out.

() c. The sails filled out by the wind.

() d. The sails filled out soon.

() e. Soon filled out the sails and the yachts started off.

15. The prices fell in spring.

() a. There fell the prices in spring.

() b. The government fell the prices in spring.

() c. The prices were fallen in spring.

() d. The prices fell by the government.

() e. The prices fell.

16. A funny thing happened yesterday.

() a. Jerry happened a funny thing yesterday.

() b. Yesterday happened a funny thing.

() c. A funny thing was happened to Jerry yesterday.

() d. A funny thing happened yesterday by Jerry.

() e. A funny thing happened.

APPENDIX F

Grammaticality Judgment Task (Task 1, Variant 2)

Read the following sentences. Put an **X** in the brackets next to any sentence that you think is not correct; put a **V** in the brackets next to any sentence that you think is grammatically correct; put a **?** next to any sentence you are not sure to be correct. Write out each incorrect sentence (i.e., the ones you have marked with **X**) correctly in the space provided.

Example: Mother bought her daughter a skirt.

(V) a. Mother bought me a skirt.

(V) b. Mother bought a skirt to me.

(X) c. Mother bought it me.

Mother bought it to me.

(?) d. Mother bought me it.

1. () The problem was studied in detail.

2. () The houses destroyed in an hour.

3. () The window was broken into small pieces.

4. () The program began with the news.

5. () The prices were fallen in spring.

6. () A funny thing happened yesterday.

7. () His letter was come by post.

8. () In summer the ice cap moved down the slope of the hill.

9. () Corn is grown in the valley.

10.() The letters send easily to America.

11.() Turkey is visited all year round.

12.() The sails filled out soon.

13.() The book was sold out in a week.

14.() His clothes dried easily.

15.() The traffic rules are learned easily.

16.() The key turned in the lock.

17.() The program was begun with the news.

18.() The problem studied in detail.

19.() The houses were destroyed in an hour.

20.() His letter came by post.

21.() His clothes were easily dried.

22.() The traffic rules learn easily.

23.() In summer the ice cap was moved down the slope of the hill.

24.() The window broke into small pieces.

25.() A funny thing was happened yesterday.

26.() The prices fell in spring.

27.() The letters are easily sent to America.

28.() Corn grows in the valley.

29.() The key was turned in the lock.

30.() The book sold out in a week.

31.() The sails were filled out soon.

32.() Turkey visits all year round.

APPENDIX G

Production Task (Task 2)

Complete the following sentences by using the words under the lines in the correct form. Then, read the sentence to yourself to see if it sounds okay to you.

Example. The teacher knew who had skipped classes yesterday.

skip classes

1. This subject _____ in all universities of Turkey.

study

2. All buildings in the street _____ by the fire.

destroy

3. This book is a bestseller -- it _____ well for 10\$.

sell

4. Suddenly the car _____ to the right and stopped.

turn

5. When a customer was pushed against a glass counter it suddenly

_____.

break

6. I don't know why last year the fall semester _____ so late.

begin

7. The information about the earthquake _____ from several

come

sources at the same time.

8. The race cars _____ fast around the stadium and

move

thousands of spectators watched this exciting scene with admiration.

9. In this part of the country grapes _____ fast since the

grow

days are usually warm and sunny.

10. My new dress _____ to the wrong address by mistake.

send

11. Picture galleries and museums _____ mostly on weekends.

visit

12. Foreign languages _____ by thousands of students but
learn

not all become fluent speakers.

13. I cannot put wet wood into the fireplace and you know that wood
_____ so slowly.

dry

14. The animals of the desert gather around these pits because from time to
time they _____ with water.

fill up

15. The milk spilled on the table and the cup _____.

fall down

16. Usually such things _____ unexpectedly and take people

happen

by surprise.

Appendix H
Mean Number of Incorrect Judgments for Different Types of
Structures of Ergative Verbs

Level	Verbal Structures					Total
	Full ergat.	Cut ergat.	Pass. struc.	By ergat.	VS struc.	
High						
<u>M</u>	1.40	1.60	1.00	0.20	2.40	6.60
<u>SD</u>	1.34	1.34	1.41	0.45	1.52	1.80
Mid						
<u>M</u>	4.07	4.22	1.00	1.33	2.22	12.85
<u>SD</u>	2.35	2.28	1.04	2.11	1.99	4.56
Low						
<u>M</u>	4.11	4.17	1.14	3.49	4.03	16.94
<u>SD</u>	2.03	2.60	1.70	2.39	2.44	5.27

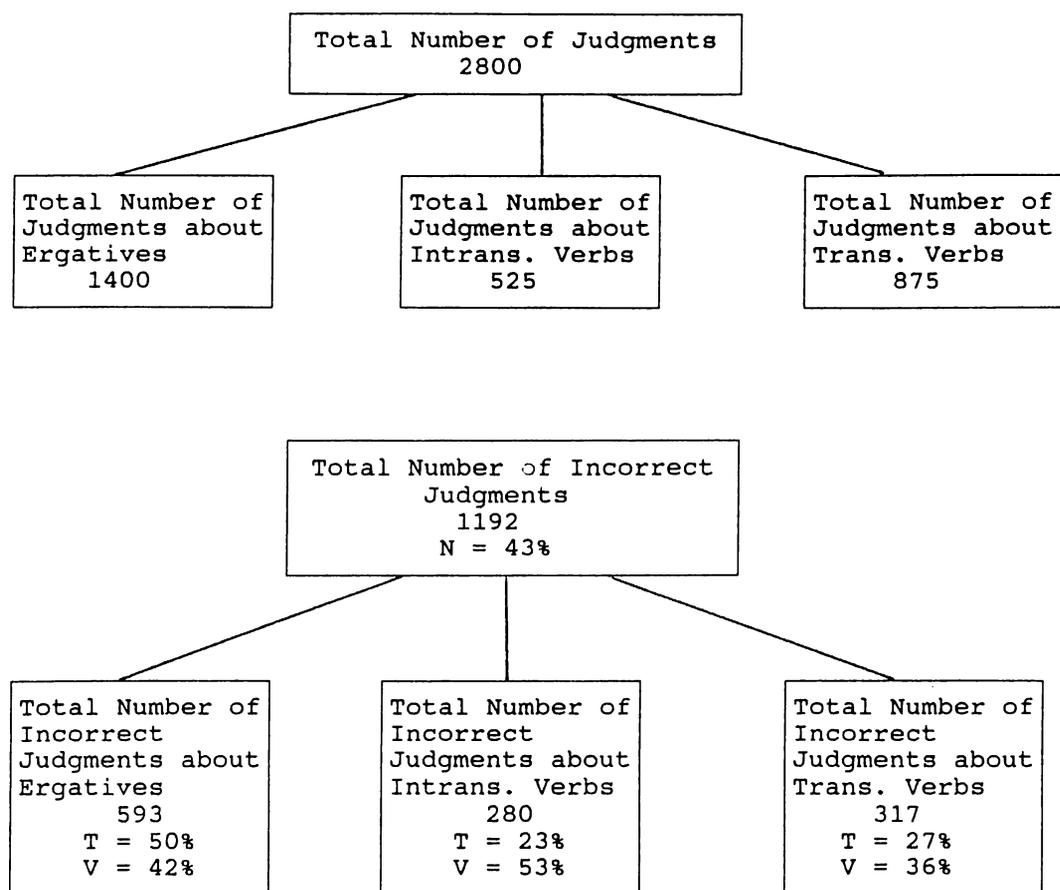
Appendix I

Distribution of Incorrect Judgments among Different Types of Structures

Verbs	Verbal Structures					Total
	^a S1	^b S2	^c S3	^d S4	^e S5	
High level						
Ergative	21%	24%	15%	3%	37%	100%
Intransitive	14%	0%	14%	0%	72%	100%
Transitive	0%	0%	0%	0%	100%	100%
Mid level						
Ergative	32%	33%	8%	10%	17%	100%
Intransitive	20%	3%	28%	17%	32%	100%
Transitive	12%	12%	0%	10%	66%	100%
Low level						
Ergative	24%	25%	7%	20%	24%	100%
Intransitive	24%	8%	32%	18%	18%	100%
Transitive	25%	23%	4%	25%	23%	100%

^aS1 = Full ergative structure for ergative and transitive verbs and transitive structure for intransitive verbs; ^bS2 = Cut ergative structure; ^cS3 = Passive structure; ^dS4 = By ergative structure; ^eS5 = VS structure.

Appendix J

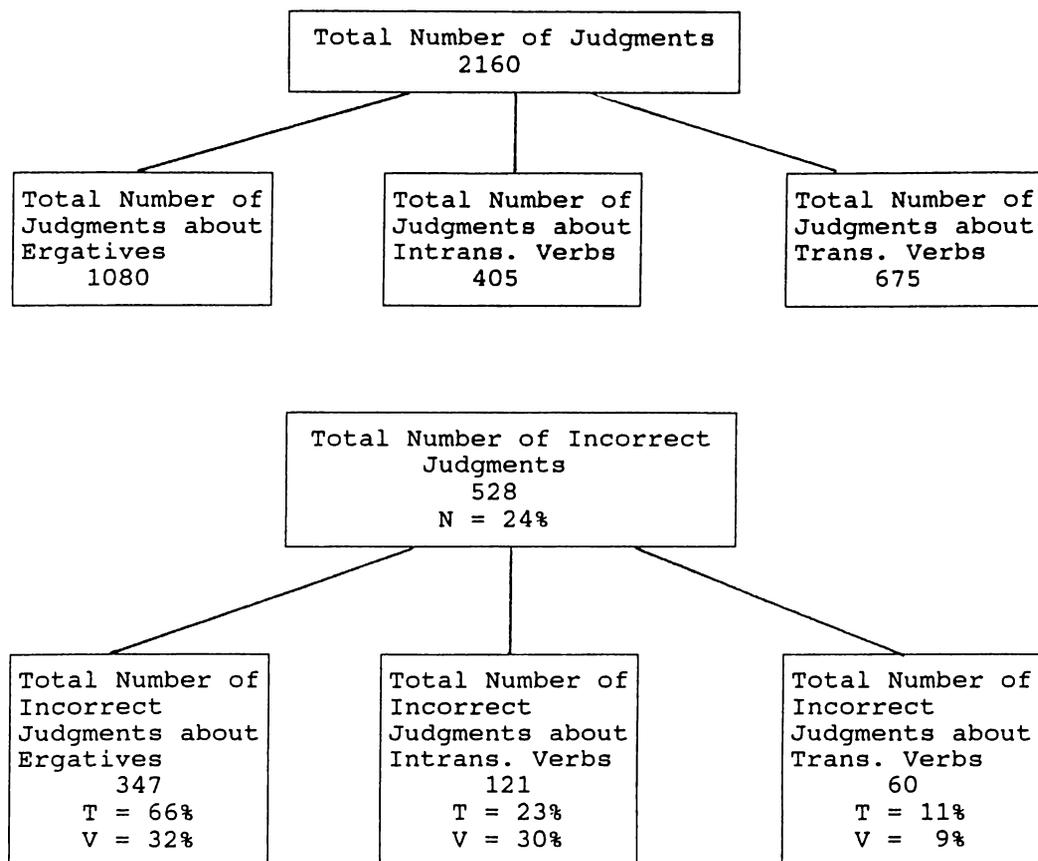
Distribution of Incorrect Judgments at the Low Level (Task 1)

Note. N = % of incorrect judgments out of total number of judgments

T = % out of total number of incorrect judgments

V = % out of total number of judgments about the particular verb category

Appendix K

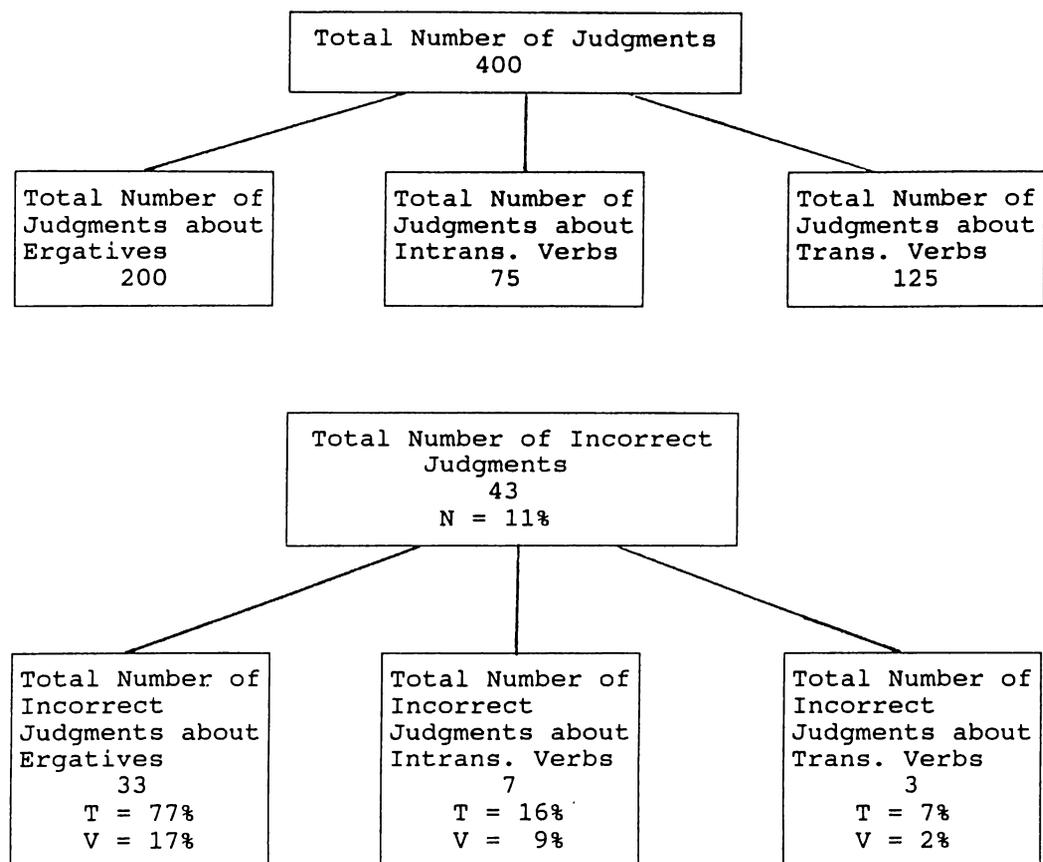
Distribution of Incorrect Judgments at the Mid Level (Task 1)

Note. N = % of incorrect judgments out of total number of judgments

T = % out of total number of incorrect judgments

V = % out of total number of judgments about the particular verb category

Appendix L

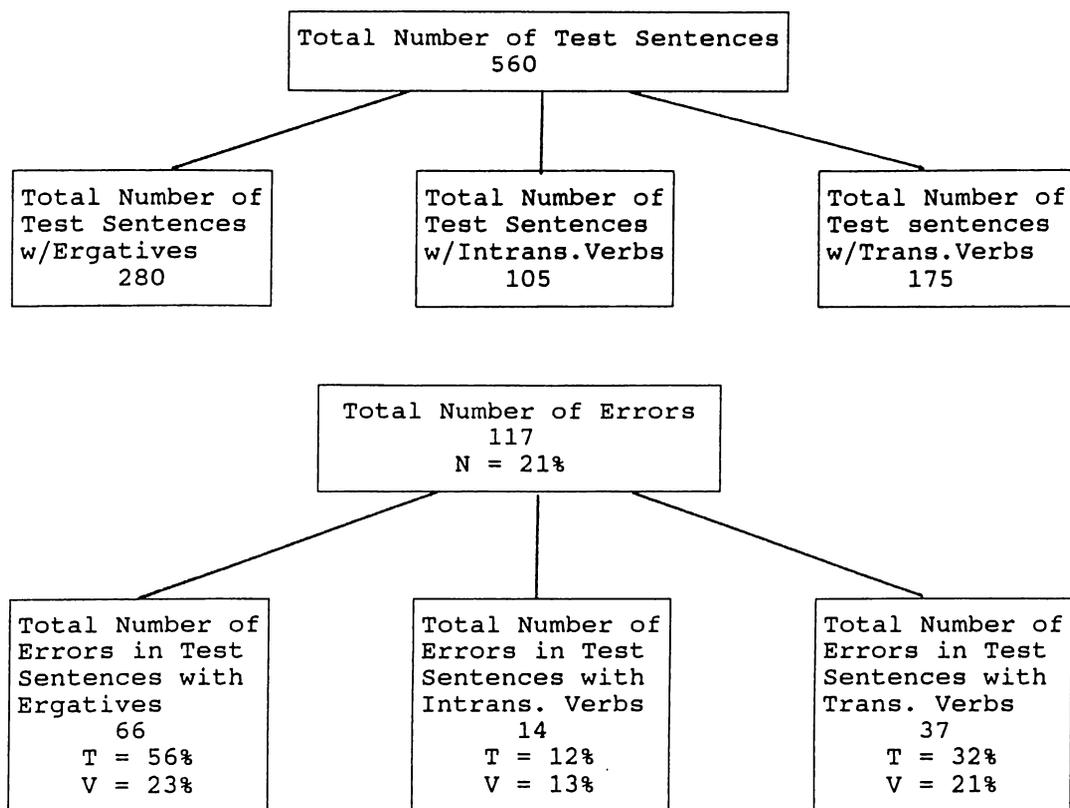
Distribution of Incorrect Judgments at the High Level (Task 1)

Note. N = % of incorrect judgments out of total number of judgments

T = % out of total number of incorrect judgments

V = % out of total number of judgments about the particular verb category

Appendix M

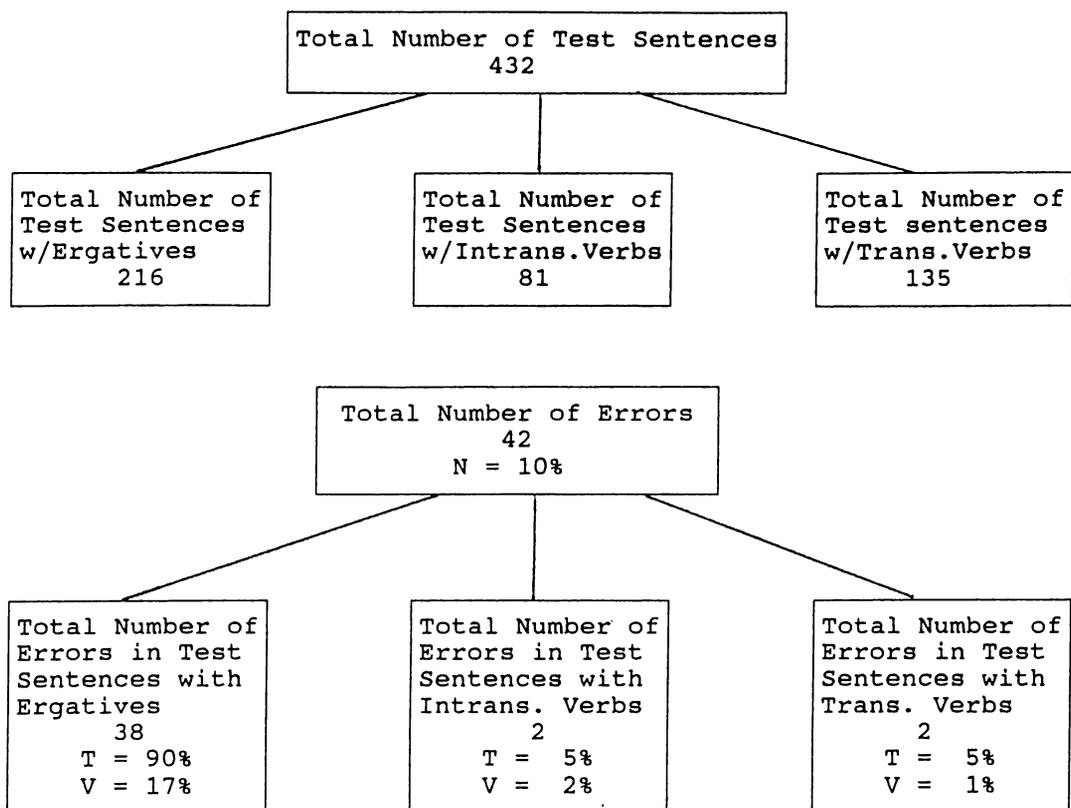
Distribution of Errors at the Low Level (Task 2)

Note. N = % of errors out of total number of test sentences

T = % out of total number of errors

V = % out of total number of test sentences with the particular verb category

Appendix N

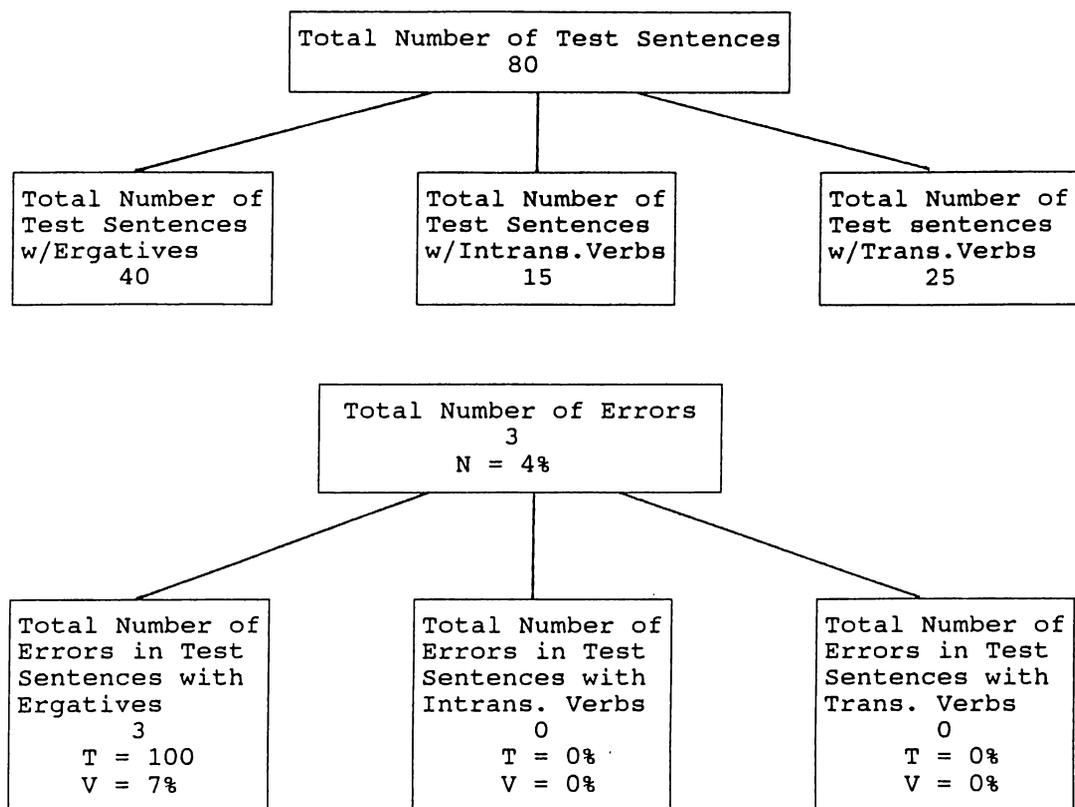
Distribution of Errors at the Mid Level (Task 2)

Note. N = % of errors out of total number of test sentences

T = % out of total number of errors

V = % out of total number of test sentences with the particular verb category

Appendix O

Distribution of Errors at the High Level (Task 2)

Note. N = % of errors out of total number of test sentences

T = % out of total number of errors

V = % out of total number of test sentences with the particular verb category

Appendix P

Distribution of Incorrect Judgments for Different Types of Ergative VerbsLow Level

Verbal Structures

Verbs	Full ergat.	Cut ergat.	Passive	By ergat.	VS	Total*
	str.-re	str.-re	str.-re	str.-re	str.-re	
sell	15%	14%	10%	12%	16%	14%
turn	17%	14%	6%	9%	10%	12%
break	15%	16%	0%	11%	6%	11%
begin	5%	7%	10%	11%	8%	8%
move	12%	13%	30%	14%	15%	15%
grow	10%	12%	12%	13%	16%	13%
dry	11%	10%	12%	12%	12%	11%
fill	15%	14%	20%	18%	17%	16%
Total	100%	100%	100%	100%	100%	100%

* % out of the total number of incorrect judgments about ergative verbs

Appendix Q

Distribution of Incorrect Judgments for Different Types of Ergative VerbsMid Level

Verbal Structures

Verbs	Full ergat.	Cut ergat.	Passive	By ergat.	VS	Total*
	str.-re	str.-re	str.-re	str.-re	str.-re	
sell	22%	20%	0%	8%	15%	17%
turn	17%	17%	4%	6%	13%	14%
break	16%	20%	4%	19%	3%	15%
begin	6%	7%	33%	14%	2%	8%
move	9%	4%	41%	22%	12%	12%
grow	7%	9%	7%	6%	30%	11%
dry	7%	8%	4%	6%	2%	6%
fill	16%	15%	7%	19%	23%	17%
Total	100%	100%	100%	100%	100%	100%

* % out of the total number of incorrect judgments about ergative verbs

Appendix R

Distribution of Incorrect Judgments for Different Types of Ergative VerbsHigh Level

Verbal Structures

Verbs	Full ergat.	Cut ergat.	Passive	By ergat.	VS	Total*
	str.-re	str.-re	str.-re	str.-re	str.-re	
sell	43%	37%	0%	0%	0%	18%
turn	0%	37%	40%	0%	25%	25%
break	0%	13%	0%	0%	8%	6%
begin	0%	0%	40%	0%	0%	6%
move	14%	0%	20%	100%	8%	12%
grow	0%	0%	0%	0%	34%	12%
dry	29%	0%	0%	0%	0%	6%
fill	14%	13%	0%	0%	25%	15%
Total	100%	100%	100%	100%	100%	100%

* % out of the total number of incorrect judgments about ergative verbs

Appendix S

Distribution of Errors among Different Types of Ergative Verbs

Verbs	Level		
	Low	Mid	High
sell	21%	39%	33%
turn	9%	0%	0%
break	12%	10%	0%
begin	6%	3%	0%
move	14%	0%	0%
grow	11%	8%	0%
dry	9%	3%	0%
fill	18%	37%	67%
Total	100%	100%	100%