KILICISIZ GEÇİŞSİZ EYLEMLERİN TÜRK ÖĞRENCİLER TARAFINDAN KULLANIMI

THE USE OF ERGATIVE VERBS BY TURKISH LEARNERS OF ENGLISH

Abdullah CAN

(Yüksek Lisans Tezi)

Eskişehir 2000

THE USE OF ERGATIVE VERBS BY TURKISH LEARNERS OF ENGLISH

KILICISIZ GEÇİŞSİZ EYLEMLERİN TÜRK ÖĞRENCİLER TARAFINDAN KULLANIMI

Abdullah CAN

YÜKSEK LİSANS TEZİ

Danışman: Yrd. Doç. Dr. Ümit Deniz TURAN

Eskişehir

Anadolu Üniversitesi Sosyal Bilimler Enstitüsü

Eylül 2000

YÜKSEK LİSANS TEZ ÖZÜ

KILICISIZ GEÇİŞSİZ EYLEMLERİN* TÜRK ÖĞRENCİLER TARAFINDAN KULLANIMI

Abdullah CAN
İngiliz Dili Eğitimi Anabilim Dalı
Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Eylül 2000
Danışman: Yrd.Doç.Dr. Ümit Deniz TURAN

Bu çalışma, Türk öğrencilerin İngilizce kılıcısız geçişsiz eylemleri nasıl kullandıklarını ve bu eylemleri kullanırken ne tür hatalar yaptıklarını ortaya koymayı amaçlamaktadır. Ayrıca bu çalışmada, bu tür eylemlerin özellikleri, diğer geçişsiz eylemlerden farklılıkları ve bu farklılıkların dilbilgisinin çeşitli alanlarına yansıması, Chomsky (1981)'nin "Yönetim ve Bağlama Kuramı" çerçevesinde tartışılmaktadır.

Çalışmanın verileri, bu çalışma için geliştirilen bir Dilbilgisel Doğruluk Saptama Testi, Cümle Tamamlama Alıştırmaları ve Cümle Kurma Alıştırmaları aracılığı ile elde edilmiştir. Çalışma, Uludağ Üniversitesi Eğitim Fakültesi'nde, İngilizce Öğretmenliği Programına kayıtlı 50 birinci sınıf öğrencisinin katılımı ile 1999-2000 Akademik Yılı

---

* İngilizce "ergative" sözcüğünün karşılığı olan bir Türkçe sözcük, henüz sözlüklere girmemiştir. Geçişsiz eylemlerdeki bu ayrım, birkaç istisna dışında, henüz eğitsel dilbilgisinin konusu olmadığı için, bu durum olağan karşılanmalıdır. Bu konuda, Aksan (1997) "ergative verb" karşılığı olarak "*kılıcısız geçişsiz eylem*" ifadesini kullanmakta; Türkçede geçişsiz eylemleri, bu çalışmanın da konusu olan ölçütlere göre sınıflandırırken, şu açıklamalara yer vermektedir:

> bu sınıflamaya göre, kılıcılı geçişsiz eylemler (*dalmak, gitmek, gülmek* gibi) genellikle bir etkinlik anlattıkları için özneleri kılıcı rolü taşır. Diğer bir deyişle, özne eylemin anlattığı olayı ya da devinimi bilinçli olarak başlatan, uygulayan ve tamamlayandır. Öte yandan, **kılıcısız geçişsiz eylemlerin** (*düşmek, batmak, kurumak* gibi) yüzeydeki özneleri daha çok nesne olarak karşımıza çıkar; özne konumunda olan öğe eylemi tasarlayan ya da gerçekleştiren olmaktan çok, eylemden etkilenen, etki altında olan rolündedir" (Aksan 1997:96-97).

Karacaer (1998:169) ise "ergative verb" karşılığı olarak "istemsiz geçişsiz fiil" ifadesini kullanmıştır. Ancak bu terimler, *Patlıcan pişti, Zil çaldı, Lamba söndü* örneklerinde görüldüğü gibi sözü edilmeyen ancak zorunlu olan [+canlı, +insan] bir öznenin varlığını gerektiren eylemlerle (middles), *Kar eridi, Gemi battı, Elbise kurudu* gibi yukarıda tartışılan eylemler (inchoatives) arasındaki ayrımı karşılamamaktadır. 22 Ocak 2000 tarihindeki kişisel görüşmede, Ömer Demircan, "*ergative verb*" karşılığı olarak "*ön özneli dönüşlü eylem*" ifadesini önermiştir.

sonunda gerçekleştirilmiştir. Ayrıca, bu çalışmaya kontrol grubu olarak, anadili İngilizce olan 60 İngilizce öğretmeni ve dilbilimci katılmıştır.

Dilbilgisel Doğruluk Saptama Testi sonuçları, kılıcısız geçişsiz eylemlerin, öğrenciler için, diğer geçişsiz eylemlere göre daha fazla sorunlu olduğunu göstermiştir. Ayrıca, Cümle Tamamlama ve Cümle Kurma alıştırmalarının sonuçları da, öğrencilerin edilgen yapıya olanak veren kılıcısız geçişsiz eylemleri Özne-Yüklem sözdiziminde kullanmaktan kaçınarak bunun yerine edilgen yapıyı tercih etmeleri şeklinde bir eğilimi ortaya koymuştur. (Örneğin, *This shirt **washes** easily* yerine *This shirt **is washed** easily* gibi.) Bu eğilim, birçok dilbilgisi kitabına göre kılıcısız geçişsiz eylem kullanmayı gerektiren bağlamlarda gözlenmiştir. Edilgen yapıya olanak vermeyen kılıcısız geçişsiz eylemlerin edilgen yapıda kullanılması (örneğin, *Clouds **were appeared** on the horizon*), ya da bir nesne ile birlikte geçişli olarak kullanılması (örneğin, **The sun **appeared** the clouds*) kılıcısız geçişsiz eylemlere ilişkin diğer tipik sorunlar olarak ortaya çıkmıştır.

Ayrıca bu çalışmada, anadili İngilizce olan katılımcıların da dikkate değer bir kısmının, kılıcısız geçişsiz eylemleri Özne-Yüklem sözdiziminde kullanmaktan kaçınarak edilgen yapıda kullandıkları gözlenmiştir. Bu sonuç, bugüne dek söylenegelen, Özne-Yüklem sözdizimindeki kılıcısız geçişsiz eylemlerin edilgen yapıda kullanılmalarının bir dilbilgisel hata olduğu görüşünü tartışmaya açmaktadır. Bundan başka, istatistiksel olarak anlamlı olmasa da, öğrencilerin genel dil seviyeleri ile kılıcısız geçişsiz eylemleri Özne-Yüklem sözdiziminde kullanmaktan kaçınmaları arasında ters bir bağlantı gözlenmiştir. Bu sonuç da, bu güne dek yapılmış çalışmalarda elde edilen sonuçları destekler görünmektedir.

ABSTRACT

THE USE OF ERGATIVE VERBS BY TURKISH LEARNERS OF ENGLISH

Abdullah CAN

English Language Teaching Department

Anadolu University Social Sciences Institute, September 2000

Advisor: Assistant Professor Ümit Deniz TURAN

This study investigates the use of ergative verbs and related errors made by Turkish learners of English. Ergative verbs, the ways that they differ from other intransitive verbs, the reflection of this distinction in various areas of syntax and morphology are discussed within the linguistic framework of Government and Binding Theory (Chomsky 1981).

The data for the empirical analysis are elicited via a Grammaticality Judgment Test, a Sentence Completion Task and a Sentence Production Task from an experimental and a control group. The experimental group consists of 50 first year ELT students at the end of the 1999-2000 academic year at Uludag University, Bursa, Turkey. The control group includes 60 native speakers of English, professional English teachers and linguists.

The results of the Grammaticality Judgment Test indicated that ergative verbs are more problematic for the learners than other typical intransitive verbs. The results of the Sentence Completion Task and Sentence Production Task showed that the learners tend to avoid paired ergative verbs in NP-VP word order and prefer to use the corresponding passive form instead (e.g. *This shirt is washed easily* instead of *This shirt washes easily*) This tendency is observed in contexts which require ergative forms as suggested in various grammar books. Passivisation of unaccusative verbs (e.g. **Clouds were appeared on the horizon*) and transitivisation of unaccusative verbs (e.g. **The sun appeared the clouds on the horizon*) emerged as typical error types related to ergative verbs.

It was also observed that paired ergative verbs in NP-VP order were also passivised by considerable number of native speakers, which seems to be a challenge to the common claim that passivisation of paired ergatives is a grammatical error. Although not statistically significant, a reverse correlation between proficiency level and the rate of avoidance of ergative verbs in NP-VP word order has been observed in this study. This observation seems to support similar claims made in the literature.

JÜRİ VE ENSTİTÜ ONAYI

Abdullah CAN'ın "The Use Of Ergative Verbs By Turkish Learners of English (Kılıcısız Geçişsiz Eylemlerin Türk Öğrenciler Tarafından Kullanımı)" başlıklı tezi **20 Ekim 2000** tarihinde, aşağıdaki jüri tarafından Lisansüstü Eğitim Öğretim ve Sınav Yönetmeliğinin ilgili maddeleri uyarınca, **İngiliz Dili Eğitimi** Anabilim Dalında, yüksek lisans tezi olarak değerlendirilerek kabul edilmiştir.

İmza

Üye (Tez Danışmanı)	:	Yrd.Doç.Dr.Ümit Deniz TURAN
Üye	:	Prof.Dr.Gül DURMUŞOĞLU KÖSE
Üye	:	Yrd.Doç.Dr.İlknur MAVİŞ

Prof. Dr.Enver ÖZKALP
Anadolu Üniversitesi
Sosyal Bilimler Enstitüsü Müdürü

ACKNOWLEDGEMENTS

I would like to express my special gratitude to my thesis supervisor Dr.**Ümit Deniz TURAN** for her support and valuable comments throughout the study. She always responded to my last-minute requests for help, even with her busy schedule.

I owe much to the academic staff of the ELT Department at Anadolu University, especially Professor **Gül DURMUŞOĞLU**, Associate Professor **İlknur KEÇİK**, Assistant Professors **F. Hülya ÖZCAN**, **Şeyda ÜLSEVER** and **Handan KOPKALLI YAVUZ**. My own contribution to the field, if there is, is based on what they taught me during the MA Program. I am grateful to Assistant Professor **İlknur MAVİŞ** for her valuable comments.

I also thank to the Faculty Administration of *my* University. Professor **Ali ÖZÇELEBİ**, Professor **Mustafa DURAK** and Assistant Professor **A. Rana SAKA** kindly provided me with the opportunity to attend the MA Program at Anadolu University.

I was also fortunate to receive enormous support from Dr.**Hiroyoki OSHITA**. He patiently answered all my e-mails and kindly made his works available to me. I thank to Professor **Ömer DEMİRCAN.** He made very helpful suggestions.

My thanks also extend to **Silvina MONTRUL**, who sent me copies of some articles. I am most directly indebted to **Casey PELTIER** for her constant and unconditional support and unchanging "long-distance friendship". I also present my thanks to **Alastair CLARKE**, **Debbie WALTON**, **John Shaw ADAMS**, **Robyn GOYETTE** and **Brian WISTNER**. They helped me by correcting and modifying the research instruments that I devised for this work.

A lot of English Teachers (who are native speakers of English), whom I have never met before, generously spent their time completing the test sentences of my Sentence Completion Task. An important part of this work would not be possible without their contribution. I thank to all of them (see Appendix K).

I must also express my appreciation to Dr.**Mehmet ZAMAN** for his everlasting support, encouragement and friendship. Dr.**Meral ÖZTÜRK** generously shared her documents with me, and my ex-student, now a colleague of mine, Research Assistant **Şafak BAYIR** kindly searched in libraries in Ankara for materials relevant to the study. I thank to both.

I am also thankful to first year students of the ELT Department of Uludağ University, who participated in the study voluntarily (see Appendix K). It was great fun to work with them.

Finally, my very special thanks go to my family. I am grateful to my father, mother and sister, for their love and trust. By deleting considerable part of this work, my son **Oğuzhan** (Prof Crocodile) taught me how important to back up computerised information.

Without unconditional love and support of my wife, **Seyhan**, I would not be writing these acknowledgements.

Any remaining mistakes and inadequacies in this work are my own.

CONTENTS

SECTIONS Page

CHAPTER 3
ERGATIVE VERBS

CHAPTER 4
LITERATURE REVIEW ON ACQUISITION OF ERGATIVE VERBS

CHAPTER 5
METHODOLOGY

CHAPTER 6
ANALYSIS OF THE RESULTS

CHAPTER 7
CONCLUSION AND IMPLICATIONS FOR L2 TEACHING

LIST OF TABLES

LIST OF FIGURES AND GRAPHS

FIGURES Page

GRAPHS Page

LIST OF ABBREVIATIONS

A-Structure	Argument Structure
BNC	British National Corpus
COBUILD	Collins Birmingham University International Language Database
CR	Corpus References
C-R	Consciousness Raising
DOR	Direct Object Restriction
D-Structure	Deep Structure
e	Empty Category
EFL	English as a Foreign Language
ESL	English as a Second Language
GB	Government and Binding Theory
L1	First Language (Mother Tongue)
L2	Target Language (Second Language)
LLC	Longman Learner Corpus
LSR	Lexical Semantic Representation
NP	Noun Phrase
[P_{loc}]	Locative Preposition
RG	Relational Grammar
SLA	Second Language Acquisition
S-Structure	Surface Structure
VP	Verb Phrase

CHAPTER 1 INTRODUCTION

1.1 Background to the Problem

Gass and Selinker (1994:272) claim that the major task of second language lexical research is "to discover what second language learners know about the lexicon of second language, how they learn it, and why this particular path of development is followed". Because, as Levelt (1989:181) states, "the lexicon is the driving force in sentence production", and "this means that grammatical encoding is mediated by lexical entries".

In the same line, Ingham (1996:35) claims that "the task facing L2 learners in acquiring the syntax of a language may be facilitated ***if they become aware of the distributional properties of individual words*** [emphasis added]", and adds that "it is important, then for researchers to have a better understanding of how lexical semantics could assist the language learner in acquiring properties of syntax".

When the concern is teaching grammar, Little (1994:106) argues that "whether we are concerned with explicit or implicit grammatical knowledge, words inevitably come before structures", because, as he adds, "explicit knowledge of grammatical rules is useless unless we know some of the words whose behaviour the rules describe".

When grammar is considered from the above perspective, Owen describes the following tendency in teaching grammar:

> A cornerstone of the grammar we shall be looking at is the belief that a description of the language should be organised much more closely around ***the ways in which words behave*** [emphasis added] than around abstract structures into which we can slot items selected from a wordstore or 'lexicon' " (1993:168).

It is widely accepted that the final goal of language instruction is to train "native-like" speakers of the target language. In defining the knowledge of native speaker and an important aspect of this knowledge, Cook states that

> a speaker of English knows not just what a word means and how it is pronounced but also ***how it fits into sentences***. The Universal Grammar model of language acquisition ...claims that ***learning how each word behaves in sentences is crucial*** [emphasis added] (1991:43).

Considering the functions of language, "to communicate our ideas" constitutes "the most widely recognised function of language" (Crystal 1987:10), because "it [the language] is the principal medium of human communication" (Clark et al.1998:41). This communication takes place chiefly by means of sentences[1] and as Dixon (1991:9) states "verb is the centre of the sentence".

From ***this*** viewpoint, teaching verbs seems to be one of the important area of language instruction, since it is the verb that establishes the relationship between semantics (*meaning*) and syntax (*structure*). Consequently, the number and order (or position) of the obligatory sentence constituents according to the pragmatic function of the sentence are determined by the verb.

1.2 Problem

In English, it is assumed that there is a sub-class of intransitive verbs, namely ergative verbs[2], that have distinctive properties. As stated by Yip (1994:126), "they look like active intransitive verbs in that they subcategorise for a single Noun Phrase", but the canonical relationship between semantic roles and grammatical functions is not observed in this type as seen in sentences (1a) and (1b) because the syntactic subject in such structures originates as the underlying object of a transitive structure (Radford 1988:446).

(1) a. That cheese cuts easily. (Dixon 1991:329).
b. The guests arrived. (Yip 1994:127).

In the recent years a number of studies indicated that this sub-class of intransitive verbs pose acquisition problems. Studies on the problem (Burt and Kiparsky, 1972; Richars, 1973; Kellerman, 1978; Rutherford, 1987; Hubbard and Hix, 1988; Zobl, 1989; Abdullayeva, 1993; Yip, 1994; Hubbard 1994; Hirakawa, 1995; Ingham, 1996; Oshita, 1997; Montrul, 1997; Karacaer, 1998) revealed that learners misuse such verbs in the following ways:

---

[1] Sentence is the intersection of two aspects of language. In one hand, it is "capable of standing alone to express a coherent thought" (Trask 1993:250), that is, a sentence has a communicative intention such as asking a question, a request for action, warning of something etc. On the other hand it is the "unit of language in which parts of speech (e.g. nouns, verbs, adverbs) and grammatical classes (e.g. word, phrase, clause) are said to function" (Richards et.al. 1992:330).

[2] See section 3.2 for the description and subclasses of ergative verbs..

Since the previous studies have suggested that ergative verbs are problematic for Turkish learners of English, the study addresses the following research questions.

1) Which sub-class of ergative verbs poses more learning difficulties with respect to the other intransitives?

2) What type of errors do Turkish learners of English encounter in using or processing ergative verbs?

3) Is there any connection between the difficulty rates posed by various sub-type of intransitives and overall proficiency levels of the learners ?

4) What might be the cause(s) of the most significant error type concerning ergative verbs?

1.4 Significance of the Study

Studies on acquisition of ergative verbs have shown that erroneous use of these verbs by learners appears in a wide spectrum of syntactic variations as stated in section (1.2).

A general survey on the awareness of English Teachers about the distinct sub-classes of intransitive verbs (see section 3.4 footnote 13) also indicated that ***most teachers and learners are uninformed about the distinction***.

Moreover, distinctions between two sub-classes of intransitive verbs (ergatives and unergatives) ***affect the various areas of grammar both morphologically and structurally*** such as formation of *-er* nominals and *-ed /-ing* adjectives; interpretation of personal pronoun *they*; formation of resultative constructions etc. Consequently, ergative verbs seem to deserve academic investigation.

CHAPTER 2 LINGUISTIC BACKGROUND

2.1. Introduction

The linguistic classification now often referred to as "***ergative verbs***" is a fairly recent discovery first identified by Perlmutter in 1978 in the context of "Unaccusative Hypothesis". This hypothesis proposes that "the class of intransitive verbs is not homogenous, but consists of two subclasses, each associated with a distinct syntactic configuration" (Levin and Rappaport Hovav 1995:2). Within intransitive verbs, Perlmutter called *a class of 'change of state verbs' that denote processes which lack volitional control*[1] as "unaccusative verbs" for the first time (Yip 1994:126). In 1981, Luigi Burzio integrated what Perlmutter had named "unaccusatives" into Government & Binding Theory[2] (henceforth GB) and relabelled them "ergatives" (Doell 1997:Sect.1). This chapter aims to state the theoretical background and the framework in which the class of "ergative verbs" is reviewed.

2.2. Organisation of Grammar

Grammar consists of two major components: the lexicon and the syntax. These components are related by the requirements of ***Theta Criterion*** (Trask 1993:278). (see section 2.3.4)

LEXICON

|

(*Theta Criterion*)

|

SYNTAX

---

[1] Volitional control means that the action denoted by the verb is the result of "the choice or decision made by the will of the subject".

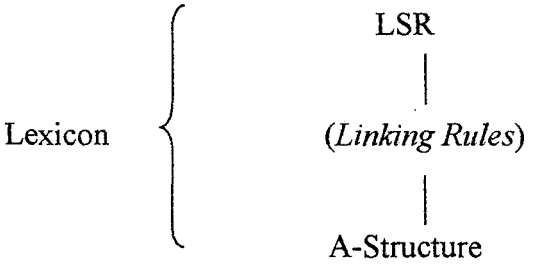
[2] A theory of language developed by Chomsky (1981). GB Theory can be seen a network of following sub-theories which consists of certain principles and conditions:

a.BINDING THEORY shows the reference relationship between noun phrases
b.BOUNDING THEORY places restrictions on movement within a sentence
c.CASE THEORY assigns cases to the noun phrases in the sentence
d.θ-THEORY assigns semantic roles to the elements in the sentence
e. X-BAR THEORY describes the structure of phrases (Richards et. al 1992:159)

2.3. The Lexicon

"The lexicon was described [...] simply as a set of lexical entries, each consisting of a distinctive feature matrix" (Chomsky 1965:164). The lexical entry, in addition to phonological and semantic information, includes grammatical information such as the lexical category (also part of speech or word classes like *Noun*, *Verb*, *Adjective,* etc.), syntactic behaviour and grammatical irregularities (Trask 1993:156).

Lexicon also has two levels of representations: ***Lexical Semantic Representation*** (henceforth LSR) and ***Argument Structure*** (henceforth A-Structure). LSR is the level where grammatically relevant semantic information is represented. A-Structure is the level that contains syntactically relevant information. The two levels in the lexicon are related by ***Linking Rules*** (see section 2.3.3).



2.3.1. Lexical Semantic Representation

LSR is the level of representation that encodes the syntactically relevant aspects of the meaning. Since the discussion within this work is related to verbs, explicit representations of the verb meaning have been of two types: *semantic role lists* and *predicate decompositions.*

In predicate decomposition, meaning of a verb is represented in terms of a fixed set of primitive[3] predicates such as *do, cause, be, become or state* (Montrul 1999:197).

---

[3] Primitive means "any one of the minimal elements in terms of which the system is constructed, and which cannot be defined in terms of any other elements in the system. All other elements used in the system must be defined in terms of the primitives" (Trask 1993:217) Crystal states that primitives are certain constructs in scientific investigations, which are taken as 'given' by a theory (1992:276).

The semantic roles can be identified with particular representations[4] associated with these predicates. For example, LSR of a verb meaning that expresses an action which results in a changed STATE of something due to the CAUSE created by the performer of this action can be shown as:

[*x* CAUSE [*y* BECOME STATE]] (Levin and Rappaport Hovav 1995:75)

In this representation, "*x*" represents the performer of the action and "*y*" the entity that undergoes the directed change.

2.3.2. Argument Structure

Sentence is the largest unit of grammatical organisation in which parts of speech (e.g. nouns, verbs) and grammatical classes (e.g. phrase, clause) are said to be organised (Richards et. al 1992:330). From the viewpoint of generative grammar, sentence is considered the largest syntactic category capable of binding all of its components by the rules of syntax (Trask 1993:250). In English, a simple sentence ***normally*** contains a subject and a finite verb as components. In the structure of the sentence, there is one (or more) noun phrase(s) bearing a specific relation to the verb. These noun phrases are called "**arguments**" and their overt or implied presence is required for well-formedness in structures containing that verb (Trask 1993:20). Arguments may be identified either in terms of syntactic functions (such as *Subject, Direct Object,* etc.) or in terms of semantic roles (such as *Agent, Patient,* etc.) as we shall see in section (2.3.4).

(1) The child broke the bottle.
NP_1 NP_2

In sentence (1) above, there are two arguments, that is, two noun phrases ("*The child*" and "*the bottle*"), whose presence is required for well-formedness of the sentence with the verb "*break*". Note that the following sentences (2a) and (2b) are ungrammatical without these noun phrases :

(2) a. *The child broke
b. *Broke the bottle.

---

[4] Semantic roles are expressed in a particular state which is filling the argument position of the primitive. Such templates are called 'thematic cores' by Pinker (1989), and '*lexical semantic templates*' by Levin and Rappaport Hovav (1995:24).

Different verbs require different number of arguments for well-formedness, as shown in the sentences (3 a-c) which have different verbs. Some verbs require one, some two, and some require three arguments, but no verb requires more than three noun phrases.

(3) a. *My head* ***aches*** (Only one NP, "*my head*")
NP_1

b. *The farmer* ***kicked*** *the horse* (Two NPs, "*The farmer*" and "*the horse*")
NP_1 NP_2

c. *My father* ***gave*** *my sister* *a birthday present*.
NP_1 NP_2 NP_3

(Three NPs, "*My father*", "*my sister*" and "*a birthday present*")

The number of noun phrases that a verb requires is known as its ***valency*** (Jacobs 1995:10). In valency, usually complements (obligatory) and adjuncts[5] (optional) are distinguished.

The specification of the number and types of arguments which a verb requires for well-formedness is called "***argument structure***" (A-Structure) of this verb (Trask 1993:20). For example, the argument structure of the verb "*break*" in sentence (1) [*The child broke the bottle*] can be shown as [**(x(y))**] where "**x**" represents the noun phrase "*The child*" and "**y**" represents the other noun phrase "*the bottle*".

2.3.2.1. Subcategorisation

A member of a single lexical category (*Noun, Verb, Adjective, Preposition*, etc.) can differ in the categories that it combines with, more precisely, in the complements that it takes (Borsley 1991:61,231). Subclassification of lexical categories on the basis of what complements they take is known as subcategorisation. It refers to information about the range of complements which given item takes (Radford 1988:339).

---

[5] Adjunct is part of the basic structure of the clause or sentence in which it occurs, and modifies the verb. Adverbs of time, place, frequency, degree, and manner are examples of adjuncts (Richards et al. 1992:8).

Although both *valency* and *subcategorisation* involve arguments of verb, there are some points that make difference[6] between.

2.3.3. Linking Rules

The grammatically relevant semantic information contained in LSR (see section 2.3.1) is connected to the A-Structure by means of "mapping" (Trask 1993:166) or, as proposed by Levin and Rappaport Hovav, "linking" rules (1995:135). The following sections review the relevant linking rules to the work.

2.3.3.1. Immediate Cause Linking Rule

It is a linking rule proposed by Levin and Rappaport Hovav, which states that "[t]he argument of a verb that denotes the immediate cause of the eventuality described by that verb is its external[7] argument" (1995:135 (1)).

2.3.3.2. Directed Change Linking Rule

It is the second linking rule which states that "[t]he argument of a verb that corresponds to the entity undergoing the directed change described by that verb is [called] its direct internal[7] argument" (Levin and Rappaport Hovav (1995:146 (24)).

---

[6] The ***valency*** tells which arguments are expected. On the other hand, the ***subcategorisation*** tells which combinations are legitimate. The *valency* merely provides a possibility to have an argument. Thus, a verb having three valency slots may have e.g., subcategorisation SVO_iO_d or SVOC. The former denotes: Subject, Verb, Indirect Object and Object, and the latter: Subject, Verb, Object and Object Complement. The default is a nominal type of complement, but there might also be additional information concerning the range of possible complements, e.g., the verb may have an object (SVO), which may also be realised as a to-infinitive clause, WH-clause, that-clause or quote structure (Tapanainen 1997:Sect 3.2).

[7] As has been stated before, predicate determines the arguments, more precisely, predicate has the ability to restrict the kinds of arguments that accompany it. When a predicate selects a particular number of arguments according to the thematic roles of these arguments, it is called ***s-selection*** (Semantic Selection). Besides s-selection properties, it is often assumed that lexical items also have ***c-selection*** (Category Selection) properties (Cook and Newson 1996:161,162). This [c-selection] is the ability to determine THE TYPE OF COMPLEMENT that the lexical item may have. For example, the verbs *ask* and *wonder* both can have a WH-clause or an NP as complement (*Mary asked/wondered what the time was / the time*). As Cook and Newson (1996:171) argues, ***subjects*** are different kinds of arguments from ***complements (objects)*** because complements are *c-selected* and *s-selected* by their head Verbs, but subjects are only *s-selected*. For that reason, complement arguments and subject arguments are viewed as different. As a result, complement arguments are called ***internal arguments*** to indicate that they are included within a domain that only the head Verb has direct control over; subjects are called ***external arguments*** to indicate that they lie outside this domain.

2.3.3.3. Existence Linking Rule

It is the third linking rule which proposes that "[t]he argument of a verb whose existence is asserted or denied is its direct internal argument" (Levin and Rappaport Hovav 1995:153(46)).

2.3.4. Thematic Roles

Thematic role (or theme) is, in GB, the usual term for one of the semantic roles assigned by verbs to their arguments (Trask 1993:278). In numerous works over the past three decades, beginning with the pioneering work of Gruber (1965), Fillmore (1968), and Jackendoff (1972), it has been argued that each argument bears a particular semantic role. Semantic role is any of several semantic relations that a noun (or prepositional) phrase may bear from the viewpoint of the involvement of this phrase in the situation expressed by the sentence. For example, a sentence such as "*Sally gave Jim a record*" has three semantic roles. *Sally* refers to person who is carrying out the action (the **Agent** role), *the record* refers to the object affected by it (the **Theme**) and *Jim* to the person who receives it (the **Goal**) (Cook and Newson 1996:49).

Commonly assumed semantic roles can be listed as:

a) ***patient*** or ***theme*** (Entity undergoing the effect of action as in "***Mary*** *fell over*")
b) ***agent*** or ***actor*** (Instigator or causer of action as in "***John*** *killed Harry*")
c) ***experiencer*** (Entity experiencing a psychological state as in "***John*** *was happy*")
d) ***benefactive*** (Entity benefiting from action as in "*John bought flower* ***for Mary***")
e) ***instrument*** (Means by which something comes about as in "*John wounded Harry* ***with a knife***")
f) ***locative*** (Place in which something is situated or takes place as in "*John hid the letter* ***under the bed***")
g) ***goal*** (Entity towards which something moves as in "*John passed the book* ***to Mary***")
h) ***source*** (Entity from which something moves as in "*John returned* ***from Paris***")

(Radford 1988:373 (97a-h))

As has been stated, prepositions also assign semantic roles to arguments and from this viewpoint, the preposition which indicates the location of its complement can be called [P_{loc}] "locative preposition"(Levin and Rappaport Hovav 1995:21). Some semantic roles which prepositions encode are indicated below:

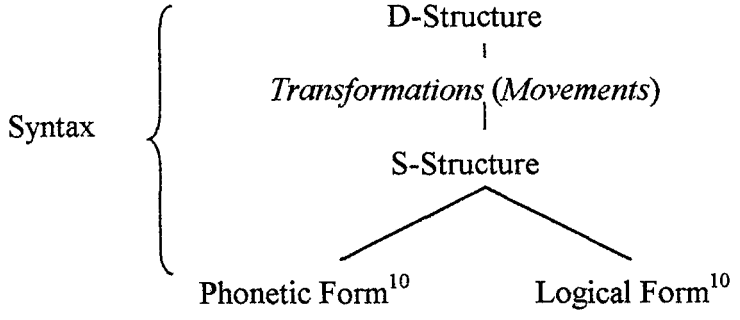
PREPOSITION	SEMANTIC ROLE THAT PREPOSITION ENCODES
in, on, onto	locative
by	agent
from	source
to	goal
with	instrument
for	benefactive

(Radford 1988:381)

In GB, arguments of a verb in a syntactic structure and thematic roles required by the verb's lexical entry (see section 2.3) must match up on a one-to-one basis. As stated by Chomsky (1981:36), "[e]ach argument bears one and only one θ-role[8], and each θ-role is assigned to one and only one argument". This requirement is called ***Theta Criterion***[9].

2.4. Syntax

Syntax, the second major component of grammar, is related to "principles and processes by which sentences are constructed" (Chomsky 1957:11). The syntactic component of grammar also consists of two representational levels: ***Deep Structure*** (henceforth D-Structure) and ***Surface Structure*** (henceforth S-Structure). D-Structure is the initial syntactic representation to which arguments of A-Structure are projected. S-Structure representation is obtained by movements which are called ***transformations***.



[8] "***θ-role***" represents thematic (or semantic) role.

[9] Chomsky (1986:97) has, however, suggested some changes in the way Theta Criterion is to be viewed. One reason is that in its strongest form the Theta Criterion is not completely true. For example, in sentences like *John left the room angry*, the subject *John* is related to two predicates *left the room* and *angry*. In this case, *John* is not only *the one who left the room* but also *the one who is angry*. This looks suspiciously like a violation of the Theta Criterion since the same argument has two thematic roles (Cook and Newson 1996:167).

[10] "The phonetic form (PF) component presents the S-Structure as sound, and the logical form (LF) gives the syntactic meaning of the sentence" (Richards et al :1992:117)

2.4.1. D-Structure

D-Structure is the ***initial syntactic*** representation to which arguments of A-Structure are projected. It shows the basic form of the sentence, and it can be considered an abstract level of representation where semantic roles are assigned to the sentence (Richards et al 1992:117).

2.4.2. S-Structure

S-Structure is a representation which is obtained from D-Structure by movements of constituents from one syntactic position to another, which are called transformations.

2.4.2.1. Case

Case is a distinctive and overtly marked form of a NP. This marked form indicates that that NP bears some identifiable grammatical or semantic relation to the rest of the sentence (Trask 1993:35). Richards et al. (1992:46) define the case as "a grammatical category that shows the function of the noun or noun phrase in a sentence".

Two *case*s relevant to this work are "nominative" and "accusative" cases[11]. Nominative is a case form used for **subjects** of both transitive and intransitive verbs (Trask 1993:184). Accusative is a case form that marks the obligatory argument of a transitive verb typically expressing a patient (from the viewpoint of grammatical function, it is object) which undergoes the action of the verb (Trask 1993:4, 82).

2.4.2.2. Case Filter

Case Filer is a module in GB, which "stipulates that every overt (non-empty) NP must be assigned only one Case" (Trask 1993:35).

2.4.3. Movements

Movement is "any operation by which a word or phrase is moved from one position in a structure to another" (Radford 1997:265). *NP movement* which is related

---

[11] There are other cases such as ***dative, genitive, locative, ablative***, etc. (Trask 1993:35). One most frequently distinguished case is ***dative*** and this case typically expresses *indirect object*. In English, dative is usually marked with prepositions ***to*** and ***for*** as in *"to Mary"* or *"for John."*

to this work involves *passives* and *ergative verbs* (Though there is another *NP movement* called raising[12]).

According to this movement rule, an NP occupying a surface subject position in a passive construction is moved to this position from an underlying object position. For example, The sentence, "*Janet was arrested* **e**[13]" is derived from "**e** *arrested Janet*."

In the same way, ergative "*The ice melted* **e**" is derived from underlying "**e** *melted the ice*" by means of NP movement (Trask 1993:190).

---

[12] In ***raising*** (phenomenon in which some linguistic element appears in a higher clause than is semantically appropriate) the subject of a subordinate clause moves to subject position of the raising verb. Verbs ***seem*** and ***appear*** are typical examples of raising verbs. For example in

____ *seems [**John** is clever]* becomes

John *seems [to be clever]* Otherwise, the empty subject position is filled with a dummy subject as in

It seems that John is clever.

[13] Here "**e**" represents an empty category, that is, any of abstract element which has no overt realisation but which is posited as occupying NP position (Trask 1993:90).

CHAPTER 3 ERGATIVE VERBS

All seemingly intransitive verbs are not created equal.
(Baker 1983:1)

3.1. Introduction

In grammar, verbs can be classified according to various criteria. For example, there are *lexical verbs* and *auxiliary verbs* based on their functions within the verb phrase of a sentence, or one can mention *one word verbs* and *multi-word verbs* (that is, phrasal verbs, prepositional verbs or verb+noun+preposition idioms) according to the number of words that these verbs have.

Another important type of classification based on complementation depends on whether or not the lexical verb in a clause can occur on its own (i.e. without a complement) or it is obligatorily followed by words that complete its meaning (Aarts and Aarts 1982:40). But, recent studies (Perlmutter 1978, Burzio 1981) revealed that classification of verbs based on complementation within the framework of traditional grammar cannot distinguish between different types of verbs that have distinct argument structures.

This chapter mentions the types of verbs in general and explores the classification criteria in order to show that there are two types of intransitive verbs classified with respect to their argument structures. Besides, following the account for the distinctions between these intransitive types, refers briefly to various areas of grammar in which these distinctions are observed.

3.2. Two Types of Intransitive Verbs

Traditionally, verbs that can occur on its own are called intransitive verbs, and these intransitive verbs have been defined in contrast to transitive verbs. While a transitive verb requires an object, either nominal (a word functioning as noun) or clausal, an intransitive verb does not require one. From this viewpoint, verbs are classified into two groups such as *transitive verbs* and *intransitive verbs*.[1]

---

[1] Of course more detailed classification is possible according to the ***type*** and the ***number*** of the complement(s) that a verb can have. For example, Aarts and Aarts (1982:41) mention "monotransitive verbs" that have only one complement (*The farmer kicked* ***the horse***), ditransitive verbs that have two complements (He gave ***her a book***), complex transitive verbs (*They find* ***him a bore***) and non-transitive verbs (*This box contains* ***sugar***) that have different type of complements.

Although a verb is generally labelled as either "*transitive*" or "*intransitive*" from this viewpoint, there are some cases in which the same verb can be used both transitively (with the underlined objects) and intransitively as seen in the following sentences (1a-h)

(1) a. The hare ***runs*** at enormous speed.
b. She ***runs*** a hotel.

c. She ***reflected*** for a moment and then decided to back out.
d. His ideas ***reflected*** the influence of progressive thinkers.

e. I can ***manage*** perfectly well on my own.
f. I can no longer ***manage*** my life.

g. She ***moved*** rather gracefully
h. The whole incident had ***moved*** her profoundly

(Sinclair et al. 1990:152)

As it is seen in the sentences in (1a-h), one important reason for using verbs intransitively as well as transitively is that many **verbs have more than one common meaning**[2]. For example, the verb *run* is intransitive when it is used in the sense "*to move quickly*", but transitive when it is used in the sense "*to manage or operate*".

When we consider the different meanings of a verb as a criterion for transitivity, the verbs of the sentences in (2 a-h) will pose some problems, since these verbs can be used both transitively and intransitively **without any change in meaning**.

(2) a. John ***eats*** an apple for lunch.
b. John ***eats*** sensibly

c. They are ***saving*** money for a holiday.
d. They are ***saving*** to buy a house.

e. She ***typed*** five letters.
f. She sat and ***typed***.

g. Children ***learn*** names of places easily.
h. Children ***learn*** quickly.

(Downing and Locke 1992:74 ; Sinclair et al. 1990:152)

---

[2] Some of them are; *add, aim, blow, call, count, draw, dress, drive, exercise, fit, fly, follow, hang, hold, hurt, leak, meet, miss, pass, play, point, press, show, spread, stand, strike, study, tend, touch, turn, win,*etc. (Sinclair et al. 1990:152)

The verbs in sentences in (2a,c,e,g) all appear with a following underlined noun phrase that serves as object. On the other hand, the same verbs in sentences (2b,d,f,h) lack an overt object, but they are interpreted as if they had one. The objects in these sentences are not needed because it is obvious what type of thing is mentioned or introduced. In other words, the missing objects in such sentences are usually interpreted as typical objects that the verbs would take as transitives. For example, they may be *books* and *novels* for the verb *read* and *meals* for the verb *eat* [3]. Generally speaking, object is introduced when it is different from the one that people would normally associate with the verb or when people want to be specific. These verbs[4] are called "pseudo-transitive" verbs by Oshita, (1997:3), and "*labile*" or "*amphibious*" verbs by Trask (1993:152).

There is another group of verbs similar to the verbs appeared in sentences (2a-h). They are usually transitive but they can be used intransitively with the same meaning. These are verbs where the object is obvious because it has already been mentioned. For example, if the place where something happened has already been mentioned, it is possible to say "*I left*", without naming the place again.

As seen in (3a), (3c), (3e) and (3g) objects are not used again since they have already been mentioned. (cf. sentences (3b), (3d), (3f) and (3h) where the same verbs appear with underlined objects[5])

It should be noted that the verbs in the following sentences (3a), (3c), (3e) and (3g) differ from the verbs of (2b), (2d), (2f) and (2h) in that the verbs in latter cannot

---

[3] It should be noted that the verb ***devour*** which has approximately the same meaning always requires object.

[4] The following are some of the verbs which can be used without an object when it is obvious what sort of thing is involved: *borrow, change, clean, cook, dust, help, iron, learn, lend, marry, paint, park, point, save, sing, spend, steal, study, wash, wave,* etc. (Sinclair et al. 1990:153)

[5]Some other verbs which can be used without an object when the object has already been mentioned are: *accept, aim, answer, approach, ask, begin, bite, blow, board, call, check, choose, consider, direct, dry, enter, explain, fit, forget, guess, improve, join, judge, know, lead, lose, mind, miss, move, notice, observe, offer, order, pass, phone, play, produce, pull, push, remember, ring, rule, search, serve, share, sign, strike, telephone, understand, watch, win.* (Sinclair et al. 1990:154)

be used intransitiviely if the object has already been mentioned in the proceeding discourse [6].

(3) a. At last she thanked them and ***left***.
b. Michael and I never ***left*** the house.

c. He turned away and walked quickly up the passage. I locked the door and ***followed***.
d. Miss Lindley ***followed*** Rose into the shop.

e. I was in the middle of a quiet meal when the tanks ***attacked***.
f. He ***attacked*** the enemy by night.

g. She did not look round when he ***entered***.
h. I ***entered*** the Duke's cabin without knocking.

(Sinclair et al. 1990:153-54)

These examples show the classification of verbs according to surface characteristics of transitivity. On the other hand, it is proposed that **intransitive verbs can also be sub-classified based on the criteria different from those mentioned above**.

Perlmutter (1978) was the first linguist who claimed that intransitive verbs can be divided into separate classes on the basis of different semantic and syntactic patterns. This classification rests on "the thematic nature of the sole argument that these verbs project", (that is the semantic role borne by the noun phrase required for the grammaticality of the sentence in which the verb takes place) as well as on "its [argument's] initial position in syntactic configuration" (Montrul 1999:191).

Consider, for example, the italicised verbs in (4a-c)

(4) a. The children ***laughed*** at the clown.
b. My mother ***swims*** in the lake.
c. The boy ***walked*** around the lake.

---

[6] For example, in the following context, verb "*eat*" cannot be used intransitively, since the object "*apple*" has already been mentioned:
-Where is my apple?
-I have ***eaten*** it.
On the other hand, intransitive use of the verb "*eat*" is possible in the following discourse. (cf. sentences (2 b,d,f,h))
-Will you join us for lunch today?
-No thanks, I have already ***eaten***.

In these sentences, the noun phrases preceding the verbs serve as subjects, and these subjects "*the children*", "*my mother*" and "*the boy*" are responsible (or accountable) for the events (or actions) denoted by the verbs, because in these sentences it is the subject that causes the event deliberately. It is important that these verbs **do not** normally take an object as shown in (5a-c)

(5) a. *The clown laughed the children.
(cf. The clown made the children laugh)

b. *My father swims my mother in the lake.
(cf. My father made my mother swim in the lake)

c. *His father walked[7] the boy around the lake.
(cf. His father made the boy walk around the lake.)

The subclass of intransitive verbs like *laugh*, *swim* and *walk* that take immediate causers as their subjects will be called **UNERGATIVE** verbs within this work. It should be noted that unergative verbs such as *dance, dream, shout, skip, sleep, smile, smirk, talk, telephone, walk,* and *yell* imply volitional control (see chapter 2 footnote 1).

Consider the following sentences quoted from the British National Corpus Online service, managed by Oxford University Computing Services on behalf of the BNC Consortium. Parentheses at the end of the sentences include corpus references (henceforth CR) listed in the References Section.

---

[7] Intransitive verb *walk* can be used transitvely with a limited number of objects. For example, in **Random House Webster's Electronic Dictionary and Thesaurus** (1992: CD Version) the entries for transitive sense of the verb *walk* (v.t) are listed as:

01. to proceed through, over, etc., on foot: *walking London streets by night.*
02. to lead, drive, or ride at a walk, as an animal: *to walk one's horse.*
03. to force or help to walk, as a person.
04. to conduct or accompany on a walk: *He walked us about the park.*
05. to move (a box, trunk, or other object) by a rocking motion suggestive of walking.
07. (of a baseball pitcher) to give a base on balls to (a batter).
08. to spend or pass (time) in walking (often followed by away): *We walked the morning away.*
09. to accomplish by walking: to walk guard.
10. to examine, measure, etc., by traversing on foot: *to walk the boundaries of a property.*

(6) a. The glass ***broke*** with a loud noise (CR-01).
b. The water in one of the bathrooms ***froze*** (CR-02).
c. It ***cooks*** and browns so the food tastes good (CR-03).
d. The curtains ***moved*** at the window (CR-04).

The verbs in (6a-d), are also intransitive since they do not subcategorise for objects (see section 2.3.2.1) but they differ from (4a-c) in that preceding noun phrases which serve as subjects ***are not the immediate causers of the event*** denoted by the verbs (see section 2.3.4). Within these sentences, syntactically unexpressed causers of the events are **implied** and interpreted as a "generic agent" (Oshita 1997:3). Moreover, they are the type of intransitive verbs whose **subjects originate as objects**. In other words, for example, '*break*' in *The vase broke* is such a verb, '*the vase*' being understood in the same way as it is in '*John broke the vase*', where it is an object" (Crystal 1992:364).

Such verbs in (6a-d) will be considered within the general class of ***"ergative"*** verbs in this work, and more explicitly they will be called **PAIRED ERGATIVES** (as a term which covers both INCHOATIVE VERBS and MIDDLE VERBS)[8] since they have morphologically identical causative alternants as seen in (7 a-d) quoted from the corpus. In other words, the same verbs in these sentences can be used as causatives (i.e., transitively) with underlined objects :

---

[8]In the literature there is a further classification of these verbs according to the interpretation of the AGENT of the action. For example, consider the following sentences:

a. *The boat sank*
b. *Greek translates easily*

The verb ***sink*** in sentence (a) is called ***"inchoative"*** because its subject (*The boat*) originates as object, but in the eventuality **there is no one interpreted as *somebody who sank the boat deliberately***. On the other hand, the verb ***translate*** in sentence (b) is called ***"middle"*** because in middles (and passives as well) **there is a subject (that is the agent or causer of the event** (see section 2.3.4)) **either stated or implied**. Consequently, sentence (b) implies that **it is easy for *someone* to translate Greek.** Likewise, the verb ***burst*** in "*The bubble burst*" is ***inchoative*** since there is no (overt or implied) agent responsible for the action volitionally; but the verb ***wash*** in "*This shirt washes easily*" is ***middle*** because it is interpreted that someone washes the shirt volitionally.

Keyser and Roeper (1984:384-87) discuss that there are several differences between middles (or surface intrasitives) and inchoatives. According to Keyser and Roeper,

i.Middles are generic sentences that do not describe particular events (? *Yesterday, the mayor bribed easily*), while inchoatives describe particular event as in sentence (a)

ii.While middles cannot occur in imperative/vocative (**Translate,Greek!*), inchoatives can (*Sink, boat !* or *Close, door !*)

iii. Inchoatives can occur in progressive construction, (*The boat is sinking*) but middles cannot (**Greek is translating*)

iv. Middles require adverbs and without these adverbs they are unacceptable (**Greek translates*), but inchoatives can occur without adverb (*The door opened*)

(7) a. If you ***broke*** a window you had to pay for it (CR-05).
b. That cold statement ***froze*** her heart (CR-06).
c. Hannah ***cooked*** breakfast herself (CR-07).
d. Recently I ***moved*** my tank onto a new stand (CR-08).

The following verbs in (8a-d) seem to share the same characteristics with the verbs in (6a-d) because they are intransitive verbs and appear without any object.

(8) a. A truck ***appeared,*** and rocks and stones were emptied (CR-09).
b. After seven hours we ***arrived*** in Ekondo Jundu (CR-10).
c. If the problem still ***exists***, please contact Support Department (CR-11).
d. That conversation would never have ***happened*** spontaneously (CR-12)

However, the verbs in (8a-d) differ from the verbs in (6a-d) in that they do not allow transitive use with grammatical objects as seen in the ungrammatical sentences in (9a-d) :

(9) a. *A cloud of dust did not appear the truck.
(cf. A cloud of dust prevented the truck from being seen)

b. *The bus arrived us in Ekondo Jundu .
(cf. The bus brought us to Ekondo Jundu)

c. *New product still exists a problem.
(cf. New product still creates a problem)

d. *My friends and I happened that conversation spontaneously.
(cf. My friends and I started that conversation)

Again, such verbs in (8a-d) will be considered within the general class of "***ergative***" verbs in this work, and more explicitly, they will be called **UNACCUSATIVE** verbs (or **unpaired ergatives**) since they **do not** have morphologically identical causative alternants as seen in (9 a-d).

Thus, *the classification of verbs based on complementation*[9] in **traditional grammar**, which is summarised in Figure 1

---

[9] This classification is not an exhaustive one. For detail, refer to Palmer 1965; Aarts and Aarts, 1982; and Levin,1993

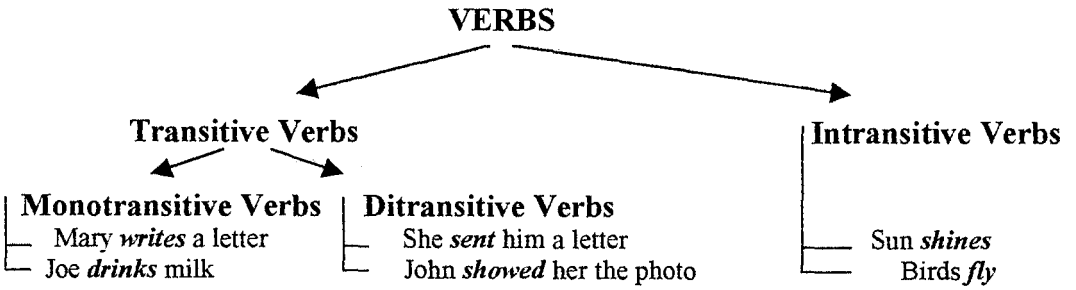


Figure 1 Classification of Verbs based on complementation in Traditional Grammar

Instead the following classification is adapted in this work.

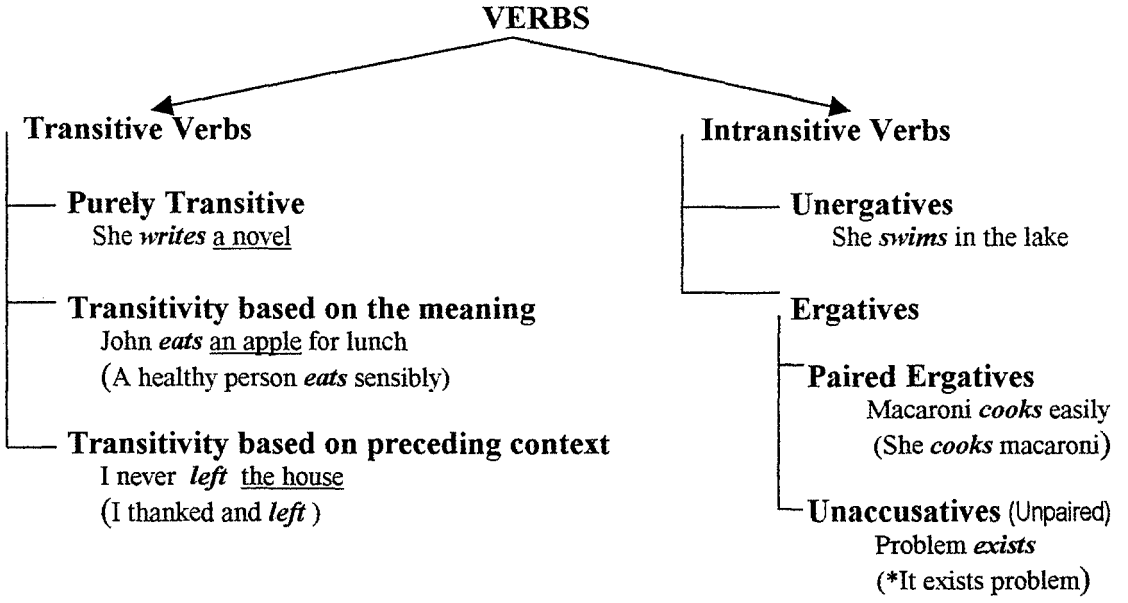


Figure 2 Classification of Verbs based on complementation in Modern Grammar

As has been stated, a comparison between Figure 1 and Figure 2 indicates that ***classification of verbs based on transitivity in traditional grammar does not reflect the distinction between intransitive verbs that have different argument structures***.

3.3. An Account for the Distinction between Ergative and Unergative Verbs

This section aims to discuss the distinctions between ergatives and unergatives. The analytical framework which is adopted here is Government-Binding Theory of Chomsky 1981, which was further elaborated by subsequent developments on lexical theory in the work of Levin and Rappaport Hovav (1995).

The distinction between unergatives and ergatives will be shown by means of LSR (see section 2.3.1) and A-Structure representations (see section 2.3.2) of ergative (both unaccusatives and paired ergatives) and unergative verbs.

3.3.1. LSR and A-Structure Representation of a Transitive Verb

Following is the LSR of the transitive (or causative) verb "***break***" in the sentence (10)

(10) The child broke the bottle

break: [[x DO-SOMETHING] CAUSE [y BECOME ***BROKEN***]]
(Levin and Rappaport Hovav 1995:83(5))

First of all, this representation of the sentence shows that there are two phases within the eventuality described by the verb "*break*". The entity that performs the action of *breaking* (here it is "*the child*") is indicated by "x" (in terms of thematic roles it is the *Agent*) and is contained within the first (or activity) phase. Since "*breaking*" normally causes a change of state, the entity that undergoes a change as the result of the action (here it is *the bottle*) is indicated by "y" (in terms of thematic roles it is the *Theme*), and is contained in the second phase. According to "Immediate Cause Linking Rule" (see section 2.3.3.1), "x" constitutes the *external argument*, and according to "Directed Change Linking Rule" (see section 2.3.3.2), "y" constitutes the *internal argument*. Consequently, A-Structure (see section 2.3.2) of the verb break in sentence (27) can be represented as (x(y)).

3.3.2. LSR and A-Structure Representation of an Unergative Verb

The prototypical unergative verb *laugh* in the sentence (11) has the following LSR representation:

(11) The child ***laughed.***

laugh: LSR: [[x ***LAUGH***] CAUSE [_____]]

The entity that *laughs* (here it is *The child*) is indicated by "x", and it is contained in the first (or activity) phase of the eventuality described by the verb. Since in the activity phase there is no action that ***affect*** something, we use the verb itself

(*laugh*) to express this action instead of primitives (see footnote 3 in chapter 2) such as *do, be*, etc. The second phase (the change of state) is shown blank since "*laughing*" normally does not cause a state or a change in a state.

As for the A-Structure; the "Immediate Cause Linking Rule" (see section 2.3.3.1) projects "x" in LSR to the ***external argument*** position, since "x" represents the immediate causer of the event described by the verb. Since LSR does not include an entity that undergoes the directed change described by the verb, the internal argument position is shown as null, (ø), and the A-Structure of the unergative verb "*laugh*" can be represented as **[(x(ø))]**. The connection between LSR and A-Structure can be schematised as follows:

LSR : [[x ***LAUGH***] CAUSE [_____]]

↓ ⟵ Immediate Cause Linking Rule

A-Structure : (x (ø)) (Summarised from Oshita 1997:7)

3.3.3. LSR and A-Structure Representation of a Paired Ergative Verb

Following is LSR representation of paired ergative verb "*break*" in the sentence (12).

(12) The window ***broke*** .

break: LSR: [[ø DO SOMETHING] CAUSE [y BECOME ***BROKEN***]]

As LSR indicates, there is no entity specified that *breaks* the window in the activity phase of the eventuality described by the verb. For that reason, immediate causer of the event is represented as "ø". However, in the second (or change of state) phase there is an entity (here it is *the window*) that undergoes the directed change described by the verb. This entity was represented as "y" in the second phase.

In this case, according to the "Directed Change Linking Rule" (see section 2.3.3.2), the entity "y" in the *change of state phase of LSR* is projected as internal argument, because it is the entity undergoing the directed change. Since LSR does not include an entity that is responsible for the eventuality described by the verb, the external argument position is shown as (ø), and the A-Structure of the paired ergative

verb "*break*" is represented as **[(ø (y))]**.

At D-Structure (see section 2.4.1), the internal argument (y) is projected as an NP, but this NP fails to receive "accusative case" (see section 2.4.2.1) due to a linguistic condition known as "Burzio's Generalisation"[10]. According to this condition, "a verb which lacks an external argument fails to assign "accusative case" (Burzio 1986 cited in Haegeman 1994:321). Consequently the NP *moves* (see section 2.4.3) to Subject position at S-Structure (see section 2.4.2) and receives "nominative case" (see section 2.4.2.1) to avoid violation of "Case Filter" (see section 2.4.2.2).

As a result, the paired ergative verb "break" can be represented as follows:

LSR: [[ø DO SOMETHING] CAUSE [y BECOME ***BROKEN***]]

↓ ⟵ Directed Change Linking Rule

A-Structure : (ø (y)) (Summarised from Oshita 1997:9)

3.3.4. LSR and A-Structure Representation of an Unaccusative Verb

The prototypical unaccusative verb "exist" in sentence (13) has the following representation:

(13) The idea ***exists*** in my mind.

exist: LSR: [[_____] CAUSE [y BE (P_{loc} z)]]

In LSR of the unaccusative verb "exist", the activity phase is shown blank since there is no entity and no relevant activity that causes a change. Within the second (state) phase, the entity which *exists* (here, *The idea*) is represented with "y" with its locative preposition [P_{loc}] (see section 2.3.4) indicating its location "z".

Since LSR does not include an entity that is responsible for the eventuality described by the verb, the external argument position is shown as (ø). But the *existing* entity which is represented with "y" in the second (state) phase is connected to the

---

[10] Burzio states that the function of this generalisation is to force a non-subject NP into an empty subject position (cited in Trask 1993:34). For example, in passive formation the passive morphology absorbs the accusative case to the direct object. When the object remains caseless, it has to move to the subject position.

internal argument position by the "Existence Linking Rule" (see section 2.3.3.3). Then A-Structure of the unaccusative verb "*exist*" is represented as **[(ø(y))]**.

At D-Structure the internal argument (y) is projected as an NP. Again, this NP fails to receive "accusative case" because the verb "*exist*" lacks an external argument. Consequently the NP moves to Subject position at S-Structure (see section 2.4.2) and receives "nominative case" (see section 2.4.2.1) there, avoiding violation of "Case Filter". Finally, representation of the unaccusative verb "*exist*" is;

LSR : [[_____] CAUSE [y BE (P_{loc} z)]]

↓ ⟵ Existence Linking Rule

A-Structure : (ø (y)) (Summarised from Oshita 1997:10)

3.3.5. Comparison between LSR and A-Structure Representations of Ergatives and Unergatives

The discussion above indicates that sub-classes of intransitive verbs differ from each other in that their arguments bear different thematic roles and different initial syntactic positions.

More explicitly, **unergative verbs which have external but no internal arguments** [(x(ø))] **differ from ergative** (paired ergatives-unaccusatives) **verbs which have internal but no external arguments** [(ø(y))].

It should be noted that both paired ergative verbs like *"break"* and unaccusative verbs like "*exist*" fall into the same group of verbs that match the condition of "Burzio's Generalisation". This is because both types of verb lack an external argument in their A-Structure representation. Despite their different Lexical Semantic Representations, these two kind of verbs (paired ergatives and unaccusatives) share the identical D-Structure and S-Structure. For that reason, we can conclude that both sub-types of ergative verbs such as *break* and *exist* form one major subclass of intransitive verbs and they contrast with unergatives such as "*laugh, dance* and *swim*".

In sum, considering the syntactic properties of intransitive verbs from this perspective, we can make the following points about the new sub-types of intransitives discussed so far:

a) ***There are two major subclasses of intransitive verbs, namely unergatives and ergatives. As a further subclassification, ergatives can be divided into two groups, that is, paired ergatives and unaccusatives*** *(unpaired ergatives)*

b) ***The surface subject of an unergative verb shares some characteristics of the subject of a transitive verb.***

For further explanation, consider the following sentences,

(14) a. Jeremy **swims** in the lake. (unergative)
b. George **reads** the book (transitive)

In (14a) the "surface subject" (the subject as a syntactic function other than semantic considerations) meets some criteria[11] of the syntactic function "subject" introduced by Aarts and Aarts (1982:133). From the viewpoint of ***position***, the subject (*Jeremy*) precedes the verb phrase; from the viewpoint of ***concord***, it accounts for the presence of a sibilant suffix in the verb phrase, and from the viewpoint of ***repetition in tag questions***, its pronominalised form (*she*) takes place in tag-question when a tag question is added. Consequently, the surface subject of an unergative verb shares some (not all) characteristics of the subject of the transitive verbs as stated above. For example, the subject of an unergative verb (*Jeremy*) does not meet the criterion

---

[11] According to Aarts and Aarts (1982:133-35), the function subject may be attributed to a constituent of a sentence on the basis of following criteria:

1. POSITON: Syntactic function Subject precedes the verb phrase in statements (***He shouldn't have done it***) and in questions containing *who, whose, what, which* and their compounds ever (***Who(ever) knows this?***) It follows the first word of the verb phrase in Yes/No questions (*Does* ***he*** *realise he is wrong?*), in questions introduced by *when, where, why* and *how* (*When did* ***you*** *see the accused last?*)

2-CONCORD: Syntactic function Subject accounts for the presence of a sibilant suffix (3rd person singular present tense indicative) in the verb phrase. (***John*** *hate**s** his brothers*)

3-PASSIVISATION: The subject of an active sentence can be attributed to that constituent which occurs in the *by*-phrase of the corresponding passive sentences (***The Pope*** *excommunicated the Cardinal→ The Cardinal was excommunicated* ***by the Pope***)

4-REPETITION IN TAG-QUESTIONS: Pronominalised form of the Syntactic function Subject can be repeated in so-called tag questions. (***John*** *hates girls,* ***doesn't he***)

passivisation, that is, as seen in sentence (15) the subject in the underlying active sentence can not occur in *the by-phrase* of the corresponding passive one.

(15) *The lake is swum *by Jeremy*

On the other hand, subject of a transitive verb meets the same criterion as seen in sentence (16), since the subject of the underlying active sentence occurs in the *by-phrase*.

(16) The book is read *by George*

From the viewpoint of thematic roles, (see section 2.3.4) **both subjects** in (10a) and (10b) **are identical since they are both *agents***[12], i.e., performers of the action.

c) ***The surface subject of an ergative verb shares characteristics of the object of a transitive verb***.

(17) a. The shirt ***irons*** easily (ergative)
b. Mary ***irons*** the shirt . (transitive)

In (17a), the noun phrase "*The shirt*" functions as the "surface subject" of the ergative verb "*iron*" according to the "***position***" criterion because it precedes the verb phrase. Since it [*The shirt*] marks the verb with sibilant suffix [*iron*s], the "***concord***" criterion can also be observed. From the viewpoint of thematic roles it [surface subject *The shirt*] bears, it is ***theme*** (see section 2.3.4).

On the other hand, in the sentence (17b), the noun phrase "*the shirt*" functions as the object of the transitive verb "*iron*". From the viewpoint of semantic role of the object "*the shirt*", again it is the ***theme***. Consequently, as seen above, **the surface subject of an ergative verb shares characteristics of the object of a transitive verb.**

---

[12] It is incorrect to claim that subject of a transitive verb is always interpreted as "agent" from the viewpoint of thematic roles. Consequently, the complement of *-by phrase* in a passive is not always "agent" For example, in the following sentences, thematic roles of subjects vary:

a. Mary killed Bill.	Bill was killed by ***Mary***	(AGENT)
b. John sent the package	Package was sent by ***John***	(SOURCE)
c. Bill received the letter.	Letter was received by ***Bill***	(GOAL)
d. All students fear that professor	That professor is feared by ***all students***	(EXPERIENCER)

(based on Jaeggli (1986:599))

3.4. More on Paired Ergatives

Some studies on the issue, Abdullayeva (1993), Montrul (1997), Karacaer (1998) and the others[13], indicated that paired ergatives (such as *break, melt, cook, sell, cut* etc.) in NP-VP word order seem to be the most problematic sub-class of the ergatives for Turkish learners of English. Besides, grammaticality of the structure with certain paired ergative verbs is open to question since considerable number of native speakers of English have different views about the matter.

This part of the study is mostly based on views of Dixon (1991:322-27), Levin and Rappaport Hovav (1994:61), Thewlis (1997:56-57) and some English Teachers who are native speakers of English.

3.4.1. The Contexts where Paired Ergatives are Used.

Dixon (1991:322) argues that "the semantic role which is most likely to be relevant for the success of an activity is placed in syntactic subject relation". For example in sentence (18) it is *Mary* who is responsible for the lack of success:

(18) Mary didn't pour the custard properly.

In the context above, the lack of success might be because of weak arms of *Mary* or her clumsiness or incompetence. As Dixon (1991:322) claims, in some particular instance of an activity, it is possible for the success or lack of success of an activity to be due **not to the subject**, but to some role in non-subject relation. Consider the following cases in sentences (19a) and (19b)

(19) a. The custard doesn't pour properly.
b. The new jug doesn't pour properly. (Dixon 1991:322)

In (19a), it might be due to the fact that the custard has too many lumps in it. In (19b) one cannot pour whatever the jug contains because the jug has a crooked spout. In both cases, subjects are not responsible for the lack of the success of the activity.

---

[13] Interviews with English Teachers at Pertevniyal Lisesi (Istanbul), Yıldırım Bayezit Lisesi (Bursa) and Nuri Erbak Lisesi (Bursa) revealed that students and (even most teachers) are not conscious of the ergative structures such as "*This cloth washes easily*, or *That report reads well*". Besides, in 1998 a pilot study related to the topic indicated that nearly all of the fourth year students at ELT Dept of Uludag University were not aware of the structure in question. (Can, 1998 ***The Learnability Problem of English Ergative Verbs*** Seminar Work in MA Program at Anadolu University)

In this case, the non-subject cause is promoted into subject slot and the original subject is omitted from the sentence. Likewise, it might be interpreted that *Sports cars sell quickly* since it is inherent in the nature of the vehicle that people want to buy them, or *The shirt washes easily* because of the material it is made of.

Levin and Rappaport Hovav (1994:61) suggest that this structure is possible if "[t]he eventuality can happen spontaneously without the volitional intervention of an agent".

Thewlis (1997:57) lists the following cases in which such structures are preferred for pedagogical purposes:

a) In "dramatic narration" (e.g. "Suddenly the window ***shattered*** into a million pieces".)

b) When "the most important information is not the verb" (e.g. "The mirror shattered into ***a million tiny pieces***".

c) When "there is no single identifiable agent, or the agent is unknown or unimportant". (e.g. "The demonstration quickly ***developed*** into a serious confrontation with the police".

d) When "the subject is one that can change without an apparent agent". (e.g. "The ***bubble*** burst".)

3.4.2. Distinctive Grammatical Properties of Paired Ergatives

Dixon (1991:325) states that this structure, paired ergatives in NP-VP word order, is possible "when there is some marker of the activity. This marker can be an ***adverb***, the ***negative particle***, a ***modal***, or **emphatic *do***". The following are brief explanations about these markers:

a. **Adverb**: Only a small set of adverbs based on adjectives from three semantic types[14] (speed, value and difficulty) occur in this structure.

---

[14] Some adverbs belong to these semantic classes are
SPEED : *slowly, fast, quickly, rapidly*
VALUE : *well, badly, properly, oddly, strangely* (but not most other members of this type)
DIFFICULTY : *easily* and the adverbial phrases *with/without difficulty* (note that **difficultly*)
(Dixon 1991:325-26)

(20) a. The bucket fills *rapidly* (speed)
b. This scene does not photograph *well* (value)
c. These mandarins peels *easily* but those oranges peel only *with great difficulty*. (difficulty)

b. **Negative Particle**: This can be used when the lack of success of some activity is attributed to the referent of underlying object.

(21) That book *didn't* sell.

c. **Modal**: Most modals may be the marker of this structure as seen in the sentences (22a) and (22b).

(22) a. Do you think this material *will* make up into a nice-looking dress?
b. Yes, it *must / should / ought to / might* make up into a really stunning gown.

d. **Emphatic *do***: The semantic effect of emphatic *do* can be similar to that of an adverb *well*.

(23) These red sports models *do* sell, don't they?

Dixon adds that markers mentioned above are almost always obligatory if the underlying object is promoted into subject slot. For that reason, "sentences like *The new jug pours*, *Sports car sell*[15], *The woollens washed* are ungrammatical; but if something like *well* or *don't* or *won't* is added, they become acceptable" (Dixon 1991:326).

The most common tense choice for this structure is "present" with generic time reference, e.g. *That type of garment wears well.* But past tense is possible as in *The woollens washed well.* Sometimes an adverb like *well* may be omitted when the construction is in present tense, reinforced by an adverb such as *always*, e.g. *I find that Easter eggs always sell.*

Additional examples listed below are claimed to be grammatical by the authors of some grammar books. On the other hand there are native speakers of English who question the grammaticality of the some paired ergatives in this structure. One may form an opinion by comparing the following sentences and native speaker views.

---

[15] Dixon states that the verb ***sell*** is one the verbs that most frequently used in this structure, and can be acceptable without a marker. For example, *Did those cars sell?* is acceptable (1991:326).

(24) a. The woollens ***washed*** well in the Hoovermatic.
b. I am afraid that this scene does not ***photograph*** well.
c. Porcelain sinks ***clean*** easily.
d. This boomerang ***throws*** well.
e. That box ***lifts*** easily.
f. The new design of ball ***catches*** easily.
g Your case ***carries*** easily.
h. This string won't ***tie*** properly.
i. My new steel-tipped boots ***kick*** well.
j. That shape of box doesn't ***wrap up*** easily.
k. This dirt won't ***brush off***.
l. These Mills and Boon novels ***lend*** rather rapidly.
m. Milk won't ***keep*** in hot weather.
n. Top-floor apartments tend not to ***rent*** so easily as ground-floor ones.
o. The Kingsland Police ***bribe*** easily.
p. These pills ***swallow*** easily.
q. This meat ***chews*** rather easily.
r. This new board game ***plays*** well for a competition.
s. This kingdom ***governs*** easily with this social contract.
t. Grandpa ***tires*** quickly these days.
u. Greece and Italy don't ***compare*** in terms of cuisine.
v. Shakespeare's works ***translate*** well into French.

(Dixon 1991:322-34)

(25) a. The cloth ***tore***.
b. The rice ***cooked***.
c. My resolve ***weakened***. (Halliday 1994:163)

3.4.3. Native Speakers' Views on Paired Ergatives in NP-VP Word Order

Dixon notes that this structure is not a very common phenomenon, because it applies only for certain kinds of NP filling non-subject relations (1991:328). Although not very common, it is a structure still in use by native speakers of the language.

Grammar can be defined from various viewpoints and from a perspective, *description of* "what speakers know" *is called descriptive grammar* (Jannedy et al. 1994:12). Similarly, Richards et al. (1992:162) claim that "a sentence is grammatical if it follows the rules of a native speaker competence". In defining the type of language to be taught, Rivers (1981:42) argues that "language is what its native speakers say, not what someone thinks they ought to say". Following the reasoning above, it seems to be worth to mention and consider native speakers opinions on the structure.

3.4.3.1. Native Speakers who Accepted the Structure

Peltier[16] (p.c:2000) has the following opinion about the structure in question:

> The more I look at the examples you use for this study, the more I am struck that we use that structure mostly to sell things. *Blouses that wash easily, wear well, iron beautifully, hang out nicely* (remove wrinkles by hanging on a hanger over night) and so on are the first examples that come to my mind. *A car that drives like a dream, paint that goes on in a flash, hair colouring that shampoos in and rinses out, tools that sharpen quickly, milk pitchers that pour neatly, computer components that connect easily*--all of these are things that are used by persons, but when we write advertising copy, we commonly leave the "agent" out, and make it look like the receiver of the action is doing the action. So perhaps the next time you have to explain this phenomenon to someone, tell them it's the **Madison Avenue** structure.

Peltier's opinions indicate that this structure is mostly used in advertisements in a sense that receiver (or buyer) of the product is considered to be the performer of the action.

In response to my query posted on a discussion board, Meadows[17] (p.c:2000) suggests the following considering the structure from the viewpoints of the organisation of language, cognition, culture and context:

> I am not sure this grammar and syntax structure explains easily. It is in common use. It reverts to the most primitive, simple, use of mental schemata associated with words. That is, each word is finite in its concept and infinite in its function. That is, one word is a noun, a verb, an adjective and any other function of a concept. Perhaps it can be considered idiomatic. We simply take two concepts and put them together in their most logical fit. It is somewhat like "*the clothes fit well*," a transitive expression without an object, even if we know that clothing performs no action. We hear the subject and we hear the verb and common knowledge fits them together properly. For instance: *This material washes easily.* We understand what material is and we understand what wash is. So, we put them together. If we did not know that material can be washed, we would not be able to do this. However, if we add the word, windows, as in "*This material washes windows easily*" we re-examine the meaning. In a sense, the sentence "*This material washes easily*" can be considered passive because the subject is being washed, only because we understand that there is nothing else in the sentence to be washed and that it will not wash itself. I think perhaps the structure is more idiomatic than anything else, however. English is perhaps more primitive than other languages wherein such syntax is not meaningful, not allowed. Consider the ancient Egyptian word, *Ankh*, which means *alive, live, living, the living, to live, did live, is living, shall live, vibrant, quick* and all other indications of life. Culture, and knowledge of culture, is an important aspect of the use of such forms. An example that would require more exact knowledge of context to serve in this manner: *Birds kill easily.* Are we speaking of *hunting birds* or explaining *how birds treat worms*?

---

[16] **Casey Peltier** is an Adjunct Instructor at English Language Institute, George Mason University, Fairfax, Virginia, USA. She holds a Masters of Arts in English Linguistics and a Graduate Certificate in TESOL from George Mason University. (p.c via e-mail from *casevp@patriot.net* Date 15 May 2000 / 05.27)

[17] **J.Richardson Meadows** is a linguist who is teaching English as a Foreign Language at Old Dominion University, Norfolk, Virginia. (p.c via e-mail from *jmead001@odu.edu* Date 19 May 2000 /16.35)

For the distinction between sentences "*The book reads easily*" and "*The book is read easily*" a native speaker[18] (p.c: 2000) comments that:

> I think the distinction in these two sentences is very high level, concerning advanced writers and editors. "*The book reads easily*" is used often by reviewers. In conversation I think a person would be more likely to say "*The book is easy to read*". "*The book is read easily*" sounds unnatural and incomplete to my ear. It would be more natural to say "*The book is* (can be) *read easily in one hour*". Or, "*The book is* [easily] *read by those knowledgeable in physics*". (I would change the position of "easily".) The sentence sounds formal, so it might be part of an academic text or review paper. As you know, English speakers seldom agree on small matters!

Payne[19] (p.c:2000) accounts for the distinction between the sentences "*The bag is carried*" and "*The bag carries*" as follows:

> The difference between "*The bag is carried*" and "*The bag carries*" is clear. First, both of them are totally non-functional without some other adjunct. So you might say "*The bag is carried from the store to the house, and left on the front porch.*" You might also hear "*The bag carries easily* [but not the box]." But you would never hear "**The bag carries from the store to the house ...*" This is just totally ungrammatical. "*The bag is carried easily*" makes some sense *to me, but it means something different than "The bag carries easily." "The bag carries easily*" describes a property of the bag, e.g., it has handles on it. "*The bag is carried easily (by John)*" describes a situation in which someone is carrying a bag easily, e.g., someone who is very strong is carrying a bag that no-one else could lift.

As a response to the my query asking the usage frequency of ergative structure, Sandeen[20] (pc:2000) states that "[t]he Shakespeare example [Shakespeare's works translate well into French.] is an excellent example of one verb 'translate' which is ***often used*** [emphasis added] in this structure". She adds that "***common sense*** [emphasis added]" is the criterion to distinguish between "ergative structure" and its "passive counterpart".

Elliot[21] (p.c:2000) considers the matter from the viewpoint of language variety, and thinks that

---

[18] **A native speaker** teaching ESL and writer of ELT materials from StMU, Texas, USA (did not permit her name to appear) (p.c via e-mail Date 9 June 2000 / 17.12)

[19] **Tom Payne** from University of Oregon, USA (p.c via e-mail from tpayne@oregon.uoregon.edu Date 01 June 2000 / 00.18)

[20] **Sue Sandeen** from Gainesville, Fl, USA (p.c via e-mail from Sandees32605@aol.com Date 01 June 2000 / 23.08)

[21] **Don Elliott** from Texas, USA (p.c via e-mail from maese@ij.net Date 22 June 2000 / 04.35)

> One must keep in mind that there are many regional variations of English as well as numerous idiolects. While it is easily accepted that these are not the most common ways of expressing the thoughts presented, each is correct. All too often some people will consider such structures to be wrong because of hypercorrection of their part.

3.4.3.2. Opposing Views

Not all the native speakers share the same opinion about the structure. For example, Millar[22] (p.c:2000) thinks that ***it is unnecessary to avoid the passive if it works***, and he deliberately preferred passive structures in the sentence completion task given to the control group of the study.

According to Meadows[23] (p.c:2000), ***the choice of ergative or passive structure is to the speaker*** and "it all means the same thing". Besides he thinks that "[t]his is very unimportant in English".

Considering some verbs in ergative structures proposed by Dixon (1991:322), a native speaker[24] (p.c:2000) finds "it difficult to believe", in the following instances, "that the sentences were offered by a textbook writer as revered as Dixon once was". These sentences are, "*The new design of ball catches easily*" and "*The new board game plays well for a competition*". Moreover, she thinks that a learner of English who is studying for the TOEFL or some similar exam will never encounter this sort of grammar questions.

Referring to the expected ergative structures in the sentence completion task of this study, Stanley[25] (p.c:2000) states that

> Let me mention that I would probably not use any of these sentences. Now, I could say, "*The book can be read relatively easily*", "*This bag can be carried fairly easily*". I don't particularly like "*The book reads easily*", but would rate it borderline. However, I find "*This bag carries easily*" unacceptable.

---

[22] **George Millar** is a retired English teacher. He taught 5 years in Ireland, 27 years in Canada, 1 year in Korea. (p.c via e-mail from *geomillar@hotmail.com* Date 19 May / 23.04)

[23] **J.Richardson Meadows** is a linguist who is teaching English as a Foreign Language at Old Dominion University, Norfolk, Virginia. (p.c via e-mail from *jmead001@odu.edu* Date 27 May 2000 /22.58).

[24] **A native speaker** from Gainesville, Fl, USA (did not permit her name to appear) (p.c via e-mail / Dates 31 May 2000 / 12.40 and 01 June 2000 / 23.08)

[25] **Karen Stanley** from Central Piedmont Community College North Carolina, USA (p.c via e-mail from *kstanley@charlotte.infi.net* Date 10 June 2000 / 15.07)

Considering most of the ergative structures in the sentence completion task as grammatical, Zante[26] (p.c:2000) raises an objection against the ergative structure with the verb *swallow* and states that "this one [sentence with the verb swallow] DEFINITELY can't be "swallow easily" because *pills can't swallow*".

A 75 year-old native speaker[27] (p.c:2000) who calls himself "linguistically (though not socially) very conservative" states that in practice he would never use these "active" forms himself and he would always use either ***a passive*** or some expression like "*you can peel them easily*".

As seen, paired ergative verbs in NP-VP word order seem to be a matter of discussion, and "passivisation" should not be considered an absolute error from the perspective of Descriptive Grammar.

3.5. Brief History of Ergativity

The word "ergative" is derived from the ancient Greek word for "work" ÉRGON[28]. (Random House Dictionary (CD Version) [Etymology Module] 1992)

Tchekhoff (1978:12) claims that the term "ergative" was first coined by Adolf L. Dirr in 1928 (cited in Doell 1997:section 1). Doell adds that Dirr used the term "*ergative*" to describe languages in which the subjects of intransitive verbs and the objects of transitive verbs are treated in the same way syntactically or morphologically. On the same topic, Trask explains the matter in a slightly different way:

> Usually credited to Dirr (1912) [16 years earlier than Tchekoff claimed] but Alexis Manaster-Ramer has uncovered earlier uses by Sidney Ray, Johannes Schmidt and Alfredo Trombetti. Ray's unrelated locative use is from Latin *erga* 'next to, towards'; the modern sense is presumably from Greek *ergon* 'work' (1993:92-93).

In 1968, Lyons examined the relationship between transitivity and ergativity from a different perspective. Considering the sentences (26a) and (26b), he stated that "the subject of an intransitive verb 'becomes' the object of a corresponding transitive verbs,

---

[26] **Janis van Zante** (is writer and editor of English language teaching materials and teacher trainer) from Boulder, Colorado, USA (p.c via e-mail from *jvzante@ix.netcom.com* Date 23 June 2000 / 08.30)

[27] A native speaker from UK (who did not respond to the mail asking for permission to be mentioned his name) (p.c. via e-mail / Date 30 June 2000 / 20.57)

[28] It is interesting to note the similarity between the Greek word "ergát" ,which means worker, and the Turkish word "ırgat" which has the same meaning in some regional dialects.

and a new *ergative* subject is introduced as the 'agent' (or 'cause') of the action referred to" (Lyons 1968:352).

(26) a. The stone moved
b. John moved the stone (Lyons 1968:352(1,3))

Moreover, Lyons introduced the following pair of Turkish sentences including the Turkish verb *pişmek* (cook) which is a typical example of a paired ergative verb[29].

(27) a. Patlıcan pişiyor . ('The eggplant is cooking')
b. Ahmet patlıcanı pişiriyor ('Ahmet is cooking the eggplant)
(Lyons 1968:353 (8,9))

It was Perlmutter (1978) who classified the intransitive verbs into two subclasses, and today, the type of verbs known as "*ergatives*" is based on this classification. Following Perlmutter, Burzio studied on ergatives and integrated this class of intransitive verbs into GB (see footnote 2 in section 2.1) in 1981.[30]

3.6. Other Terms Suggested for Ergative Verbs

When the term "ergative" was coined first, it referred to subsystems of languages[31] (verbal agreement, word order, syntactic and even discourse properties) that treat Subject and Object in a specific way (Manning 1996:4).

As a term referring to sub-class of intransitive verbs in question, Perlmutter used the "*unaccusative*" for the first time (Yip 1994:126). The term "*unaccusative*" was emphasising the ***un***ability [sic.] of such verbs to assign accusative case (see section 2.4.2.1) to the direct object. Luigi Burzio relabelled these verbs "*ergatives*" (Doell

---

[29] I propose a number of Turkish sentences including inchoative and unaccusative verbs:
a)Inchoatives that has causative alternant
Uzakta bir gramafon çalıyordu. Bu türküyü bana çaldırdılar.
Tabelada sağa dönün yazıyor Tabelaya sağa dönün yazdırdı.
Lamba söndü Ali lambayı söndürdü
b)Unaccusatives that have no causative alternant
Aniden karanlık çöktü (bastı) *Kış mevsimi karanlığı erkenden bastırıyor
Dalları kiraz bastı *Ağaç dallarını kiraz bastırdı
Bugün Görükle çok esiyor. *Görükle çok (rüzgar) estiriyor

[30] For a detailed account of the history of the term "ergative" see Seely (1977)

[31] For some of the ergative languages (such as Basque, Dyirbal and the others) and their distinctive properties see Dixon (1994:2-5) and Palmer (1971:76).

1997:Sect.1) while integrating what Perlmutter had named "*unaccusatives*" into Government and Binding Theory. According to Burzio (1981:45), "[e]rgative verbs refer to all verbs that appear in D-structure (see section 2.4.1) with a direct object, and with a non-thematic[32] subject [i.e., without a theta-role]".

Among others, Keyser and Roeper (cited in Yip 1994:126); Sinclair, et al. (1990:155); Halliday (1994:163) and Radford (1998:446), followed Burzio in using the term "***ergative***" in this sense.

However, the terminology for this phenomenon is a matter of heated academic debate. For example, Dixon has the following opposing view:

> The use of 'ergative' in this lexical-semantic/causative sense is quite illicit... Sadly, the misuse does not stop here. In what Pullum (1988:585) calls 'a truly crackbrained piece of terminological revisionism' , there has arisen the habit - which appears to have begun with the MIT theses of Burzio (1981) and Pesetsky (1982)- of again using the term 'ergative' in connection with pairs of sentences such as *John opened the window* and *The window opened*, but now referring to S and O as 'the ergative set'. Not only is the label 'ergative' being used in an appropriate context, it is being used for the wrong member of the opposition, in place of 'absolutive' (1994:20).

Consequently, Dixon (1991:322) calls the structure "promotion to subject" instead of using the term "ergative verb".

The ergative structure labelled "promotion to subject" was introduced in some pedagogical grammar books under different headings mostly in relation to *passive structure*.

For example, Palmer (1965:90), under the heading of "Lexical Passive", states that "it has long been known that many verbs in English function both as transitives and intransitives". According to Palmer, following examples in (28 a-c) were ***verbs that function as both transitive and intransitive***.

(28) a. The bell **rang**.
b. The window **broke**.
c. The door **opened**. (Palmer 1965:90)

---

[32] Here, non-thematic subject means a syntactic subject which does not have a thematic role (see section 2.3.4). In other words, subject meets syntactic criteria such as position, concord etc., but it is not the agent (causer) of the action, nor is it theme.

Swan (1980:457) also considers "ergatives" as ***active verbs which can be used with passive meanings***. His examples constitute the following sentences (29 a-d)

(29) a. Your report **reads** well.
b. The new Ford is **selling** badly.
c. This dress **does up** at the front
d. It's a pretty material, but it doesn't **wash**. (Swan 1980:457)

Eastwood (1994:142) also introduces "ergatives" under the heading of "The Passive". According to Eastwood, they are main ***verbs that can be used in active form with a passive meaning***. His examples are listed in the following sentences (30 a-c)

(30) a. The singer's latest record is **selling** like hot cakes.
b. This sentence doesn't **read** quite right.
c. This sweater has **washed** OK. (Eastwood 1994:142)

According to Thewlis (1997:56), these verbs are ***change-of-state verbs*** that can be used in certain cases (for these cases and examples, see section 3.3.1)

Since the term "ergative" does not distinguish between the verbs that have transitive use and those that do not, Sorace (1993:25) termed these verbs "*paired*" and "*unpaired*" unaccusatives, where "*paired*" comprises ergatives that have a transitive counterpart. In further reference to the transitive and intransitive use of paired ergatives, (e.g., *The child broke the glass* and *The glass broke suddenly*) Oshita (1997:4) uses the terms "*causative use*" and "*inchoative use*" respectively.

3.7. The Frequency of Ergative Verbs in English

This section aims to state the potential usage of ergative verbs among other verbs in English. Francis and Sinclair (1994:197) claim that "ergative uses are productive feature of the language and increasing". This claim raises the issue of the "frequency of ergative verbs" in English.

The following include the occurrence of ergative verbs in ESL Materials and naturally occurring language.

3.7.1. Ergative Verbs in ESL Materials

In order to reveal the frequency of ergative verbs in ESL materials, one can refer to the study of Juffs (1998). Juffs conducted research about the types of the verbs in ESL materials. He selected the three volume *Interchange*[33] series written by Richards, et al.(1991). The entire text of each of the three volumes (including exercises and supplementary texts) was scanned into a computer file constituting 71.933 words that was used as the data base. Except modals and the other auxiliaries, a total of 413 verbs were identified out of these words. Frequency of occurrence of the verb types within our concern are shown in the following table:

Verb Class		The Number of Verbs	% of Total
Standard transitive	(e.g. *put*)	181	43.82
State/Alternator	(e.g. *melt*)	34	08.23
Move/Alternator	(e.g. *slide*)	22	05.23
Unergative	(e.g. *laugh*)	48	11.62
Unaccusative	(e.g. *happen*)	15	03.63

(Juffs 1998:108 (Table 2))

What is remarkable in Juffs' study is that the lowest number of verbs of all types comes from unaccusatives (3.63%).

Some other figures about the frequency of ergatives come from the study of Carroll, et. al. (1971)[34] on word frequency values of a number of verbs. Following lists include word frequency values of ergative verbs in printed English School Materials (cited in Abdullayeva 1993:52).

---

[33] Juffs (1998:105-106) explains three reasons why he chose ***Interchange series*** as a research material. These reasons are:

a)the reputation of the authors as ESL authors and scholars in applied linguistics
b)the stated communicative orientation of the methodology underlying the creation of the series
c)the fact that the series is published by major publisher of ESL materials, Cambridge University Press

[34] Carroll, John Bissel et.al. (1971) ***The American Heritage Word Frequency Book*** Boston: Houghton Mifflin

Paired Ergative Verbs	per million verbs
sell	78
turn	292
break	97
begin	174
move	292
grow	243
dry	176
fill	89

Unaccusative Verbs	per million verbs
come	837
fall	152
happen	84

3.7.2. Ergative Verbs in Naturally Occurring Language

Data in this section come from Kučera and Francis (1967) and Hoover and Shaer (1990). Following figures are extracted from Hoover and Shaer's (1990) A thematic taxonomy of English Verbs, which is an analysis based on Kučera and Francis's *Computational analysis of present-day American English* (cited in Juffs 1998:109).

Word Class	%
unergatives	0.70 %;
unaccusatives	1.50 %
change-of-state alternators	8.00 %.

Also Collins COBUILD English Grammar (Sinclair et al. 1990) is based on a corpus[35] which is assumed to be reflecting naturally occurring English language. Ergative verbs (more precisely paired ergatives verbs) within Collins COBUILD English Grammar form a fuller list of 430 verbs that had this label. This list was compiled using a corpus of 20 million words (1 ergative verb per 46500 words). It was noted that "once-off" occurrences were ignored as they might be accidental or idiosyncratic that is peculiar to individual (Francis and Sinclair 1994:198).

---

[35] For the corpus and COBUILD project see Sinclair (1991), Willis (1990) and Vance (1995)

3.8. The Reflections of Unergative Ergative Distinction on Various Areas of Grammar

As it was discussed in previous sections, unergative and ergative verbs constitute subclasses of intransitive verbs, since these verbs have distinct semantic and syntactic properties. Various aspects of these verbs not only distinguish two subclasses of intransitive verbs but also affect the grammar. Distinction between unergative and ergative verb classes can be observed in various areas of grammar. This section has dual aims. First, it aims to present *how the distinction between these subclasses of verbs can be observed in various areas of grammar*, and secondly it aims to *provide explanatory theoretical background for one of the pedagogical implications of this study*, which is "teaching some grammar points in connection with ergative verbs".

3.8.1. Formation of *-er* nominals.

The distinction between unergative and ergative verbs is related to the formation of the nominals (words functioning as noun) from verbs by means of the derivational suffix *-er*.

We know that most of the *-er* nominals are derived from transitive verbs; e.g. the nominal *driver* is derived from the verb *to drive*, or *writer* from *to write*. Semantically speaking, in most cases these *-er* nominals (such as *driver, writer, attacker*) refer to animate[36] entities. For that reason they are called "agential nouns" (Quirk et al. 1985:1550).

The following examples are taken from the British National Corpus, and include nominals derived from verbs such as *dream, swim* etc. :

(31) a. My wife Ann is also a ***dreamer***. (CR-13)
b. This helps to prevent the ***glider*** from bouncing. (CR-14)
c. He's the school's best ***swimmer***. (CR-15)
d. My father encouraged me as a high ***jumper***. (CR-16)
e. The ***beeper*** alarm on Diane's watch sounded. (CR-17)

As the examples in (31 a-e) indicate, from the viewpoint of formation of *-er* nominals, intransitive verbs, more specifically ***unergatives***, such as *dream, glide, swim, jump, beep* are similar to transitive verbs.

---

[36] However, as Oshita (1987:19) argues, this is not always the case. For example, nominals such as *cleaner* and *grinder* can be a machine or tool as well as a human.

However, not all intransitive verbs can appear as a base of an *-er* nominal. For example **appearer, *approacher *erupter* [**ariser, *arriver, *dier, *enterer, *exister, *happener, *occurer, *remainer*] are ungrammatical (Keyser and Roeper 1984:397 (49)), because a student who enters a classroom cannot be called an *enterer* or a rare kind of metal that exists in some place cannot be called *exister*.

The examples of *-er* nominals above indicate a generalisation that "the referent of an *-er* nominal is a potential subject of a sentence whose predicate is its base verb" (Oshita 1997:20). That is, **these nominals correspond to the *subject*, not the object, of a sentence in which the respective verb appears as the predicate function of this sentence**. In other words, the nominal ***writer*** refers to one who writes and this corresponds to the subject of a sentence in which the verb ***write*** appears as predicate.

In argument structure terms, the suffixation with *-er* can be considered as an argument structure alternation process that makes the referent of a derived noun (*-er* nominal), semantically correspond to the external argument of the base verb. As seen in the Argument Structure of a transitive verb, [(x(y))], these verbs have both external and internal arguments.

For transitive verbs, the external argument (x) makes this alteration process possible, and consequently the referent noun corresponds to the external argument (x). Unergative verbs also have external arguments in their argument structures, [(x(ø))], and this external argument (x) makes the same alternation process possible for unergative verbs, and as a result, *-er* nominals can be derived from unergatives. Since ergative verbs have no external argument (x) that makes the alternation process possible, ergatives[37] fail to form *-er* nominals.

Consequently, in English, **while the *-er* nominals can be formed from unergative verbs** (such as *dancer, runner*), **ergative verbs do not form *-er* nominals** (Levin and Rappaport Hovav 1995:139).

---

[36] Note that nominals such as *developer, freezer* and *opener* are derived from the causative alternants of the verbs *develop, freeze* and *open*, which are paired ergatives. The *-er* nominals *comer* and *goer*, which are derived from unaccusative verbs *come* and *go* never appear in this form, but do appear either in compounds like "*late comer*" and "*church goer*" or in a noun phrase such as "*earlyriser*" (Oshita 1997:19).

3.8.2. Passive and Perfective Adjective Formation from Verbs

Formation of deverbal[38] adjectives that have the same form as the past participle of the base verb is another piece of morphological evidence for the distinction between ergatives and unergatives (Bresnan 1982:30; Oshita 1997:23).

Very often, these adjectives are derived from regular **transitive verbs** as seen in the sentences (32 a-e) quoted from the British National Corpus;

(32) a. Sir W.Osler was one of the most ***respected*** medical practitioners.(CR-18)
b. Better ***tested*** materials than ours have met with a similar fate. (CR-19)
c. The beautifully ***furnished*** rooms have lovely views (CR-20)
d. He ran his eyes down the ***typed*** message (CR-21)
e. There is a clearly ***written*** text with an illustrated chronology (CR-22)

It should be noted that the adjectives derived from transitive verbs have a **passive reading**.

Respected medical practitioner → Medical practitioner who *was respected*
Tested materials → Materials which *were tested.*
Furnished rooms → Rooms which *were furnished*

In contrast to the adjectives above, the following adjectives in sentences (33a-e) are derived from **intransitive verbs**[39]. Sentences were quoted from the same corpus.

(33) a. The chamber seemed darker beyond the ***elapsed*** time (CR-23).
b. Pepita began to pick up the ***fallen*** bananas (CR-24).
c. It's dangerous to hunt among chasms full of ***drifted*** snow (CR-25).
d. I think it is a ***failed*** attempt (CR-26).
e. It is a specific medical treatment for ***undescended*** testis (CR-27).

In this case, adjectives derived from intransitive verbs (more specifically ergative verbs) have a **perfective reading**:

---

[38] The word "deverbal" denotes, in word formation, a lexical item of another class derived from a verb or verbal stem. For example, "*realisation*" is a deverbal noun derived from the verb "*realise*" Likewise, **deverbal adjective** denotes **an adjective derived from a verb or verbal stem** (Trask 1993:81).

[39] Word search criterion in the corpus is based on verbs mentioned by Bresnan (1982:30 (47)) and Levin and Rappaport (1986:654 (101))

Elapsed time	→	time which *has elapsed.*
Fallen bananas	→	bananas which *have fallen.*
Drifted snow	→	snow which *has drifted.*

From the viewpoint of argument structures of verb types that can form deverbal adjectives (whether they have passive or perfective reading) both types, transitives and ergatives, have internal arguments in their argument structures. [(x (y)) , (ø (y))]

In formation of passive and perfective adjectives from transitive and ergative verbs, **the internal argument of the verb** [(y)] **is associated with the referent** (the identity which is modified) **of the derived adjective** (Oshita 1997:25). For example, the argument structure of the transitive verb *to test* in a sentence like *Joe tested the method* has both the external argument[40] [(x)=*Joe*] and the internal argument [(y)=*method*]. The deverbal adjective *tested* in "*tested method*" modifies the referent "*method*" which corresponds to the internal argument of the verb. The case is the same for ergative (more explicitly *unaccusative*) verb *fall* in sentence "*The leaf has fallen*". Although the argument structure of the unaccusative verb *fall* does not have an immediate causer which is projected there as external argument, *the leaf* corresponds to the internal argument, since it is the entity which undergoes directed change. Consequently, **ergative verbs can constitute deverbal adjectives** since the deverbal adjective "*fallen*" in "*fallen leaf*" modifies the internal argument "*leaf*".

As has been stated above, deverbal adjectives can be derived from *verbs that have internal argument in their argument structure*. In other words, verbs that do not have any internal argument in their argument structures fail to form deverbal adjectives. For that reason, **unergative verbs that have argument structure of "[(x(ø))]" cannot constitute deverbal adjectives**, since they do not have an internal argument which corresponds to the referent of a deverbal adjective derived from such verbs. As Levin and Rappaport state, **run man, *coughed patient, *swum contestant, *flown*

---

[40] In formation of deverbal adjectives from transitive verbs, the external argument (x) is deleted. The deletion of (x) is necessary because unlike the regular passivisation of a transitive verb, in which the external argument remains potentially available as an argument of *by phrase* (Jaeggli 1986:600) (as seen in sentence (a) below), but the external argument of the base verb for the adjective formation is not available in any way. (as seen in sentence (b) below)

a The method was *tested* (by Joe)
b This is a *tested* method (*by Joe)

*pilot, *cried child, *exercised athlete, *sung artist, *yawned student* and **laughed clown* are ungrammatical (1986:654 (102))[41] .

3.8.3. Formation of Adjectives from Verbs with the *-ing* Suffix

Another type of morphological evidence observed in grammar, which stems from unergative versus ergative distinction is formation of adjectives from verbs with the adjectival suffix *–ing*.

In sentences (34a-d) the adjectives are derived from transitive verbs with the suffix *–ing* . The examples below were cited from the corpus:

(34) a. They were steep walls of water ***dropping*** like guillotines (CR-28).
b. [It] could be a very mind ***broadening*** experience for people (CR-29).
c. Pain ***relieving*** medicines are used for headache (CR-30).
d. I'm just a money ***making*** machine (CR-31).

It should be noted that, as seen in the examples, derived *–ing* adjectives appear as compound adjectives with a *left-hand constituent*. Otherwise, they are ungrammatical unless the original internal argument, if there is one, is projected as a left-hand constituent of the compound adjective[42] (Oshita 1997:27).

For example, in the argument structure of the transitive verb *"form"* in a sentence like *"Suffix forms adjective"*, there are both external [(x)=*suffix*] and internal [(y)=*adjective*] arguments. When the *–ing* adjective is derived from the verb *to form* (****forming** suffix*), the referent (the identity which is modified) of the derived adjective corresponds to the external argument of the base verb. But, in such structures, contrary to *Passive and Perfective Adjective Formation*, the internal argument (y) is still intact and available. For that reason, the internal argument is projected as a left-hand constituent of the compound adjective as seen in ***"adjective forming suffix"***

---

[41] As Oshita (1997:26) claims, paired ergative verbs present an interesting case for the interpretation of passive and perfective adjectives based on them. If derivation is based on paired ergative verb, the adjective has the perfective sense. If the derivation process involves a causative, the derived adjective takes on the passive sense. For that reason, *"a broken vase"* can be either *"a vase that was broken"* or *"a vase that broke"*

[42] The same type of adjective compounds such as *"breathtaking", "fact-finding", "heart-breaking", "life-giving", "record-breaking", "self-defeating", "self-justifying"* are called ***"verb and object type"*** by Quirk et al (1985:1576 (Sec.I.68)). But, psychological causative verbs such as *"frighten"* and *"discourage"* are exceptions to this generalisation (Oshita 1987:27 Footnote 16)

Unergative verbs which have argument structure [(x(ø))], **do not form compound adjectives** since there is no internal argument (y) in their argument structures, which has to be projected as left-hand constituent.

Following sentences quoted from the corpus indicate the case:

(35) a. There's a ***flying*** saucer in the car park (CR-32).
b. He was the nearest possible to being a ***walking*** encyclopedia (CR-33).
c. She can become the next ***sleeping*** beauty (CR-34).
d. The bus driver kicked the ***travelling*** salesman (CR-35).
e. There were ***flying*** fish all around us (CR-36).

Consequently, compound adjectives within the following phrases in (36a-d) are ungrammatical since they are derived from unergative verbs:

(36) a. **patient-**walking*** miracle medicine
b. **child-**crying*** horror movies
c. **audience-**smiling*** auditoriums
d. **friend-**grinning*** weddings (Oshita 1997:29 (34))

On the other hand, ***ergative verbs which have internal argument in their argument structures*** [(ø (y))] ***can form compound adjectives***, in which the internal argument appears as left-hand constituent as seen in (37a-d), and they are ungrammatical without left-hand constituents as in ****watering** garden vegetable* or ****dropping** additional suggestion*.

(37) a. *mouth-**watering*** garden vegetables
b. *jaw-**dropping*** additional suggestions
c. *pulse-**pounding*** psychological thrillers
d. *knee-**shaking*** anxiety (Oshita 1997:30 (35))

As a result, *–ing* adjectives derived from unergative verbs appear as independent word, (e.g. ***sleeping*** beauty) but *–ing* adjectives derived from ergative verbs have to appear with a left-hand constituent which serve as the internal argument of the base verb. (e.g. *voice-**quavering*** anxiety)

3.8.4 Interpretation of the pronoun *they*

Interpretation of the third person plural pronoun "*they*" in a sentence, whether it has *a definite referential reading*[43] or *an indeterminate arbitrary reading*[44], might vary according to the type of the verb within the sentence.

Jaeggli (1986:62) claims that it is possible to have either a definite referential reading or an indeterminate arbitrary reading for the subject pronoun *they*, as long as the referents are understood to be human (cited in Oshita 1997:31). According to this claim, sentences (38 a-d) are ambiguous since the subject pronoun *they* in these sentences might have either *definite referential reading* or an *indeterminate arbitrary reading*.

(38) a. ***They*** rarely dance in Japanese weddings
b. ***They*** walk faster in big cities
c. ***They*** sell cigarettes at all gas stations
d. ***They*** do not allow dogs on the beach (Oshita 1997:31 (37))

For example, in (38 c) and (38 d), the subject pronoun *they* either refers to a specific group of people (e.g. ***Children who are not aware of the risk*** sell cigarettes at all gas stations, ***Lifeguards*** do not allow dogs on the beach) or people in general. In the second case, sentences (38 c) and (38 d) can be paraphrased as sentences (39 a-b)

(39) a. Cigarettes are sold at all gas stations
b. Dogs are not allowed on the beach.

On the distributional restriction of the arbitrary third person plural pronoun *they*, Jaeggli (1986) generalises that "**an arbitrary plural pronominal** [word functioning as, or resembling a pronoun] **cannot be in a chain that is Case -or theta- marked directly by a verb**" (cited in Oshita 1997:32 (41)).

---

[43] In this case ***they*** functions as a personal pronoun which refers to particular group of things, or to a particular group of people as in (a)"*Newspapers reach me on the day after **they** are published*", or as in (b)"*There are two boys here, **they** are both students*". In (a) ***they*** refers to ***newspapers***, and in (b) refers to ***boys***.

[44] In this case, ***they*** refers to "people in general as in *Isn't that what **they** call love?*" (Sinclair et al. 1990:30). Quirk, et. al. (1985:353) call the case of "*they*" in "***They** say it is going to snow today*" '**generic use** of personal pronoun'. It should be noted that sentences including "*they*" which has indeterminate arbitrary reading can be replaced by passive sentences with unspecified agents.

In the following examples of the passive sentences in (40 a-d), the pronouns do not allow arbitrary reading since they are in a chain that is case marked[45] by the verb.

(40) a. They are arrested all the time by the police.
b. They are seen on the beach every Sunday morning.
c. They are admired in this country.
d. They will be found in the hotel lobby. (Oshita 1997:32(39))

Moreover, pronouns in the following sentences (41a-d) which have three semantic subtypes of unaccusative verbs [verbs of existence in (41a, b), a verb of inherently directed motion in (41 c), and a verb of appearance in (41 d)] do not allow arbitrary reading, either.

(41) a. They **exist** without any water on this planet
b. They **remained** in their home country
c. They **arrive** really tired after such a long trip
d. They always **appear** without prior notice (Oshita 1997:32(40))

Pronouns in sentences in (40) and (41) cannot be interpreted as arbitrary pronoun "*they*" since "*they*" in passive and unaccusative sentences are surface subjects generated in object position, where they are theta-marked by the verb. Likewise, the third person plural pronoun appears in **object** position of a transitive verb (as in 42 a, b) cannot have arbitrary reading either, since the pronoun is both Case-marked and theta-marked by the verb.

(42) a. I haven't seen them in gas stations.
b. The police will arrest them.

(Oshita 1997:31 (38))

---

[45] For example, sentence (40 a) was derived from *The police arrested them all the time* at D-Structure. When the passive morpheme is added (... are arrested ***e***), the chain of the object, that is, the empty category "***e***" (see footnote 6 in Chapter 2) cannot stay as *object* since the passive morpheme absorbs *accusative case*. Otherwise, it will remain caseless, violating the *case filter*" (see section2.4.2.2). Therefore, it has to move to a position where it should get a case. As a result, accusative marked "them" becomes "they" and has to move to subject position in a passive sentence to get nominative case. [***They***$_i$ are arrested e_i]. These two, ***They*** and ***e*** form a chain. Since ***e*** is the chain of the S-Structure subject, it was the object (of the verb), which is marked with case at D-Structure, and it is θ role assigned.

Jaeggli's generalisation leaves room for the ambiguity between the definite and arbitrary readings of "*they*" in (38 a-d) because in transitive and unergative sentences, the subject arguments are neither Case-marked nor theta-marked directly by the verb.

Consequently, in sentences including transitive or unergative verbs, it is possible to have either a *definite referential reading* or an *indeterminate arbitrary reading* for the subject pronoun *they*. On the other hand, in sentences with ergative verbs, subject pronoun *they* does not allow an *arbitrary reading*.

3.8.5. Formation of Resultative Constructions

The contrast between ergative and unergative verbs is also observed in resultative constructions.

Halliday (1967:63) describes a resultative construction as "an attribute that results from a process". Carrier and Randall (1992:173) classify resultative construction according to the type of the verb in the main predicate. According to this classification, there are two types of resultative constructions: "transitive resultatives" as in (43a); and "intransitive resultatives" as in (43b):

(43) a. The gardener watered the tulips flat.
b. The joggers ran their Nikes threadbare.
(Carrier and Randall (1992:173(1a,2a))

In this work, following Levin and Rappaport Hovav (1995) and Oshita (1997), these types of resultatives will be called "*transitive-based resultatives*" and "*unergative-based resultatives*" for convenience.

3.8.5.1. Transitive-Based Resultative Constructions:

Consider the following sentence;

(44) I painted the car *yellow* (Tsujimura 1990:280 (9a))

The sentence (44) contains the basic transitive word order of SVO [S(*I*), V (*painted*),

O (*the car*)] and an additional descriptive phrase[46] (*yellow*) which describes a state (*being yellow*), into which the object NP (*the car*) is brought as the result of the event (*painting*) expressed by the main verb.

As seen in sentence (45), this additional descriptive phrase does not need to be adjacent to the NP which is described by this phrase:

(45) *The tulips* were watered ***flat*** [47]
[cf. She watered *the tulips* ***flat***]
(Carrier and Randall (1992:218(1a))

Although type[48] and position of the descriptive phrase may vary, a descriptive phrase in transitive-based resultative construction functions as a secondary predicate[49] that describes a state to which ***the object NP*** comes as a consequence of the event expressed by the main predicate. That NP has to be a verbal object[50] (or ***direct object***) of the main predicate. This syntactic characteristics of the transitive-based resultative constructions

---

[46] This phrase is called "*resultative attribute*" by Tsujimura (1990:280), and "*object attribute*" by Aarts and Aarts (1982:160).

[47] When the descriptive phrase is not adjacent to the NP, again the case is the same as in sentences (43 a, b) because surface subjects of the passive sentences have moved out of object position leaving a trace (a putative empty category left behind in a particular location by the movement of some element out of that position (Trask 1993:280)) behind, and the resultative phrases in passive sentences are predicated of these traces. For example the sentence (45) has S-Structure representation:

The tulips$_i$ *were watered* t_i *flat*

[48] As Aarts and Aarts state (1982:160-61) its [of descriptive phrase] type may vary, for example it might be

a) a noun phrase (*He named his new yacht* ***Marina***),
b) an adjective phrase (*The jury found Mrs Bonnington* ***guilty***),
c) a prepositional phrase (*Jim keeps his Jaguar* ***in perfect order***),
d) a finite clause (*Sir Keith Hamilton made the firm* ***what it is today***),
e) a non-finite clause (*I call that* ***putting the car before the horse***)

[49] To account for this syntactic fact, a linking verb (copula) such as *be, seem, look, appear* can be placed between the **object NP** and the **descriptive phrase**. This structure will form a grammatical and meaningful clause. For example, for some of the examples above, we can say;

for (11a) → His new yacht ***is*** Marina
for (11b) → Mrs Bonnington ***seems*** guilty
for (11c) → His Jaguar ***looks*** in perfect order

[50] **When this NP is not direct object**, for example, as Simpson (1983:147) indicates, if it is the complement of a preposition then **the transitive-based resultative is ungrammatical**:

*The silversmith pounded ***on*** the metal flat.
[cf. The silversmith pounded the metal flat.] (Levin and Rappaport Hovav (1995:41 (23a,b))

can be summarised as "Direct Object Restriction[51]" (henceforth DOR). According to DOR, **a resultative phrase must always be predicated of an NP or its trace in DIRECT OBJECT position** (Simpson 1983:146, Levin and Rappaport Hovav 1995:35).

Therefore, paired ergative verbs, such as *burn, freeze, melt* or *break* can take place in resultative constructions because these verbs have internal argument [(y)] in their argument structures, which is syntactically projected to OBJECT position at D- Structure (where semantic roles are assigned). The surface subjects of sentences including paired ergatives are projected to this preverbal position from initial object position mentioned above. When the subject is projected to preverbal position it leaves its trace behind them. The descriptive phrase –satisfying the DOR– is predicated of this trace, as in (46):

(46) **The toast** $_i$ burned t_i *black*

[cf. She burned **the toast** *black*] (Carrier and Randall (1992:218 (115))

Therefore, **paired ergative verbs can form resultative constructions** as seen in (47a-d):

(47) a. Butter ***melted*** to liquid in half an hour (CR-37)
b. It ***broke*** into pieces and dissolved in the air. (CR-38)
c. A casserole ***burned*** black (CR-39)
d. The ice cream ***froze*** solid. ((Tsujimura 1990:280 (10a-c))

Unaccusative verbs[52] can also appear in resultative constructions since they have the same A-Structure, i.e., [(ø (y))]

(48) a. She ***blushed*** red (CR-40)
b. She ***flushed*** red (CR-41)

---

[51] Simpson calls the same case "*Direct Object Condition*", but in this study, Levin and Rappaport Hovav's term "*Direct Object Restriction*" is preferred since there seems to be a ***restriction*** here.

[52] However, not all unaccusative verbs appear in resultative constructions because of some semantic restrictions. Besides, there are descriptive phrases indicating **the state which the surface subject is already in**, *not a state into which the surface subject is brought as the result of the event expressed by the main verb.* For a detailed discussion on semantic restrictions and various types of descriptive phrases see Levin and Rappaport Hovav (1995:56) and Oshita (1997:37)

The descriptive phrase *red* in these sentences is semantically related to surface subjects which were projected into this position from initial OBJECT position. As Levin and Rappaport Hovav (1995:56) argue, "the S-Structure subject of these [unaccusative] verbs is an underlying ***direct object***. [emphasis added]". Consequently, structures in (48a,b) can satisfy the syntactic requirement of DOR.

The case of **unergative verbs**, from the viewpoint of formation of resultative constructions, is absolutely different from that of *transitive verbs* and *unaccusative verbs*. In terms of argument structure, unergative verbs do not have *internal argument* [(y)] which corresponds to the OBJECT, and in contrast, surface subjects of unergative verbs are *external arguments* projected to this position. Consequently, unergative verbs cannot form resultative constructions, in which a descriptive phrase can describe an OBJECT, since they have no object or trace of an object to be described. For that reason, the following sentences including unergative verbs are ungrammatical.[53]

(49) a. *The tenors sang *hoarse.*
b. *The tourists walked *ragged.*
(Carrier and Randall (1992:215 (107a,d))

Consequently, despite the semantic constraint which excludes most English unaccusative verbs from appearing in it, still the distinction between unergative and ergative verbs affects the formation of resultative constructions. While, **ergative verbs can form resultative constructions, unergative verbs fail to form transitive based resultative constructions.**

3.8.5.2. Unergative-based Resultative Constructions:

Unergative verbs appear in a slightly different constructions which also have resultative reading. In these constructions, unergative verbs are followed a nominal

---

[53] This does not mean that all unergative verbs with a descriptive phrase are ungrammatical. But in this case the descriptive phrase describes the subject's condition when the event took place. For example "*John danced **sweaty***" means "*John was sweaty while he danced*" not "*John got sweaty as a result of dancing*". It also should be pointed out that such a phrase, in transitive verb resultative constructions, can describe the condition of the **direct object** as well as the condition of the **subject** when the event took place. For example "*John ate the fish **raw***" means that "*the fish was raw when John ate it*" while "*John ate the fish **nude*** means" that "*John was nude when he ate the fish*" (Oshita 1997:37).

(a word functioning as noun) and an additional descriptive phrase as seen in sentences in (50 a-c)

(50) a. He would have laughed ***himself*** sick (CR-42).
b. Diana cried ***her eyes*** out (CR-43)
c. The dog barked ***him*** awake[54]

It should be noted that the nominal described by the descriptive phrase is not the direct object of the verb. According to Levin and Rappaport Hovav (1995:35-36), this nominal (which is described by the descriptive phrase) falls in one of three types:

1) ***subject's reflexive pronoun*** (also called as "fake reflexive" (Simpson 1983:145)) as seen in sentence (50 a),

2) *a* ***non-subcategorised*** (which is not direct object of the predicate) ***inalienably*** (not transferable, required for wellformedness) ***possessed NP*** as seen in sentence (50 b) and,

3) an ***independent NP*** as seen in sentence (50 c).

On the other hand **ergative verbs** do not form resultative constructions involving ***subject's reflexive pronoun***[55] (as in sentence (51 a,b)), ***inalienably possessed NP***[56](as in sentence (51 c,d)) or ***independent NP*** [57](as in sentence (51 e,f)).

---

[54] This sentence is not quoted from the National British Corpus. The sentence "*I.... ruthlessly roused Mr.Contreras by knocking on his door until the dog barked him awake*" is from "*Blood Shot*" (Paretsky,S 1988:183 New York: Dell) (cited in Levin and Rappaport Hovav 1995:36 (6a))

[55] In constructions with ***reflexive pronouns***, both reflexive pronoun and the descriptive phrase are required not only for the grammaticality of sentence but also for their resultative reading. Descriptive phrase indicates the state of preceding reflexive as a result of the event expressed by the main predicate. Since, the reflexive and the subject refer to the same identity, the resultative state is ultimately the one in which the subject finds itself as a result of its own action

[56] In such constructions, both the ***inalienably possessed NP*** and a resultative phrase are required for the grammaticality of the sentences and their resultative reading. Again, the resultative phrase describes the state of the preceding NP but, in this case the influence or impact of the event is not as direct as in the case of subject's reflexive pronoun, because the relation between subject and the NP is not co-reference, but one of the whole and a part (e.g. *eyes* of *Diana*, in sentence 50b)

[57] In constructions with ***independent NP***, grammaticality of the sentences depend on both this NP and the descriptive phrase. In this type, however, there is no semantic relatedness between the subject and the independent NP. Consequently only the NP is interpreted to be affected by the event expressed by the main predicate

(51) a. *The ice cream froze ***itself*** hard.
b. *He flushed ***himself*** red.

c. *The butter melted ***its surface*** to a liquid.
d. *He blushed ***his cheeks*** red.

e *The fish burned ***the room*** smoky.
f. *He flushed ***the young girl*** embarrassed.
(Oshita 1997:43 (57-59))

3.8.6. Constructions with "Cognate Object"

Cognate object is defined as:

> a direct object whose semantic content is more or less identical to that of the verb which governs it. The direct objects in the following examples are cognate objects: *I dreamed a dream last night; She sang a song; I'm thinking terrible thoughts.* (Trask 1993:48)

As Levin and Rappaport Hovav (1995:40) state, unergative verbs can form constructions with *cognate objects* as shown in (52 a-d). Levin (1993:95) observes that cognate objects in such structures usually appear with a modifier which functions like an adverbial.

(52) a. Louisa slept a restful ***sleep***.
b. Malinda smiled her most enigmatic ***smile.***
(Levin and Rappaport Hovav 1995:40)

c. The couple waltzed the most elegant ***waltz*** in the competition.
d. Nancy danced an exotic ***dance.***
(Oshita 1997:47 (64a,b))

On the other hand, no ergative verb appears in a construction with a cognate object, as seen in (53)

(53) a. *The mirror broke a jagged break.
Levin and Rappaport Hovav (1995:147 (28a)

b. *She arrived a glamorous arrival.
c. *The apples fell a smooth fall.
d. *Karen appeared a striking appearance at the department party.
e. *Phyllis existed a peaceful existence.

Levin and Rappaport Hovav (1995:148 (31a,b;32a,b))

3.8.7. Summary of the Areas of Grammar involving Ergative-Unergative Distinction

The following table summarises the various areas of grammar affected by the type of the verb, morphologically or structurally. As has been stated, they are also points of grammar which can be taught in connection with ergative verbs.

Symbol (✓) indicates the possibility of structure with the related verb type. Verb type marked with symbol (×) means that that structure in question is ungrammatical with this verb type.

AREA OF GRAMMAR	Unergative Verbs	Ergative Verbs	
		Paired Ergatives	**Unaccusatives**
–er nominals from verbs	✓	×	×
Passive and perfective adjectives from verbs	×	✓	✓
Compound –ing adjectives from verbs	×	✓	✓
Interpretation of *they* as indeterminate arbitrary pronoun	✓	×	×
Transitive based resultative constructions	×	✓	✓*
Unergative based resultative constructions	✓	×	×
Constructions with "Cognate Object"	✓	×	×

* with some semantic restrictions

Table 1 Areas of Grammar involving Ergative-Unergative Distinction

CHAPTER 4 LITERATURE REVIEW ON ACQUISITION OF ERGATIVE VERBS

4.1 Introduction

As Oshita states "when noticed in the early 70s, the anomaly in non-native speakers' use of certain English intransitive verbs received no special attention either from ESL scholars or from theoretical linguists"(1997:153). Perlmutter's Unaccusative Hypothesis (see section 2.1) provided a much needed theoretical framework in which to analyse the phenomenon. After a decade of theoretical discussion of their distinctive properties, ergative verbs has found its way into pedagogical grammars with Collins COBUILD Grammar (Yip 1994:126). Simultaneously, various L2 studies have established that ergative verbs pose an acquisition problem in SLA. Ungrammatical structures produced by non-native learners were considered to be indication of this problem.

Various studies which were designed to diagnose how learners use ergative verbs show that learners misuse these verbs in various ways. For example, learners

a) passivise ergative verbs

b) avoid ergative verbs (especially *paired ergatives*) in NP-VP order, that is, they reject grammatical sentences including these verbs in NP-VP order,

c) use unaccusative verbs transitively,

d) add a postverbal NP to ergative structures and,

e) use unaccusative verbs in different structures from those mentioned above.

This chapter reviews the studies and findings on learner errors stated in (a-e)

4.2 Passivisation of Ergative[1] Verbs

The most remarkable way in which ergative verbs are used by learners of English seems to be "passivised" ergative structure. In this structure, nominal argument of the ergative verb appears before the verb, and is followed by the auxiliary *be* and the

---

[1] Although native speaker views cast some doubt on the grammaticality of the paired ergative verbs in NP-VP word order (see section 3.4.3.2), following the general tendency in the literature, "passivisation of paired ergatives" is assumed to be "passivisation errors" as well. Sole passivisation errors are mainly observed in structures with "unaccusative verbs". In fact, in most cases, passivisation errors and avoidance related to ***paired ergatives*** overlap, since most learners favour passive structure when they avoid paired ergatives. For that reason, in heading above, "***Ergative Verb***" is used referring to both *unaccusatives* and *paired ergatives*.

past participle form of the verb. Although a number of proposals have been made in the literature, there has been no general consensus on the true reason why learners passivise these structures.

There are two early studies that recorded the "passivised" ergative errors in learners' English. In 1972, Burt and Kiparsky compiled learners' errors with pedagogical suggestions in an ESL teachers' grammar manual. Following examples come from the section entitled "Making Intransitive Verbs Passive" which is in a more general section of "Inappropriate Use of Passive".

(1) a. *I hope that the good will between U.S.A. and Republic of Korea *will be lasted* long time
b. *Some people afraid that if the war ends a financial crisis *will be arisen.*
c. *He *was arrived* early. (Burt and Kiparsky 1972:47)

As for the origin of ungrammaticality of the sentences above, the authors state:

> verbs like *last, arise*, and *arrive* are intransitive and that means objects may not follow them. But the idea of passive sentences in English is to put the object the verb or another noun phrase in subject position. If there is no object of the verb or of a preposition, there is no noun phrase to become the subject of the passive verb (Burt and Kiparsky 1972:47).

Thus, Burt and Kiparsky considered the passivised ergative structure as a result of misapplication of passivisation to the general intransitive verb class, which cannot be passivised because they lack an object. The semantic similarity of the three verbs in (1a-c), that is the subjects are not causers, might not be noticed by the authors. Consequently, further subclassification of these intransitives was not made. In those days, researchers were unaware of the unaccusative- unergative distinction.

Richards (1973) exemplified passivised ergative errors (though he did not use this term "ergative"). His examples are given below:

(2) a. *He *was died* last year.
b. *One day it *was happened.* (Richards 1973:103)

Richards attributed the errors in (2 a, b) to erroneous usage of tense and aspect system. Consequently, in his analysis, the type of errors in (3 a, b) are not different from the errors in sentences (2 a, b)

(3) a. *The teacher *was told* us
b. *They *are opened* the door. (Richards 1973:103)

Hubbard (1993) is one of the researchers who shed much needed theoretical light on the passivised unaccusatives within the theoretical framework based on Perlmutter's Unaccusative Hypothesis.

Hubbard (1994:55-56) found that the overwhelming majority (more that 90 percent) of errors of this type were concentrated in a particular subclass of intransitive verbs identified by Perlmutter as unaccusatives. These errors included passivisation of unaccusative verbs in compositions written by native speakers of eight different languages. His study also showed that passivisation of unaccusative verbs was widely observed among interlanguage[2] English of learners from various L1 backgrounds. The following are some of the examples of passivised ergative structure or the "intrusive *be*[3]" (Hubbard and Hix 1988:93).

(4) a. *The strange event *was occurred* last May
b. *The problem *is exist* today in many countries.
(Hubbard and Hix 1988:94)

c. *Something strange *was happened* before I could open the door.
d. *This problem *is existed* for many years. (Hubbard 1994:55)

As Hubbard points out, these errors stem from the fact that passive is used with verbs like *happen*, which have direct objects advancing to become surface subjects[4]. So, Hubbard concludes that

> the production of these sentences is not due to an incomplete knowledge of tense/auxiliary system, bur rather to incorrectly assuming that English unaccusative verbs (or some subset of them) receive passive morphology (1994:56).

---

[2] The type of language produced by second- and foreign language learners who are in the process of learning a language. It differs from both mother language and target language (Richards et. al. 1992:186).

[3] The "intrusive *be*" here refers to primary auxiliary of passive voice entering the structure without a necessity

[4] As has been presented before, within the GB Framework (see Burzio 1981:45), ergative verbs have D-structure object in the initial syntactic representation of the basic form of the sentence, where thematic roles are assigned. Again, as has been shown, this D-structure object appears as syntactic Subject without theta-role at S-Structure. But, learners mistakenly consider this D-structure object projected into Subject position as it were Surface Object which can be the Subject of the corresponding passive sentence.

Zobl (1989) is "probably the first study" (Oshita 1997:137) dealing with different structures in which English unaccusative-paired ergative verbs used by learners. Besides passivised unaccusatives, he noticed and discussed two more non-standard structures (Zobl 1989:204). (These structures will be discussed in following sections.)

Zobl's data about passivised ergatives come from compositions written by university-age students in ESL program in Canada and the United States. Informants are from different L1 backgrounds. (90 Japanese, 10 Arabic, 10 Chinese, 1 Turkish, 1 Thai and 1 Indonesian speakers.)

The following examples are productions of learners whose proficiency levels are high intermediate to advanced:

(5) a. *The most memorable experience of my life *was happened* 15 years ago.
b. *Most of people *are fallen* in love and marry with somebody.
c. *My mother *was died* when I was just a baby.
(Zobl 1989:204, (1)-(3))

According to Zobl (1989:218), learners assume that the only argument of ergative verb should be projected into the position of syntactic subject. But, in learners' grammar, after the movement, the argument is incorrectly marked by the passive verbal phrase *be* + V*en*.[5]

On passivised ergatives, Balcom (1997) conducted another study in which 38 university students took place (20 Chinese, 15 Mandarin, 3 Cantonese speakers) with a mean score on TOEFL 578.9 (Balcom 1997:3). Subjects were given a grammaticality judgement task and a cloze passage including blanks with the base form of the verbs provided. In the grammaticality judgement test, there were ungrammatical sentences containing *be* + V*en* besides the grammatical ones. Results of the judgement task

---

[5] Zobl argues that "once the correct A-Structure representation for ergative verbs is acquired, learners face a syntactic challenge, namely, how to use the class of verb without an external argument when the syntax of English requires an ***overt subject*** in every finite clause" (cited in Oshita 1997:165). For example, in A-Structure of the sentence *The window broke*, [(ø(y))] there is no external argument which represents the agent of the action (agent or the causer of the action, is referred to ***logical subject***. (Richards et. al. 1992:117)). Learner who has acquired the correct A-Structure knows that "*The window*" occupying the syntactic subject position is not the agent or logical subject. When the *passive structure, in which syntactic subject is not the agent or logical subject,* is acquired, the case of ergative is associated with the passive structure.

indicated that *be* + V*en* was accepted as grammatical significantly with ergatives (Balcom 1997:4), but not as high as in the cloze as it was in the judgement task. As Balcom (1997:5) states, "the study confirms Zobl's findings".

As part of her research on the Interlanguage English of a group of Chinese speakers, Yip examined the passivised ergatives within the ungrammatical structures produced by advanced learners. Her observation was based on examples such as:

(6) a. *I do not think that such abusive action *should be happened* to a twelve year old child.
b. *Rush hour traffic *can be vanished* because working at home is a new version.
c. *This kind of diglossic situation *can only be appeared* in society where the two different variations should not be too different and too similar.
d. *For last 15 years computers have drastically affected our life and this *will be continued* in the future.

(Yip 1995:130, (3)-(6))

Yip proposes that Chinese Learners' erroneous production of passivised ergatives cannot be attributed to L1 transfer of similar sentences since there are no equivalent passivised ergatives in Chinese. Thus, Yip's data analysis indicates that Chinese learners of English apparently use a structure acceptable neither in their L1 nor in English.

Yip's (1994) another study[6] revealed that tendency to produce (or accept) passivised ergatives is not limited to Chinese speakers of English. This conclusion is based on the results of a grammaticality judgement test given to advanced learners of English from different L1 backgrounds. (2 Korean, 2 Indonesian, 1 German, 1 Spanish, 1 Greek, 1 Hebrew, 2 Chinese). She concluded that " [a] clear pattern emerges: Learners tend to reject good ergatives and extend the passive rule to ergatives " (Yip 1994:129).

Yip suggests a number of possible explanations for the interpretation of passivised ergative structures. Firstly:

---

[6] In fact the study addressed the question *whether consciousness-raising (C-R) makes a difference in language learning*. Ergative verbs were selected as the focus of the study to investigate the difficulties posed by these verbs. For this purpose, *a contextualised gramaticality judgement test* was given, and participants were asked to correct the sentences judged as ungrammatical by themselves.

> Ergatives share close similarities with agentless passives: Both are intransitive, both lack an agent, while the patient appears in subject position. . .learners seem to treat ergatives like passives. The tendency stems from the inherent similarities between the two structures (Yip 1994:128).

Secondly, after explaining the canonical[7] typological structure of English, in which the semantic role of *agent* normally corresponds to the grammatical function *subject*, that of *theme* to the grammatical function *object* (Yip 1994:129), she states that "passive is very productive in English" and "it is plausible for learners to adopt the working hypothesis: Whenever the *theme* is in subject position, mark the verb with passive morphology" (Yip 1994:130).

Thirdly, Yip (1995:138) proposes that learners might be treating some ergative verbs as inherently passive. She argues for the probability of this interpretation drawing attention to the existence of inherent passive verbs in languages like Latin.[8]

Finally Yip mentions a further factor that contributes to the learners' production of passivised ergative structures: "Learners seem reluctant to believe that any change of state occurs spontaneously, without external causation" (Yip1994:130). The preference of L2 learners for the passive over the ergative is related to this belief[9].

As an attempt to diagnose the problems of Turkish learners with 'ergative' verbs in English, Karacaer (1998:168) conducted a study based on Yip (1994). Participants of the study were 40 EFL students at the College of Tourism and Hotel management at Anadolu University. 25 (14 males and 11 females) were second year, and 15 (7 males and 8 females) were fourth year students, and they are at intermediate level.

---

[7] The regularity that can be called law or rule

[8] The following sentence takes place in interlanguage English of Chinese speakers:

*She has been ***suffered*** the pain of tangled legs.

The verb *suffer* occurs in a sentence with an object. Yip (1990:63 Note:4), quoting Matthews, states that this structure is exactly parallel to the Latin sentence:

Passus es dolorem.
Suffer PERF-PASS pain-ACC
"He suffered pain"

Yip (1990:53) adds that "such verbs in Latin are inherently passive, (like the English *be born*) yet can take an object.

[9] "Carey (1985) notes that lay people –and even undergraduate physics students – have a firm but misguided intuition that no motion is possible without a force causing it" (cited in Yip 1994:130 footnote 3). The belief mentioned above is based on this observation.

As a research instrument, a grammaticality judgement task consisted of 30 sentences including ergative verbs and other related structures[10] were adopted from Yip's (1994) study. The participants were given the grammaticality judgement task and they were asked to supply corrections when they regarded given sentences as ungrammatical.

Students' erroneous judgements on ergatives and the other verbs were counted and their percentages were summarised in the table below.

	erroneous judgements on ergative verbs	erroneous judgements on other verbs	TOTAL
Second Year Students	49.20%	24.80%	32.90%
Fourth Year Students	57.30%	25.30%	36.00%

(Karacaer 1998:172 (Table 2))

Karacaer's findings indicate that the number of erroneous judgements on ergative verbs is greater than double the number of erroneous judgements on the other verbs. In other words, results show that in comparison with other verbs, ergative verbs pose problems for these learners. Another interesting finding within the study is the fact that second year students are more successful than the fourth year students.

The analysis of the number of erroneous judgements of students per individual ergative verb (Karacaer 1998:173 (Table 3)) revealed that the verb "*fall in love*" is the most problematic verb for the second year students while "*die*", "*fall*" and "*finish*" constitute the most problematic verbs for the fourth year students.

The following (7a) and (7b) are experimental sentences which were regarded as ungrammatical by the students, and the students' corrections for these sentences. They indicate that the problem is *passivisation of ergative verbs* by learners.

(7) a. On the halfway to the cinema, our car *broke down.*
Correction → *was broken down*
b. While we were.... and the window *shattered.*
Correction → *is shattered*

(Karacaer 1998:173 (1),(2))

[10] The ergative (unaccusatives and paired ergatives) verbs in the task were *happen, break down, shatter, arrive, start, fall in love, sink, die, fall, finish, melt, get home* Other verbs were *finish, win, want, know, go wrong, do, think, hit, decide, like, write, be sorry, eat, have dinner, have some ice cream, go to a pub.*

In 1995 Hirakawa investigated Japanese speakers' acquisition of syntactic NP-movement (see section 2.4.3) in English with respect to constructions that involve unaccusatives, paired ergatives and passives (cited in Oshita 1997:142). Her data contained the results of a production task and grammaticality judgement task given to 22 Japanese intermediate learners of English, attending a month-long intensive English program in Canada and a control group of 14 native English speakers (cited in Doell 1997: Sec.3-1).

Among the results that she obtained, the following finding is particularly relevant to the passivisation of ergative verbs. Hirakawa reports that unlike the native speaker subjects, Japanese subjects inappropriately passivised the paired ergative verbs. Among the six paired ergative verbs used in the production task (namely, *melt, break, continue, dry, spill and increase*) three verbs (*break, spill* and *dry*) were passivised 13 times out of a total 33 occasions (cited in Oshita 1997:142).

4.3. Avoidance of Paired Ergative Verbs in NP-VP Word Order

A second syntactic phenomenon observed about the learners' use of paired ergative verbs is their tendency to avoid these verbs in the NP-VP word order.

In 1978 Kellerman conducted a study with two experiments in order to investigate the transferability of various senses of the Dutch verb "*breken*" to the English verb "*break.*"

In the first experiment, the informants were 83 first year and 26 second year students of English at Nijmegen University, and informants of the second experiment were 50 first year students and 31 third year students of English at Utrecht University (cited in Oshita 1997:143).

Kellerman used a grammaticality judgement task including 9 sample sentences contained the English translations of nine different meanings of the Dutch word "*breken*", where "*breken*" could actually be translated and transferred into English as the verb "*break*" (cited in Doell 1997: sec 3.1).

Among his findings what concerns us is the tendency of more advanced Dutch speakers to reject the typical English paired ergative sentence (8)

(8) The cup broke.

While beginners generally accept the sentence (8) as grammatical, advanced learners favoured either causative sentence (9) or the agentless passive sentence (10).

(9) Someone broke the cup
(10) The cup was broken

As Oshita (1997:145) quoted, Kellerman replicated the study in 1979, and he asked 32 first year university students to translate "Dutch counterpart"[11] of the sentence (8). In this case, 25 of the 32 students avoided the direct translation, instead they gave their answers in passive structure or they chose paraphrases including other verbs.

In a follow-up "break" study in 1983, Kellerman asked 70 Dutch speaking students to complete the English sentence "*The child hit the vase until..... *" with an appropriate form of the verb "*break*". This time, out of 70 students, 66 of them correctly supplied "*it broke*" for the answer. Kellerman interprets this result as evidence that the tendency to avoid the paired ergative "*break*" can be overridden by pragmatic considerations (cited in Oshita 1997:145).

The avoidance of paired ergative verbs in the NP-VP word order is also observed by Yip (1994:128,129). In her contextualised questionnaire, she asked her subjects to judge the grammaticality of sentences including paired ergative verbs. Besides, subjects were also asked to make corrections if a given sentence was judged to be ungrammatical.

Following sentences (11a-d) are from Yip's judgement task, and include students' corrections:

(11) a. The mirror *shattered* during the earthquake
Correction →*was shattered*
b. My car *has broken down*
Correction →*has been broken /was broken down*
c. What *cooks* most quickly?
Correction →*can be cooked*
d. We had some ice cream, but it *has melted.*
Correction →*has been/ was melted*

(Yip 1994:129 (12-15))

---

[11] The sentence "*Het kopje brak*" is the perfectly grammatical Dutch counterpart of the English sentence "*The cup broke*"

The judgements showed that even the most advanced learners are unable to accept all of the paired ergatives in NP-VP word order. Even the highest scoring informant, a linguistics graduate student, judged the sentences including paired ergatives as probably grammatical (Yip 1994:128).

As previously reviewed, Karacaer (1998) conducted a study based on Yip (1994) in order to diagnose the problems of Turkish learners with 'ergative' verbs in English. This study also revealed that the participants of the study judged the following ungrammatical sentences in (12 a-g) as grammatical ones.

(12) a. *What *was happened?*
b. *... before the movie *was started.*
c. *Two young people *were fallen in love* with each other.
d. *Yes, the scene in which the ship Titanic *was sunk* with the loss of many lives.
e. *... when Jack Dawson *was died.*
f. *Darkness *was fallen* when it finished
g. *We have some ice cream as dessert, but it *was melted* in the heat.

(Karacaer 1998:174 (4-10))

Karacaer claims that erroneous judgements of the students indicate that they reject grammatical ergatives by accepting ungrammatical structures (Karacaer 1998:174).

As reviewed in previous section, Hirakawa's study has shown that her subjects inappropriately passivised paired ergative verbs such as *break*, *spill* and *dry*, when the discourse contexts clearly demanded the use of paired ergative.

On Hirakawa's study, Oshita comments that

> Unlike the native speaker subjects, the Japanese subjects were found to have difficulty in accepting the inchoative verbs in the correct NP-V word order. Hirakawa's results from both production and judgement tasks, therefore, give further support to the reality of ***inchoative***[paired ergative] ***avoidance*** [emphasis added] (1997:146).

Ingham (1996) also examined how L2 learners of English acquire paired ergative verbs. As a research instrument he designed a grammaticality judgement task which includes 20 test sentences contained verbs in inchoative constructions and 19 distracter sentences. Subjects were instructed to accept or reject the grammaticality of the sentences. As a guard against guessing, subjects were told that if they rejected a sentence they should underline the part of the sentence that contained mistake (Ingham 1996:38).

A total of 147 subjects, who were learners of English in secondary schools in Hungary and Hong Kong, participated in Ingham's research. They were grouped according to their L1 backgrounds as Cantonese L1 group, Hungarian Group and mixed L1 group.

As Ingham stated, especially Cantonese speakers rejected grammatical sentences including paired ergative verbs in NP-VP word order. Their erroneous rejections were 197 out of 381 occasions [51.70 %] (Ingham 1996:42).

In another study on unaccusatives and paired ergatives, Abdullayeva (1993:1) aimed to find out "whether Turkish learners will treat both structures with paired ergatives and passive constructions as grammatically correct or they will show a preference for one of them". Subjects of the study were 73 volunteer EFL students who were grouped into three proficiency levels as low, mid and high according to the results of Michigan Test of English Language Proficiency. As research instruments, a grammaticality judgement task and a production task were designed, and within these tasks focus was on the paired ergative verbs. Besides, unaccusative verbs and some distracting transitive verbs were included in the tasks. Verbs in the tasks were selected in accordance with the consideration that unaccusative verbs cannot form grammatically correct passive structure whereas transitive verbs cannot form grammatical constructions with paired ergatives in NP-VP word order such as *Detective stories read quickly* (Abdullayeva 1993:10).

Following tables summarise the distribution of the incorrect judgements in grammaticality judgement tests and the errors in production task according to verb types and proficiency levels of the learners.

The number and percentage of Incorrect Judgements in Grammaticality Judgement Task

Proficiency Level	Total Number of Incorrect Judgements	Paired Ergative Verbs		Unaccusative Verbs		Transitive Verbs	
Low	1190	593	49.75 %	280	23.49 %	317	26.59 %
Mid	528	347	65.72 %	121	22.92 %	60	11.36 %
High	43	33	76.47 %	7	16.28 %	3	06.98 %

Summarised from Abdullayeva (1993:Appendices J, K and L)

The number and percentage of errors in Production Task

Proficiency Level	Total number of errors	Paired ergative Verbs		Unaccusative Verbs		Transitive Verbs	
Low	117	66	56.41 %	14	11.97 %	37	31.62 %
Mid	42	38	90.48 %	2	04.76 %	2	04.76 %
High	3	3	100.00 %	0	00.00 %	0	00.00 %

Summarised from Abdullayeva (1993:Appendices M, N and O)

Abdullayeva's research showed that learners avoided structures with paired ergatives in NP-VP word order and preferred passive structures. It is remarkable within this research that the rate of avoidance increases as the proficiency level of the learners increases.

Montrul (1997:20) designed a study including an experiment to see whether learners know different verb classes in terms of their transitivity.

Participants of the experiment were 17 native speakers of Turkish who were students at Tömer (their mean age was 19.16), 29 Spanish-speaking learners of English who were taking an intermediate English class in a private high school in Mar del Plata, (their mean age was 19.16) and a control group of 19 English native speakers.

To measure the proficiency of the participants a cloze test was administered. Besides, a vocabulary translation task was used to ascertain the learners' knowledge of individual verbs before they were ready to judge them in a given grammatical context, since Montrul thinks that a learner might know syntactic behaviour of a verb if he or she knows its basic meaning. Consequently, she excluded the verbs which were unknown to learners from the main task of the study.

Participants were divided into four groups as a) *low-intermediate Turkish learners* b) *intermediate Spanish learners* c) *high intermediate Spanish learners* and d) *a control group* according to the result of the proficiency test.

In order to see whether learners know different verb classes, Montrul designed a picture judgement task consisted of pictures and pairs of sentences such as a drawing which illustrates *an open door* accompanying with the following pair of sentences: "*The door got opened*" and "*The door opened*".

Result of the vocabulary translation task showed that most verbs in the classes of both unergatives and ergatives (*unaccusatives* and *paired ergatives*) were known to almost all learners. (Montrul notes that two verbs of the alternating class *sink* and *melt* posed problems.)

As the result of the main (picture judgement) task, Montrul states that

> the control group accepted both forms [causative and paired ergative forms] equally natural. However, the three groups of L2 learners treated causative and inchoative forms [paired ergatives in NP-VP word order] differently, showing remarkable accuracy with the causative (transitive) forms and ***rejecting the inchoative*** [paired] ***form.*** [emphasis added] (1997:25).

Finally, Montrul (1997:36) adds that "these results replicate Kellerman's (1978,1983) findings with Dutch learners of English and Yip's (1995) findings with Chinese learners of English. According to her, there are two possible explanation for these findings: either learners find the transitive construction more basic (unmarked) than the intransitive one, or learners reject paired ergatives in NP-VP word order because it is zero derived in English.

4.4. Transitivisation of Unaccusative Verbs

Another type of erroneous structure observed in learners' use of unaccusative verbs is *causative or transitive structure*.

Rutherford focused on non-target transitivisation which is apparent in the following sentences[12]:

(13) a. *The shortage of fuels *occurred* the need for economical engine.
b. *This construction will *progress* my country.
(Rutherford 1987:89)

These examples show that although verbs such as *occur* and *progress* have only intransitive use in English, they may be used as transitives by some learners of English erroneously.

---

[12] Rutherford (1987:95 endnote 5) quoted these sentences from Scarcella. [Scarcella, Robin (1984) *Cohesion in the Writing Development of native and non-native English speakers.* Doctoral Dissertation: University of Southern California Los Angeles. (Full documentation is added)]

Mentioning a number of English verbs[13] that can be used both transitively and intransitively without morphological change, (such as *The door **opened**, X **opened** the door.; The wax **melted**, X **melted** the wax.; His head **moved**, X **moved** his head*), Rutherford (1987:89) claims that this transitivisation phenomenon which is observed in the interlanguage of the learners is a result of "extensive use" or "over applying" of a causativisation rule.

Yip, for the transitive use of unaccusative verbs, quoted Rutherford's examples to support her argument that *the passive unaccusatives are produced based on the learners' misclassification of unaccusatives as underlying transitive verbs.* She speculates that learners might be interpreting both types of verbs (paired ergatives and their causative alternants) as underlyingly transitive, since only transitive verbs allow passivisation in English (Yip 1994:129). Consequently, according to this idea, "the 'passivised' unaccusatives can be considered as genuine passive sentences which are derived from 'transitive' verbs hidden in the learners' lexicon" (Oshita 1997:148).

As already mentioned before, Hirakawa has found that Japanese learners of English have a tendency to accept incorrect passivisation of unaccusative-paired ergative verbs. As Oshita (1997:149) reviews, Hirakawa's subjects were found to be more inclined to regard ungrammatical passivisation of unaccusative verbs as grammatical than to accept non-target transitivisation of them. Hirakawa herself summarises this finding by stating "[i]t was not always the case that those who allowed incorrect passivised unaccusatives also allowed transitive counterparts"(cited in Oshita1997:149). This means that there are some cases in which learners apply non-target transitivisation without relating to passivisation. Consequently, this transitivisation may be attributable to reanalysis of unaccusatives as transitives not to a transitivisation process based on misinterpretation of argument structure.

Finally, a slightly different type of transitivisation is mentioned by Zobl. Among his data collected from compositions written by university age students in ESL program, following sentences account for this type of transitivisation:

---

[13] It should be noted that these examples account for the alternation between paired ergative use and causative use of verbs such as *open, melt* and *move*.

(14) a. *I hope he's always light up his face.
(in the sense of) "I hope his face will always light up." (when he sees me)
b. *Whenever I met an ill-natured person, I'm break my heart.
(in the sense of) "Whenever. . .my heart breaks."
c. *I changed myself a lot in those years.
(in the sense of) "I changed a lot in those years."
Zobl (1989:216 (16),(17),(18))

In these sentences in (14a-c), verbs are assumed to belong to the unaccusative-paired ergative class because in well formed sentences, verbs have a sense of *change of state* but do not have clear external or internal causer. But, as seen in the productions of learners, they inserted non-causative arguments ("*he*" in 14 a ; "*I*" in 14 b and 14 c) in subject position and kept the internal arguments ("*his face*" in 14 a ; "*my heart*" in 14 b and "*myself*" in 14 c) in object position. This insertion of additional argument blocks the movement of the internal arguments to subject position. For that reason, this non-causative transitivisation differs from the causative transitivisation based on "extensive use of causativisation rule" (cf. Rutherford's examples in sentences (13 a,b)) and "learner's misclassification of unaccusatives as transitives".

4.5 Postverbal NP Structure

Another structure related to the erroneous use of English unaccusatives and paired ergatives by learners of English is the postverbal NP structure.

Zobl (1989:204) discussed this type of non-target structures referring to the following data collected from Japanese learners who are in "low" to "high intermediate" proficiency levels.

(15) a. *Sometimes *comes a good regular wave*. (Japanese L1: low intermediate)
b. *I was just patient until *dried my clothes*. (Japanese L1: high intermediate)
(in the sense of) 'I was just patient until my clothes had dried'
c. *I think it *continue of today condition* forever. (Japanese L1: intermediate)
(in the sense of) 'I think the condition of today / today's condition will continue forever'.
(Zobl 1989:204 (4)-(6))

As it is seen, surface subjects of the sentences in (15 a-c) occur in postverbal position, that is subjects follow the verb phrases. In target English, these subjects should

precede the verb phrase. Sentence (15 c) is noteworthy, since the subject position is occupied with "expletive or dummy"[14] *it*.

Some examples of the same structure are introduced and discussed by Rutherford (1989). In his research, Rutherford examined the effect of the differences in word order of the native and target languages of the learners of English on their interlanguage. Examining some 600 compositions of learners from 20 native language backgrounds, Rutherford extracted 304 compositions of students, representing three native languages (59 Spanish, 149 Saudi Arabic and 21 Japanese) for research purposes (1989:167).

The following are sentences among Rutherford's data, including verbs which require a single nominal argument. Sentences in (16 a, b) were produced by L1 Spanish speakers and the ones in (17 a-d) were produced by L1 Arabic speakers

(16) a. *On his particular place called G. ...*happened a story* which now appears on all Mexican history books, ...

b. And then at least *comes the great day*.

(Rutherford 1989:178-179)

(17) a. *... but lately *happen some extra things or little changes* on this custom because of the civilization, opening on the world and the development ideas and movements.

b. After that, they'll be lead to their house, and with that *comes the end of the wedding*.

c. The first people to come into the church were the closest relatives of the bride and bridegroom and then *came the rest of the invited people*.

d. The bride was very attractive, on her face *appeared those two red cheeks* and above them beautiful deep eyes.

(Rutherford 1989:179)

What is remarkable here is that most of the sentences including *an NP following a verb phrase* contain unaccusative verbs or other verbs that manifest unaccusativity.

---

[14] It is a semantically empty element, most often a noun phrase, which is required for well-formedness in certain positions in certain structures (Trask 1993:87). Besides, it might mean a word, particularly one inserted into the middle of a phrase as a meaningless emotional intensifier, as in "*Where's **that** bloody cat*" (Trask 1993:98).

Rutherford himself states that these constructions are "limited to what Perlmutter (1978) identifies (in Relational Grammar[15] terms) as 'unaccusativity' " (1989:170).

4.6 Other Structures

Oshita (1997:155) claims that "one of the fundamental goals of the research on the L2 acquisition of English *unaccusatives* and *paired ergative verbs* is to determine the full spectrum of syntactic variations in which this class of verbs to appear." Referring to the structure of the sentence[16] in (15 c), he proposes that besides *it-V-NP* structure, there is one more possibility, namely *there-V-NP* structure, which results in grammatical English sentences with a certain semantically restricted subclass of unaccusative verbs

(21) a. There appeared a huge iceberg in front of the ship. (APPEARANCE)
b. There exists some challenging problems for all of us. (EXISTENCE)
c. There arrived three boys at the station. (INHERENTLY DIRECTED MOTION)

(Oshita 1997:154 (27 a-c))

Then, he adds that

> Similarly, we cannot ignore the potential existence of structures which combine the postverbal NP and the "passive" verbal phrase of *be+Ven*. That is, we need to investigate if L2 learners of English also employ structural patterns such as *be+Ven NP*, *it be+Ven NP*, and *there be +Ven NP* (Oshita 1997:155).

Consequently, following theoretical considerations, Oshita proposed 10 plausible surface structures in which unaccusative verbs might appear. Moreover, he selected ten unaccusative verbs[17]. In a computerised database, he searched the occurrences of these plausible surface structures containing the unaccusative verbs he selected. The data for

---

[15] A theory of grammar developed by David Perlmutter and Paul Postal in the 1970s. It represents the first major attempt at incorporating grammatical relations into syntactic theory. Relational Grammar (RG) differs from all other approaches in taking grammatical relations like Subject, Direct Object and Indirect Object as its primitives and in assigning no particular importance to constituent structures of the familiar kind (Trask 1993:236-7).

[16] It was one of the sentences introduced by Zobl (1989:204 (6)), in which subject position is filled with dummy "*it*". Consequently, the structure of the sentence is regarded as ***it-V-NP*** [*I think it *continue of today condition* forever (Japanese L1: intermediate)].

[17] These unaccusative verbs are *appear, arise, arrive, die, disappear, exist, fall, happen, occur* and *rise* (Oshita 1997: 173).

the study was gathered from the 1993 version of LLC (Longman Learners Corpus) which is a large computerised database containing written English produced by native speakers of various languages. For this study, he chose four native languages, i.e. Italian, Spanish, Japanese and Korean, and 3362 essays written by native speakers of these languages. The number of essays in each language was: Italian (684), Spanish(1079), Japanese(1363), and Korean(236).

The 10 plausible surface structures (Oshita 1997:179) and the number of sentences in these structures (Oshita 1997:326) produced by learners are listed below. Italicised sentences are some examples of these sentences from various L1 backgrounds. (Oshita 1997:329-334)

a. Preverbal NP structures

i. NP-V.....(851 occurrences)
(*not included due to a large number of instances*)

ii. NP-be-Ven.....(37 occurrences)
**I was nearly arrived to my office (Italian)*
**I thought that maybe I was died (Spanish)*
**education boom, ... , was arised among high societies (Korean)*

b. Postverbal NP without "passive" structures

iii. there-V-NP..... .....(04 occurrences)
there exist two kinds of jobs (Italian)
there exist many kind of prejudices. (Korean)
there often arise the problem of political indiference (sic.) (Japanese)

iv. it-V-NP.....(13 occurrences)
**it existed a lot of restrictions (Italian)*
**it arrived the day of his departure (Spanish)*
**it happened very strange thing (Korean)*

v. ø-V-NP.....(16 occurrences)
**...and appeared a little green man who... (Italian)*
**..., so appeared the phenomena called, video (Spanish)*
**And happened a few case. (Japanese)*

c. Postverbal NP with "passive" structures

vi. there-be-Ven-NP.....(04 occurrences)
**there are appear_new dreams (Japanese)*
**After the war, there were appeared a lot of women who believed... (Japanese)*
**there was happen_problem about American minister (Japanese)*

vii. it-be-Ven-NP..... (no occurrence)

viii. ø-be-Ven-NP.....(no occurrence)

d. Transitive Structure

ix. NP1-V-NP2.....(12 occurrences)

**I was explaining that(=what) I had happened (Spanish)*

**he falls a piece of note into dough by mistake (Korean)*

**[the Congress] may die out the ban on women in the battle (Japanese)*

e. Special

x. there-be-NP-V..... (04 occurrences)

**because I know there are so many kind of people exist in the U.S. so called...(Japanese)*

**there was two thig (sic.) happened (Japanese)*

**there are a lot of strange things happen who saw the UFO (Japanese)*

Following table summarises the overall relationship between the structure and the L1 in which unaccusative verbs were used.

		Italian	Spanish	Korean	Japanese	**TOTAL**
i	NP-V	216	327	39	269	**851**
ii	Np-be-Ven	8	4	8	17	**37**
iii	There-V-NP	2	0	1	1	**4**
iv	İt-V-NP	5	6	1	1	**13**
v	ø -V-NP	7	8	0	1	**16**
vi	there-be-Ven-NP	0	0	0	4	**4**
vii	İt-be-Ven-NP	0	0	0	0	**0**
viii	ø-be-Ven-NP	0	0	0	0	**0**
ix	NP1-V-NP2	2	2	1	7	**12**
x	There-be-NP-V	0	0	0	4	**4**
	TOTAL	**240**	**347**	**50**	**304**	**941**

(Oshita 1997:180)

Finally, various studies on acquisition of ergative verbs indicate that this class of verbs pose learnability problem for learners from different L1 backgrounds. Three research (Abdullayeva (1993), Montrul (1997) and Karacaer (1998)) on acquisition of ergatives by Turkish Learners of English show that ***Turkish learners avoid ergative structures and prefer passive structures instead. Moreover, both research, Abdullayeva (1993) and Karacaer (1998) indicate that the rate of avoidance seems to increase as the proficiency level increases.***

CHAPTER 5 METHODOLOGY

5.1. Participants

Participants of the study are 50 Turkish speaking learners of English randomly selected among the 1st year students of English Language Teaching Department of Faculty of Education at Uludag University in 1999-2000 academic year. Majority of the students (45) are from high schools where intensive Foreign Language Programme is applied. According to the placement test given at the beginning of the academic year, their proficiency level is high intermediate. For research purposes, their relative proficiency levels were determined with a cloze test[1]. Their mean age is 19 (range 18-23) and 17 of them are male, but in this study age and sex were not taken into consideration as variables.

A total of 60 native speakers of English served as control group for the study. Members of the control group are professional language teachers and linguists from The United States of America and England. Communication with them is provided via the Internet.

5.2. Materials

In this study, four research instruments, *a cloze test, a grammaticality judgment test* (in the form of sentence-acceptability), *a sentence completion task* and a *sentence production task* were used.

5.2.1. Cloze Test

In order to determine overall proficiency levels of the learners relatively (in comparison with one another) a *cloze test* was used despite the

---

[1] Although a placement test was given at the beginning of the academic year to determine the proficiency levels of the participants, it seemed necessary to measure the learners' ***current*** levels of language mastery for two reasons. Firstly, it is quite probable that an instruction period of 8 months has influenced the learners' proficiency levels. Secondly, the placement test was in the form of multiple choice test which aimed at measuring the learners' competence on specific grammar points such as tense, aspect, voice, adverbial use, etc. On the other hand, the nature of this study requires to know the learners' knowledge of vocabulary, syntax and especially semantics-syntax correspondences. For these reasons, a cloze test (reliability, validity and practicability of which were verified at Ohio University) was administered. The term "proficiency" in the following sections refers to the learners' scores in the cloze test (see section 5.2.1 for the details of the test).

scoring problems[2] because "cloze tests do hold potential for measuring aspects of students' written grammatical competence, consisting of 'knowledge of vocabulary, morphology, syntax, textual competence and knowledge of the cohesive and rhetorical properties of text" (Bachman 1990:87-88). Moreover, validity of cloze tests has been supported by a considerable body of literature ((Rivers (1981:377); Madsen (1983:47); Celce-Murcia and Hilles (1988:152-54); Hughes (1989:62-63); Chapelle and Abraham (1990:390); Brown (1994:262-63)). For these reasons, with the permission of the author, a cloze test with fixed-ratio deletion produced by Oshita (1997) was used. (see Appendix A) The test consists of two stories with 25 blanks each (totally 50 blanks), and in each story every 5th word was deleted, except the ones in the first and last sentences, which were kept intact to provide contextual information. The list of acceptable answers compiled on the basis of native speaker preferences were provided by the author as well (see Appendix B).

5.2.2. Grammaticality Judgment Test

A pilot study of examining the written compositions of the participants from the viewpoint of transitivity errors in verb usage indicated that their erroneous usage of ergative verbs fall in "passivisation" and "transitivisation". The Grammaticality Judgment Test (see Appendix C) was developed on the basis of this observation. The Grammaticality Judgment Test aimed to assess the subjects' perception of ergative verbs in various (both correct and erroneous) structural patterns in order to show the relative error rate for each verb in each structure with respect to the other intransitive verbs in the same structural patterns.

In the test, the same number of certain *"unaccusative"*, *"paired ergative"* and *"unergative" verbs* were presented in the structural patterns stated below:

First of all, 10 ***paired ergative*** verbs, (*wash, peel, clean, cut, carry, cook, rent, swallow, read* and *break*) were chosen. That each verb can be used as both "*ergative verb*" and "*transitive verb*" was confirmed by various grammar books

---

[2] In scoring a cloze test on the basis of acceptable-word method, Madsen (1983:50) does not recommend that non-native speakers decide what equivalent words to use. Instead, the test should be given to a group of native speakers and any word that two or more of these native speakers put any blank can be considered as a good equivalent.

Dixon 1991:322-34, Palmer 1965:90, Swan 1980:457, Eastwood 1994:142, Halliday 1994:163 and Thewlis 1997:57. Among the three possible structures for each verb, an ergative (e.g. *The book reads well*) and a passive (*The book was read*) were selected and in these two versions, two test sentences for each verb were produced. Since the concern here is learners' choice between ergative and passive structures, transitive use of these verbs, such as *He read the book*, were discarded. Consequently, 20 test sentences were produced for 10 paired ergative verbs.

In order to be able to contrast participants' erroneous usage of ergative verbs with respect to all intransitive verbs, secondly, 10 ***unergative verbs*** (*dance, joke, laugh, smile, speak, talk, sleep, swim* and *shout*) were chosen. Besides a grammatical test sentence for each unergative verb (e.g. *She sleeps*), considering the erroneous use of these verb revealed in the pilot study, two ungrammatical sentences for each verb, one in transitive use (e.g. **Mother sleeps her baby*) and one in passive use (**The baby was slept*) were produced. Consequently, 30 test sentences were produced for 10 unergative verbs.

Thirdly, 10 ***unaccusative verbs***, (*appear, arise, arrive, die, exist, fall, happen, occur, rise* and *emerge*) were chosen. Following the same procedure mentioned above, three test sentences for each verb (a grammatical one: e.g. *The accident happened*, a transitive one: e.g. **Slippery road happened the accident*, and a passive one **The accident was happened by him*) were produced. Consequently 30 test sentences were produced for 10 unaccusative verbs. Finally, adding 5 irrelevant sentences, total of 85 test sentences were produced.

In order to provide contextual information, additional sentences were added to some of the test sentences when necessary, but the parts that subjects were asked to judge were underlined. As a result, judgement test has included 85 passages.

Grammatical correctness of each underlined clause was judged on a 3-scale measure: *correct, not correct* and *cannot decide*.

Since the test includes ungrammatical sentences produced deliberately, grammaticality of the rest of the sentences have vital importance for the validity of the test. For that reason, grammaticality of the test items were checked by native speakers before it was submitted. (see section 5.3 for the validity of the test)

5.2.3. Sentence Completion Task

Following Leow (1996), who claims that judgment tests should be supplemented by other tests, a Sentence Completion Task (see Appendix D) was devised in order to confirm The Grammaticality Judgment test results, which clearly indicated that the most problematic sub-class of ergatives is ***paired ergatives***. The problem stemmed from the fact that a great majority of the participants favoured passive structures with these verbs instead of grammatical structure in NP-VP pattern. Besides, the learners were instructed to account for their preferences in the Sentence Completion Task with the aim of obtaining some signs that can shed light on the reasons of the errors.

In order to see if there is consistency in subjects' preferences, the same verbs (*wash, peel, clean, cut, carry, cook, rent, swallow*, *read* and *break*) used in the Grammaticality Judgment Test were chosen again. For each verb, a passage including vital contextual information[3] was written, and each passage ended with an incomplete sentence, where the main predicate was missing. The students were asked to complete the sentence with the verb given in infinitive form. Besides ten passages for ten ergative verbs, five additional distracting passages that might be finished with passive sentences were added.

When the piloting phase showed that some native speakers also passivised the ergative verbs in this structural pattern, a native speaker version of the same Sentence

---

[3] This contextual information is based on the cases in which *ergative* NP-VP structure is claimed to be necessary by Dixon (1991:322) and Thewlis (1997:57). Briefly, contexts *in which success (or lack of success) of the activity is not due to the Subject* are created, and in some instances this aspect of the context is emphasised (according to a native speaker, exaggerated)

A number of minor issues related to distinctions between British English and US English (e.g. *To swallow a pill* and *Swallowing a pill*, or *ready meals* or *ready-made meals*) were not taken into consideration since the control group includes native speakers from both UK and USA. and the importance of the distinction seem to be losing its importance as seen in the following native speaker (Roberts:p.c:2000*) opinions

> Alongside native speaker varieties of English there has grown up an International English which seems different from native speaker varieties, if only that it is certainly simpler, less idiomatic and expressive of international business (or sometimes academic) culture...When the time comes, I would like to ask those confident, fluent non-native speakers for advice on areas of a language which I do not own and which is sufficiently distant form the language I was brought up speaking for me to seek occasional help with how it works

---

* Paul Roberts (*p.roberts@herts.ac.uk*) University of Hertfordshire, UK (Date 09 June 2000/ 18.04)

Completion Task (see Appendix E) was prepared in order to ascertain if a considerable number of native speakers passivise these verbs in the same structural pattern. In control group (or e-mail) version of the task, no distracting sentences were included and the purpose of the study was stated explicitly. Besides, native speakers were informed of the claim that these verbs are passivised erroneously[4].

5.2.4. Sentence Production Task

Grammaticality Judgment test indicated that "passivised" and "transitivised" ***unaccusative*** verbs constitute the **secondary problematic** division of intransitive verbs, but there was no statistical difference between passivisation and transitivisation rates. To see the most problematic error type and obtain erroneous productions that might be the indication of the reason why the participants encounter such errors, a sentence production task was designed.

Participants were given a grammar quiz which requires *"writing their own sentences related to some sentence patterns reviewed in their regular grammar course"*. The students were not aware of the focus of the quiz, and they were asked to form sentences in certain patterns (for example, a cleft sentence or a complex sentence or a compound sentence, etc.) with the given 10 unaccusative verbs which were also used in the Grammaticality Judgment Test. The questions in the grammar quiz were arranged in a way that students produced two sentences of their own using each verb.

In the quiz, dictionary meanings[5] of the verbs were quoted from Oxford Advanced Learner's Dictionary of Current English.

5.3. Piloting and Trying out the Research Instruments

Two type of information was collected in the piloting phase. One relates to the practical aspects of administering the test, such as time required and clarity of the instructions, etc. The other relates to the reliability and validity of the test.

---

[4] Such details were included in the task in order to eliminate factors in native speaker judgements, caused by lack of attention, fatigue, carelessness, or some other aspects of performance.

[5] This study emphasises the semantics-syntax correspondence, that is the relationship between verb's meaning and syntactic pattern in which this verb appears. For that reason, meanings of these verbs were supplied in the task to see how the learners construct syntactic patterns with respect to those meanings.

For the first type of information, the test was given to four students (who did not participate in the actual study) without any time limitation to see the average time they needed. Besides, clarity of the instructions was checked according to their responds during the test administration.

For the second type of information, the Grammaticality Judgment test was given to 6 native speakers of English (who are 5 English teachers[6] and a linguist[7]) and they were informed of *the purpose of the study, instructions for the test, time allowed, item groups to be scored independently, grouping criteria for the test items* and *deliberate grammatical errors in the test.*

According to the feedback obtained from the native speakers, the test items were shortened and distracting parts were discarded, grammatical errors (except the deliberate ones) about punctuation and article use were corrected, the parts of the test items to be judged were underlined, some changes in pragmatics and word choice were made.

The same procedure was followed for the Sentence Completion Task. This time, ergative use of some verbs (*swallow* and *carry*) were found to be questionable but **not** unacceptable by a native speaker[8]. One native speaker[9] found a few contexts too exaggerated and artificial. The relevant verbs were not excluded but contexts were modified.

5.4. Procedures

All the tests were administered in regular class hours. First, the cloze test was administered and a week later grammaticality judgment test was given. Considering the results of the grammaticality judgment test, a sentence completion task and a sentence production task were developed and administered at one-week intervals.

At the very beginning, participants were informed of the purpose of the study, (*to diagnose erroneous verb use from the viewpoint of transitivity*) the voluntary nature of participation and guaranteed anonymity of their responses. Personal information such

---

[6] (in alphabetic order) John Shaw Adams, Alastair Clarke, Robyn Goyette, Casey Peltier, Debbie Walton, ,
[7] Brian Wistner
[8] John Shaw Adams
[9] Lisa Crandall

as name, sex, age, length of language study were collected on answer sheet of the first test.

In the cloze test, participants were told to write a contextually and grammatically appropriate (only one) word in each blank.

In the grammaticality judgment test, instructions were given in the L1 of the participants, and they were asked to record their judgments on each item by filling the appropriate circle on a multiple-choice answer sheet. Furthermore, participants were asked to supply corrections (or at least the reason why the structure is incorrect) when they regarded a structure as ungrammatical and the answer sheet included necessary space for this purpose.

In the sentence completion task, participants were asked to complete the missing verbs of the last sentences of the passages with the given verbs in *to* infinitive form. They were instructed that they could complete the sentences in whatever structure they prefer without any limitation on the choice of tense, aspect or mood on the condition that they should use the given verb in *to* infinitive form.

The sentence production task was in the form of routine grammar quiz, since they were asked to practise some sentence patterns reviewed in regular class hours. They were instructed to produce two sentences for each verb. Participants wrote sentences of their own on a separate sheet of paper as they do in routine quizzes.

Sentence Completion Task was administered to the native speakers via e-mails on the internet. Their responses were collected in the same way.

5.5. Scoring

For this work, there were two options to score the data: scoring the correct usage of ergative verbs or scoring the erroneous usage of the verbs. In this work, correct usage (or correct judgments / productions) of ergative verbs (except sentence production task) were taken into consideration for scoring purposes in order to compare and contrast performances of the participants in *ergative verbs* and in *other intransitives*.

In the sentence production task, only erroneous usage of the verbs from the viewpoint of transitivity was considered, since the number and type of other errors were difficult to classify.

5.5.1. Scoring the Cloze Test

The acceptable-word method was used for scoring the cloze test answers. As Hinofotis (1980:126-27) stated, acceptable-word method has superior reliability since it discriminates among levels far better than exact-word method. The list of acceptable answers is provided by the author of the test. (see sec. 5.2.1)

In scoring, minor spelling errors were tolerated but grammatical errors in part of speech, tense, number, etc. were not. For each acceptable answer 2 points were given. The possible maximum score for the cloze test was 100.

5.5.2. Scoring the Grammaticality Judgment Test

Scoring of the grammaticality judgment test was done based on the correspondence between the participants' answers and ***predetermined expected answers***. If the judgment of the participant for a particular test item was expected response, one point was given. The other answers were scored as 0.

In the grammaticality judgment test, the following cases were considered as correct English: (Parentheses adjacent to the verbs indicate the item number in the test which can be seen in Appendix C)

a) Ten grammatical sentences in NP-VP word order with ***paired ergatives*** [*wash*(20), *peel*(7), *clean*(27), *cut*(33), *carry*(50), *cook*(38), *rent*(62), *swallow*(16), *read*(56) and *break*(70)] (e.g. *This shirt washes well.*)

b) Ten grammatical sentences in passive structure with the ***same ergative verbs*** (to see preferences between passive structure and ergative structure) [*wash*(1), *peel*(17), *clean*(73), *cut*(49), *carry*(57), *cook*(51), *rent*(80), *swallow*(8), *read*(82) and *break*(21)] that have causative counterparts. (e.g. *The shirt was washed*)

c) Ten grammatical sentences in NP-VP word order with ***unergative verbs***. [*cry*(22), *dance*(2), *joke*(34), *laugh*(41), *smile*(61), *speak*(39), *talk*(58), *sleep*(69), *swim*(53) and *shout*(81)] (e.g. *Bob swims in the lake*)

d) Ten grammatical sentences in NP-VP word order with ***unaccusative verbs*** (ergatives that do not have causative counterparts) [*appear*(11), *arise*(6), *arrive*(19), *die*(37), *exist*(43), *fall*(55), *happen*(76), *occur*(30), *rise*(64) and *emerge*(25)]. (e.g *Dark clouds appeared on the horizon*)

In total, 40 out of 80 experimental items stated above in the judgment test, were considered as "correct English" for scoring purposes.

As for cases predetermined as incorrect, the following instances occurred in the test:

a) Ten ungrammatical passive sentences with the same ***(passivised) unergative*** verbs: [*cry*(40), *dance*(52), *joke*(9), *laugh*(35), *smile*(23), *speak*(59), *talk*(3), *sleep*(74), *swim*(18) and *shout* (42)] (e.g. **He was cried by his girlfriend.*)

b) Ten ungrammatical causative sentences with the same ***(transitivised) unergative*** verbs: [*cry*(79), *dance*(83), *joke*(54), *laugh*(63), *smile*(31), *speak*(10), *talk*(36), *sleep*(24), *swim*(48) and *shout*(72)] (e.g. * *Clowns laughed my son.*)

c) Ten ungrammatical passive sentences with the same ***(passivised) unaccusative verbs*** [*appear*(26), *arise*(44), *arrive*(65), *die*(75), *exist*(29), *fall*(32), *happen*(78), *occur*(13), *rise*(47) and *emerge*(71)] (e.g. * *Life might be existed by this amount of water.*)

d) Ten ungrammatical causative sentences with the same ***(transitivised) unaccusative verbs*** [*appear*(60), *arise*(12), *arrive*(45), *die*(66), *exist*(85), *fall*(77), *happen*(15), *occur*(4), *rise*(67) and *emerge*(68)]. (e.g. **Guerrillas had fallen another helicopter.*)

In total, 40 out of 80 experimental items in the judgment test were considered as "incorrect English" for scoring purposes. Five distracting sentences were not scored.

Test was administered to 10 native speakers of English and all of the native speakers' responses were the same as predetermined expected answers. For that reason, predetermined expected answers were considered as normative answers.

Besides scoring the overall test, *verb groups of ten* (based on verb class and structural pattern in which these verbs appear) were scored independently as well. The possible maximum score for each sub-group of verbs was 10. Overall score for the Grammaticality Judgment Test was 80.

5.5.3. Scoring the Sentence Completion Task

Sentence completion task were scored on the basis of expected structures for 10 test items including paired ergatives. These verbs are (the same verbs used in the grammaticality judgment test) [*wash*(1), *peel*(3), *clean*(5), *cut*(7), *carry*(9), *break*(10),

cook(12), *rent*(13), *swallow*(14), and *read*(15)]. Again, parentheses indicate the item number in sentence completion task which can be seen in (Appendix D).

Any test item with one of the paired ergatives stated above was expected to be a structure in NP-VP word order due to the contextual considerations. For scoring purposes, each expected structure in NP-VP word order was given a point. Five distracting test items (2, 4, 6, 8, 11) in learners' version were not scored.

Native Speaker responses were also scored according to the same criterion, Relative performances of the participants on the sentence completion task were evaluated in comparison with the native speaker responses. Since the number of items to be scored in the test was 10, the possible maximum score, therefore, was 10.

5.5.4. Scoring the Sentence Production Task

Since the aim of the sentence production task was to decide on the most problematic error type (either passivisation or transitivisation of unaccusative verbs) and to shed light on the nature of the erroneous formations with these verbs, only ungrammatical sentences from the viewpoint of pasivisation and transitivisation were taken into consideration and these sentences were classified and counted according to the error type. (for classified erroneous sentences see Appendix F)

5.6. Results and Scores

In this section, raw results and scores obtained by means of the research instruments were presented without being analysed.

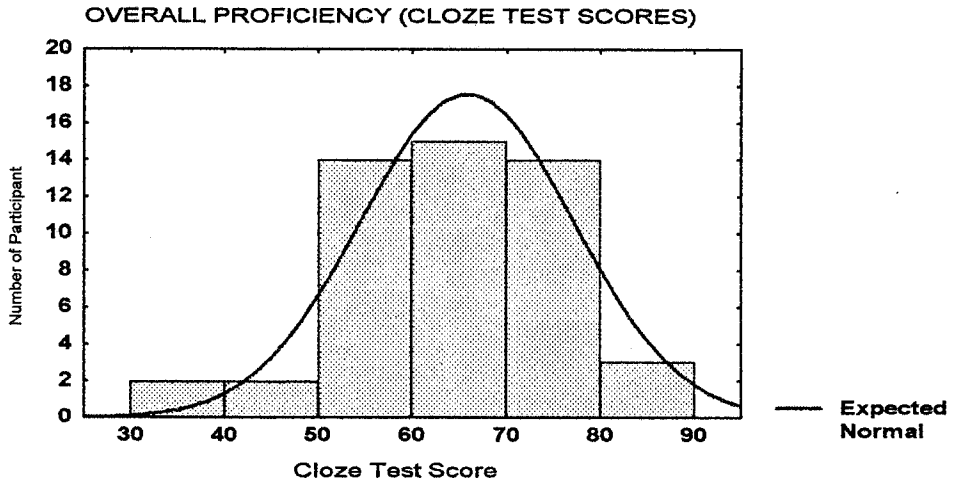
5.6.1. Cloze Test Scores

The result of the cloze test is shown below. Possible maximum score was 100.

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
65.84	68.00	38.00	90.00	11.34

To show group characteristics of the participants, frequency distributions of the cloze test results is presented below:

Graph 1 Frequency Distribution of the Cloze Test Results



5.6.2. Grammaticality Judgment Test Scores

Results of the grammaticality judgment test were analysed in two ways: Considering 80 test items, ***overall result of the test*** and considering certain groups of test items including the particular verb class in certain structures, results of the certain verb groups. (for individual scores of the participants in certain verb groups see Appendix G)

5.6.2.1. Overall Result of the Grammaticality Judgment Test

The result of the Grammaticality Judgment Test considering all the test items (80 passages) is shown below. Possible maximum score for overall test was 80.

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
57.84	58.00	43.00	67.00	06.28

Following sections include results of the sub-groups of the Grammaticality Judgment Test based on certain intransitive verb types in particular structures.

5.6.2.2. Paired Ergative Verbs in NP-VP Word Order:

Includes 10 test items. (e.g. *The book reads easily*) Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
2.08	1.00	0.00	9.00	2.12

5.6.2.3. Paired Ergative Verbs in Passive Structure:

Includes 10 test items (e.g. *The bag is carried easily*). Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
9.76	10.00	7.00	10.00	0.55

5.6.2.4. Unergative Verbs in NP-VP Word Order

Includes 10 test items. (e.g. *The baby cries*) Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
9.76	10.00	6.00	10.00	0.71

5.6.2.5. Passivised Unergative Verbs in Ungrammatical Passive Structure

Includes 10 test items. (e.g. **The baby was cried.*) Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
7.54	8.00	3.00	10.00	1.69

5.6.2.6. Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order

Includes 10 test items. (e.g. **He cried the baby*) Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
7.28	8.00	2.00	10.00	2.22

5.6.2.7. Unaccusative Verbs in Grammatical NP-VP Word Order

Includes 10 test items. (e.g. *Dark clouds appeared.*) Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
9.16	9.00	6.00	10.00	0.88

5.6.2.8. Passivised Unaccusative Verbs in Ungrammatical Passive Structure

Includes 10 test items (e.g. **The ship was appeared.*) Possible maximum score for this group of verbs was 10.

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
6.38	7.00	0.00	10.00	2.24

5.6.2.9 Transitivised Unaccusative Verbs in Ungrammatical NP-VP-NP word order

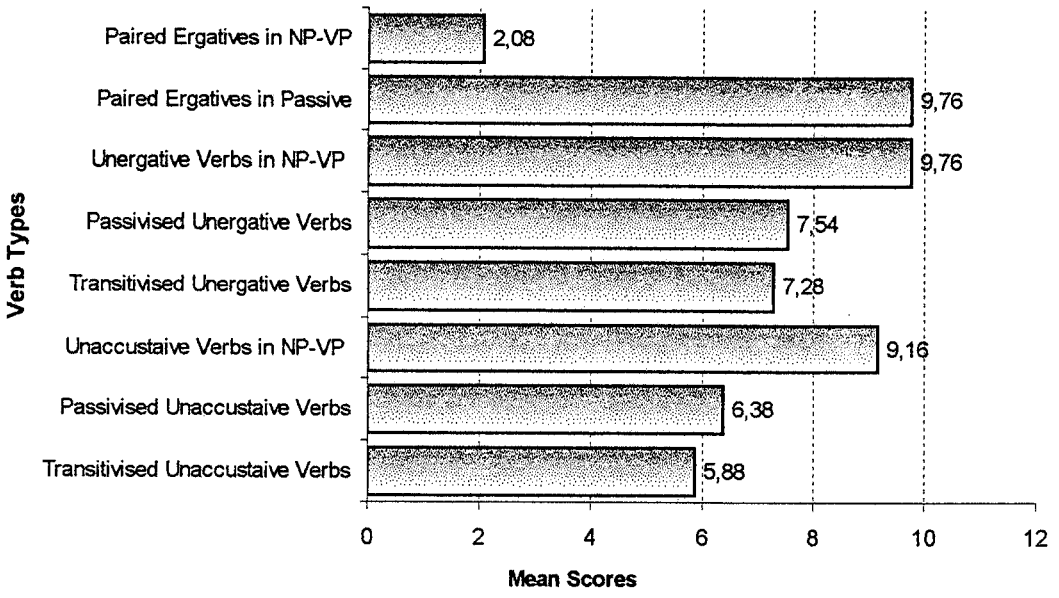
Includes 10 test items. (e.g.**The sun appeared the ship*) Possible maximum score for this group of verbs was 10

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
5.88	5.00	0.00	10.00	2.41

5.6.2.10. An Overview of the Scores in Verb Groups and Structural Patterns

Graph 2 below shows the relative performance of the participants (in terms of mean scores) in the Grammaticality Judgment Test with respect to the various verb classes in certain structures. Letter Codes used to represent the verb types and structural pattern in which these verbs appear are also shown below

Graph 2 Mean Scores in the Grammaticality Judgment Test for each Verb Group



Considering the mean scores, ***ergative verbs*** (*paired ones in NP-VP word order* [2.08], *transitivised unaccusatives* [5.88], and *passivised unaccusatives* [6.38]) seem to be the most problematic sub-class of intransitive verbs. On the other hand, mean scores of learners in paired ergatives in passive structure [9.76] shows that they favour passive when they avoid paired ergatives in NP-VP word order. According to the graph, the learners are most successful in typical intransitives (i.e., unergatives in NP-VP).

5.6.3. Sentence Completion Task Scores

Both learners' and native speaker's scores in sentence completion task were presented below. The number of items scored in the task was 10, and possible maximum score was 10. For individual preferences of learners with respect to the verbs in the task see (Appendix H) , for native speaker preferences see (Appendix I).

5.6.3.1. Scores of the Learners

Includes 10 test items. Possible maximum score was 10.

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
0.92	0.00	0.00	10.00	1.95

5.6.3.2. Scores of Native Speakers (Control group)

Includes 10 test items. Possible maximum score was 10.

Mean Score	Median	Minimum Score	Maximum Score	Std. Deviation
6.74	8.00	0.00	10.00	2.55

5.6.4 Sentence Production Task Results

In this task, total erroneous sentences from the viewpoint of transitivity were counted. The total number of erroneous sentences is 173. (156 of them [90.17%] are passivisation errors, and 17 are [9.82 %] transitivisation errors.)

Following table indicates distribution of erroneous sentences according to verb and error type.

VERBS	Passivisation Error		Transitivisation Error	
	Number	%	Number	%
appear	12	06.98 %	-	-
arise	20	11.63 %	3	01.74 %
arrive	5	02.91 %	-	-
die	8	04.65 %	-	-
exist	8	04.65 %	2	01.16 %
fall	12	06.98 %	-	-
happen	9	05.23 %	-	-
occur	19	11.05 %	-	-
rise	15	08.72 %	9	05.23 %
emerge	48	27.91 %	3	01.74 %

Table 2 Distribution of Error Types in Sentence Production task

CHAPTER 6 ANALYSIS OF THE RESULTS

Data for the research come from learners' judgments on the grammaticality of the test sentences in the ***Grammaticality Judgment Test***, their preferences for the structural patterns in which they complete the missing verb of the sentences in ***Sentence Completion Task***, and their own sentences including the given verbs in the ***Sentence Production Task***. On the other hand, native speaker preferences in Sentence Completion Task, collected via e-mails constitute the rest of the data.

Statistical analyses were performed by means of the Computer Program STATISTICA for Windows (Release 5.0) produced by StatSoft Inc. (1995), 2325 East 13th Street, Tulsa.

This section includes the discussions about the results of the Grammaticality Judgment Test in reference to each structural pattern in which various intransitive verb types appear. Besides, learners judgments were analysed according to individual verb types to see the difficulty rates posed by individual verbs.

Sentence Completion Task results of both the learners and native speakers were analysed comparatively. Again, the same procedure was followed for the analysis of Sentence Completion Task results in order to see participants' preferences for each verb.

Erroneous Sentences (from the viewpoint of transitivity) produced by the learners were counted and classified according to the error type.

Finally, this section seeks plausible explanations for the results obtained.

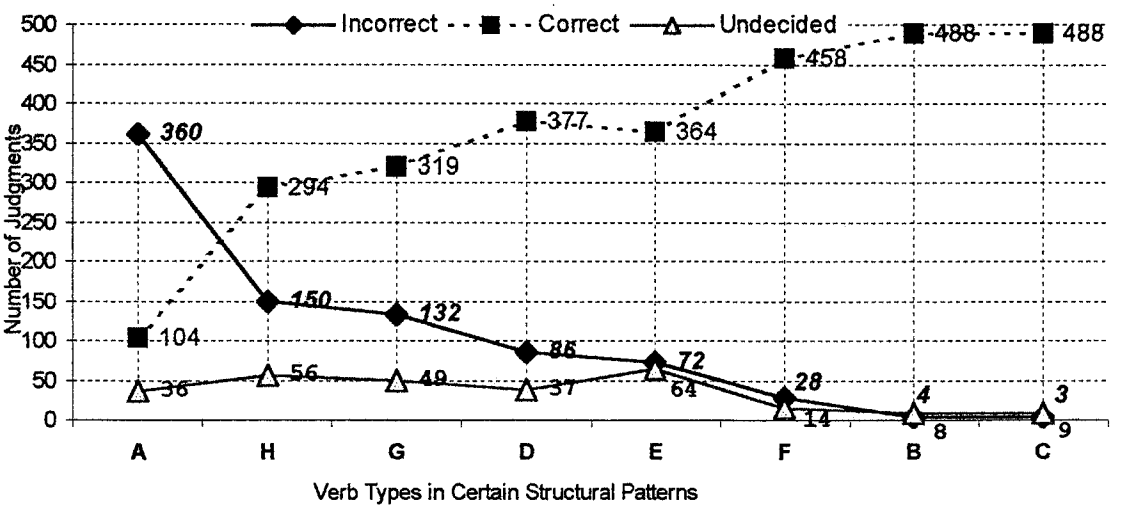
6.1. Analysis of the Results of the Grammaticality Judgment Test

As stated before (in section 5.5.2.10), separate scores of the learners in the verb groups in certain structural patterns revealed that *ergative verbs*, both paired ergatives and unaccusatives, constitute the most problematic sub-class of intransitive verbs. The list below shows, in the ascending order, the mean scores of the learners' use of intransitive verb groups according to the Grammaticality Judgment Test results. *This order also indicates the relative difficulty rate posed by various verb classes in the structural patterns stated below.*

VERB TYPES and STRUCTURAL PATTERNS	Mean
1 ***Paired Ergative Verbs in NP-VP Word Order*** (e.g. *This shirt washes easily*)	2.08
2 ***Transitivised Unaccusative Verbs in ungrammatical NP-VP-NP word order*** (* *The sun appeared the trees in the garden*)	5.88
3 ***Passivised Unaccusative Verbs in ungrammatical Passive Structure*** (**Trees were appeared by the Sun*)	6.38
4 Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order (* *Mother cried her baby*)	7.28
5 Passivised Unergative Verbs in Ungrammatical Passive Structure (e.g. **Baby was cried by her*)	7.54
6 Unaccusative Verbs in grammatical NP-VP Word Order (e.g. *Dark clouds appeared*)	9.16
7 Paired Ergative Verbs in Passive Structure (e.g. *The shirt was washed*)	9.76
8 Unergative Verbs in NP-VP Word Order (e.g. *The baby was crying*)	9.76

In this case, Graph 3 shows the number of ***correct***, ***incorrect*** and ***undecided*** judgments on the intransitive verb groups in the structural patterns stated before. In the Grammaticality Judgment Test, each group includes 10 test items to be judged and the number of participants is 50. Consequently there are 500 judgments for each verb group, and (except 5 irrelevant test items) the total number of judgments is 4000 for the entire Grammaticality Judgment Test which includes 8 sub-groups.

Graph 3 Incorrect Judgments vs. Correct Judgments



A-Paired Ergative Verbs in NP-VP Word Order (e.g. *This shirt washes easily*)
B-Paired Ergative Verbs in Passive Structure (e.g. *The shirt was washed*)
C-Unergative Verbs in NP-VP Word Order (e.g. *The baby was crying*)
D-Passivised Unergative Verbs in Ungrammatical Passive Structure (e.g. * *Baby was cried by her*)
E-Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order (* *Mother cried her baby*)
F-Unaccusative Verbs in grammatical NP-VP Word Order (e.g. *Dark clouds appeared*)
G-Passivised Unaccusative Verbs in Ungrammatical Passive Structure (* *Trees were appeared by the Sun*)
H-Transitivised Unaccusative Verbs in Ungrammatical NP-VP-NP Word Order (* *The Sun appeared the trees in the garden*)

The distribution of incorrect judgments across the verb types in certain structural patterns indicate that the most problematic verbs are the ***paired ergative verbs in NP-VP word order*** (360 incorrect judgments). ***Transitivised unaccusative verbs in ungrammatical NP-VP-NP word order*** (150 incorrect judgments) and ***passivised unaccusative verbs in ungrammatical Passive Structure*** (132 incorrect judgments) constitute the secondary problematic word types.

Descending order of the numbers of incorrect judgments and ascending order of the numbers of correct judgments match the same verb groups with the exception of Verb Group E (Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order) since the maximum number of *undecided* responses (64) belong to this group.

In order to see if there is a significant difference between the scores of learners in problematic verb groups (both *paired ergatives* and *unaccusatives*) and the scores in the other intransitives (*unergatives*), mean score of learners in each verb group in question is compared with the mean scores in the other verbs groups by means of ***t-test for Dependent Samples*** module of the Computer Program and Matrices of t-tests is obtained. (See Appendix J section 1)

The following table shows the ***t*** values ***p*** values (probability of error) in the comparison of means scores in verb groups with *t-test for Dependent Samples* (marked [shaded] differences are significant at p=0.05 level). Intersections of rows and columns in the table indicate the ***t*** and ***p*** value of the *t-test* which compares the mean scores in the verb groups shown in these rows and columns. For example, intersection of first row (1) and first column (A) indicates the ***t*** value (11.86960) and ***p*** value (0.000000) of the comparison of means of *Paired ergatives in NP-VP word order* and *Passivised Unergatives.*

Table 3 Statistical Comparison of the Mean Scores in Intransitive Verb Groups (Ergatives vs. Unergatives)

		A	**B**
		Passivised Unergatives (mean: 7.54000)	*Transitivised Unergatives* (mean:7.28000)
1	P. Ergatives in NP-VP word order (mean:2.08000)	**p=0.000000 t=11.86960**	**p=0.000000 t=9.578900**
2	Passivised Unaccusatives (mean:6.38000)	**p=0.000055 t=4.420400**	**p=0.009526 t=2.698600**
3	Transitivised Unaccusatives (mean:5.88000)	**p=0.009526 t=5.524320**	**p=0.000000 t=6.031480**

Table 3 shows that mean score in each ergative verb is statistically different from the mean scores in unergative verbs. Most specifically, ***paired ergatives in NP-VP word order*** is the most problematic verb group. According to the Grammatical Judgment Test Results, ***Transitivised Unaccusative Verbs*** and ***Passivised Unaccusative Verbs*** constitute the secondary problematic verb groups. Although mean scores in transitivised and passivised unaccusatives are different from each other (5.88 and 6.38), t-test result shows that ***the difference between mean scores in passivised and transitivised unaccusatives is not statistically significant*** (t=1.59586,df=49, p=0.116950) (see Appendix J section 2 for all possible comparisons among verb types)

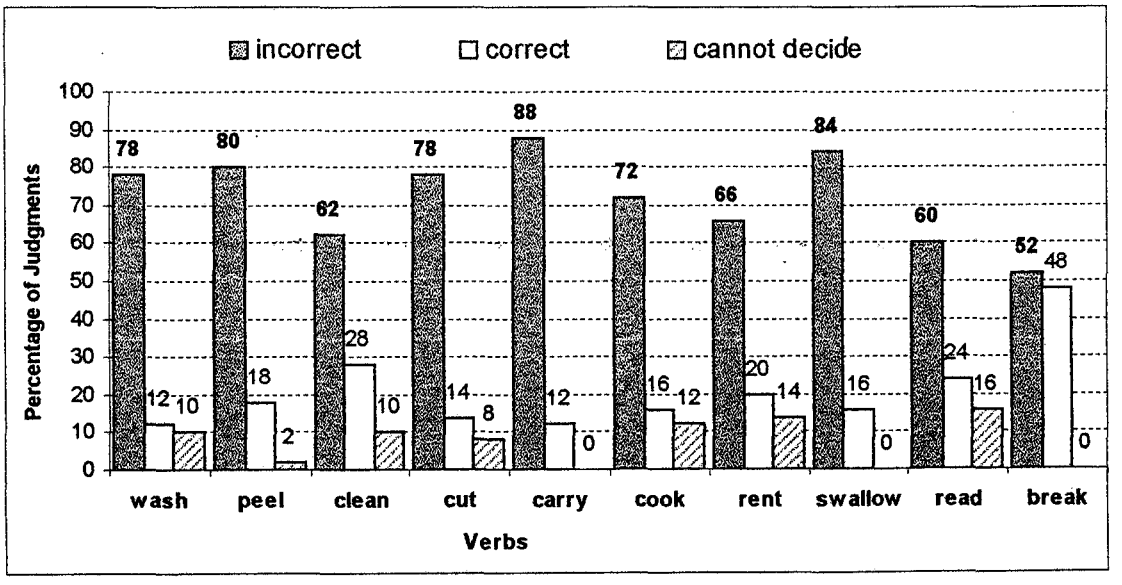
The following sections include the analysis of the judgments on the different verb groups in certain structural patterns from the viewpoints of verbs. Grammaticality of each verb in the given pattern is judged by 50 participants, that is, the total number of judgments for each verb is 50. In this case, the number and percentage of *correct*, *incorrect* and *undecided* judgments out of 50 are shown in the following tables. Graphs include the distribution of correct, incorrect and undecided judgments for each verb in terms of percentages.

6.1.1. Paired Ergative Verbs in NP-VP Word Order *(e.g. This shirt washes easily)*

Table 4 The Numbers and Percentages of Judgments on Inchoative Verbs in NP-VP Word Order

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
wash	39	78	6	12	5	10
peel	40	80	9	18	1	2
clean	31	62	14	28	5	10
cut	39	78	7	14	4	8
carry	44	88	6	12	0	0
cook	36	72	8	16	6	12
rent	33	66	10	20	7	14
swallow	42	84	8	16	0	0
read	30	60	12	24	8	16
break	26	52	24	48	0	0

Graph 4 Distribution of Judgments on Paired Ergative Verbs in NP-VP Word Order



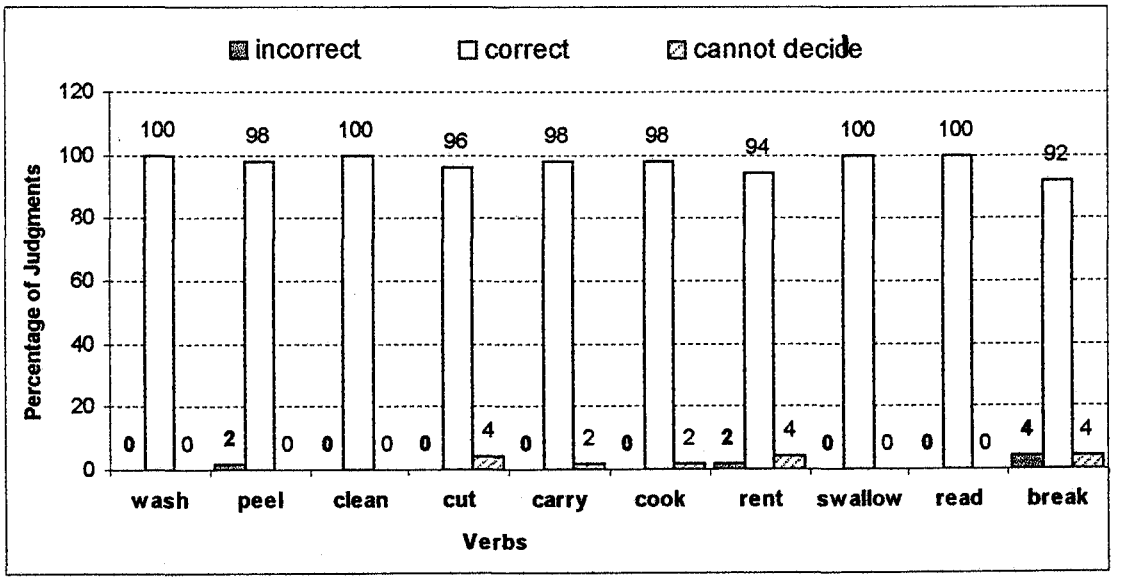
According to the results of the grammaticality judgment test, this is the most problematic group of verbs in this structural pattern. Most learners favour passive structure instead of this pattern. On the other hand, ***break*** (48 %) and ***clean*** (28%) are the verbs used most frequently in this structural pattern with respect to the other verbs in the group.

6.1.2. Paired Ergative Verbs in Passive Structure *(e.g. The shirt was washed)*

Table 5 The Numbers and Percentages of Judgments on Paired Ergative Verbs in Passive structure

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
wash	0	0	50	100	0	0
peel	1	2	49	98	0	0
clean	0	0	50	100	0	0
cut	0	0	48	96	2	4
carry	0	0	49	98	1	2
cook	0	0	49	98	1	2
rent	1	2	47	94	2	4
swallow	0	0	50	100	0	0
read	0	0	50	100	0	0
break	2	4	46	92	2	4

Graph 5 Distribution of Judgments on Paired Ergative Verbs in Passive Structure



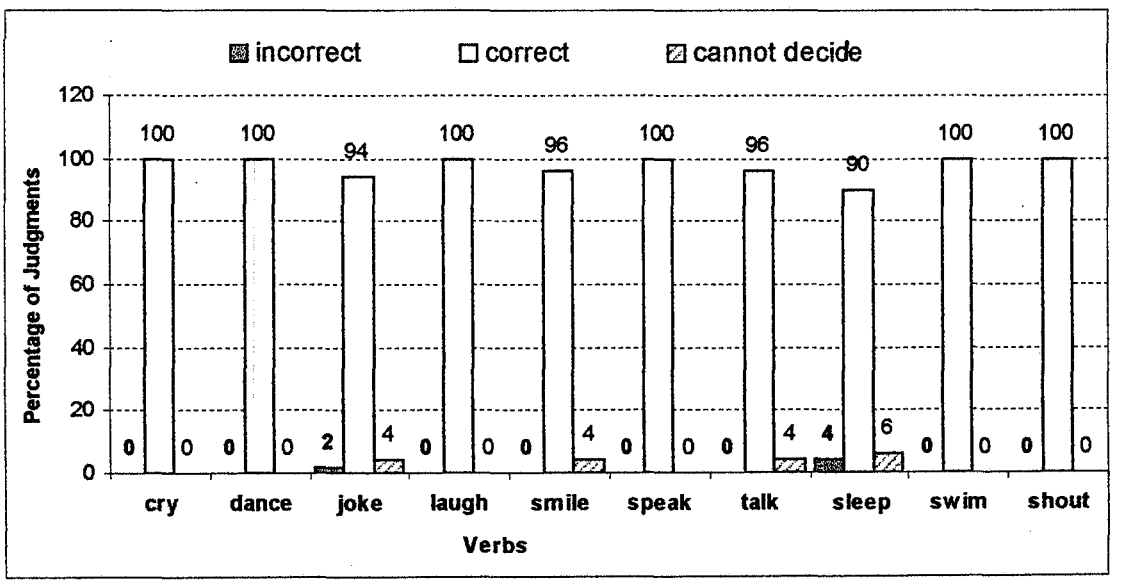
The structure with these verbs is not problematic for learners. Moreover, this is the structural pattern most learners favour as a result of avoidance of ergative verbs in NP-VP word order. Scores of the learners in this structural pattern (m=9.76) is the same as their scores in grammatical unergatives in NP-VP word order (m=9.76).

6.1.3. Unergative Verbs in NP-VP Word Order *(e.g. The baby was crying)*

Table 6 The Numbers and Percentages of Judgments on Unergative Verbs in NP-VP Word Order

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
cry	0	0	50	100	0	0
dance	0	0	50	100	0	0
joke	1	2	47	94	2	4
laugh	0	0	50	100	0	0
smile	0	0	48	96	2	4
speak	0	0	50	100	0	0
talk	0	0	48	96	2	4
sleep	2	4	45	90	3	6
swim	0	0	50	100	0	0
shout	0	0	50	100	0	0

Graph 6 Distribution of Judgments on Unergative Verbs in NP-VP Word Order



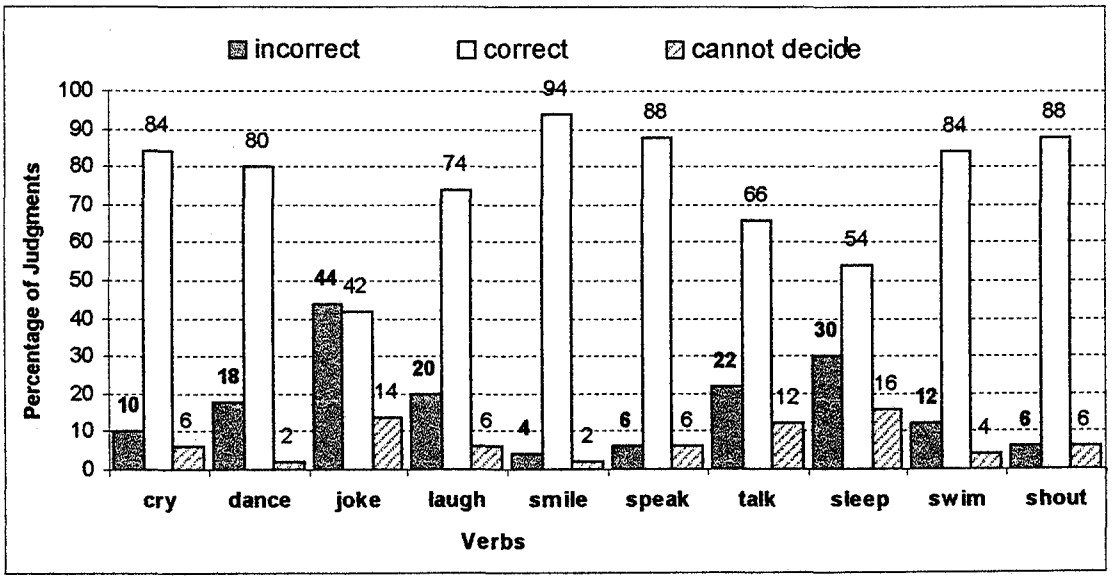
Data above indicate that typical intransitives in grammatical NP-VP word order do not pose problem for learners. Most of the verbs in this pattern are accepted as grammatical. The main reason why this structural pattern was included here is to compare learners' scores in unergatives with their scores in unaccusatives.

6.1.4. Passivised Unergative Verbs in Ungrammatical Passive Structure
*(e.g. *Baby was cried by her)*

Table 7 The Numbers and Percentages of Judgments on Passivised Unergative Verbs in Ungrammatical Passive Structure

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
cry	5	10	42	84	3	6
dance	9	18	40	80	1	2
joke	22	44	21	42	7	14
laugh	10	20	37	74	3	6
smile	2	4	47	94	1	2
speak	3	6	44	88	3	6
talk	11	22	33	66	6	12
sleep	15	30	27	54	8	16
swim	6	12	42	84	2	4
shout	3	6	44	88	3	6

Graph 7 Distribution of Judgments on Passivised Unergative Verbs in Ungrammatical Passive Structure



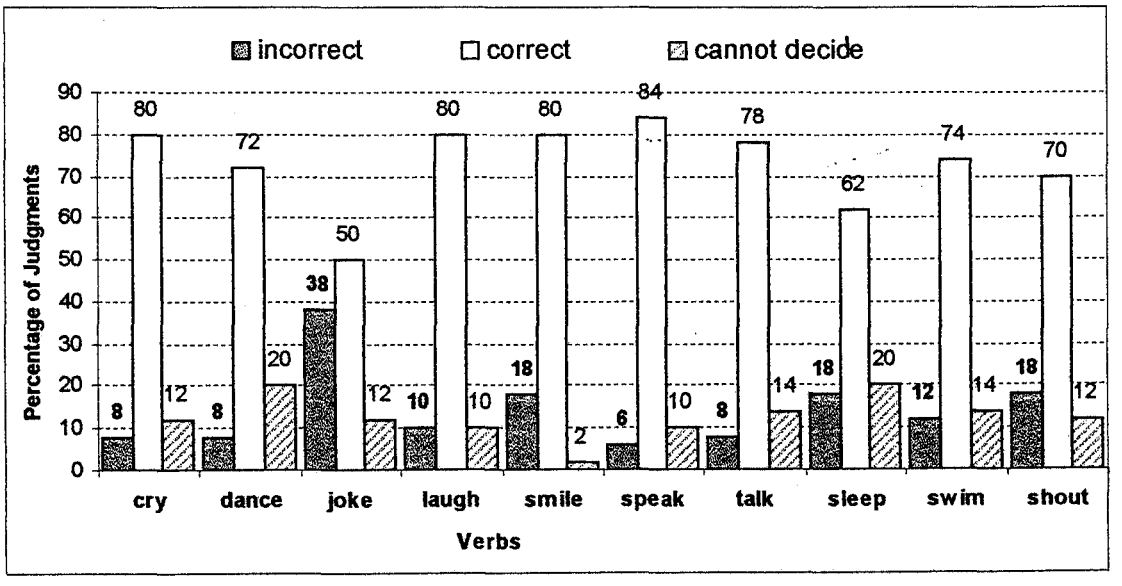
Typical intransitive verbs (unergatives) are also misused by learners in a passivised way. These verbs in this pattern are included here in order to make a comparison between performances of the learners in unergatives and in unaccustaives since unaccusatives are also passivised by learners.

6.1.5. Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order
(Mother cried her baby)*

Table 8 The Numbers and Percentages of Judgments on Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
cry	4	8	40	80	6	12
dance	4	8	36	72	10	20
joke	19	38	25	50	6	12
laugh	5	10	40	80	5	10
smile	9	18	40	80	1	2
speak	3	6	42	84	5	10
talk	4	8	39	78	7	14
sleep	9	18	31	62	10	20
swim	6	12	37	74	7	14
shout	9	18	35	70	6	12

Graph 8 Distribution of Judgments on Transitivised Unergative Verbs in Ungrammatical NP-VP-NP Word Order



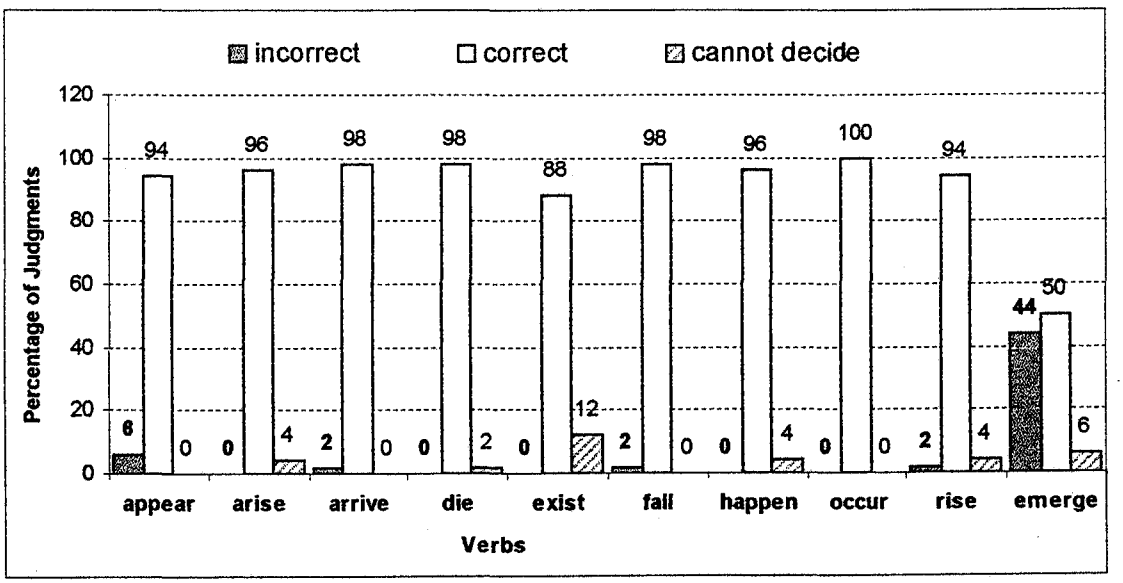
Analysis above indicates that transitivisation is a valid problem for unergative verbs as well. It is remarkable that verbs ***joke, sleep*** and ***swim*** are problematic verbs from the viewpoints of both passivisation (see section 6.1.4) and transitivisation.

6.1.6. Unaccusative Verbs in grammatical NP-VP Word Order
(e.g. Dark clouds appeared)

Table 9 The Numbers and Percentages of Judgments on Unaccusative Verbs in Grammatical NP-VP word order

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
appear	3	6	47	94	0	0
arise	0	0	48	96	2	4
arrive	1	2	49	98	0	0
die	0	0	49	98	1	2
exist	0	0	44	88	6	12
fall	1	2	49	98	0	0
happen	0	0	48	96	2	4
occur	0	0	50	100	0	0
rise	1	2	47	94	2	4
emerge	22	44	25	50	3	6

Graph 9 Distribution of Judgments on Unaccusative Verbs in Grammatical NP-VP Word Order



As seen in (section 6.1.3), unergative verbs in grammatical NP-VP word order were not as problematic as unaccusative verbs in the same structure seen above. Statistical comparison of the mean scores of learners in unergatives (m=9.76) and in unaccusatives (m=9.16) with t-test reveals that unaccusative verbs are more problematic than unergatives. (t=1.4.37880,df=49, p=0.000063) (see Appendix J section 3) Learners' insistence on passivisation of the verb ***emerge*** (44%) is remarkable.

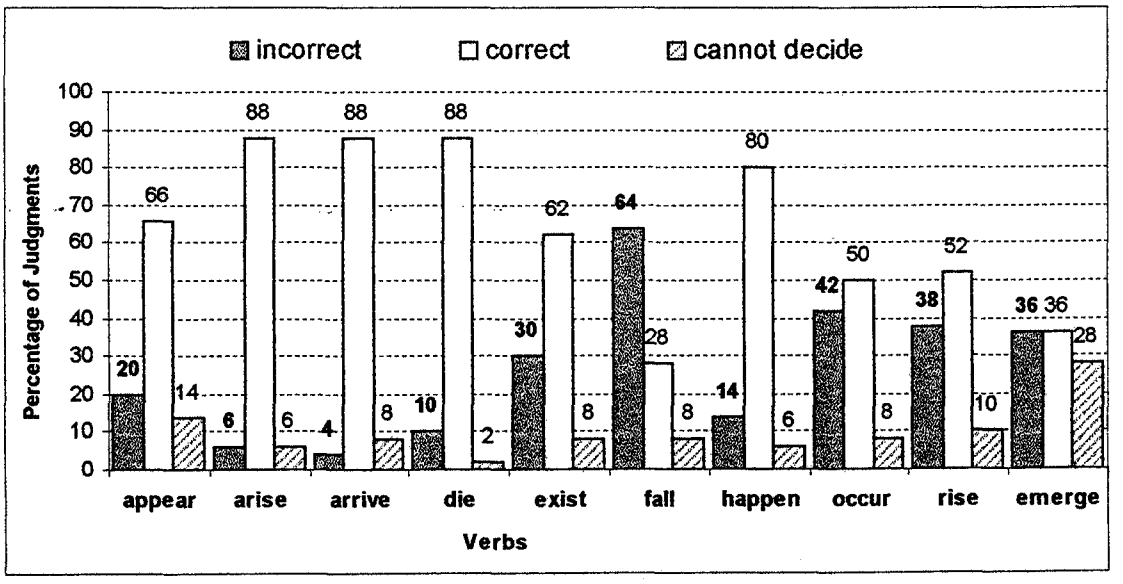
6.1.7. Passivised Unaccusative Verbs in Ungrammatical Passive Structure

*(e.g. * Trees were appeared by the Sun)*

Table 10 The Numbers and Percentages of Judgments on Passivised Unaccusative Verbs in Ungrammatical Passive Structure

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
appear	10	20	33	66	7	14
arise	3	6	44	88	3	6
arrive	2	4	44	88	4	8
die	5	10	44	88	1	2
exist	15	30	31	62	4	8
fall	32	64	14	28	4	8
happen	7	14	40	80	3	6
occur	21	42	25	50	4	8
rise	19	38	26	52	5	10
emerge	18	36	18	36	14	28

Graph 10 Distribution of Judgments on Passivised Unaccusative Verbs in Ungrammatical Passive Structure



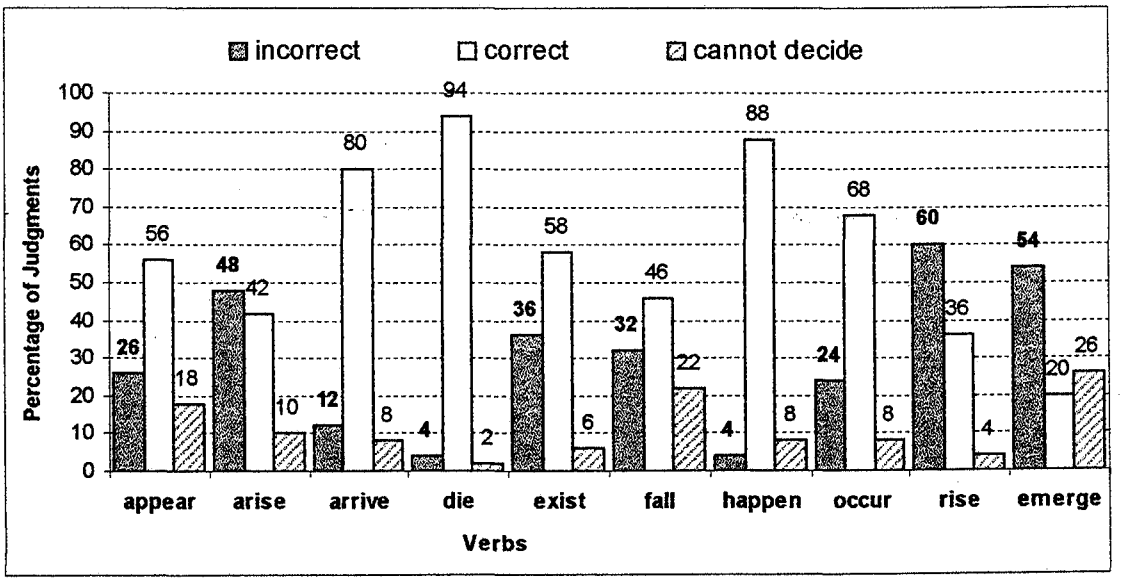
This study confirmed that ergative verbs are the most problematic intransitive verb class for the participants. Comparison of the mean scores of learners in *passivised unergatives* (m=7.54) and *passivised unaccusatives* (m=6.38) shows that the difference is statistically significant. (t=4.420361, df=49, p=0.000055) (see Appendix J section 4)

6.1.8. Transitivised Unaccusative Verbs in ungrammatical NP-VP-NP Word Order
(The sun appeared the trees in the garden)*

Table 11 The Numbers of Judgments on Transitivised Unaccusative Verbs in Ungrammatical NP-VP-NP Word Order

	Incorrect		Correct		Cannot decide	
VERBS	Number	%	Number	%	Number	%
appear	13	26	28	56	9	18
arise	24	48	21	42	5	10
arrive	6	12	40	80	4	8
die	2	4	47	94	1	2
exist	18	36	29	58	3	6
fall	16	32	23	46	11	22
happen	2	4	44	88	4	8
occur	12	24	34	68	4	8
rise	30	60	18	36	2	4
emerge	27	54	10	20	13	26

Graph 11 Distribution of Judgments on Transitivised Unaccusative Verbs in Ungrammatical NP-VP-NP Word Order



Also transitivisation is a problem concerning with both unergatives and unaccusatives. Comparison between the mean scores of learners in both unergatives (7.28) and unaccusatives (5.88) shows that the difference is statistically different. (t=6.031483, df=49, p=0.000000) (see Appendix J section 5), that is unaccusatives are more problematic.

6.2. Analysis of the Results of Sentence Completion Task

According to many studies on ergatives, it is a common claim that most learners avoid ***paired ergatives in grammatical*** NP-VP word order (e.g. *This car sells much*) and they favour passive structures instead (see section 4.2 and 4.3). Grammaticality of the paired ergative verbs in this structural pattern is stated in a number of grammar books (see sections 3.5 and 5.2.2). However, this study revealed that *grammaticality of the structure is questionable if native speakers competence is taken into consideration* since considerable number of native speakers participated in the study preferred passive structures instead of ergatives, or avoided the structure. When they avoid ergatives, they substitute the infinitive form of the verb as a postmodifier of an adjective used predicatively (e.g. *This bag is easy to carry* instead of *This bag carries easily* or *This pill is easy to swallow* instead of *This pill swallows easily*). Various native speaker views are stated in section 3.3.3.1 since they might shed light on the reason(s) why there is no consensus on the structure in question.

Unlike the previous studies, in this study, responses of learners to the Sentence Completion Task were compared with the same number of native speakers'[1] responses to the same task instead of normative structures in various grammar books.

Comparison between mean scores of learners (0.920) and that of native speakers (6.740) in sentence completion task revealed that paired ergative verbs in this structure is still problematic. According to the computation with t-test for independent samples, the difference is statistically (and highly) significant (t=12.8154, df=98, p=0.0000001) (see Appendix J section 6)

Following tables and figures aim to compare and contrast learners' (participants of the study) with native speakers' (control group of the study) preferences of structural patters for individual verbs. (for individual preferences of participants see (Appendices G, H)

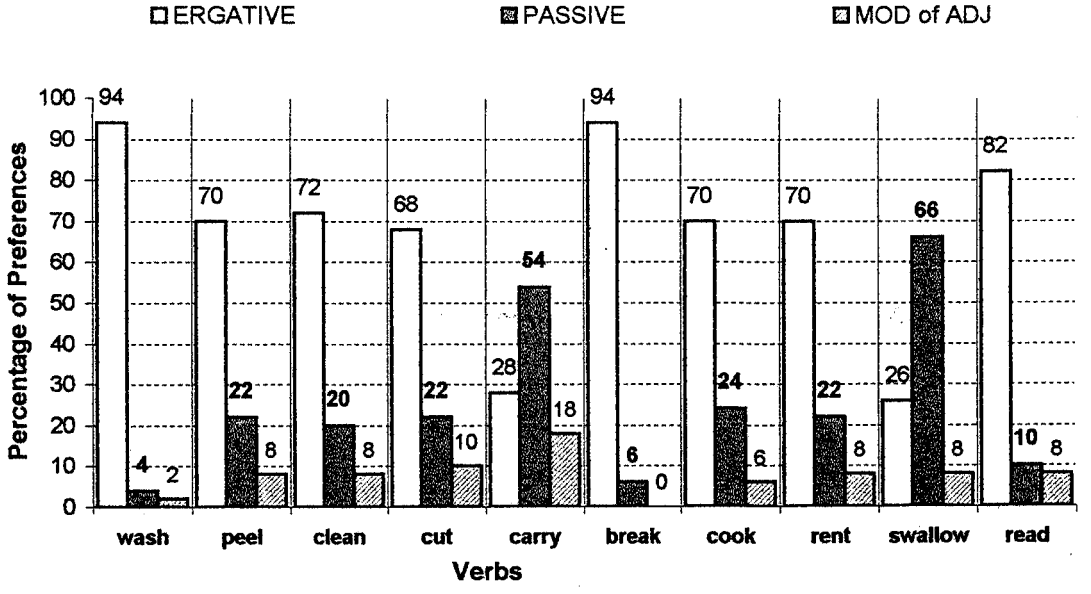
---

[1] One may suspect if language variety (American English or British English) has an effect on native speaker preferences in the Sentence Completion Task. For that reason, mean scores of native speakers from the USA and the UK were calculated independently and compared statistically. (Mean USA=6.722222, Mean UK=6.785714) Test result revealed that there is no statistical difference between mean scores of native speakers from the USA and the UK in this study. (t=0.078123, df=48, p=0.938055) (see Appendix J section 7)

Table 12 Preferences of Native Speakers for Structural Patterns according to the Verbs

	Ergative		Passive		Modifier of Adjective *(e.g. easy to carry)*	
VERBS	Number	%	Number	%	Number	%
wash	47	94	2	4	1	2
peel	35	70	11	22	4	8
clean	36	72	10	20	4	8
cut	34	68	11	22	5	10
carry	14	28	27	54	9	18
break	47	94	3	6	0	0
cook	35	70	12	24	3	6
rent	35	70	11	22	4	8
swallow	13	26	33	66	4	8
read	41	82	5	10	4	8

Graph 12 Distribution of Native Speaker Preferences in Sentence Completion Task

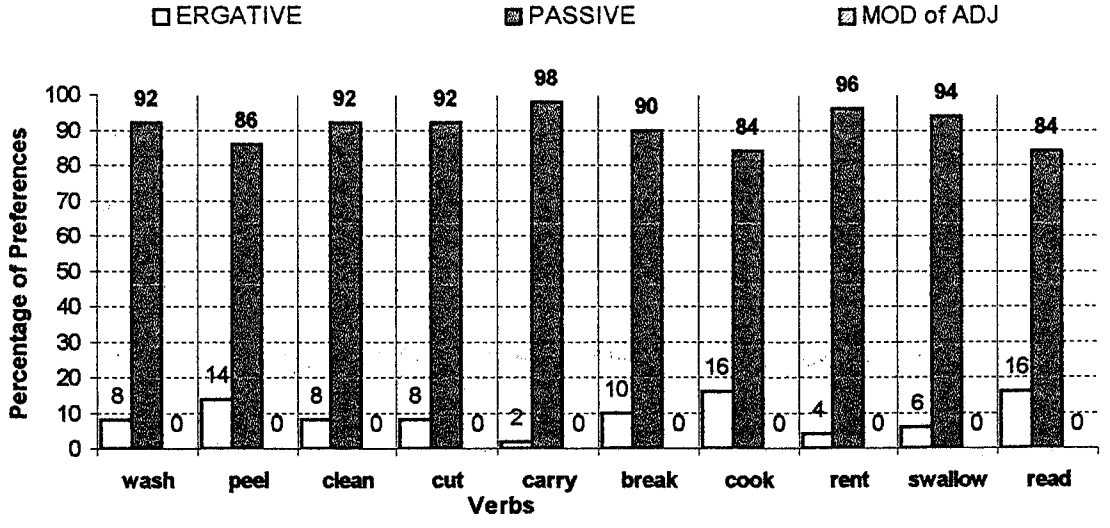


Analysis of native speaker responses indicates that grammaticality of the structure with some verbs is highly questionable. Especially passivisation rates of the verbs ***swallow*** (66%) and ***carry*** (54%) are remarkable. Simultaneously, these (*swallow* and *carry*) are the most frequent verbs used as postmodifer of a predicative adjective (e.g. *easy to carry*) According to native speaker tendencies, the most suitable verbs in this structural pattern are ***break*** (94%), ***wash*** (94%) and ***read*** (82%).

Table 13 Preferences of Learners for Structural Patterns according to the Verbs

	Ergative		Passive		Modifier of Adjective *(e.g. easy to carry)*	
VERBS	Number	%	Number	%	Number	%
wash	4	8	46	92	0	0
peel	7	14	43	86	0	0
clean	4	8	46	92	0	0
cut	4	8	46	92	0	0
carry	1	2	49	98	0	0
break	5	10	45	90	0	0
cook	8	16	42	84	0	0
rent	2	4	48	96	0	0
swallow	3	6	47	94	0	0
read	8	16	42	84	0	0

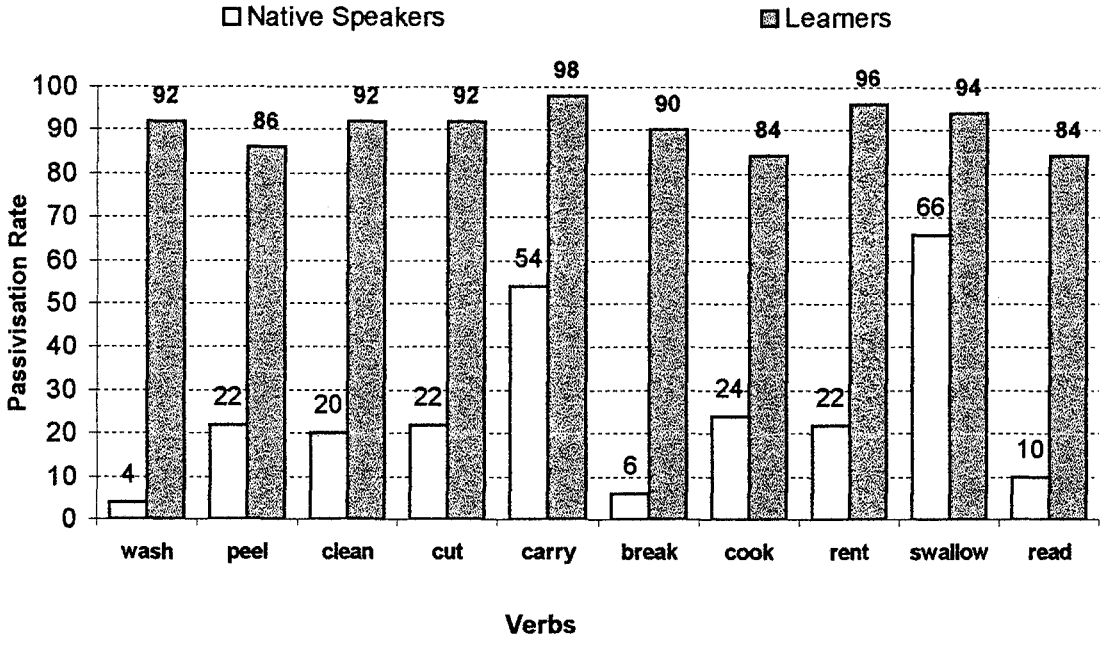
Graph 13 Distribution of Learners' Preferences in Sentence Completion Task



Analysis of the learners' responses indicate that passivisation of paired ergative verbs in expected NP-VP word order is excessive. Moreover, the learners completed the test sentences by using either passive structure or ergative stricture, that is, they did not use another alternative structural pattern as the native speakers did. The most frequent verbs used in ergative structure are ***read*** (16%) ***cook*** (16%) and ***peel*** (14%). (recall that ***read*** was one of the verbs used most frequently in ergative structure by native speakers)

As for passivisation, the learners mostly passivised the similar verbs (e.g. ***carry, swallow***) which native speakers passivised as well.

Graph 14 Passivisation Rates in Sentence Completion Task
(Native Speakers' vs. Learners')



As seen in the graph above passivisation rate of learners is significantly higher than that of native speakers. This contrast is clearly seen in verbs ***wash***, ***break*** and ***read***. On he other hand, verbs ***carry*** and ***swallow*** are frequently passivised by both native speakers and learners.

In this study, it is revealed that the native speakers participated in the study do not have a consensus on the use of paired ergatives in NP-VP word order. This case seems to be interesting since considerable number of native speakers favoured passive structures with some paired ergative verbs while some grammar books introduce the same verbs in ergative structure as part of English Grammar (Dixon 1991:322-34, Palmer 1965:90, Swan 1980:457, Eastwood 1994:142, Halliday 1994:163 and Thewlis 1997:57). On the other hand, following the grammar books, Kellerman (1978,1979,1983), Zobl (1989), Yip (1994), Ingham (1996) and Abdulleyeva (1993) have considered this passivisation phenomenon something "ungrammatical" in their studies.

The following sentences are from Dixon (1991:329), and these sentences are claimed to be so grammatical that they are included in a grammar book.

*Your case **carries** easily*
*These pills **swallow** easily.* (Dixon 1991:329)

On the other hand, the following are the test items in the Sentence Completion Task (see Appendix E, test items 5 and 9), which include the same verbs with additional contextual information which requires ergative structure:

I bought a bag, but my wife couldn't carry it easily. I bought a new one which had handles. Unfortunately, she couldn't carry it either. In the end, I bought a third one which has straps. Fortunately she liked it since this bag.....easily. (**to carry**)

Swallowing a pill is difficult for some people. I know this difficulty, because some pills are broken into parts or some of them dissolve in the mouth. The case is not the same if the pill is covered with a thin, sugary substance. Such pills.....easily because they are neither dissolved nor broken into pieces. (**to swallow**)

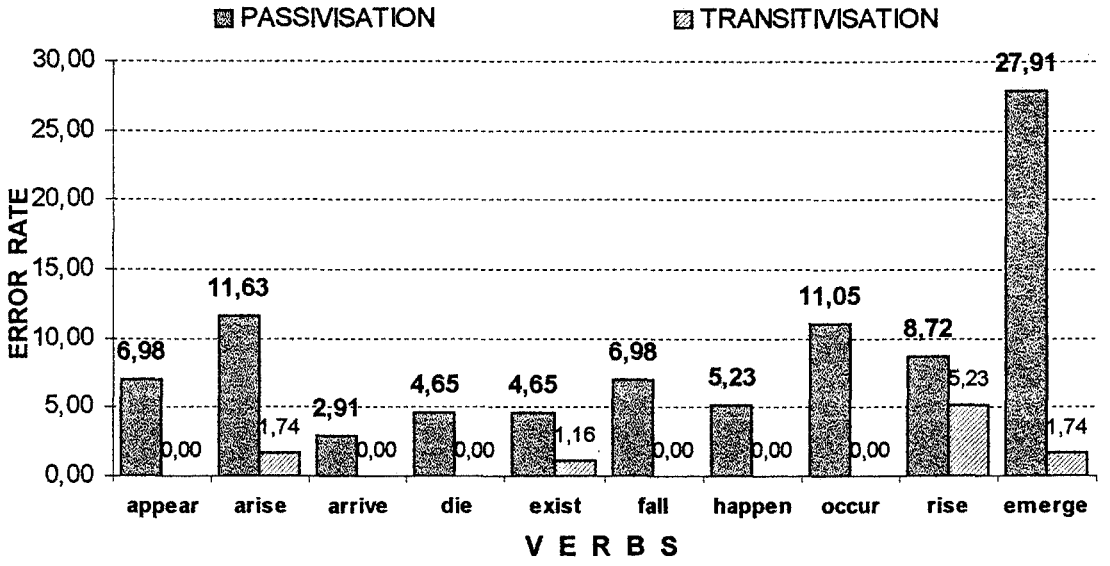
While one expects ergative structures for the test items above due to the considerations stated before, it is surprising to see that 54% of the native speakers (27 out of 50) passivised the verb ***carry*** in the above context. The passivisation rate for the verb ***swallow*** is 66% (33 out of 50). (see sections 3.4.3.1. and 3.4.3.2 for the native speakers opinions about the paired ergatives in NP-VP word order.)

6.3. Analysis of the Results of Sentence Production Task

Contrary to the results of the Grammaticality Judgment Test, in sentence production task passivisation errors related to unaccusatives are highly significant in comparison with transitivisation errors. (As stated in section 6.1, according to the Grammaticality Judgment Test results, the difference between mean scores of learners in *passivised unaccusatives* and *transitivised unaccusatives* is not statictically significant.)

Following graph indicates the distribution of total 173 erroneous sentences over error types.

Graph 15 Distribution of Error Types in Sentence Production Task



In sentence production task, learners mostly passivised the unaccusative verbs. The most problematic verb in this task is ***emerge***. In Grammaticality Judgment Test, it was ***emerge*** that most learners reject grammatical sentences including this verb in NP-VP word order. (see section 6.1.6) Besides *emerge*, ***arise, happen*** and ***occur*** are frequently passivised by learners in their own sentences. (Classified erroneous productions of learners are included in Appendix F)

Some observations and discussions in feedback sessions of the regular grammar course that participants attend might account for the independence (difference) of the transitivisation rates of unaccustaives in Judgment Test and Production Task.

Spontaneous observations on the transitivity errors that participants encounter during their regular grammar course indicate that *while they are acquiring meaning of a new verb, they make associations between the verb and possible complements (objects) of the verb on* ***semantic grounds***. As some instances in the Sentence Production task revealed, (numbers in parentheses indicate the sentence numbers in Appendix G which includes the erroneous sentences produced by learners) it is *price* (59,60,67); *leaf of a tree* (69,70); *some object on top of something* (65,66) or *careless*

people (61,62,63,64) that can ***fall***. Likewise, mostly it is an abstract concept such as *news* (125,137,169), *result* (136), *difficulty* (135), *solution* (141,152), *discovery*(147), *problem* (153,172) or *truth* (165,166) that can ***emerge***. As another instance, for example it is mostly an *accident* (71,78,77) or *event* that can ***happen***.

On the other hand, when the learners imagine the eventuality described by the new verb in acquisition process, they reformulate this eventuality in their minds automatically under the influence of their L1. Of course this reformulation need not to be in a way that learners encode the whole event again in L1 explicitly, but in the form of mental associations between the core units of the utterances in both languages; L2 and L1. As has been discussed in sections 1.1 and 2.3.2, the core units in language are verbs. From the viewpoint of transitivity of verbs, unlike English intransitive verbs, most of the Turkish equivalents of such verbs have causative counterparts. (e.g. ***die***, [*Kimyasal atıklar doğayı öldürüyor*], ***fall*** [*Rüzgar yaprakları düşürüyor*], ***arrive*** [*Taksi beni oraya tam zamanında yetiştirdi*], ***occur, arise, emerge*** [*Bu sorunu şartlar ortaya çıkardı*]. Because of these associations, learners generally interpret unaccusatives (and unergatives) as underlyingly transitive verbs. It is evident that considerable number of participants stated that they supposed that verb emerge has the meaning of "*ortaya çıkarmak*" (cause to appear).

High transitivisation rate in Grammaticality Judgment Test in comparison with the transitivisation rate in Sentence Production Task might be due to the fact that complements of the transtivised verbs in test items within the Judgment Test are more suitable to make aforementioned associations between these verbs and given complements. For example, in the following instances, all unaccusatives have transitive counterparts in L1 which might cause aforementioned associations.

George's new habit will arise some serious health problems (Test Item 12)
[... *alışkanlığı ciddi sağlık sorunları* ***çıkaracak***.]

The intense light coming from the electric bulb appeared the letters (Test Item 60)
[....*yoğun ışık harfleri* ***aydınlattı***]

These accidents die many innocent people (Test Item 66)
[...*kazalar pek çok masum insanı* ***öldürüyor***]

Guerrillas had fallen another helicopter (Test Item 77)
....*başka bir helikopter* ***düşürdüler***]

Of course, different working mechanisms of test instruments (based on judgment vs. free production) might contribute to this difference in transitivisation rates (see Birdsong (1988); Davies and Kaplan (1998); Schachter and Yip (1990); Mandell (1999) for pros and cons of Grammaticality Judgment Tests).

6.4 Correlation between Error Types in Various Structural Patterns and Proficiency Level

Quite interestingly, Abdulleyava's (1993) analysis on results of grammaticality judgement task and production task in accordance with the proficiency levels of learners demonstrated that the *rate of avoidance increases as the proficiency level increases* (see section 4.3). This might not be a coincidence because Kellerman (1978) observed the same case. In Kellerman's study, a structure with paired ergative verb was accepted as grammatical by beginners while advanced learners favoured the causative or passive structures instead (see section 4.3). Besides, as Karacaer's (1998) analysis on the rate of erroneous judgement on ergative verbs showed, second year students were more successful than fourth year students (see section 4.2 page 59). Although the grade (2nd year or 4th year) and proficiency (advanced, beginner) are not the same thing, being proficiency levels equal, a fourth year student must have been exposed to English two more years than a second year student.

As frequency distributions of the cloze test scores of the learners (see section 5.5.1) indicated, participants of this study do not form a heterogeneous group which includes different sub-groups that have significantly distinct proficiency levels. As expected, statistical analyses did not reveal any significant correlation between proficiency levels (measured by the cloze test) of the participants and their mean scores in judgments on different verb groups in various structural patterns.

The following show the correlation coefficients (r at $p<0.05$) between proficiency scores of the learners and their mean scores in judging verb groups mentioned below. (see Appendix J section 8 for correlation matrix among all possible relations)

Paired Ergative Verbs in NP-VP Word Order ..... ***-0.0451***

Paired Ergative Verbs in Passive Structure..... 0,1881

Unergative Verbs in NP-VP Word Order 0.0806

Passivised Unergative Verbs 0.1640
Transitivised Unergative Verbs 0.1929
Unaccusative Verbs in NP-VP Word Order 0.2798
Passivised Unaccusative Verbs 0.2281
Transitivised Unaccusative Verbs 0.2081

Although there is no significant correlation between *scores of learners in verb groups* and *their proficiency levels*, there is an interesting case which seems to be confirming the previous findings. ***Correlation between the most problematic verb group and proficiency level is a negative one***, that is relatively more proficient learners tend to reject paired ergatives in NP-VP word order more.

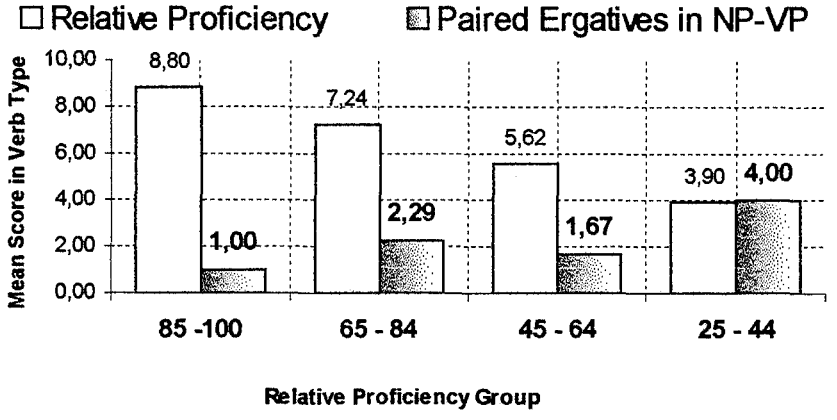
To highlight the case, the learners divided into four sub-proficiency groups according to their proficiency scores. The following table indicates the grouping based on score intervals , number of participants in each score group and their performances in judging various verb groups.

Table 16 Relative Proficiency Level Groups of the Participants

		A	B	C	D	E	F	G	H	P
Score Interval	Number of Participants	Paired Ergatives in NP-VP (Mean Score)	Passivised Paired Ergatives (Mean Score)	Unergatives in NP-VP (Mean Score)	Passivised Unergatives (Mean Score)	Transitivised Unergatives (Mean Score)	Unaccusatives in NP-VP (Mean Score)	Passivised Unaccusatives (Mean Score)	Transitivised Unaccusatives (Mean Score)	PROFICIENCY (CLOZE TEST) (Mean Score)
85 -100	2	1,00	10,00	9,50	8,00	9,50	9,50	8,00	6,50	88,0
65 - 84	28	2,29	9,82	9,86	7,57	7,14	9,32	6,57	6,07	72,4
45 - 64	18	1,67	9,61	9,67	7,50	7,22	8,83	5,89	5,56	56,2
25 - 44	2	4,00	10,00	9,50	7,00	7,50	9,50	6,50	5,50	39,0
00 - 24	0	0	0	0	0	0	0	0	0	0

Various Judgment scores of participants in relatively different proficiency groups are graphically represented in the following graphs.

Graph 16 Judgment Scores vs. Relative Proficiency (Paired Ergatives in NP-VP) (e.g. *This shirt washes easily*)



In this graph, it is clearly seen that, with the exception of proficiency group which belongs to the score interval (65-84), there is a ***reverse linear relationship*** between mean scores in Paired Ergative Verbs in NP-VP Word Order (and mean score of proficiency. In other words, ***while score in judgment increasing, proficiency decreases***. This case is observed in extremes, because the number of participants in score interval (65-84) constitute half of the population which contributes to the homogeneity of the participant group most.

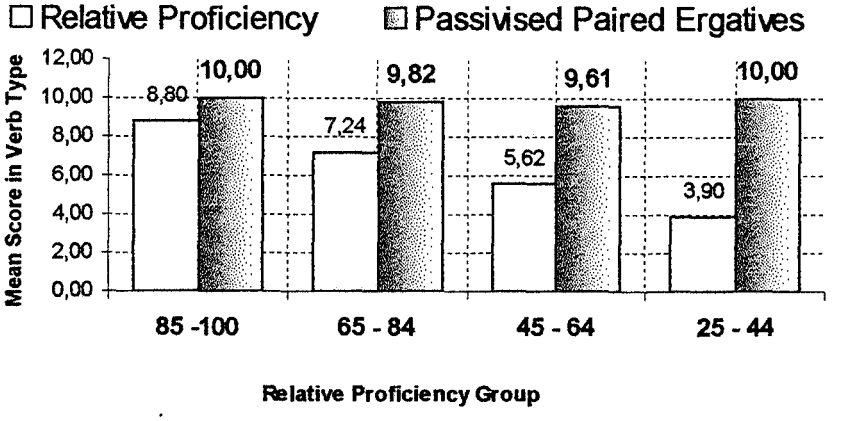
Finally, according to the results of Grammaticality Judgment Test, there is negative correlation between *proficiency level* and *accepting paired ergative verbs in NP-VP word order* (r= -0.0451 at $p<0.05$), but this correlation is not statistically significant possibly due to the homogeneity of the group.

At this stage one more correlation coefficient can be calculated. At each interval, that is, in each proficiency group there are two values, one being the mean score of proficiency (a fixed value for all cases since it is assumed as the dependent variable) and the other is the mean of score in verb in relevant structural pattern (assumed as an independent variable what is investigated according to the proficiency). Correlation

between these pairs can be calculated to visualise the type of interaction[2] between proficiency and score in verb type. For example, for this case, correlation between ***means*** of proficiency and scores in paired ergatives in NP-VP [8.80;1.00 7.24;2.29 5.62;1.67 3.90;4.00] is r= -0.85 at p <0.05. (It should be noted that this coefficient is different from the actual correlation (r= -0.0451 at p<0.05) between proficiency and scores in relevant verb type)

The following are the analyses of the relationship between *relative proficiency levels of the learners* and *their mean scores in the other verb types in various structural patterns.*

Graph 17 Judgment Scores vs. Relative Proficiency (Passivised Paired Ergatives)
(e.g. *The shirt was washed.*)

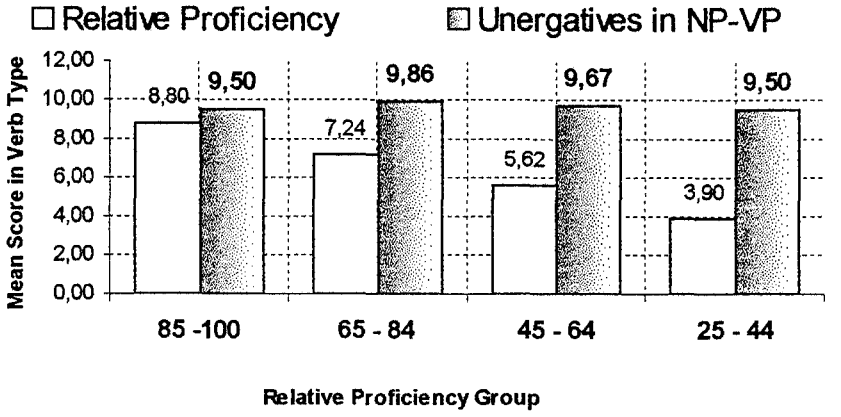


As the graph shows, there is no significant relation between means of the scores in *passivised paired ergatives* and relative proficiency. Correlation between means indicates that, there is positive relationship between them, that is, scores in verb type increases as proficiency increases, but this increase is very small in amount (r=0.13 p<0.05)

---

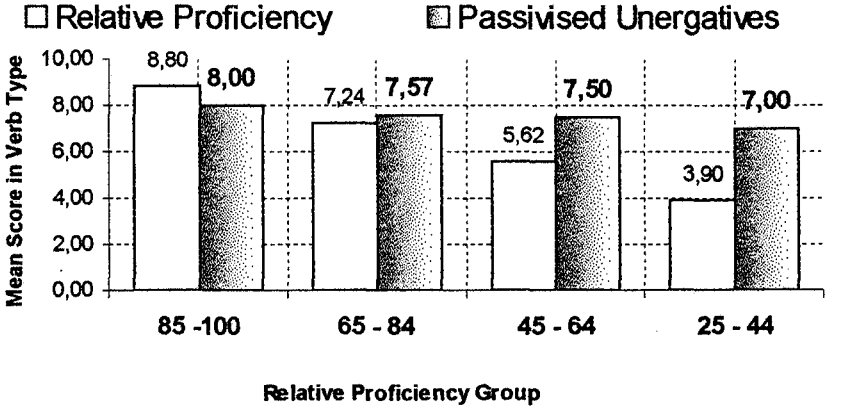
[2] It should be noted that this analysis has two shortcomings. First of all, this correlation DOES NOT reflect the actual interaction between learners' proficiency levels and scores in relevant verb types because figures (since they are means) do not reflect the actual values. Besides, the number of instances in correlation is too limited (only 4 instances) and this disturbs the reliability of correlation coefficient. Despite these shortcomings, this analysis is made in order to state the type of interaction between proficiency and score in terms of numbers, which enables us to make comparisons between the rate of interaction in various verb types in particular structural patterns.

Graph 18 Judgment Scores vs. Relative Proficiency (Unergatives in NP-VP)
(e.g. *The baby was crying.*)



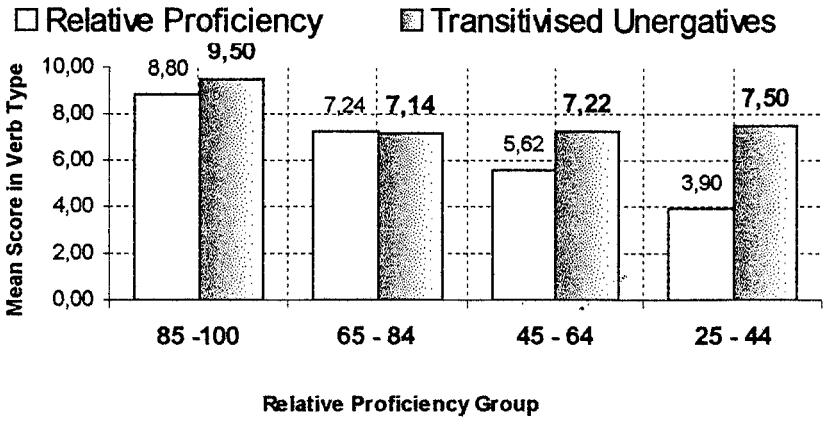
As the graph shows, there is no significant relation between means of the scores in unergatives in NP-VP word order and relative proficiency. Correlation between means indicates that, there is positive relationship between them, that is scores in verb type increases as proficiency increases, but this increase is, again very small in amount ($r=0.16$ $p<0.05$)

Graph 19 Judgment Scores vs. Relative Proficiency (Passivised Unergatives)
(e.g. * *Baby was cried by her.*)



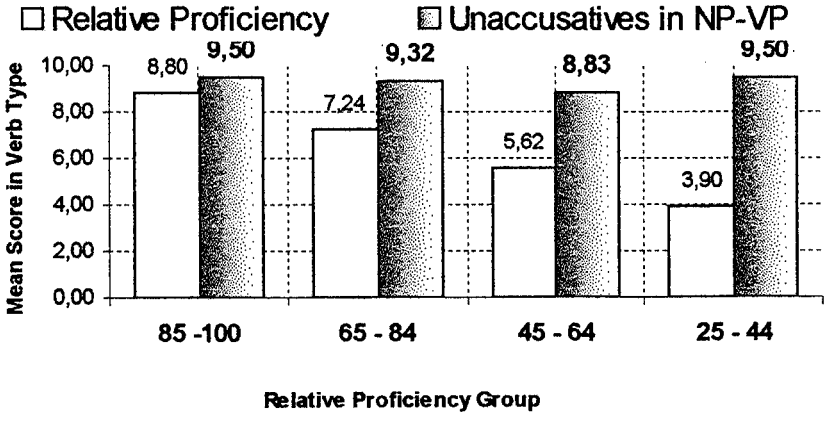
The graph shows that there is significant positive relation between means of the scores in *passivised unergatives* and *relative proficiency*. Correlation between means indicates that there is strong positive relationship between them, that is proficient learners are more successful ($r=0.97$ $p<0.05$). It should be noted that high value of the ***r*** indicates the *parallelism* in increase, not the amount of increase.

Graph 20 Judgment Scores vs. Relative Proficiency (Transitivised Unergatives) (e.g. * *Mother cried her baby.*)



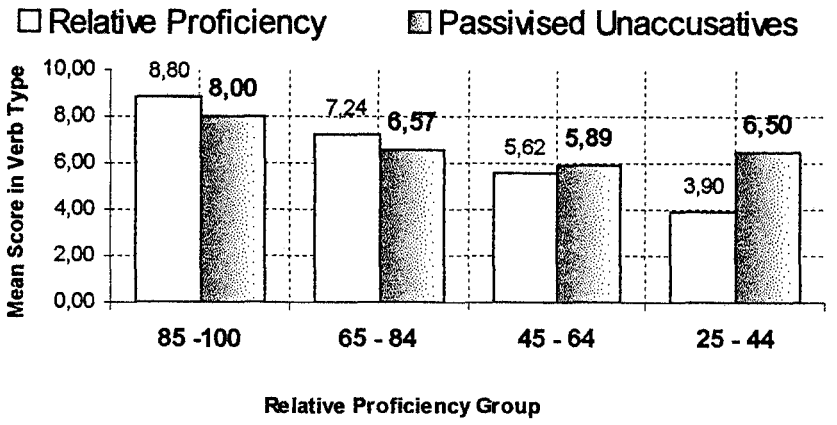
As the graph shows, there is strange relation between means of the scores in *Unergatives in NP-VP* word order and relative proficiency. In proficiency groups (85-100) and (65-84), there seems to be positive correlation. On the other hand, in the rest of the proficiency groups, correlation negates. Overall correlation between means indicates that there is positive relationship between them ($r=0.67$ $p<0.05$).

Graph 21 Judgment Scores vs. Relative Proficiency (Unaccusatives in NP-VP) (e.g. *Dark clouds appeared.*)



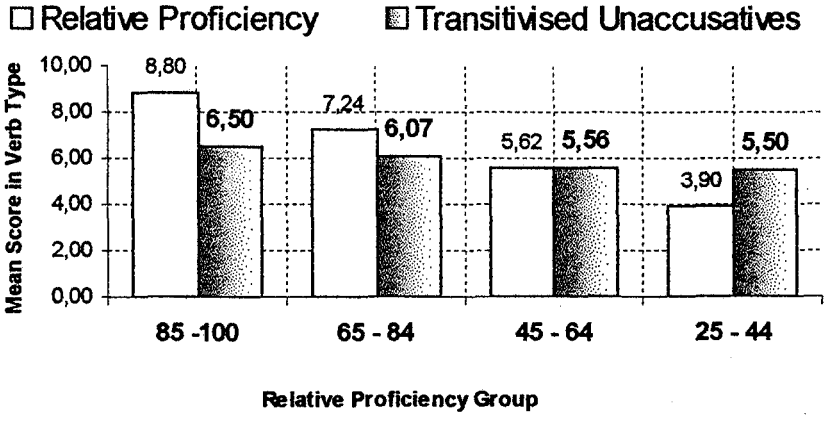
The graph shows that there is no significant relation between means of the scores in *Unaccusatives in NP-VP* word order and relative proficiency (Most students seem to be successful). Correlation between means indicates that there is positive relationship between them, that is, scores in verb type increases slightly as proficiency increases, but this increase is small in amount ($r=0.18$ $p<0.05$)

Graph 22 Judgment Scores vs. Relative Proficiency (Passivised Unaccusatives)
(e.g. **Trees were appeared by the Sun.*)



As the graph shows, with the exception of the proficiency group (25-44), there is significant positive relation between means of the scores in *passivised Unaccusatives* and relative proficiency. Correlation between means indicates that there is strong positive relationship between them, that is proficient learners are more successful ($r=0.73$ $p<0.05$).

Graph 23 Judgment Scores vs. Relative Proficiency (Transitivised Unaccusatives)
(e.g. * *The Sun appeared the trees in the garden.*)



The graph shows that there is significant positive relation between means of the scores in *Transitivised Unaccusatives* and *relative proficiency*. Correlation between means indicates that there is strong positive relationship between them, that is proficient learners are more successful ($r=0.97$ $p<0.05$), but the increase in the means of their judgments on the verb type is not notable.

As for the correlation between *proficiency* and *sentence completion task scores*, statistical analysis showed that there is no significant correlation between scores of *Sentence Completion Task* and *relative proficiency level of the participants* ($r=0.1$ at $p<0.05$). This might be due to the fact that only 15 of the learners used at least one ergative structure in completing the sentences and the mean score of the rest of the participants in sentence completion task is 0, that is they never used ergative structure. Considering only these 15 participants who use ergative structure, again there is negative correlation between their sentence completion scores and proficiency scores. ($r=-0.2$ at $p<0.05$).

6.5. Possible Explanations for the Significant Error Types Related to Ergative Verbs

Statistical analysis of the results indicate that ***avoidance of paired ergative verbs in NP-VP word order*** and ***passivisation of unaccusative verbs*** are the most significant error types that learners encounter. It is also significant that learners who avoid Paired Ergative verbs in NP-VP word order again favour passive structure instead (*The book is sold much* instead of *The book sells much*).

This section aims to discuss the reason(s) why learners avoid Paired Ergatives and passivise unaccusatives, referring to the responses of learners and their own explanations. Passivisation of unaccusative verbs will also explain passivisation of Paired Ergative verbs as a result of avoidance.

6.5.1. Passivisation of Unaccusative Verbs

English is a nominative-accusative[3] language in which the usual relation between thematic roles (see section 2.3.4) and syntactic functions (such as Subject, Object etc.) is SUBJECT-AGENT and OBJECT-THEME.

---

[3] A language in which subjects of intransitive verbs and subjects of transitive verbs are usually treated identically for grammatical purposes, while direct objects of transitive verbs are treated differently. Most familiar European languages, including English are nominative-accusative" (Trask 1993:4-5)

As Anderson (1977:367) remarks "this correlation is overwhelmingly regular and should therefore form 'part of the semantic component of a grammar[4] of English' " (cited in Zobl 1989:205). On the other hand, in an English sentence with an ergative (either paired ergative or unaccusative) verb, contrary to the generalisation above, the relation between thematic roles and syntactic functions appears to be SUBJECT-THEME as seen in sentence (1)

(1) Dark clouds ***appeared*** on the horizon.

(The 11th test item in Grammaticality Judgment Test)

Although the NP "*Dark clouds*" is the syntactic Subject of the sentence (c.f. footnote 9, Chapter 3), from the viewpoint of thematic role it bears, it is not the Agent, but the Theme because it is the entity that underwent the change of state, that is, *clouds* became visible or came into sight.

Besides the usual relationship between thematic roles and syntactic functions, another characteristic of the English language is that it makes no grammatical distinction between the Subject and Object especially from the viewpoint of morphological marking no matter what type of thematic role they bear.[5] For that reason, syntactic functions of the ergative structures are morphologically indistinguishable when they are full NPs. For example, imagine a learner who reads (or hears) the following sentence in (2)

(2) Margaret ***reads*** the reports.

The learner, who knows the generalisation that verb of a sentence assigns the thematic role Agent to the Subject, and the role Theme to the Object, interprets the NP "***report***" as something which is read, and the NP "***Margaret***" as the person who read these reports.

---

[4] More specifically, it has been proposed that thematic roles are hierarchically organised. For example, according to thematic hierarchy assumed by Larson (1988:328) thematic roles form an ordered list and there are rules that link arguments bearing certain thematic roles to certain positions in syntax. Given the thematic roles α and β, if $\alpha > \beta$ on the Thematic Hierarchy, then the element α will be projected at a "higher" position in phrase structure than the element β (Juffs 1996:179). These linking rules along with the Theta Criterion (see section 2.3.4) which states that each argument bears one and only one thematic role, and each thematic role is assigned to one and only one argument (Chomsky 1981:36), explain the grammaticality of sentences.

[5] Pronouns are exception to this generalisation since they are marked morphologically when they are *Subject* or *Object* as in ***She*** *is a beautiful girl, but Joe doesn't love* ***her.***

At this stage it might be hypothesised that a learner performs a dual task in this interpretation; first accords the syntactic functions to their positions (subject; preceding the verb, object; following the verb), and in the second place, associates the plausible thematic roles with syntactic functions. (e.g. Margaret can bear the thematic role Agent, since this word is the name of a person who can perform *reading*)

A learner **at a certain proficiency level** (where he or she is able to associate thematic roles with syntactic functions) might face a syntactic function which is not in harmony with the thematic role it bears, more specifically, a subject bearing the thematic role Theme contrary to the generalisation stated previously as in the following sentence (3)

(3) Mary's skirt washes well

(The 1st test item in Sentence Completion Task)

Such a sentence poses an unusual and interesting case for a learner who acquired *syntactic positions of sentence constituents* and *possible thematic roles for them*, since according to the generalisation stated above, *Mary's skirt* is interpreted as the entity that performs the action.

In English, there is another configurational mapping which can assign the thematic role Theme to the position of subject but with a morphological marking of the verb phrase. This situation is passive structure. For a learner who acquired passive structure and who can make associations between syntactic functions and thematic roles, this alternative structure constitutes the common hypothesis; whenever the Theme is Subject position, verb is marked with passive morphology. Consequently, learners passivise unaccusative verbs which assign the thematic role Theme to Subject position since the passive is, as stated by Balcom (1997:2), a "core rule in English".

6.5.2 Avoidance of Paired Ergative Verbs in NP-VP Word Order

In addition to the unusual alignment between thematic roles and syntactic functions in ergative structure, there is one more pitfall that causes a learner to avoid using Paired Ergative verbs in NP-VP word order.

Confirming Yip (1994:130), great majority of the participants of this study were "reluctant to believe that any change of state occurs spontaneously without external causation". By the same token, Yip (1994:130) adds that "one characteristics of ergative verbs is that the Theme argument tends, by default, to be understood as the agent ***that***

causes the change of state [emphasis added]". (cf. Zante's [a native speaker] objection to the test sentence with the verb *swallow* in section 3.4.3.2)

The following are cited from participants written comments[6] to account for their preferences in Sentence Completion Task. Participants' statements confirms the claims above.

(1) Subjects of the sentences are not "person", for that reason they cannot perform the action. (Participant 04)

(2) "*Orange can be peeled*", because the action "*cutting*" must be performed by somebody. (Participant 05)

(3) "*Mary's skirt must be washed*", because "*skirt*" is the "*object*" of the sentence. Since the sentence starts with "*the skirt*" (which is the object of the sentence), the structure must be in passive. (Participant 07)

(4) "*Mary's skirt is washed*", because the subject "*skirt*" cannot perform the action. Similarly, "*apartments are rent*" because other people rent the apartment. (Participant 13)

(5) "*Mary's skirt is washed*" or "*Orange can be peeled*". Because in these sentences, subjects of the sentences cannot perform the action themselves. Definitely, actions must be performed by someone else. (Participant 17)

(6) These sentences are meaningful for me, if only they are in passive structure. (Participant 18)

(7) "*Skirt can be washed*", because the subject of the sentence is "*Mary's skirt*". Since the "*skirt*" is not able to wash itself, verb of the sentence should be used in passive voice. (Participant 20)

(8) "*Boiled meat is cut*". The sentence conveys the meaning that someone cuts the meat, that is, the action should be performed by someone. For that reason, I expressed it in passive. "*The bag is carried*", because "*the bag*" is used as the subject of the sentence. Since "*the bag*" cannot carry itself, this situation requires the existence of someone who carries the bag. (Participant 21)

(9) "*Skirt is washed*", we cannot say "*Mary's skirt washes*", we have no way of saying this without using passive. Here, there can't be a structure such as "*Orange peels*". ***Can an orange peel itself ?*** [emphasis is added] "*Apartments are rented*", because there are always some people who rent the apartments. Moreover, apartments do not RENT, but are RENTED. (Participant 22)

---

[6] The whole data is not included here. Most participants made the similar comments on the other verbs. Only small portion of the data is quoted here in order to avoid redundancy.

(10) *"is washed"*. When we consider the sentence on the semantic grounds, we can see that there is an object which is *washed* and a performer who *washes* this object. For that reason, I used passive structure. *"can't be peeled"*, since an orange cannot peel itself, there must be someone who peels the orange. If the subject is not a personal pronoun, we should use passive structure. (Participant 23)

(11) *"skirt is washed"*, because Mary's skirt is washed by Mary. (Participant26)

(12) Since the skirt cannot wash itself, *"skirt can be washed"*. Sentence must be in passive. (Participant 27)

(13) Since Mary's skirt cannot wash itself, it must be washed by somebody. So, *"is washed well"*. Macaroni cannot cook itself, somebody cooks it. (Participant 29)

(14) Meanings that are conveyed by the sentences require passive structure. (Participant 31)

(15) In the sentence *"Mary's skirt……"*, subject of the sentence is *"Mary's skirt"*. In an active sentence, performer of the action is placed in subject position. But, in this example, subject is not the performer of the action. In fact, in this sentence, the performer is not mentioned. For these reasons, the sentence must be in passive. (Participant34)

(16) In the sentence *"Mary's skirt ……"* there is no genuine subject. Consequently, it is necessary to use passive. (Participant37)

Consequently, it seems that learners, who think that there has to be a cause for a change of state, fill the logical gap by supplying the missing causal agent. This reasoning results in the causative use of paired ergatives as a reflection in the passive structure.

Referring to the ***certain proficiency level*** issue stated in previous section (6.5.1), we can say that the case is valid for the avoidance of Paired Ergatives in NP-VP word order. In other words, it might be the case that *the more learners know about syntactic positions of grammatical units and the thematic roles that they can bear, the more they avoid ergative structure and favour passive.* This might account for the negative correlation between the proficiency level and the rate of avoidance of ergative structure.

CHAPTER 7 CONCLUSION AND IMPLICATIONS FOR L2 TEACHING

7.1 About the Study

This study aimed at revealing the status of English ergative verbs from the viewpoint of erroneous usage by Turkish learners of English. Besides, it sought plausible explanations for the most significant types of errors that learners encounter.

It is true that error analysis went out of fashion in the 1980s when a number of methodological and theoretical developments emerged especially in identifying language acquisition process. Corpus based studies provided researchers with much insights into the interlanguage of the learners. Knowing the case, conducting the study relying on research instrument such as Grammaticality Judgment Tests and Production Tasks was a must for the time being, since (and unfortunately) there is no comprehensive learners' corpus available. If there had been a learner corpus, this study would have been a different study on the same topic.

To diagnose the erroneous use of sub-types of intransitive verbs, namely paired ergative verbs and unaccusatives, a Grammaticality Judgment Test was developed. The test included various intransitive verb types in both correct and incorrect structural patterns. The aim was to compare and contrast usage of a verb type with respect to other verb types and various structural patterns by assessing learners' judgments. The result of the Grammaticality Judgment Test was supported by other tasks. Necessary attention was paid to produce reliable and valid research instruments by working in close collaboration with English teachers and linguists who are native speakers of English.

In scoring responses to the test and tasks, native speaker responses were taken into consideration as criteria instead of normative answers. For this purpose, responses of 60 native speakers were collected via the internet.

Participants of the study were 50 university students who were randomly selected from among the volunteering first year students of the English Language Teaching Department of Faculty of Education, Uludag University.

Examining 2500 answers (to the cloze test for relative proficiency), 4000 judgments (on grammaticality of the verbs in various structural patterns), 500 preferences (for structural patterns in sentence completion task) and 1000 sentences (in

sentence production task), and analysing these data, this study reached the following conclusions:

7.2. Conclusions Based on the Analyses of the Results

i. According to the results of this study ergative verbs are the most problematic group of intransitive verbs for learners. The calculated error rates related to both unaccusatives and paired ergatives are higher than the error rates of other intransitives. The difference in the error rates is statistically significant.

ii. In both Grammaticality Judgment Test and Sentence Completion Task, the learners remarkably avoided paired ergative verbs in NP-VP Word Order. Statistical analysis of the results showed that avoidance of paired ergatives in NP-VP Word Order emerged as the most significant problem in ergative verb class. When avoided, learners passivised the paired ergatives in NP-VP word order.

iii. The learners who participated in the study either passivised or transitivised the unaccusative verbs. That is, passivisation and transitivisation are remarkable error types for unaccusative verbs.

iv. In Grammaticality Judgment Test, passivisation rate and transitivisation rate of unaccusative verbs were the same, but in Sentence Production Task passivisation rate of the unaccusatives was significantly higher than transitivisation rate of the same verbs. Consequently, passivisation of unergative verbs emerged as more problematic than transitivisation of the same verb group.

v. Paired Ergative Verbs in NP-VP Word Order were also passivised by a considerable number of native speakers. Besides, native speakers preferred an alternative structure substituting the ergative structure. This finding seems to be a challenge to the common claim that passivisation of paired ergatives is a (serious) grammatical error.

vi. There was no connection between the difficulty rates posed by various intransitive verb types in various structural patterns and proficiency scores of the learners statistically, but there is strong evidence that proficient learners tend to reject paired ergative verbs in NP-VP word order more.

vii. Learners seem to transitivise the ergative verbs as a result of misinterpretation that ergatives are underlyingly transitives.

viii. Learners seem to be reluctant to believe that "no change of state occurs spontaneously" and as a result they avoid ergative structures that has no overt causal agent. Unusual mapping in thematic roles and syntactic functions within the ergative structure seem to cause learners to use passive structure when they avoid.

viii. If the aforementioned accounts for the problems are on the right track, considering the nature of the problems, ergative verbs can be taught in the framework of their Lexical Semantic Representations. Besides, a number of grammar points related to verb's argument structure can be taught in relation with ergative verbs.

7. 3. Implications for Language Teaching

Although ergative verbs have been within the concern of linguistics, it is recent consequence that these verbs have found their way into pedagogical grammar with Collins COBUILD Grammar.

Following COBULD, Yip (1994:31) discussed the "learnability problem" of these verbs with reference to Grammatical Consciousness-Raising, a cognitive approach to grammatical instruction (see Rutherford 1987:24 for justification of the approach).

As for teaching materials related to these verbs, Juff (1988:105) conducted a study on occurrence frequency of ergative verbs in ESL materials. In the framework of relevant studies on acquisition of these verbs by Turkish learners of English,

Karacaer (1998:176), following Yip, suggested teaching these verbs by means of Consciousness-Raising.

As pedagogical implications of this study, three main suggestions were made under the following headings:

a) *A design in which ergative verbs can be taught,*

b) *Features of teaching materials for ergative verbs,*

c) *Teaching various aspects of grammar in connection with ergative verbs.*

7.3.1. A Design[1] in which Ergative Verbs can be Taught

As has been discussed in sections (6.5.1) and (6.5.2), what make ergative verbs difficult to acquire are two distinctive features of this verb class; *an unusual mapping in syntactic functions and thematic roles* and *morphologically indistinguishable sentence functions no matter what type of thematic role they bear.*

Considering the learnability problems stated above, it seems to be plausible to contrast ergative verbs with transitive and typical intransitive verbs using distinctive properties of these verbs in their argument structures. This procedure will also spotlight the relations between *syntactic sentence functions* and *their thematic roles* in ergative structure. This manner also will be in harmony with the current generative linguistic theory which proposes that a verb's membership in a particular semantic class determines: the type of semantic role which the nouns in the same clause as the verb have, how many noun phrases the verb may appear with, and the syntactic position (Juffs 1998:94-95).

Ergative verbs (both unaccusatives and paired ergatives) can be distinguished by means of their Lexical Semantic Representations (see section 2.3.1). In order to visualise relation types between syntactic sentence functions and thematic roles in connection with the eventuality described by the verb, a "contextual framework" is

---

[1] "***Design***" here should be interpreted as "types of learning tasks", and the way in which "language content is selected and organised" (Richards and Rodgers 1986:20). This study, of course, does not intend to suggest an innovative approach to teach a specific point in the contents of L2 grammar.

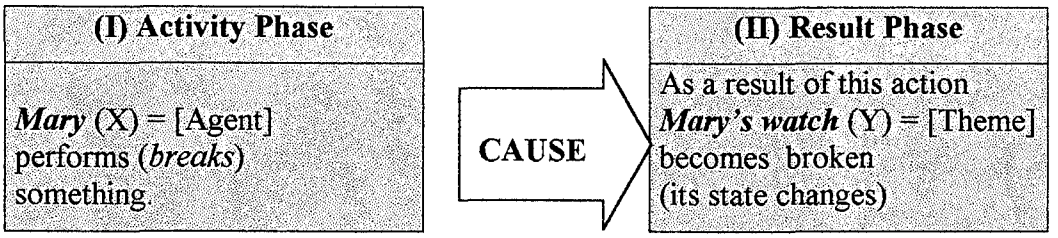
proposed. The aim of this framework is to facilitate the acquisition of verbs with its transitivity properties[2] including the number and position of obligatory complements.

Proposed framework has two phases (in connection with the LSR of the verb); (I) The activity Phase and (II) The Result (change of state) Phase. Activity Phase includes the information about the action and the performer of the action. On the other hand, the Result Phase includes the entity (***which must be someone or something different from the performer of the action***) that undergoes the directed change as a result of the action of the verb. Of course, both these phases need not exist in the framework.

In order to visualise the properties of a verb from this standpoint, the eventuality described by the verb should be mapped onto the framework as seen in the examples:

7.3.1.1. A Transitive Verb

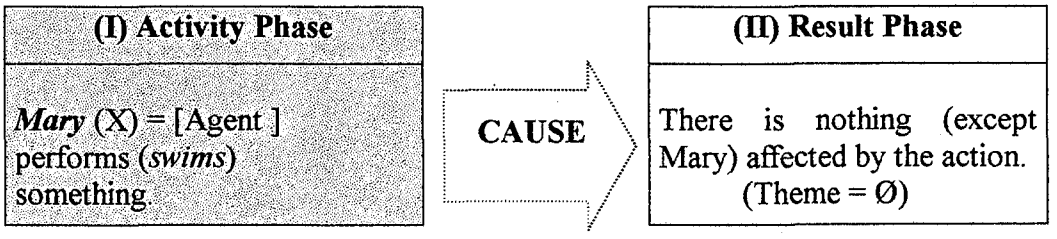
EVENTUALITY: While playing in the garden, Mary ***broke*** her watch.



Both sides of the framework is filled and both ***obligatory*** arguments (X) and (Y) are included in the framework.

7.3.1.2. A Typical Intransitive Verb (Unergative Verb)

EVENTUALITY: Every Sunday Mary ***swims*** in the pool.



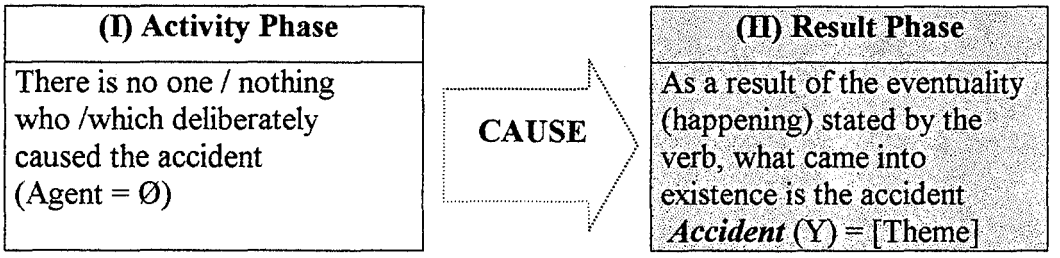
---

[2] This might be considered as teaching a verb with its ***valency*** (see section 2.3.2) plus the syntactic positions of obligatory complements including the thematic roles they bear.

Only first phase of the framework is filled, and one existing obligatory argument (X) is included in the first phase.

7.3.1.3. An Unaccusative Verb

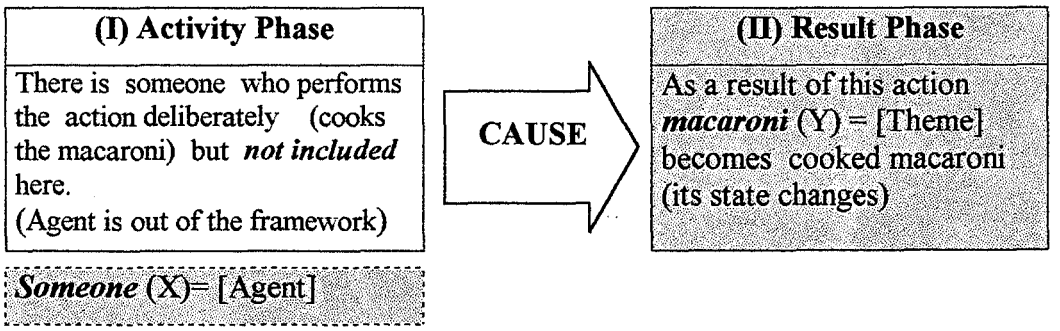
EVENTUALITY: The terrible accident ***happened*** here.



In this case, only second phase of the framework is filled, and again only one existing obligatory argument (Y) is included in the second phase.

7.3.1.4 A Paired Ergative Verb

EVENTUALITY: Macaroni cooks easily.



As in unaccusative verb, only the second phase of the framework is filled, and one obligatory argument (Y) is included in the second phase. In fact we know that there is an agent but it is not introduced inside of the first phase of the framework. The position of Agent indicates its availability in an alternative structure which is a sentence with the causative counterpart of the paired ergative verb *cook* as in *John cooks macaroni well.*

At this stage, a learner who comprehends the figures can acquire how a verb assigns thematic roles to arguments. As for syntactic position of these arguments, one can rule that arguments within the shaded sections of the frameworks should be projected into the Subject Position.

With a bit exaggeration, some verb lists can be prepared with reference to the frameworks stated above to visualise the distinctive properties of the verbs. To distinguish between paired ergatives and unaccusatives that have similar frameworks, "X" might be included in the first parts of the frameworks of paired ergatives without shading in order to represent the intact agents.

Ø	Y	*Her husband **died***	[unaccusative]
X	Ø	*Mary **smiled***	[unergative]
X	Y	*That car **sells** much*	[paired ergative]
X	Ø	*Baby is **sleeping***	[unergative]
Ø	Y	*Leaves **fall** in autumn*	[unaccusative]
Ø	Y	*Earthquake **occurred** yesterday*	[unaccusative]
X	Ø	*Joe is **crying***	[unergative]
X	Y	*Child **broke** the window*	[transitive]

As has been stated in section 6.5.2, a pitfall that causes learners to avoid using paired ergative verbs in NP-VP word order was the occurrence of an argument which is not the causal agent in Subject Position as in *This cup breaks* easily (since *the cup*, semantically, cannot be the *Agent*). In order to neutralise this idea, possibility of the same structural pattern[3] in L1 can be shown.

---

[3] According to the typological properties of English, most of the time the *Theme* does not appear in *Subject* position. If the *Theme* is in subject position (in this case it is impossible to express the actual *Agent* in terms of obligatory sentence functions) verb should be marked with passive morphology. In most cases the case is the same in Turkish. If the *Theme* is in *Subject* position, verb is marked with affix –il/ıl or –in/un as in *Kitap okundu,* or *Cam kırıldı*. In Turkish there are intransitive verbs (such as *pişmek* (cook),*çalışmak* (start) or *erimek* (melt)) that form grammatical sentences in which *Theme* appears in subject position without marking the verb with passive morphology as in

Çorba hemen ***pişti*** (The soup cooked quickly)
Bu soğukta araba zor ***çalışır.*** (The car hardly starts in this cold weather)

Quite interestingly, in these sentences (as in their English equivalents) there is no way to express the *Agent* while it is possible in passive structures in both languages, English and Turkish, by using an optional sentence constituent. (in English; *by*... in Turkish; ... *tarafından*) as seen below

Soup is cooked ***by John.*** but not *Meal cooks ***by John***
Çorba ***annem tarafından*** pişirildi. but not *Çorba ***annem tarafından*** pişti.
(The soup was cooked by my mother) (*The soup cooked by my mother)

This might be a syntactic criterion to distinguish between ergative and passive structures in both languages.

As discussed before, one of the difficulties for learners to identify the structure with paired ergative verbs in NP-VP word order was the fact that there is no morphological marker in the structure. In this case two hints, contextual information and some necessary adverbs which are required for the grammaticality of the structure are of vital importance (see sections 3.4.1 and 3.4.2). Emphasising these points (by means of suitable teaching materials as discussed below) might facilitate the acquisition of paired ergative verbs in NP-VP word order.

7.3.2. Features of Teaching Materials for Ergative Verbs

The amount of teaching materials designed specifically for teaching paired ergative verbs seem insufficient. Those, with few exceptions[4], that introduce these verbs use different terminology in relation with passive voice (see section 3.6). Of course there are quite a number of pedagogical grammar books which mention unaccusative verbs (as intransitives) but they neither use the term unaccusative nor mention syntactic and semantic properties of these verbs. Consequently, ***teaching materials which highlight semantic and syntactic properties of these verbs should be developed.***

Considering the problematic sides of the paired ergative verbs mentioned before, one can say that exercises and examples in teaching materials for these verbs should reflect the contextual information in which such structures are preferred. Although Dixon (1991:325-26) and Thewlis (1993:57) (see section 3.3.1) propose some criteria that one can apply in favouring paired ergative structures, a variety of native speaker responses to the Sentence Completion Task revealed the importance of referring to actual language use rather than to the grammar books designed specifically for instructional purposes. This issue raises the importance of authentic material use. Moreover, overall advantages[5] of authentic material use in language teaching have been supported by a considerable body of literature.

---

[4] Sinclair, John (ed in chief) (1990) ***Collins COBUILD English Grammar***
Pennington, Martha C. (1995) ***New Ways in Teaching Grammar*** (Part 6) TESOL Publications USA

[5] In one of his discussions on the relation between Linguistic Theory and Language Teaching, Stern (1991:161) claims that "linguistics influenced European language teaching particularly by a new emphasis on description and authenticity of language data in the development of language teaching materials. As the result of this view, most of the authorities concentrate on the importance of "authenticity" and they see the issue as the condition of successful language learning. For example,

For designing examples and exercises about ergative verbs, this study proposes combination of form and meaning because of the importance of the context (especially for paired ergatives). Although Cunningsworth (1984:16) thinks that "it is often very complex" to combine form and meaning, this seems to be possible in the context of "data-driven learning" by extracting special forms conveying functions selected from corpus of authentic texts (Johns 1994:293).

For example, for paired ergatives in NP-VP word order, following sample concordance[6] printouts extracted from British National Corpus can be used:

It	cooks	well and is particularly useful for children
still eaten throughout the world as it	cooks	quickly
If you write a song that	sells	well enough to reach the top 50 in the albums
never climbed the route but it still	sells	well in the Grindelwald
safety, because it is acceptable, or	sells	well at the art society exhibition
to me and telling me that their work	sells	well.

As seen, ***even this mini concordance provides the learner with the information that the most frequent adverb which collocates with paired ergative verbs is "well"*** in actual language use. Moreover, the entire context in which key word appears can be observed. For example, following sentence is the last one in collocation.

Nothing puts me off more than an artist coming to me and telling me that their work sells well.

These concordance lists enable learners to focus on certain forms including necessary contextual information with language functions. On the other hand, we know that focus on certain form in instruction speeds up the rate of learning, provides long term accuracy and raises the level of attainment (Long 1991:45). Moreover, consciously

---

Crystal (1987:371) argues that "exposure to native users of the foreign language is a real benefit, ***through the use of authentic materials*** [emphasis added]" explains why some learners are more successful than the others. Besides, good learners are defined as the ones who are involved in authentic language use (Stern 1991:411). Moreover, Haverson (1995:187) claims that authentic materials provide the best models of language and learners can learn language in a superior way by internalising that model. Also, according to (Brown 1994:245) authentic language in language instruction is the basis of being communicative. As Cook (1991:93) summarises, the obvious reason for most of them to think so seems to be the idea that students are being handicapped by never facing authentic language with its richness and diversity.

[6] Concordance is list of words in a text. These lists "give access to many language patterns in a text". The computer has made concordances easy to compile, and for some forty years a simple and effective convention called KWIC (Key Word in Context) has been widely used (Sinclair 1991:170)

paying attention to features of input and attempting to analyse their significance in terms of deeper generalisations are claimed to be highly facilitative (Schmidt 1993:35). Besides, this approach provides direct access to the data so that learner can take part in building up his or her own profiles of meaning and uses. The assumption underlies this is that effective language learning is itself a form of linguistic research, and that the concordance printout offers a unique resource for the stimulation of inductive learning strategies (Johns 1994:297).

7.3.3. Teaching Various Aspects of Grammar in Connection with Ergative-Unergative Distinction.

As has been discussed in section 3.8, ergative-unergative distinction has many reflections on various areas of grammar. Based on the theoretical background stated in sections 3.8.1-3.8.6, following areas of grammar can be taught in connection with ergativity.

Formation of –er nominals from verbs (see section 3.8.1)
Formation of passive and perfective adjectives from verbs (see section 3.8.2)
Formation of compound –ing adjectives from verbs (see section 3.8.3)
Interpretation of *they* as indeterminate arbitrary pronoun (see section 3.8.4)
Formation of Resultative Constructions (see section 3.8.5)
Cognate Object use (see section 3.8.1)

Such an approach will not only teach the grammar points stated above but also provide answers[7] to many questions such as;

*"A person who teaches" is called "**teacher**", but why is "a person who dies" not called "**dier**" ?*

*"A leaf which has fallen" is called "**fallen leaf**", but why is "the bird which has flown" not called "**flown bird**" ?*

---

[7] In –er nominals, the referent of –er nominal is a potential subject (in argument structure terms, external argument) of the verb. The nominal ***teacher*** refers to one who teaches and this corresponds to the *subject* of the sentence in which the verb ***teach*** appears as predicate. Following this argument, we can say that verbs that have external arguments [x] in their argument structures can form –er nominals. On the other hand, the verb ***die***, which has the argument structure of [(∅(y))] fails to form –er nominal since it has no external argument [x] in its argument structure.

In passive and perfective adjective formation, internal argument [y] of the verb is associated with the identity which is modified. The verb ***fall*** in *The leaf has fallen* has internal argument [(∅(y))], and the existence of this internal argument makes this formation possible. On the other hand, the verb ***fly*** has only external argument [(x(∅))]in its argument structure. This means that there is no internal argument [y] in the argument structure of the verb which can be modified with the perfective or passive adjective derived from the verb.

7.4. Suggestions for Further Research

1. The data of this study (except Sentence Production Task) is based on controlled productions and judgments of the participants. The same research can be conducted on the basis of free and actual productions of learners. (This type of study requires a learners corpus)

2. This study revealed that grammaticality of some paired ergative verbs in NP-VP word order is questionable. "To what extend and in which contexts these verbs are grammatical" might be searched in accordance with language varieties of native speakers.

3. This study, confirming some other relevant studies, showed the negative relation between proficiency level and avoidance of paired ergative verbs. Besides, an hypothesis is proposed to account for this interesting case. This hypothesis can be tested with participants who are at different proficiency levels.

4. Effectiveness of "Teaching Ergative Verbs within the framework of Lexical Semantic Representation" can be tested with experimental research.

5. Experimental research on "Teaching some grammar points (mentioned in section 7.2.3) in relation to Ergative Verbs" can be conducted.

APPENDIX A CLOZE TEST

AÇIKLAMALAR

Aşağıdaki boşluklu metinleri dikkatlice okuyunuz ve boş bırakılan her bir yere hem bağlam (context) açısından hem de dilbilgisel kurallar açısından en uygun olduğunu düşündüğünüz TEK KELİMEYİ yazınız.

Anlam ve bağlam açısından bir fikir edinebilmek için, boşlukları doldurmaksızın, metni bir ya da iki kez okumanızın yararı olabilir.

Boşlukları doldurduktan sonra da bir kez bütünüyle metni okuyup, anlam, bağlam ve dilbilgisi kuralları açısından yazdığınız sözcüklerin uygunluğunu kontrol ediniz.

Her bir boşluğa TEK BİR SÖZCÜK yazmanız gerektiğini UNUTMAYINIZ.

DIRECTIONS: Read the following two stories carefully and fill in each blank with a contextually and grammatically appropriate word. To get an idea about each story, first you can read it once or twice then try to fill in the blanks. Remember that you can write only one word in each blank.

STORY 1

Some people do not seem to have a mind of their own. They seldom make their__1__ decisions and never express __2__ own opinions. My brother __3__ one of these people. __4__ night, for example, he __5__ planning to spend a __6__ evening at home reading __7__ book. At about seven-thirty, __8__ , his friend Tom dropped __9__ and said, "Let's watch __10__ tonight." "Okay," my brother __11__ . By ten o'clock my __12__ was tired and sleepy, __13__ I am sure he __14__ to go to bed. __15__ Tom was not tired. "__16__ go out and get __17__ hamburger," Tom said. "Good __18__," my brother replied. Like __19__ , he very often says __20__ he does not mean __21__ order to please others. __22__ than that, he does __23__ tell others what he __24__ wants to do, thinking __25__ might offend them. In any case, my brother did not come home until midnight and woke up very late this morning.

STORY 2

We were about to gather up our picnic things and return to our car when a man showed up. He looked very annoyed __1__ asked us angrily if __2__ realised that we were __3__ private property. My father, __4__ looked very confused at __5__ man's statement, said that __6__ did not. The man __7__ pointed to a sign __8__ said that camping and __9__ were strictly forbidden in __10__ area where we were __11__ . Poor father explained that __12__ had not seen the __13__ until then and had __14__ realised that it was __15__ property. Despite my father's __16__ , the man did not __17__ satisfied at all and __18__ him for his name __19__ address. All the way __20__ , we were so upset __21__ hardly anyone said a __22__ . Everyone in the car __23__ wondering if the angry __24__ would report us to __25__ police. Although he didn't after all, this unpleasant incident completely ruined the wonderful time we had had in the country that day.

APPENDIX B CLOZE TEST ANSWERS

acceptable **unacceptable* (errors in part of speech, tense, number, styles, etc.)

STORY A

01. own
02. their
03. is
04. Last [**One*]
05. was [**began*]
06. quiet, whole, pleasant, lazy, relaxing, routine, nice
    [**special, *normal, *good, *free, *boring, *wonderful, *calm*]
07. a [**his, *my, etc.*]
08. however, unexpectedly, suddenly [**then*]
09. in, by
10. TV, movies, videos, baseball, tennis, etc. [**games, *movie, *video*]
11. said, replied, answered, responded, agreed
12. brother
13. and, so
14. wanted, needed, had [**decided*]
15. But [**However*]
16. Let's
17. a [**some*]
18. idea [thinking]
19. this, others [**always, *me, *that*]
20. what, things [**something, *words*]
21. in
22. More, Worse [**Other, *Rather*]
23. not
24. really, truly, actually, himself
25. it, that, this, he

STORY B

acceptable **unacceptable* (errors in part of speech, tense, number, styles, etc.)

01. and
02. we
03. on, using [**in, * invading, *trespassing*]
04. who
05. the, this [**that*]
06. we, he
07. then, angrily, simply, just, silently, immediately
    [**also, *suddenly, *strongly*]
08. which, that, and
09. picnic(k)ing, picnics,
10. the, this [**that, *his*]
11. picknic(k)ing, sitting, standing
    [**at, *in, *then, *now, *seated, *staying, *parking, *camping, *hiking*]
12. he, we
13. sign [**paper, *notice*]
14. not [**never, *just, *now, *suddenly, *finally*]
15. private, his
16. apology, explanation, pleading, excuse, reply, answer
    [**plea(s), *statement, *opinion, *words, *insistence*]
17. look, seem, appear [**get, *become, *feel*]
18. asked [**demanded*]
19. and
20. home, back
21. that [**and*]
22. word, thing
23. was, kept [**were*]
24. man [**person*]
25. the [**a*]

APPENDIX C GRAMMATICALITY JUDGMENT TEST

DİLBİLGİSEL DOĞRULUK SAPTAMA TESTİ

Aşağıdaki pasajları dikkatlice okuyunuz ve her pasajdaki altı çizili bölümde DİLBİLGİSEL BİR HATA OLUP OLMADIĞINI İNCELEYİNİZ. Altı çizili yapıların DOĞRULUĞU konusundaki kararınızı, cevap formunda uygun olan seçeneği işaretleyerek belirtiniz.

Eğer yapının DOĞRU olduğunu düşünüyorsanız cevap formunda (D) seçeneğini, eğer yapının YANLIŞ olduğunu düşünüyorsanız, cevap formunda (Y) seçeneğini işaretleyiniz. Amacımız, sizlerin BİLEREK vardığınız yargılarınızı öğrenmek olduğu için, yapının doğruluğu konusunda herhangi bir FİKRİNİZ YOKSA, cevap formunda (?) seçeneğini işaretleyiniz.

Eğer altı çizili yapının YANLIŞ olduğunu düşünüyorsanız, lütfen DOĞRU OLDUĞUNU düşündüğünüz biçimini yazınız. Bunu yapamıyorsanız, en azından NEDEN YANLIŞ olduğunu yazınız.

INSTRUCTIONS: Read the following passages carefully and decide whether each UNDERLINED PART is both contextually and grammatically correct. If you feel sure that it is correct, circle (D). If you feel sure that it is NOT correct, then circle (Y). If you cannot decide, circle (?). If you think that a passage is not correct supply its correct form. If you cannot, then state the reason why you think that it is not correct.

1	Hair that was washed the previous day will be easier to style.
2	They were very happy at the party. They danced for a long time.
3	There might be some students who never participate in the lesson. In such cases, those students should be talked by the teacher.
4	The tsunami is an unusually large sea wave produced by a seaquake. Scientists now believe that an undersea volcanic eruption can occur a tsunami
5	This is a very common pattern in both written and spoken English
6	Mount Vesuvius erupted in 79 A.D., destroying Pompeii. First, a plume of smoke arose and a deep sound followed the eruption.
7	An orange peels easily, almost nobody needs a knife to peel.
8	Doctors advise that a bite of food should be chewed before it is swallowed
9	Joe couldn't complete his homework. He was joked by one of his lazy friends.
10	Mr Johnson is a brilliant teacher since he has improved many techniques to encourage students to speak English. One of his techniques which he calls "associations" can speak any shy student who avoids speaking in public.

11	It was a long period of drought that was injurious to crops. One morning dark clouds appeared on the horizon.
12	George started smoking. I think George's new habit will arise some serious health problems.
13	The outer layer of the earth consists of separate plates, and these plates move slowly. Major earthquakes are occurred by these movements.
14	Most American families seem to be more concerned about their pets than their children.
15	How Diana was killed remains a mystery. In most people's opinions, few paparazzi happened the terrible accident in which we lost Diana
16	A pill covered with a thin, sugary substance swallows easily.
17	To prepare chips, first of all some potatoes should be peeled.
18	A lifejacket is a life preserver used on ships. It is assumed that in case of emergency passengers who cannot swim might be swum by these lifejackets.
19	When the house was on fire, one neighbour immediately called the Fire Brigade. Fire fighters arrived at the house within ten minutes.
20	Shirts made of nylon always wash well.
21	A few students were playing football in the garden. When the ball hit the window it was broken suddenly.
22	At the funeral, thousands of people were crying, which was an indication of the respect of a nation for a leader.
23	Yesterday morning Professor Douglas, a very serious teacher, made a joke. Many students were smiled by his surprising joke.
24	The importance of sleeping during babyhood is beyond any discussion. Every mother should sleep her baby for at least 12 hours a day even if the baby does not want to sleep.
25	It was a strange disease because all of the symptoms were unusual. None of the known treatments worked. After a long period of study, a possible solution emerged.
26	A strange object had landed on the foggy fields. At first sight I couldn't see anything because of the thick fog. Fortunately a strong wind blew, and a shining silver spaceship was appeared by the wind.

27	A kitchen sink with a smooth surface cleans easily no matter what type of detergent is used.
28	The present home had been built in the middle of the eighteenth century, when the family was still wealthy and influential.
29	Current investigations indicate that there is some water in the atmosphere of Mars. A type of primitive life might be existed by this amount of water, but we have no proof.
30	Tuberculosis is an infectious disease caused by lack of sunlight and fresh air. For that reason, tuberculosis occurs most often in damp climates.
31	This morning I saw John reading a book. Probably it was a humorous book, because this book smiled John from time to time.
32	We heard that a Russian war plane was fallen by the Chechen guerrillas.
33	Boiled meat cuts easily.
34	Bob is not an excellent worker at this factory. He is always joking around when there is work to be done.
35	Her style of speaking is very interesting. I know many people who were laughed by her strange pronunciation.
36	In listening lessons silence and concentration are vitally important. For that reason, teachers should avoid any interruptions that can talk the students during such lessons.
37	Sally claims that her husband died in the war, but nobody believes her
38	Macaroni is one of the favourite meals students enjoy, because it cooks quickly and easily.
39	I understand nothing because the chief engineer speaks with an Italian accent
40	A few days ago Alan's girlfriend left him unexpectedly. Consequently, Alan was cried by his girlfriend's unexpected behaviour.
41	When I make a mistake, my friends laugh at me. Of course this discourages me.
42	A few days ago I saw a huge snake. I should admit that I was shouted by the sudden movement of the snake.
43	To write a poem, one should form an opinion about the different aspects of an event and such an opinion exists only in the minds of gifted poets.

44	The day before the exam George broke his index finger. Of course this unfortunate event was arisen an important difficulty for George during the exam.
45	Besides being relatively cheap, the train has a seating capacity that accommodates hundreds of people. For these reasons, in many developing countries, trains arrive people to their workplaces.
46	One of the differences between quality newspapers and popular newspapers is that quality newspapers have more real news.
47	It rained a lot this winter. The water level in the lake was risen by the heavy rain.
48	Last weekend we decided to have picnic at Sauté Lake. I had to enter the lake in order to swim my daughter Mary since she cannot swim herself
49	It is known that when a forest is cut down very different plants spring up.
50	It is difficult to carry a bag without handle. On the other hand, a bag with straps carries easily.
51	Such food should be cooked in the oven.
52	At the wedding ceremony the orchestra played a famous waltz. To tell the truth, most of the guests were danced by the performance of the orchestra, although they were not willing to.
53	Last Sunday Bob went to a swimming pool, but he didn't swim.
54	When I was a student at the boarding school, we had a friend whose unusual opinions joked us much.
55	Autumn is a season of great beauty. The leaves fall in autumn.
56	Since Orwell employs high-frequency words, his novels read well
57	His dead body was carried slowly out of the house and through the village, followed by all of us.
58	In some societies most men do not love their mothers-in-law. The reason seems to be the fact that they talk too much.
59	Last month she decided to attend an English Speaking club. She thinks that she will be spoken English in a short time by the help of the club.
60	She couldn't read the passage in the dark, so she turned the light on. The intense light coming from the electric bulb appeared the letters clearly.

61	One day, I noticed her at the student cafeteria. She also noticed me and smiled in a friendly way.
62	If an apartment is in a good district and needs no repair, it rents easily
63	Yesterday my son and I went to a circus. Especially clowns and their comic show really laughed my son.
64	The weather here is generally cold. When you consider the fact that the mountains hereabouts rise to 2000 feet, you can easily see the reason why it is cold here.
65	On the day of the exam, John missed the school bus and had to call a taxi. The taxi came in a few minutes and the driver who had known the situation was arrived John at school on time.
66	Careless drivers cause terrible traffic accidents. In most cases these accidents die many innocent people.
67	In spring it rains heavily here. Consequently, heavy rains rise the water level in rivers.
68	His study on teaching methods emerged the expected result.
69	We don't have to have eight hours of sleep a night in order to be healthy. There is no set number of hours one must sleep to maintain good health.
70	When you pour boiling water into a glass cup, the cup may break suddenly due to the instant change in temperature.
71	Tide is the periodic rise and fall of the waters of the ocean. Twice a day, many different seashells are emerged on the sandy beaches by the tide.
72	By the other side of the river there were two men. I wanted to ask them what they were doing, but since my voice is not loud enough to be heard, I shouted John instead of me. The men heard us when John shouted.
73	The room was cleaned during lunch time.
74	Some people suffer from difficulty in falling or staying asleep. On serious occasions, sufferers are slept by medicine despite of the side effects.
75	In the freezing cold, it was really hard to survive. Despite their efforts, one of the mountaineers was died by the severe weather conditions.
76	Apart from the fact that it is exciting, a trip sometimes can be an adventure. Any minute something unexpected may happen.

77	We heard that Chechen guerrillas had fallen another Russian helicopter.
78	It rained a lot during those days. The great flood was happened by the heavy rains.
79	In most cases a baby expresses its desires by crying. For example, a desire not fulfilled in time may cry the baby.
80	An office was rented in London and a small staff was appointed, with Michael Hardman as the first editor of publications.
81	I shouted twice, but he didn't look at me. I think he didn't hear me.
82	In our reading lessons, passages are read by all students silently.
83	Mary was not willing to dance since she felt dizzy. On the other hand, Joe's insistence danced Mary although she was not willing to.
84	If I was interested in China, he would tell me all the stories I wanted to hear.
85	People suffering from psychopathy think unusual things. This mental illness exists very strange ideas in their minds.

END OF THE TEST

APPENDIX D SENTENCE COMPLETION TASK (Learner Version)

CÜMLE TAMAMLAMA TESTİ

Aşağıdaki cümlelerde boş bırakılmış bölümler vardır. Hem dilbilgisel hem de bağlam (context) açısından en uygun olacak şekilde cümleyi tamamlayınız. Cümleyi tamamlarken, cümle sonundaki fiili kullanmanız kaydı ile, ***istediğiniz yapıyı, zamanı*** (tense) ***ve gerekli gördüğünüz başka kelimeleri*** kullanabilirsiniz.

1	Mary always washes her skirt until it is clean. We know that the skirt is made of material capable of being washed without fading or other damage. We can say that Mary's skirt .....well. ***(to wash)***
2	While she was carrying the glass vase, the vase fell on the floor and consequently it..... ***(to break)***
3	The peel of an orange is different from the peel of an apple. For instance, one can easily peel an orange without a knife, but whoever wants to peel an apple must use a knife. From that viewpoint, an orange is different from an apple, because an orange.....easily no matter who does it. ***(to peel)***
4	She ..... meals in which the meat, if any, was like leather and the rice was lukewarm and came in gluey lumps. ***(to cook)***
5	Cleaning a kitchen sink has been a problem for most people. To help them, manufacturers produced a kitchen sink with a smooth surface which never holds food stains. Such kitchen sinks ..... easily no matter what type of detergent is used. ***(to clean)***
6	When a firm has the opportunity to increase its product range; however, an additional building should ..... for production purposes. ***(to rent)***
7	If you suffer from an ulcer you should refrain from eating fried meat. Instead you should eat boiled meat. It is easy to chew boiled meat. Besides, boiled meat ..... . easily. ***(to cut)***
8	First, she filled a large pan with warm water and then she ..... it upstairs. ***(to carry)***
9	I bought a bag, but my wife couldn't carry it easily. I bought a new one which had handles. Unfortunately, she couldn't carry it either. In the end, I bought a third one which has straps. Fortunately she liked it since this bag .....easily. ***(to carry)***
10	Some tea cups made of glass might be manufactured in such a way that they cannot react well to instant changes in temperature. When you pour boiling water into such a cup, it ..... easily. ***(to break)***
11	The Archbishop crowned the young prince king. Before the ceremony, clothes of the prince..... by the Imperial tailors. ***(to clean)***
12	To save time most students prefer ready-made meals or meals quick to prepare. Macaroni is one of the favourite meals of students, because it ..... quickly and easily. ***(to cook)***
13	An estate agent found an apartment for us. It was in a good district and near the school. Besides, it was on the third floor and the rent was low. Moreover the building was a new one and needed no repair. He strongly recommended that we rent it immediately. He is right, because such apartments ..... easily and someone might rent it before us. ***(to rent)***
14	Swallowing a pill is difficult for some people. I know this difficulty, because some pills are broken into parts or some of them dissolve in the mouth. The case is not the same if the pill is covered with a thin, sugary substance. Such pills.....easily because they are neither dissolved nor broken into pieces. ***(to swallow)***
15	He is considered to be the most famous writer of the decade, for he has a great number of readers. His sentences are simple and easy to understand. His vocabulary choice is reader-friendly, because he selects frequent words known by everyone. Moreover, he has a pleasant style. Consequently his novels ..... well. ***(to read)***

APPENDIX E SENTENCE COMPLETION TASK (*Native Speaker Version*)

If you are a native speaker of English, and interested in contributing to a research please go on reading, otherwise just delete this message and accept my apologies for occupying you.

At the very beginning, it was a simple query about some intransitive verbs called ergatives or unaccusatives which can form grammatical sentences in NP-VP word order such as *"This book sells much."* Some responses from native speakers of English revealed that there is no consensus on the usage of some of these verbs. This result seems to be a challenge to the known claim that most learners use these verbs erroneously by passivising them, for considerable portion of native speakers I corresponded preferred passive structures. Finally, I collected responses of some 50 learners of English by means of a sentence completion task, and now I need at least the same number of native speaker responses to see if there is significant difference in responses.

Would it be possible for you, as a native speaker of English, to complete the following sentences with the given verbs. I would be grateful if you could forward this message to those who could help me.

Thanks in advance.

Abdullah CAN
Uludag University Bursa

acan@uludag.edu.tr

1 Mary always washes her skirt until it is clean. We know that the skirt is made of material capable of being washed without fading or other damage. We can say that Mary's skirt .....well. (to wash)

2 The peel of an orange is different from the peel of an apple. For instance, one can easily peel an orange without a knife, but whoever wants to peel an apple must use a knife. From that viewpoint, an orange is different from an apple, because an orange.....easily no matter who does it. (to peel)

3 Cleaning a kitchen sink has been a problem for most people. To help them, manufacturers produced a kitchen sink with a smooth surface which never holds food stains. Such kitchen sinks ..... easily no matter what type of detergent is used. (to clean)

4 If you suffer from an ulcer you should refrain from eating fried meat. Instead you should eat boiled meat. It is easy to chew boiled meat. Besides, boiled meat ..... easily. (to cut)

5 I bought a bag, but my wife couldn't carry it easily. I bought a new one which had handles. Unfortunately, she couldn't carry it either. In the end, I bought a third one which has straps. Fortunately she liked it since this bag .....easily. (to carry)

6 Some tea cups made of glass might be manufactured in such a way that they cannot react well to instant changes in temperature. When you pour boiling water into such a cup, it ..... easily. (to break)

7 To save time most students prefer ready-made meals or meals quick to prepare. Macaroni is one of the favourite meals of students, because it ..... quickly and easily. (to cook)

8 An estate agent found an apartment for us. It was in a good district and near the school. Besides, it was on the third floor and the rent was low. Moreover the building was a new one and needed no repair. He strongly recommended that we rent it immediately. He is right, because such apartments ..... easily and someone might rent it before us. (to rent)

9 Swallowing a pill is difficult for some people. I know this difficulty, because some pills are broken into parts or some of them dissolve in the mouth. The case is not the same if the pill is covered with a thin, sugary substance. Such pills.....easily because they are neither dissolved nor broken into pieces. (to swallow)

10 He is considered to be the most famous writer of the decade, for he has a great number of readers. His sentences are simple and easy to understand. His vocabulary choice is reader-friendly, because he selects frequent words known by everyone. Moreover, he has a pleasant style. Consequently his novels ..... well. (to read)

APPENDIX F ERRONEOUS SENTENCES IN SENTENCE PRODUCTION TASK

Nr of Sentences	Participant Code	Error Type	Nr of Sentence	
				APPEAR
1	3	P	**1**	All the students have ***been appeared*** by the teacher during the examination.
2	7	P	**2**	When her eldest brother in Ankara, Ayşe ***was appeared*** in a party.
3	9	P	**3**	The scene of wreck could ***be appeared*** slowly.
4	12	P	**4**	It ***was appeared*** by the lights of sun.
5	14	P	**5**	Mary ***was appeared*** in front of the door.
6	16	P	**6**	The man with black mask ***was appeared*** only in such conditions.
7	21	P	**7**	After the war, it has ***been appeared*** that there is lots of damage.
8	21	P	**8**	The unknown points of investigation should ***be appeared*** once more.
9	22	P	**9**	This night UFOs might ***be appear***[sic] .
10	27	P	**10**	A new cinema will ***be appeared*** the next week.
11	31	P	**11**	It is said that same strange things have ***been appeared*** in the sky after the earthquake.
12	31	P	**12**	In our dormitory a lot of flies have ***been appeared***.
				ARISE
13	39	P	**1**	This kind of flower ***is arisen*** by an expert.
14	5	P	**2**	My face's thrown smiles around since you've ***been arising*** as my sun over huge mountains.
15	48	P	**3**	It is claimed that it was impossible the sunk ship Titanic, to ***be arisen*** over frozen water.
16	5	P	**4**	In the play, the sun shape ***was arisen***.
17	6	P	**5**	It is very amusing that the price has ***been arisen***.
18	7	P	**6**	It has been claimed that the event ***was arisen*** because of him.
19	7	P	**7**	He had ***been arosen*** [sic] at the end, but where he is isn't known.
20	9	P	**8**	If Ali had not solved that problem, new and more great problems might have ***been arised*** [sic].
21	14	P	**9**	The prices have ***been arisen*** these days.
22	14	P	**10**	Commiting [sic] a suicede[sic] has ***been arisen*** for 20 years..
23	21	P	**11**	It has been mentioned that the project can ***be arose***.
24	22	P	**12**	It has been suggested that the value of T.L. should ***be arisen***.
25	26	P	**13**	The new theories about space ***was arisen***.
26	26	P	**14**	She claimed a theory which ***was arisen*** before.
27	27	P	**15**	It is thought that new expectation might ***be arisen*** by scientists.
28	28	P	**16**	An answer should ***be arisen*** for this situaton.
29	30	P	**17**	Having ***been arised***[sic], people had difficulty buying this material.
30	30	P	**18**	It has been suggested that prices should not ***be arised***[sic] above this portion.
31	40	P	**19**	He hasn't called me back yet, an argument could ***be arisen*** at the meeting.
32	43	P	**20**	His sister homesick, his being unhappy had ***been arisen***.
33	3	T	**1**	It shouldn't ***arose*** a mistake.
34	23	T	**2**	He should have ***arisen*** his hand when the teacher asked a question.
35	5	T	**3**	His words are the things that have ***arisen*** this argument.

				ARRIVE
36	3	P	1	The suitcase have ***been arrived*** by my cousin.
37	3	P	2	The letters ***were arrived*** yesterday.
38	14	P	3	It was claimed that the car must have ***been arrived*** before the exact time.
39	21	P	4	After lots of efforts, the child had ***been arrived*** his house.
40	28	P	5	I ***was arrived*** there by my neighbours.

				DIE
41	7	P	1	She might have ***been died*** of hunger.
42	14	P	2	If he has been castaway for 18 years, he might have ***been died*** now.
43	19	P	3	He should have ***been died*** after that long captivity in mountain.
44	21	P	4	The illness ***is died*** my beloved grandmother.
45	26	P	5	She should have ***been died*** because she couldn't find for a long time.
46	27	P	6	A person can ***be died*** by suffocating by rope.
47	46	P	7	All her relatives here, her father was crying she can ***be died***.
48	50	P	8	My bird must have ***been died***.

				EXIST
49	3	P	1	Sea turtles will have ***been exist*** [sic] more than they are by the natural protectors.
50	7	P	2	It was said that his brother had ***been existed***.
51	21	P	3	By the help of the people, the dolphin could be could ***be existed***.
52	26	P	4	The nuclear weapons ***were*** not ***existed*** in prehistoric times.
53	38	P	5	It is a common truth that world ***is existed*** by God.
54	42	P	6	Earthquakes has never ***been existed*** their age.
55	46	P	7	This idea must ***be exist***[sic] only in her mind.
56	49	P	8	If he had been treated well, he would have ***been existed***.
57	31	T	1	People must bring in new laws to ***exist*** the dolphins.
58	43	T	2	Having a charismatic one in a community does not mean she/he have ***been existed*** her life within this position during her/his life.

				FALL
59	4	P	1	It has been forced that the price should ***be fallen***.
60	6	P	2	Whenever prices ***are fallen***, salesmen tout for customer.
61	9	P	3	They believe that he must have ***been fallen***.
62	10	P	4	Her clothes in dirt, she must have ***been fallen***.
63	21	P	5	The baby had ***been fallen*** by his mother because of her carelessness.
64	22	P	6	I heard that he had broken his leg, he might have ***been fallen***.
65	28	P	7	The vase ***was fallen*** by my brother.
66	32	P	8	The vase might have ***been fallen***.
67	35	P	9	The prices might ***be falled***[sic] if the government changes.
68	38	P	10	It was a ship which named Titanic ***was fallen*** down by the iceberg.
69	42	P	11	In the fall, the leaves should have ***been fallen***.
70	47	P	12	Leaves have ***been fallen*** since last month.

				HAPPEN
71	2	P	**1**	The accident may have ***been happened*** at home too.
72	14	P	**2**	It may have ***been happened***, but I'm not sure.
73	27	P	**3**	That serious matter could have ***been happen***[sic] at early hour.
74	28	P	**4**	It ***was happened*** that I was captured.
75	40	P	**5**	An accident must have ***been happened***. Look at that crowd.
76	43	P	**6**	It was my being loneliness that had ***been happened*** despite my hard studying.
77	43	P	**7**	It was an accident that ***was happened*** and destroyed the position of a nice day.
78	46	P	**8**	Everywhere is dirty, a wedding or ceremony may ***be happened***.
79	49	P	**9**	The event might have ***been happened*** in this home, I'm not sure.

				OCCUR
80	3	P	**1**	This terrible event ***was occurred*** by the storm.
81	4	P	**2**	If it ***is occurred*** again, I promise I really won't forgive you.
82	6	P	**3**	It was her success that the statue ***was occurred***.
83	7	P	**4**	It must have ***been occurred*** in his house.
84	9	P	**5**	To go school, necessary circumstances ***are occurred***.
85	14	P	**6**	It ***was occurred*** when I was 20.
86	22	P	**7**	Next year flood might ***be occur***[sic].
87	26	P	**8**	Genetic marker of cancer can ***be occurred*** on breast.
88	26	P	**9**	This illness ***is*** not ***occurred*** in animals.
89	27	P	**10**	It has been suggested that these rules must ***be occurred*** there.
90	38	P	**11**	The war ***is occurred*** because of only small things.
91	38	P	**12**	The error on the computer ***was occurred*** by the virus.
92	43	P	**13**	It was a strange event that had ***been occurred*** by change.
93	43	P	**14**	It was a horrifying accident that ***was occurred*** by road driver.
94	45	P	**15**	This kind of problems ***are occurred*** by his mind.
95	45	P	**16**	It's believed in religion that human ***is occurred*** by soil and water.
96	46	P	**17**	This event must ***be occurred*** here.
97	46	P	**18**	Another fight may ***be occurred*** yesterday.
98	49	P	**19**	I'm not sure, but this event might have ***been occurred*** in 19th century.

				RISE
99	3	P	**1**	The price of the houses will have ***been risen*** in two weeks.
100	5	P	**2**	It is discussed if special workers' wage should ***be risen*** up.
101	14	P	**3**	Prices of the cars ***were risen*** last year.
102	16	P	**4**	It is said that the prices will ***be risen*** day by day.
103	21	P	**5**	The price of cars has ***been risen*** by the some authorities because of some factors.
104	22	P	**6**	After this election, ticket prices will ***be risen***, I know !
105	26	P	**7**	My salary might ***be risen***.
106	28	P	**8**	The price of bean ***was risen*** by Hasan.
107	28	P	**9**	My weekly money have ***been risen*** by my father.
108	35	P	**10**	If value of money can ***be risen***, our life can be better.

109	40	P	11	The building should ***be risen*** by the end of this month.
110	46	P	12	The prices again can ***be rised***[sic].
111	46	P	13	The level of students in this class can ***be rised***[sic] next year.
112	47	P	14	Balloons will have ***been risen*** by the time you arrive.
113	50	P	15	The buildings shouldn't have ***been risen*** up any more.
114	1	T	1	She has been ***rising*** his hand for 5 minutes.
115	4	T	2	The thieves said that it was a robbery, everybody should ***rise*** their hands.
116	7	T	3	It was ***rising*** the prices that he heard on TV.
117	7	T	4	It was ***rising*** the prices that made everybody sad.
118	21	T	5	It was the responsibility of the government that ***rise*** the degree of education.
119	23	T	6	You should ***rise*** your hand if you want to speak.
120	24	T	7	It was only Ayşe who ***rose*** her hand to participate the lesson.
121	24	T	8	You should ***rise*** your hand if you want to talk about the subject.
122	43	T	9	Being a hardworking student in the classroom does not mean that you always ***rise*** your finger.

				EMERGE
123	1	P	1	It ***was emerged*** that he was a thief.
124	3	P	2	The crime ***is emerged*** by the efforts of the policemen.
125	3	P	3	It was the news that ***was emerged*** by a journalist.
126	4	P	4	N... to ***be emerged*** just make a cassette
127	5	P	5	The continent America ***was emerged*** by ...
128	5	P	6	The mixed condition of some verbs in English is being studied now, and I hope it'll ***be emerged*** by A. Can.
129	6	P	7	It should ***be emerged*** that genes determine how a woman is fat.
130	7	P	8	It was my closest friend Ali who ***was emerged*** as a liar.
131	7	P	9	It is known that this situation ***was emerged*** in every bad situation.
132	8	P	10	It ***is emerged*** that everything he tell[s] me is more than just a lie.
133	10	P	11	Omlett[sic] ***is emerged*** from egg and oil.
134	13	P	12	It had ***been emerged*** that he was not a dedective.
135	13	P	13	A lot of difficulties could have ***been emerged***.
136	14	P	14	The results have ***been emerged***.
137	15	P	15	It has been suggested that the disappointing news should ***be emerged***.
138	15	P	16	The book ***was emerged*** on unwaited[sic] day.
139	17	P	17	Tarkan ***was emerged*** by the song of "Bunların hepsi senin mi?".
140	17	P	18	It is difficult to ***be emerged*** in 18 years old as a famous singer.
141	20	P	19	A solution might ***be emerge***[sic] for your problem.
142	21	P	20	The murderers of Uğur Mumcu has ***been emerged***.
143	22	P	21	It ***was emerged*** that she had been ill.
144	22	P	22	It ***was emerged*** that she fell in love with me.
145	24	P	23	Unless the help ***is emerged*** quickly, nobody will survive.
146	25	P	24	It was the accident which ***was emerged*** around the city.
147	26	P	25	A new discovery about alcoholism ***was emerged***.
148	27	P	26	It is important that criminals ***are emerged***.
149	28	P	27	I think it should ***be emerged*** by everybody.
150	28	P	28	It ***was emerged*** that she was a boy.

151	29	P	**29**	When the things that nobody knows ***are emerged***, you feel embarrassed.
152	31	P	**30**	A political solution for this will have ***been emerged*** by 2000.
153	31	P	**31**	When the problem had ***been emerged***, everybody was so surprised.
154	33	P	**32**	If he could keep secrets, he might have ***been emerged*** by his reliability.
155	34	P	**33**	It has ***been emerged*** that he got into the jail.
156	36	P	**34**	It ***was emerged*** that there is a big hole in ozone layer.
157	38	P	**35**	The criminal ***was emerged*** because of his madness.
158	40	P	**36**	This soap opera can ***be emerged*** quickly by the help of the handsome actor.
159	42	P	**37**	It has ***been emerged*** that a man can live up to 100 yrs.
160	43	P	**38**	It was an important search that had ***been emerged*** throughout the world.
161	43	P	**39**	It was a big shot who had ***been emerged*** in our uni[versity].
162	45	P	**40**	AIDS ***is emerged*** in last five years.
163	45	P	**41**	She is a very famous singer who ***is emerged*** by public.
164	46	P	**42**	The final exams dates should ***be emerged***.
165	46	P	**43**	All truths about her must ***be emerged***.
166	47	P	**44**	The truth have ***been emerged*** after years.
167	47	P	**45**	Those old songs have ***been emerged*** again.
168	48	P	**46**	"Feminism" ***is emerged*** by some brave women.
169	49	P	**47**	This wrong news might have ***been emerged*** from Japan.
170	50	P	**48**	It was the last robbery which ***was emerged*** by detective.
171	25	T	**1**	It has been adviced[sic] that we shouldn't ***emerge*** your illness.
172	33	T	**2**	It has been a problem that that he ***emerged*** lies to his wife.
173	41	T	**3**	It was my cat that ***emerged*** a new kind of illness.

APPENDIX G INDIVIDUAL SCORES OF LEARNERS

PARTICIPANTS	Gender	Paired Ergatives in NP-VP	Paired Ergatives in Passive	Unergatives in NP-VP	Passivised Unergatives	Transitivised Unergatives	Unaccusatives in NP-VP	Passivised Unaccusatives	Transitivised Unaccusatives	Overall Judgment Score	Sentence Completion Task	Proficiency Scores (CLOZE)
Participant 01	M	3	10	10	7	9	9	8	9	65	0	68
Participant 02	F	6	10	10	5	3	8	5	0	47	4	68
Participant 03	F	1	10	10	9	3	8	4	2	47	2	66
Participant 04	F	2	9	9	7	8	8	2	7	52	0	52
Participant 05	M	4	10	10	4	6	10	6	4	54	1	76
Participant 06	M	1	10	10	9	9	9	6	8	62	0	58
Participant 07	F	3	10	10	9	7	9	8	5	61	0	60
Participant 08	M	0	10	10	7	9	10	6	5	57	0	60
Participant 09	F	2	9	10	8	8	10	8	5	60	0	64
Participant 10	F	2	10	10	5	6	10	4	2	49	1	68
Participant 11	F	3	10	10	9	10	10	8	7	67	1	74
Participant 12	M	6	10	10	4	6	10	3	4	53	6	40
Participant 13	F	0	9	8	6	8	10	6	7	54	0	74
Participant 14	F	4	10	10	6	7	9	3	5	54	0	64
Participant 15	F	5	10	10	7	8	8	5	7	60	5	66
Participant 16	F	7	9	10	3	3	10	0	1	43	2	68
Participant 17	M	6	10	10	8	6	10	6	5	61	4	68
Participant 18	M	0	10	10	10	10	9	7	10	66	0	76
Participant 19	F	1	10	10	10	9	9	9	7	65	1	70
Participant 20	F	0	10	10	10	10	9	8	9	66	0	72
Participant 21	F	3	10	10	7	6	9	9	8	62	0	74
Participant 22	M	0	10	10	8	8	9	6	7	58	0	60
Participant 23	F	1	9	10	8	8	9	8	10	63	0	70
Participant 24	F	1	10	9	7	9	10	7	5	58	0	86
Participant 25	F	1	10	10	8	8	9	6	5	57	0	78
Participant 26	F	0	9	10	9	6	8	8	4	54	0	68
Participant 27	M	1	9	10	8	9	6	5	8	56	0	54
Participant 28	M	0	10	10	8	7	10	7	7	59	0	50
Participant 29	F	1	9	10	6	6	8	7	5	52	0	68
Participant 30	M	2	10	10	7	3	9	8	4	53	1	54
Participant 31	F	0	10	10	7	6	9	5	5	52	0	46
Participant 32	F	1	10	10	9	10	9	9	8	66	1	90
Participant 33	F	1	10	10	10	10	9	8	8	66	0	82
Participant 34	F	1	10	10	9	10	10	8	8	66	0	80
Participant 35	F	0	10	10	7	8	10	9	10	64	0	78
Participant 36	F	2	10	10	8	7	10	2	4	53	6	80
Participant 37	F	1	10	8	8	10	9	7	8	61	0	72
Participant 38	M	1	10	10	5	10	9	5	5	55	0	52
Participant 39	F	2	10	10	9	9	10	9	8	67	2	78
Participant 40	F	1	10	10	7	4	10	5	3	50	0	66
Participant 41	F	0	10	10	7	10	9	7	9	62	0	58
Participant 42	M	9	10	10	6	2	10	4	3	54	9	76
Participant 43	M	2	10	9	10	9	9	10	7	66	0	38
Participant 44	M	0	7	10	6	7	9	6	3	48	0	52
Participant 45	F	4	9	6	9	7	7	6	4	52	0	58
Participant 46	M	2	10	10	7	4	10	8	4	55	0	58
Participant 47	F	2	10	9	10	7	8	8	4	58	0	58
Participant 48	F	2	10	10	8	7	10	10	8	65	0	70
Participant 49	M	1	10	10	9	8	10	8	8	64	0	72
Participant 50	F	6	10	10	7	4	9	2	5	53	0	54

MEAN		**2,08**	**9,76**	**9,76**	**7,54**	**7,28**	**9,16**	**6,38**	**5,88**	**57,84**	**0,92**	**65,84**
MOD		**1,00**	**10,00**	**10,00**	**7,00**	**8,00**	**9,00**	**8,00**	**5,00**	**66,00**	**0,00**	**68,00**
MEDIAN		**1,00**	**10,00**	**10,00**	**8,00**	**8,00**	**9,00**	**7,00**	**5,00**	**58,00**	**0,00**	**68,00**
STD DEV		**2,12**	**0,55**	**0,71**	**1,69**	**2,22**	**0,88**	**2,24**	**2,41**	**6,28**	**1,95**	**11,34**

APPENDIX- H LEARNERS' PREFERENCES IN SENTENCE COMPLETION TASK

P Passive Structure E Paired Ergative Verb in NP-VP Word Order

			1	2	3	4	5	6	7	8	9	10	
			wash	peel	clean	cut	carry	break	cook	rent	swallow	read	SCORE
1	Participant 01	M	P	P	P	P	P	P	P	P	P	P	0
2	Participant 02	F	E	E	P	P	P	P	E	P	P	E	4
3	Participant 03	F	P	E	P	P	P	P	E	P	P	P	2
4	Participant 04	F	P	P	P	P	P	P	P	P	P	P	0
5	Participant 05	M	P	P	P	P	P	P	P	P	P	E	1
6	Participant 06	M	P	P	P	P	P	P	P	P	P	P	0
7	Participant 07	F	P	P	P	P	P	P	P	P	P	P	0
8	Participant 08	M	P	P	P	P	P	P	P	P	P	P	0
9	Participant 09	F	P	P	P	P	P	P	P	P	P	P	0
10	Participant 10	F	P	E	P	P	P	P	P	P	P	P	1
11	Participant 11	F	P	P	P	P	P	E	P	P	P	P	1
12	Participant 12	M	P	P	E	E	P	E	E	P	E	E	6
13	Participant 13	F	P	P	P	P	P	P	P	P	P	P	0
14	Participant 14	F	P	P	P	P	P	P	P	P	P	P	0
15	Participant 15	F	E	P	E	E	P	P	E	P	P	E	5
16	Participant 16	F	P	E	P	P	P	P	E	P	P	P	2
17	Participant 17	M	P	E	E	P	P	P	E	P	P	E	4
18	Participant 18	M	P	P	P	P	P	P	P	P	P	P	0
19	Participant 19	F	P	P	E	P	P	P	P	P	P	P	1
20	Participant 20	F	P	P	P	P	P	P	P	P	P	P	0
21	Participant 21	F	P	P	P	P	P	P	P	P	P	P	0
22	Participant 22	M	P	P	P	P	P	P	P	P	P	P	0
23	Participant 23	F	P	P	P	P	P	P	P	P	P	P	0
24	Participant 24	F	P	P	P	P	P	P	P	P	P	P	0
25	Participant 25	F	P	P	P	P	P	P	P	P	P	P	0
26	Participant 26	F	P	P	P	P	P	P	P	P	P	P	0
27	Participant 27	M	P	P	P	P	P	P	P	P	P	P	0
28	Participant 28	M	P	P	P	P	P	P	P	P	P	P	0
29	Participant 29	F	P	P	P	P	P	P	P	P	P	P	0
30	Participant 30	M	P	P	P	E	P	P	P	P	P	P	1
31	Participant 31	F	P	P	P	P	P	P	P	P	P	P	0
32	Participant 32	F	P	P	P	P	P	E	P	P	P	P	1
33	Participant 33	F	P	P	P	P	P	P	P	P	P	P	0
34	Participant 34	F	P	P	P	P	P	P	P	P	P	P	0
35	Participant 35	F	P	P	P	P	P	P	P	P	P	P	0
36	Participant 36	F	E	E	P	P	P	P	E	E	E	E	6
37	Participant 37	F	P	P	P	P	P	P	P	P	P	P	0
38	Participant 38	M	P	P	P	P	P	P	P	P	P	P	0
39	Participant 39	F	P	P	P	P	P	E	P	P	P	E	2
40	Participant 40	F	P	P	P	P	P	P	P	P	P	P	0
41	Participant 41	F	P	P	P	P	P	P	P	P	P	P	0
42	Participant 42	M	E	E	P	E	E	E	E	E	E	E	9
43	Participant 43	M	P	P	P	P	P	P	P	P	P	P	0
44	Participant 44	M	P	P	P	P	P	P	P	P	P	P	0
45	Participant 45	F	P	P	P	P	P	P	P	P	P	P	0
46	Participant 46	M	P	P	P	P	P	P	P	P	P	P	0
47	Participant 47	F	P	P	P	P	P	P	P	P	P	P	0
48	Participant 48	F	P	P	P	P	P	P	P	P	P	P	0
49	Participant 49	M	P	P	P	P	P	P	P	P	P	P	0
50	Participant 50	F	P	P	P	P	P	P	P	P	P	P	0

PASSIVE	46	43	46	46	49	45	42	48	47	42	***454***
AVOIDANCE	0	0	0	0	0	0	0	0	0	0	***0***
ERGATIVE	4	7	4	4	1	5	8	2	3	8	***46***

APPENDIX - I NATIVE SPEAKER PREFERENCES IN SENTENCE COMPLETION TASK

E Ergative Verb in NP-VP (*The book reads easily*) **A** Avoidance (*The book is easy to read*) **P** Passive

		1	2	3	4	5	6	7	8	9	10	
		wash	peel	clean	cut	carry	break	cook	rent	swallow	read	SCORE
1	Native Speaker from UK 01	E	P	P	P	P	E	P	P	P	E	3
2	Native Speaker from UK 02	E	E	P	P	P	P	E	P	P	E	4
3	Native Speaker from UK 03	E	E	E	E	A	E	E	A	E	E	8
4	Native Speaker from UK 04	E	P	P	E	A	E	E	E	P	E	6
5	Native Speaker from UK 05	E	E	E	E	E	E	E	E	E	E	10
6	Native Speaker from UK 06	E	E	E	E	E	E	E	E	E	E	10
7	Native Speaker from UK 07	E	E	E	E	P	E	E	P	E	E	8
8	Native Speaker from UK 08	E	E	E	E	P	E	E	E	P	E	8
9	Native Speaker from UK 09	E	E	E	E	E	E	E	E	P	E	9
10	Native Speaker from UK 10	E	E	E	E	P	E	E	E	P	E	8
11	Native Speaker from UK 11	E	E	E	E	P	E	E	E	P	E	8
12	Native Speaker from UK 12	E	P	E	E	P	E	P	E	P	P	5
13	Native Speaker from UK 13	E	E	E	E	P	E	E	E	P	E	8
14	Native Speaker from UK 14	P	P	P	P	P	P	P	P	P	P	0
15	Native Speaker from USA 01	E	E	E	E	P	E	E	E	P	E	8
16	Native Speaker from USA 02	A	E	E	E	E	E	E	E	P	A	7
17	Native Speaker from USA 03	E	E	A	A	A	E	E	E	P	E	6
18	Native Speaker from USA 04	E	E	E	E	P	E	E	E	P	E	8
19	Native Speaker from USA 05	E	A	E	E	A	E	E	E	E	E	8
20	Native Speaker from USA 06	E	E	E	E	E	E	E	E	E	E	10
21	Native Speaker from USA 07	E	P	P	E	P	E	P	E	P	E	5
22	Native Speaker from USA 08	E	P	P	P	P	E	P	E	P	E	4
23	Native Speaker from USA 09	E	P	E	P	P	E	P	E	P	E	5
24	Native Speaker from USA 10	E	E	E	E	A	E	A	E	E	A	7
25	Native Speaker from USA 11	E	E	E	E	A	E	E	E	A	E	8
26	Native Speaker from USA 12	E	P	P	P	P	E	P	P	P	A	2
27	Native Speaker from USA 13	P	E	P	E	P	P	E	P	P	P	3
28	Native Speaker from USA 14	E	A	A	A	A	E	A	A	A	A	2
29	Native Speaker from USA 15	E	P	P	P	P	E	P	P	P	E	3
30	Native Speaker from USA 16	E	E	E	E	E	E	E	E	P	E	9
31	Native Speaker from USA 17	E	A	A	A	A	E	E	E	A	E	5
32	Native Speaker from USA 18	E	E	E	E	E	E	E	E	P	E	9
33	Native Speaker from USA 19	E	E	E	E	P	E	E	E	P	E	8
34	Native Speaker from USA 20	E	E	E	E	P	E	E	E	P	E	8
35	Native Speaker from USA 21	E	E	E	P	P	E	P	E	P	E	6
36	Native Speaker from USA 22	E	A	A	A	A	E	A	A	A	E	3
37	Native Speaker from USA 23	E	E	E	E	E	E	E	E	P	E	9
38	Native Speaker from USA 24	E	E	E	E	E	E	E	E	E	E	10
39	Native Speaker from USA 25	E	P	E	P	P	E	P	P	P	E	4
40	Native Speaker from USA 26	E	P	E	P	P	E	P	P	P	E	4
41	Native Speaker from USA 27	E	E	E	E	E	E	E	E	E	E	10
42	Native Speaker from USA 28	E	E	E	E	P	E	E	E	E	E	9
43	Native Speaker from USA 29	E	E	E	A	E	E	E	A	E	E	8
44	Native Speaker from USA 30	E	E	E	E	E	E	E	E	E	E	10
45	Native Speaker from USA 31	E	E	E	E	E	E	E	E	P	E	9
46	Native Speaker from USA 32	E	E	P	P	P	E	P	P	P	E	4
47	Native Speaker from USA 33	E	E	E	E	P	E	E	E	P	P	7
48	Native Speaker from USA 34	E	E	E	E	E	E	E	E	E	P	9
49	Native Speaker from USA 35	E	E	E	E	P	E	E	E	P	E	8
50	Native Speaker from USA 36	E	E	E	E	P	E	E	P	P	E	7
	PASSIVE	2	11	10	11	27	3	12	11	33	5	125
	AVOIDANCE	1	4	4	5	9	0	3	4	4	4	38
	ERGATIVE	47	35	36	34	14	47	35	35	13	41	337

APPENDIX J (STATISTICAL RESULTS)

Introductory Notes for *p- level* in Comparison of Means

Statistical Significance (p-level)

The statistical significance of a result is an estimated measure of the degree to which it is "true" (in the sense of "representative of the population"). More technically, the value of the p-level represents a decreasing index of the reliability of a result. The higher the p-level, the less we can believe that the observed relation between variables in the sample is a reliable indicator of the relation between the respective variables in the population. Specifically, the p-level represents the probability of error that is involved in accepting our observed result as valid, that is, as "representative of the population." For example, the p-level of .05 (i.e.,1/20) indicates that there is a 5% probability that the relation between the variables found in our sample is a "fluke." In other words, assuming that in the population there was no relation between those variables whatsoever, and we were repeating experiments like ours one after another, we could expect that approximately in every 20 replications of the experiment there would be one in which the relation between the variables in question would be equal or stronger than in ours. In many areas of research, the p-level of .05 is customarily treated as a "border-line acceptable" error level.

(Compiled from HELP Files of STATISTICA for Windows StatSoft, Inc. (1995). [Computer program manual]. Tulsa, OK: StatSoft, Inc., 2325 East 13th Street, Tulsa, OK 74104, (918) 583-4149, fax: (918) 583-4376.)

Section 1 Matrices of t-tests among Means of the Scores in Verb Groups in Grammaticality Judgment Test

T-test for Dependent Samples **Marked differences are significant at p < ,05000**

Verb Type	Mean	Std. Dev.	N	Diff	Std. Dev. Diff	t	df	p
PERGATIVE IN PASSIVE	9,760	0,5554921						
PERGATIVE IN NP-VP	2,080	2,1269889	50	7,680000	2,1327380	25,46295	49	,000000*
PERGATIVE IN PASSIVE	9,760	0,5554921						
UNERGATIVES IN NP-VP	9,760	0,7159979	50	,000000	,8081220	,00000	49	1,00000
PERGATIVE IN PASSIVE	9,760	0,5554921						
*PASSIVISED UNERGATIVES	7,540	1,6928421	50	2,220000	1,6817144	9,33439	49	,000000*
PERGATIVE IN PASSIVE	9,760	0,5554921						
*TRANSITIVISED UNERGATIVES	7,280	2,2227029	50	2,480000	2,2609371	7,75619	49	,000000*
PERGATIVE IN PASSIVE	9,760	0,5554921						
UNACCUSATIVES IN NP-VP	9,160	0,8889342	50	,600000	,9035079	4,69574	49	,000022*
PERGATIVE IN PASSIVE	9,760	0,5554921						
*PASSIVISED UNACCUSATIVES	6,380	2,2487185	50	3,380000	2,2396246	10,67152	49	,000000*
PERGATIVE IN PASSIVE	9,760	0,5554921						
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906	50	3,880000	2,3873818	11,49198	49	,000000*
UNERGATIVES IN NP-VP	9,760	0,7159979						
PERGATIVE IN NP-VP	2,080	2,1269889	50	7,680000	2,2446308	24,19365	49	,000000*
UNERGATIVES IN NP-VP	9,760	0,7159979						
*PASSIVISED UNERGATIVES	7,540	1,6928421	50	2,220000	1,9197151	8,17714	49	,000000*
UNERGATIVES IN NP-VP	9,760	0,7159979						
*TRANSITIVISED UNERGATIVES	7,280	2,2227029	50	2,480000	2,4179600	7,25250	49	,000000*

UNERGATIVES IN NP-VP	9,760	0,7159979						
UNACCUSATIVES IN NP-VP	9,160	0,8889342	50	,600000	,9689043	4,37880	49	,000063*
UNERGATIVES IN NP-VP	9,760	0,7159979						
*PASSIVISED UNACCUSATIVES	6,380	2,2487185	50	3,380000	2,3637570	10,11111	49	,000000*
UNERGATIVES IN NP-VP	9,760	0,7159979						
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906	50	3,880000	2,5042006	10,95589	49	,000000*
*PASSIVISED UNERGATIVES	7,540	1,6928421						
PERGATIVE IN NP-VP	2,080	2,1269889	50	5,460000	3,2526912	11,86957	49	,000000*
*PASSIVISED UNERGATIVES	7,540	1,6928421						
*TRANSITIVISED UNERGATIVES	7,280	2,2227029	50	,260000	2,0484937	0,897480	49	,373853
*PASSIVISED UNERGATIVES	7,540	1,6928421						
UNACCUSATIVES IN NP-VP	9,160	0,8889342	50	-1,620000	2,0789519	-5,51005	49	,000001*
*PASSIVISED UNERGATIVES	7,540	1,6928421						
*PASSIVISED UNACCUSATIVES	6,380	2,2487185	50	1,160000	1,8556038	4,42036	49	,000055*
*PASSIVISED UNERGATIVES	7,540	1,6928421						
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906	50	1,660000	2,1247809	5,52432	49	,000001*
*TRANSITIVISED UNERGATIVES	7,280	2,2227029						
PERGATIVE IN NP-VP	2,080	2,1269889	50	5,200000	3,8385797	9,57895	49	,000000*
*TRANSITIVISED UNERGATIVES	7,280	2,2227029						
UNACCUSATIVES IN NP-VP	9,160	0,8889342	50	-1,880000	2,4213338	-5,49020	49	,000001*
*TRANSITIVISED UNERGATIVES	7,280	2,2227029						
*PASSIVISED UNACCUSATIVES	6,380	2,2487185	50	,900000	2,3582249	2,69862	49	,009526*
*TRANSITIVISED UNERGATIVES	7,280	2,2227029						
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906	50	1,400000	1,6413036	6,03148	49	,000000*
UNACCUSATIVES IN NP-VP	9,160	0,8889342						
PERGATIVE IN NP-VP	2,080	2,1269889	50	7,080000	2,2482646	22,26747	49	,000000*
UNACCUSATIVES IN NP-VP	9,160	0,8889342						
*PASSIVISED UNACCUSATIVES	6,380	2,2487185	50	2,780000	2,3585710	8,33452	49	,000000*
UNACCUSATIVES IN NP-VP	9,160	0,8889342						
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906	50	3,280000	2,5717460	9,01843	49	,000000*
*PASSIVISED UNACCUSATIVES	6,380	2,2487185						
PERGATIVE IN NP-VP	2,080	2,1269889	50	4,300000	3,7375644	8,13514	49	,000000*
*PASSIVISED UNACCUSATIVES	6,380	2,2487185						
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906	50	,500000	2,2154375	1,59586	49	,116950
*TRANSITIVISED UNACCUSATIVES	5,880	2,4128906						
PERGATIVE IN NP-VP	2,080	2,1269889	50	3,800000	3,8808793	6,92370	49	,000000*

SECTION 2 Comparison between mean scores of ***Passivised Unaccusatives*** (6.380) and ***Transitivised Unaccusatives*** (5.880) in Grammaticality Judgment Test.

T-test for Dependent Samples (judgment.sta)
Marked differences are significant at p < ,05000

	Mean	Std.Dv.	N	Diff.	Std.Dv. Diff.	t	df	p
UNACCPAS	6,380000	2,248718						
UNACCTRN	5,880000	2,412891	50	,500000	2,215437	1,595863	49	,116950

SECTION 3 Comparison between mean scores of ***Unaccusatives in NP-VP word order*** (9.160) and ***Unergatives in NP-VP word order*** (9.760) in Grammaticality Judgment Test.

T-test for Dependent Samples (judgment.sta)
Marked differences are significant at p < ,05000

	Mean	Std.Dv.	N	Diff.	Std.Dv. Diff.	t	df	p
UNERNPVP	9,760000	,715998						
UNACNPVP	9,160000	,888934	50	,600000	,968904	4,378803	49	,000063*

SECTION 4 Comparison between mean scores of ***Passivised Unergatives*** (7.540) and ***Passivised Unaccusatives*** (6.380) in Grammaticality Judgment Test.

T-test for Dependent Samples (judgment.sta)
Marked differences are significant at p < ,05000

	Mean	Std.Dv.	N	Diff.	Std.Dv.	t	df	p
UNERGPAS	7,540000	1,692842						
UNACCPAS	6,380000	2,248718	50	1,160000	1,855604	4,420361	49	,000055

SECTION 5 Comparison between mean scores of ***Transitivised Unergatives*** (7.280) and ***Transitivised Unaccusatives*** (5.880) in Grammaticality Judgment Test.

T-test for Dependent Samples (judgment.sta)
Marked differences are significant at p < ,05000

	Mean	Std.Dv.	N	Diff.	Std.Dv. Diff.	t	df	p
UNERGTRN	7,280000	2,222703						
UNACCTRN	5,880000	2,412891	50	1,400000	1,641304	6,031483	49	,000000

SECTION 6 Comparison between mean scores of ***learners*** (subjects of the study) and mean scores of ***native speakers*** (control group of the study) in Sentence Production Task.

Grouping: VAR2 (tuvsnat.sta)
Group 1: G_1:1 (learners)
Group 2: G_2:2 (native speakers)

	Mean G_1:1	Mean G_2:2	t-value	df	p
VAR1	,920000	6,740000	-12,8154	98	,000000

Valid N G_1:1	Valid N G_2:2	Std.Dev. G_1:1	Std.Dev. G_2:2	F-ratio variancs	P Variancs
50	50	1,946635	2,553988	1,721349	,060131

SECTION 7 Comparison of mean scores of the ***native speakers from the USA*** with ***the native speakers from the UK.***

Grouping: VAR2 (ukvsusa.sta)
Group 1: G_1:1 (native speakers from UK)
Group 2: G_2:2 (native speakers from USA)

	Mean G_1:1	Mean G_2:2	t-value	df	p
VAR1	6,785714	6,722222	,078123	48	,938055

Valid N G_1:1	Valid N G_2:2	Std.Dev. G_1:1	Std.Dev. G_2:2	F-ratio variancs	p variancs
14	36	2,860300	2,468211	1,342947	,472285

Introductory Notes for *correlation coefficient r*

Correlation is a measure of the relation between two or more variables. The measurement scales used should be at least interval scales, but other correlation coefficients are available to handle other types of data. Correlation coefficients can range from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation while a value of +1.00 represents a perfect positive correlation. A value of 0.00 represents a lack of correlation.
The most widely-used type of correlation coefficient is Pearson r, also called linear or product-moment correlation.

Pearson Correlation

The most widely-used type of correlation coefficient is Pearson r (Pearson, 1896), also called linear or product-moment correlation (the term correlation was first used by Galton, 1888). It is the basic type of correlation that is offered in in every module; see and the Basic Statistics and Tables module.
Using non technical language, one can say that the correlation coefficient determines the extent to which values of two variables are "proportional" to each other. The value of the correlation (i.e., correlation coefficient) does not depend on the specific measurement units used; for example, the correlation between height and weight will be identical regardless of whether inches and pounds, or centimeters and kilograms are used as measurement units. Proportional means linearly related; that is, the correlation is high if it can be approximated by a straight line (sloped upwards or downwards). This line is called the regression line or least squares line, because it is determined such that the sum of the squared distances of all the data points from the line is the lowest possible. Pearson correlation assumes that the two variables are measured on at least interval scales

(Compiled from HELP Files of STATISTICA for Windows StatSoft, Inc. (1995). [Computer program manual]. Tulsa, OK: StatSoft, Inc., 2325 East 13th Street, Tulsa, OK 74104, (918) 583-4149, fax: (918) 583-4376.)

SECTION 8 Correlation Matrix for all possible relations among the scores of learners in various verb types in certain structural patterns (in Grammatical Judgment test)

Correlations (judgment.sta)
Marked correlations are significant at p < ,05000
N=50 (Casewise deletion of missing data)

	PEGTIVE	INCPASS	UNERNPVP	UNERGPAS	UNERGTRN	UNACNPVP	UNACCPAS	UNACTRN	PROFICIE
PEGTIVE	1,0000	,1202	-,0005	***-,4430***	***-,5574***	,0686	***-,4588***	***-,4594***	-,0451
INCPASS	,1202	1,0000	,2114	,1840	,0555	***,2860***	,1399	,1608	,1881
UNERNPVP	-,0005	,2114	1,0000	-,1266	-,1236	***,2860***	-,0056	,0184	,0806
UNERGPAS	***-,4430***	,1840	-,1266	1,0000	***,4797***	-,2213	***,5883***	***,5108***	,1640
UNERGTRN	***-,5574***	,0555	-,1236	***,4797***	1,0000	-,0335	***,4437***	***,7522***	,1929
UNACNPVP	,0686	***,2860***	***,2860***	-,2213	-,0335	1,0000	,0711	-,0004	,2738
UNACCPAS	***-,4588***	,1399	-,0056	***,5883***	***,4437***	,0711	1,0000	***,5502***	,2281
UNACCTRN	***-,4594***	,1608	,0184	***,5108***	***,7522***	-,0004	***,5502***	1,0000	,2081
PROFICIE	-,0451	,1881	,0806	,1640	,1929	,2738	,2281	,2081	1,0000

APPENDIX K (PARTICIPANTS OF THE STUDY)*

NATIVE SPEAKERS

Richard BADGER, Barry BAKIN, Deborah BLAZ, Troy BRADY, Kathryn BROWN, Pat BUCKNER, Lisa CRANDALL, Martha DANIELS, Jennifer DATENTO, Donn ELLIOTT, E. FLEMING, Mary Ann FREEMAN, John B. GARVEY, Amorey GETHIN, Simon GILL, Susan GOLDSMITH, John HIGGINS, Janel HINRICHSEN, Tom HOWARD, Sandra HOWARD, Jana KEILHOLTZ, Carolyn KINNEY, Jane C. KIRSCH, Isa KOCHER, Thomas KOZUMPLIK, Linda KRAUSEN, Stacie LEVY, Thomas LINKER, K. MARTHA, John R. MEADOWS, George MILLAR, Laurie MILLER, Gabriella MODAN, Ron MONTESANO, Sue NICHOLSON, Patty NODEN, Tom PAYNE, Melissa PEREIRA, Rebecca PETERS, Kathleen A PORTO, Pamela SCHROEDER, Karen STANLEY, Linda SWIHART, Judy THATCH, Sherry TRECHTER, David De VERNY, Sheri WALTERS, Twila WICHTENDAHL, Janis Van ZANTE.

THE LEARNERS

Özlem AKBAŞ, Erdoğan ARSLAN, Emek AŞIROĞLU, Aslı ATAR, Ayşen ATAY, Zehra ATEŞ, Sibel AYDIN, Özlem BALCILAR, Veli BATDI, Vildan BAY, Seval BIÇAKÇI, Burak BORA, Emine CEBE, Mehmet COŞKUN, Meyrem ÇEVİK, Zeliha DOĞAN, Umut DUMAN, Gülden EKMEKÇİ, Pınar ERBİGE, Başak ERTURAN, Ece GİTTİ, Duygu GÖK, Miray HACIOSMANOĞLU, Burçin İNCE, Alper KAHRAMAN, Nurdan KALABAY, Emine KARATAŞ, H.İbrahim KELEŞ, Gürkan KILIÇ, Meltem KILIK, Özkan KIRÇİÇEK, Gürkan KORKUT, Fatma KÖSE, Cemil ÖZCAN, Hatice ÖZENDİM, Ümit Yaşar ÖZTÜRK, Hakan SARP, Elif SEVEN, Fatma Deniz SİNAĞ, Bünyamin ŞAHBAN, Öznur ŞAMLI, R.Murat ŞENSOY, Nihan TOPTAN, Fatma TUNÇ, Yakup TURALI, Ayşe ÜNLÜ, Zehra VATANSEVER, N.Sönmez YAPICI, Onur İ.YETKİN, Yonca YILMAZ

* Names of the participants are listed in alphabetical order and this does not reflect the participant codes in appendices.

REFERENCES

Aarts, Flor and Jan,. **English Syntactic Structures.** Oxford : Pergamon Press Ltd. (1982)

Abdullayeva, Ophelia. **The Acquisition of Ergative Verbs by Turkish EFL Students**. Unpublished MA Thesis. Bilkent University Ankara (1993)

Aksan, Yeşim. "Konu yorumu ve Türkçede kimi geçişsiz eylemler" **Dilbilim Araştırmaları** (1997)

Baker, Mark. "Objects, themes and lexical rules in Italian." In **Papers in Lexical-functional Grammar**, ed. Lori Levin, Malka Rappaport and Annie Zaenen, 1-45. Indiana University Linguistic Club, Indiana University, Bloomington (1983)

Balcom, Patricia. "Why is this happened? Passive morphology and Unaccusativity". **Second Language Research** Vol:13.1 (1-9) (1997)

Bachman, Lyle F. **Fundamental Considerations in Language Testing**. Oxford : Oxford University Press (1990)

Birdsong, David. "On the Instability of Grammaticality Judgments" Paper presented at **the Annual Meeting of the American Association for Applied Linguistics** (New Orleans, LA, December 27-30, (1988)

Borsley, Robert D. **Syntactic Theory: A Unified Approach** New York : Edward Arnold (1991)

Bresnan, Joan. "The passive in lexical theory". In **The Mental Representation of Grammatical Relations**, ed. Joan Bresnan (3-86) Cambridge Massachusetts: MIT Press (1982)

Brown, H. Douglas. **Principles of Language Learning and Teaching** (3rd Edition) New Jersey : Prentice Hall Regents (1994)

Burt Marina K., and Carol Kiparsky. **The Gooficon: A Repair Manual for English.** Rowley, Massachusetts : Newbury House (1972)

Burzio, Luigi. **Intransitive Verbs and Italian Auxiliaries**. Unpublished Ph.D. Dissertation. Massachusetts Institute of Technology (1981)

Carrier, Jill and Janet H. Randall. "The Argument Structure and Syntactic Structure of Resultatives". **Linguistic Inquiry** Vol:15 No: 3 (381-416) (1992)

Celce-Murcia, Marianne and Sharon Hilles. **Techniques and Resources in Teaching Grammar** Oxford : Oxford University Press (1988)

Chapelle, Carol A. and Roberta G. Abraham. "Cloze Method: What difference does it make?". In **Readings on Second Language Acquisition,** eds. H.Douglas Brown and Susan Gonzo, 389-413. New Jersey : Prentice Hall Regents (1990)

Chomsky, Noam. **Syntactic Structures** (Eleventh Printing) The Hague. Paris : Mouton (1957)

_____. **Aspects of the Theory of Syntax** (Tenth Printing). Massachusetts : The MIT Press (1965)

_____. **Lectures on Government and Binding.** Dordrecht : Foris (1981)

_____. **Knowledge of Language: Its Nature, Origin and Use**. New York: Praeger (1986)

Clark, Virginia P., Paul A. Eschholz and Alfred F. Rosa. **Language : Readings in Language and Culture**. New York : St.Martin's Press (1998)

Cook, Vivian. **Second Language Learning and Language Teaching**. London : Edward Arnold (1991)

Cook, Vivian and Mark Newson. **Chomky's Universal Grammar :An Introduction** (2nd Edition). Oxford : Blackwell Publishers (1996)

Crystal, David. **The Cambridge Encyclopaedia of Language.** Cambridge : Cambridge University Press (1987)

_____. **A Dictionary of Linguistics and Phonetics** (3rd Edition). Oxford : Blackwell Publishers (1992)

Cunningsworth, Alan. **Evaluating and Selecting EFL Teaching Materials.** Liverpool : Heinemann (1984)

Davies, William D. and Tamar I. Kaplan. "Native Speaker vs. L2 Learner Grammaticality Judgments". **Applied Linguistics** Vol:19 No:2 (183-203) Jun 1998 (1988)

Dixon, Robert M.W. **A New Approach to English Grammar, on Semantic Principles**. Oxford : Clarendon Press (1991)

_____. **Ergativity (Cambridge Studies in Linguistics).** Cambridge : Cambridge University Press (1994)

Doell, Wernfrid. "Language Acquisition and Ergative/Unaccusative Verbs" [On-Line] Available: http://www.chat.carleton.ca/~wdoell/work/ergativeverbs.htm (1997)

Downing, Angela., Philip Locke. **A University Course in English Grammar.** London : Prentice Hall International (UK) (1992)

Eastwood, John. **Oxford Guide to English Grammar**. Oxford : Oxford University Press (1994)

Fillmore, Charles J. "The case for case". In **Universals in Linguistic Theory,** eds. Bach, E. and Harms R.T, pp. 1-88. Holt Rinehart and Winston, New York (1968)

Francis, Gill and John Sinclair. " 'I Bet He Drinks Carling Black Label': A Riposte to Owen on Corpus Grammar". **Applied Linguistics** Vol:15 No:2 (190-200) Oxford : Oxford University Press (1994)

Gass, Susan M., and Larry Selinker. **Second Language Acquisition: An Introductory**. Course Hillsdale, New Jersey : Lawrence Erlbaum Associates (1994)

Gruber, Jeffrey S. **Studies in Lexical Relations**. Ph.D. Dissertation MIT : Cambridge Massachusetts (1965)

Haegeman, Liliane. **Introduction to Government and Binding Theory** (2nd Edition). Oxford : Blackwell Publishers (1994)

Halliday, Michael Alexander Kirkwood. "Notes on Transitivity and Theme in English, Part 1". **Journal of Liguistics** 3 (37-81) (1967)

Halliday, Michael Alexander Kirkwood. **An Introduction to Functional Grammar** (Second Edition). New York : Edward Arnold (1994)

Haverson, Wayne W. **Adult literacy training in Teaching English as a Second or Foreign Language** (eds. Celce-Murcia Marianne) Boston : Heinle & Heinle Publishers (1995)

Hinofotis, Frances Butler. "Cloze as an alternative method of ESL placement and proficiency testing". In **Research in Language Testing**, ed. John W. Oller, Jr. and Kyle Perkins, (121-128). Rowley, Massachusetts : Newbury House (1980)

Hubbard, Philip L. "Non-transformational theories of grammar: Implications for language teaching". In **Perspectives on Pedagogical Grammar**, ed. Terence Odlin, 49-71. Cambridge : Cambridge University Press (1994)

Hubbard, Philip L. and Donna Hix. "Where vocabulary meets grammar: Verb subcategorisation errors in ESL writers". **CATESOL Journal** (November) 89-100 (1998)

Hughes, Arthur. **Testing for Language Teachers.** Cambridge : Cambridge University Press (1989)

Ingham, Richard. "The ergative alternation in L2 acquisition". In **Lexicon Research Group Handbook,** 1996-1997 (35-47) Department of Linguistic Science of The University of Reading : Reading (1996)

Jackendoff, Ray S. **Semantic Interpretation in Generative Grammar.** MIT Press : Cambridge, Massachusetts (1972)

Jacobs, A. Roderick. **English Syntax: A Grammar for English Language Professionals**. Oxford : Oxford University Press (1995)

Jaeggli, Osvaldo A. Passive Linguistic Inquiry Vol:17, No:4 (587-622) (1986)

Jannedy Stefanie; Robert Poletto; Tracey L. Weldon (eds.). **Language Files (Materials for an Introduction to Language & Linguistics** / Sixth Edition) Columbus : Ohio State University Press (1994)

Johns, Tim. "From printout to handout: Grammar and vocabulary teaching in the context of Data Driven Learning". In **Perspectives on Pedagogical Grammar,** ed. Terence Odlin, Cambridge University Press (1994)

Juffs, Alan. "Semantics-syntax correspondences in second language acquisition" **Second Language Research** Vol:12.2 (177-221) (1996)

_____. "The acquisition of semantics-syntax correspondences and verb frequencies in ESL materials". **Language Teaching Research** Vol:2.2 (93-123) London: Arnold (1998)

Karacaer, Zehra. "Anadili Türkçe olan öğrencilerin İngilizce'deki istemsiz geçişsiz fiillerde karşılaştıkları sorunlar ve bu fiillerin öğretimine ilişkin öneriler". **Anadolu Üniversitesi Eğitim Fakültesi Dergisi** Cilt 8 Sayı 1-2 Güz 1998 (ss 168-183) Eskişehir (1998)

Keyser, Samuel Jay and Thomas Roeper. "On the middle and ergative constructions in English". **Linguistic Inquiry** Vol:15, No: 3 (381-416) (1984)

Leow, Ronald P. "Grammaticality judgment tasks and second language development". In **Georgetown University Round Table of Languages and Linguistics, Language Acquisition, and Language Variation: Current Trends and Future Prospects,** eds. Alatis, James E. et al, Washington DC: Georgetown University Press (1996)

Levelt, Willem J.M. **Speaking: From Intention to Articulation**. Cambridge, MA : MIT Press (1989)

Levin, Beth. **English Verb Classes and Alternations: A preliminary investigation** Chicago : University of Chicago Press (1993)

Levin, Beth and Malka Rappaport. "The formation of adjectival passives". **Linguistic Inquiry** Vol:17 No: 4 (623-661) (1986)

Levin, Beth and Malka Rappaport Hovav. "The lexical semantics of verbs of motion:The perspective from unaccusativity". In **Thematic structure: Its role in grammar**, ed. I. M. Roca, 247-269. Berlin: Foris (1992)

_____. "A preliminary analysis of causative verbs in English". **Lingua** 94 (35-77) (1994)

_____. **Unaccusativity: At the syntax-lexical semantics interface.** Cambridge, MA: MIT Press (1995)

Little, David. "Words and their properties: Arguments for a lexical approach to pedagogical grammar". In **Perspectives on Pedagogical Grammar**, ed. Terence Odlin, 123-139. Cambridge: Cambridge University Press (1994)

Long, Michael. "Focus on form: A design feature in language teaching methodology". In **Foreign Language Research in cross-cultural perspective**, eds. Kees de Bot, Ralph Ginsberg and Claire Kramsch. Amsterdam and Philadelphia : John Benjamins Publishing Co (1991)

Lyons, John. **Introduction to Theoretical Linguistics**. Cambridge : Cambridge University Press (1968)

Madsen, Harold S. **Techniques in Testing.** Oxford : Oxford University Press (1983)

Manning, Christopher D. **Ergativity Argument Structure and Grammatical Relations.** Stanford : CSLI Pubications (1996)

Mandell, Paul B. "On the Reliability of Grammaticality Judgment Tests in Second Language Acquisition Research". **Second Language Research** Vol:15 No:1 (73-99) (1999)

Montrul, Silvina. "On the Nature of Interlanguage Grammars: Causatives and Transitivity in L2 English". (Revised version of) article presented at **the American Association for Applied Linguistics**, Orlando Florida (1997)

_____. "Causative errors with unaccusative verbs in L2 Spanish". **Second Language Research** Vol:15 No:2 (191-219) (1999)

Rivers, M.Wilga. **Teaching Foreign Language Skills.** Chicago : The University of Chicago Press (1981)

Oshita, Hiroyoki (1997) The Unaccusative Trap: L2 Acquisition of English Intransitive Verbs: Unpublished Ph.D. dissertation. University of Southern California, Los Angeles

Owen, Charles. "Corpus-Based Grammar and the Heineken Effect: Lexico-grammatical Description for Language Learners". **Applied Linguistics** Vol:14 No:2 (167-187) Oxford University Press (1993)

Palmer, Frank Robert. **The English Verb** (Second Edition). New York : Longman Inc. (1965)

Perlmutter, David M. "Impersonal passives and unaccusative hypothesis". In **Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society** (157-189). Berkeley : University of California (1978)

Palmer, Frank Robert. **Grammar.** Middlesex : Penguin Books Ltd. (1971)

Quirk, Randolph; Sidney Greenbaum; Geoffrey Leech and Jan Svartvik. **A Comprehensive Grammar of the English Language.** Essex : Longman Group UK Limited (1985)

Radford, Andrew. **Syntax: A Minimalist Introduction**. Cambridge : Cambridge University Press (1997)

Radford, Andrew. **Transformational Grammar: A First Course.** Cambridge : Cambridge University Press (1988)

Random House Webster's Electronic Dictionary and Thesaurus. College Edition Version 1.0 Reference Software International (1992)

Richards, Jack C., A noncontrastive approach to error analysis. In **Focus on the learner: Pragmatic perspectives for the language teacher**, ed. John W. Oller, Jr. and Jack. C. Richarsd, 96-113. Rowley, Massachusetts: Newbury House (1973)

Richards, Jack, J.Hull and S.Proctor. **Interchange: English for International Communication** 3 Volumes. Cambridge : Cambridge University Press (1991)

Richards, Jack; John Platt and Heidi Platt (1992) **Dictionary of Language Teaching & Applied Linguistics** Essex : Longman Group UK Limited

Richards, Jack C. and Theodore S. Rodgers. **Approaches and Methods in Language Teaching**. Cambridge : Cambridge University Press (1986)

Rutherford, William E. **Second Language Grammar: Learning and Teaching**. London : Longman (1987)

Rutherford, William E. "Interlanguage and pragmatic word order". In **Linguistic Perspectives on Second Language Acquisition**, ed. Susan M. Gass and Jacquelyn Schachter, 163-182. Cambridge : Cambridge University Press (1989)

Schachter, Jacquelyn and Virginia Yip. "Grammaticality judgments: why does anyone object to subject extraction?". **Studies in Second Language Acquisition** Vol:12 No:4 (379-92) Dec 1990 (1990)

Schmidt, Richard. "Consciousness, learning and interlanguage pragmatics". In **Interlanguage Pragmatics,** eds. Gabriele Kasper and Shoshana Blum-Kuka Oxford: Oxford University Press (1993)

Seely, Jonathan. "An ergative historiography". **Historiographica Lingustica** Vol: 4 (191-206) (1977)

Simpson, Jane. "Resultatives". In **Papers in lexical-functional grammar**, ed. Lori Levin, Malka Rappaport and Annie Zaenen, (143-157). Indiana University Linguistics Club, Indiana University, Bloomington (1993)

Sinclair, John. **Corpus, Concordance, Collocation.** Oxford : Oxford University Press (1991)

Sinclair, John., Gwyneth Fox et al.(eds.) **Collins Cobuild English Grammar**. London : Collins (1990)

Sorace, Antonella (1993) Incomplete vs. divergent representations of unaccusativity in nonnative grammars of Italian. Second Language Research 9:22-47

Stern, Hans Heinrich. **Fundamental Concepts of Language Teaching.** Oxford : Oxford University Press (1991)

Swan, Michael. **Practical English Usage.** Oxford : Oxford University Press (1980)

Tapanainen, Pasi.. **A non-projective dependency** Parser Timo Järvinen Research Unit for Multilingual Language Technology, University of Helsinki Finland. [On-Line] Available: http://www.conexor.fi/anlp97/anlp97.html (1997)

Thewlis, Stephen. **Grammar Dimensions: Form, Meaning and Use**. Book 3 Boston, Massachusetts : Heinle and Heinle Publishers (1997)

Trask, Robert Lawrence. **A Dictionary of Grammatical Terms in Linguistics.** London and New York : Routledge Inc. (1993)

Tsujimura, Natsuko. "Ergativity of nouns and case assignment". **Linguistic Inquiry** Vol:21 No: 2 (277-287) (1990)

Stevens, Vance. "Concordancing with language learners: Why? When? What?". **CAELL Journal** Vol: 6 No:2 Summer 1995 (2-10) (1995)

Yip, Virginia. "Interlanguage ergative constructions and learnability". **CUHK Papers in Linguistics** No:2 (45-68) (August 1990) (1990)

_____. "Grammatical consciousness-raising and learnability". In **Perspectives on Pedagogical Grammar**, ed. Terence Odlin, 123-139. Cambridge : Cambridge University Press (1994)

_____. **Interlanguage and learnability: From Chinese to English.** Amsterdam : John Benjamins Publishing Co. (1995)

Willis, Dave. **The Lexical Syllabus: A New Approach to Language Teaching.** Glasgow : Collins E.L.T (1990)

Zobl, Helmut. "Canonical typological structures and ergativity in English L2 acquisition". In **Linguistic perspectives on second language acquisition**, ed. Susan M. Gass and Jacquelyn Schachter, 203-221. Cambridge : Cambridge University Press (1989)

CORPUS REFERENCES

"Data cited herein has been extracted from the British National Corpus Online service, managed by Oxford University Computing Services on behalf of the BNC Consortium. All rights in the texts cited are reserved

This service is available at ***http://sara.natcorp.ox.ac.uk/lookup.html***

CR-01 (**GVM 0** ***The glass broke with a loud noise***)**GVM** *New Yorkers.* Mowat, Diane and Hutson, S. Oxford: Oxford University Press, 1991, pp. 6-44. 644 s-units, 6122 words.

CR-02 (**AAF 130** ***Inside, the water in one of the bathrooms froze.*** **AAF** *[Guardian, electronic edition of 19891221].* London: Guardian Newspapers Ltd, 1989, World affairs material, pp. ??. 930 s-units, 16557 words.

CR-03 (**G36 1464** ***Perfect for quick meals, it cooks and browns so the food tastes good and looks good, too.***) **G36** *Woman.* London: IPC Magazines Ltd, 1991, pp. ??. 2456 s-units, 31099 words.

CR-04 (**FRC 1889** ***The curtains moved at the windows.***) **FRC** *The magic toyshop.* Carter, Angela. London: Virago Press Ltd, 1993, pp. 28-157. 3208 s-units, 41752 words.

CR-05 (**FY5 921** ***And if you broke a window you had to pay for it.***) **FY5** Nottingham Oral History Project: interview (Leisure). Recorded on [date unknown] with 2 participants, totalling 17872 words, 334 utterances (duration not recorded).

CR-06 (**JY8 3284** ***That cold statement froze her heart.***) **JY8** *The stolen heart.* Browning, Amanda. Richmond, Surrey: Mills & Boon, 1992, pp. ??. 4822 s-units, 53546 words.

CR-07 (**H9P 467** ***Hannah cooked breakfast herself.***) **H9P** *Sweet death come softly.* Whitehead, Barbara. London: Headline Book Publishing plc, 1993, pp. 79-229. 3004 s-units, 40371 words.

CR-08 (**C97 2606** ***Recently I moved my tank onto a new stand.***) **C97** *Practical Fishkeeping.* Peterborough, Cambs: EMAP Pursuit Publishing Ltd, 1992, pp. ??. 2631 s-units, 43141 words.

CR-09 (**CJP 499** ***A truck appeared, and rocks and stones were emptied in a large pile.***) **CJP** *Amnesty.* London: Amnesty International, 1993, pp. ??. 823 s-units, 16334 words.

CR-10 (**HJM 399** ***After seven hours we arrived in Ekondo Jundu, a village in a forest clearing, where only a few outsiders had been seen before.***) **HJM** *WWF News.* UK: World-wide fund for nature, n.d., pp. ??. 810 s-units, 16529 words.

CR-11 (**HWF 13071** ***If the problem still exists, please contact Sema Software Technology Technical Support Department for assistance.***) **HWF** *Lifespan computer manuals.* Corporate. u.p., n.d., pp. ??. 15278 s-units, 210711 words

CR-12 (**CG3 1112** ***That conversation would never have happened spontaneously.***) **CG3** *Creative writing. A practical guide.* Casterton, Julia. Basingstoke: Macmillan Publishers Ltd, 1992, pp. 1-96. 2169 s-units, 34146 words.

CR- 13 (**AS7 226** ***My wife Ann is also a dreamer, but fur more practical***)
AS7 *Tales of the loch.* Sandison, Bruce. Edinburgh: Mainstream Publishing Company Ltd, 1990, pp. 1-102. 1850 s-units, 37218 words

CR-14 (**A0H 520** ***This helps to prevent the glider from bouncing on any rough ground.***) **A0H** *Gliding safety.* Piggott, Derek. London: A & C Black (Publishers) Ltd, 1991, pp. 9-91. 1829 s-units, 39217 words.

CR-15 (**AT4 502** ***He's the school's best swimmer and he can run as well.)*** **AT4** *Who, sir? Me, sir?* Peyton, K M. Oxford: Oxford University Press, 1988, pp. 5-138. 4137 s-units, 45340 words.

CR-16 (**K5J 1354** ***`It was my father who encouraged me as a high jumper.***) **K5J** *[Scotsman].* u.p., n.d., Leisure material, pp. ??. 4985 s-units, 113147 words.

CR-17 (**FYY 599** ***The beeper alarm on Diane's watch sounded as they were driving back, the signal that it was time for her to go and collect the litterbug Jed from his minder.***) **FYY** *The boat house.* Gallagher, Stephen. Sevenoaks: New English Library, 1992, pp. 43-185. 2676 s-units, 40496 words.

CR- 18 (**B79 207** ***Sir William Osler, one of the most respected medical practitioners of the early 20th century, recommended it as the best means to reduce pain in lumbago.***) **B79** *New Scientist.* London: IPC Magazines Ltd, 1991, pp. ??. 591 s-units, 12638 words.

CR-19 (**G0W 1058** ***Better designed and better tested materials than ours have met with a similar fate.***) **G0W** *National Congress on Languages in Education materials.* Brighton: National Congress on Languages in Education, 1988, pp. ??. 3397 s-units, 65956 words.

CR- 20 (**EET 892** ***The beautifully furnished rooms have lovely views of the waterfront or city, and guests can relax by the pool with its impressive views out to sea.***) **EET** *Sovereign worldwide.* Crawley: Sovereign worldwide, 1989, pp. ??. 2846 s-units, 27142 words.

CR- 21(**CN3 3017** ***He ran his eyes down the typed message.***) **CN3** *Whirlpool.* Forbes, Colin. London: Pan Books Ltd, 1991, pp. 1-120. 4107 s-units, 41105 words

CR-22 (CKV 757 ***There is a clearly written text with an illustrated chronology of the country's history taking it up to 1992***) **CKV** *The Art Newspaper.* London: Umberto Allemandi & Company, 1993, pp. ??. 1175 s-units, 29928 words.

CR- 23 (G02 2113 ***And the chamber seemed darker beyond the elapsed time.***) **G02** *Cathedral.* Maitland, I. London: Headline Book Publishing plc, 1993, pp. 199-341. 3525 s-units, 40488 words

CR-24 (ARW 1110 ***Pepita began to pick up the fallen bananas and place them back in their crate.***) **ARW** *Spare Rib.* u.p., n.d., pp. ??. 1743 s-units, 31411 words

CR-25 (BNU 1962 ***It's too dangerous to hunt them there among all those crags and chasms full of drifted snow.***) **BNU** *Against a peacock sky.* Connell, Monica. London: Viking, 1991, pp. ??. 2173 s-units, 39644 words.

CR-26 (ARW 763 ***However, while I think it is a failed attempt, there is a lot in the film which deserves attention, particularly the initial sequences.***) **ARW** *Spare Rib.* u.p., n.d., pp. ??. 1743 s-units, 31411 words.

CR-27 (FT0 965 ***We classified specific medical treatments that mimic physiological processes (human chorionic gonadotrophin for undescended testis and indomethacin for patent ductus arteriosus) as secondary prevention.***) **FT0** *British Medical Journal.* London: British Medical Association, 1976, pp. 9-513. 1709 s-units, 36221 words

CR-28 (ASV 547 ***Now they were steep walls of water dropping like guillotines onto the reef.***) **ASV** *Walking on Water.* Martin, Andy. London: John Murray (Publishers) Ltd, 1991, pp. 60-163. 2691 s-units, 36459 words.

CR-29 (JYN 264 ***Well I think I think growing up with gay or lesbian parents I think, I think could be a very mind broadening experience for people it will certainly teach you about social life in a, in a lot of different ways that er***) **JYN** Aston University psychology department: lecture (Educational/informative). Recorded on 28 January 1994 with 7 participants, totalling 19439 words, 1563 utterances (duration not recorded).

CR-30 (HWV 1659 ***Pain relieving medicines such as aspirin or ibuprofen are used for headache, pain, and arthritis.***) **HWV** *The Lancet.* London: The Lancet Ltd, 1993, pp. ??. 2079 s-units, 44073 words.

CR-31 (CEP 1894 ***I'm just a money making machine***) **CEP** *Today.* London: News Group Newspapers Ltd, 1992, pp. ??. 11230 s-units, 195186 words.

CR-32 (HTU 2787 ***There's a flying saucer in the car park.***) **'HTU** *The suburban book of the dead.* Rankin, Robert. London: Corgi Books, 1993, pp. 103-264. 5540 s-units, 43742 words.

CR-33 (**BN3 496** ***He was the nearest possible to being a walking encyclopedia.***) **BN3** *Memories of the Gorbals.* Caplan, Jack. Durham: The Pentland Press Ltd, 1991, pp. 1-97. 2550 s-units, 33215 words.

CR-34 (**C8P 737** ***If the person picks up the keys, then he or she can become the next sleeping beauty.*** **C8P** *Colin the Clown's party book.* Francome, Colin. Hemel Hempstead, Herts: Argus Books, 1990, pp. 5-96. 2198 s-units, 30229 words.

CR-35 (**HWN 1984** ***The bus driver kicked the travelling salesman where Cornelius had kicked Hamish.***) **HWN** *The book of ultimate truths.* Rankin, Robert. London: Doubleday, 1993, pp. 13-142. 4567 s-units, 38693 words.

CR-36 (**G1K 3399** ***There were flying fish all around us, heading into shore.***) **G1K** *Red bride.* Fowler, C. London: Warner Books, 1993, pp. 183-340. 3501 s-units, 41845 words.

CR-37 (**JYD 3033** ***Butter melted to liquid in half an hour if left out of the fridge.***) **JYD** *Ungoverned passion.* Holland, Sarah. Richmond, Surrey: Mills & Boon, 1993, pp. ??. 4446 s-units, 51906 words.

CR-38 (**AT3 1545** ***When it drove away over the ochre expanse, it broke into pieces and dissolved in the air.***) **AT3** *Wheelbarrow across the Sahara.* Howard, Geoffrey. Gloucester: Alan Sutton Publishing Ltd, 1990, pp. 12-91. 2552 s-units, 38276 words.

CR-39 (**G0V 145** ***After a couple of standard bride's-dinner-party disasters (a casserole burned black, a salted ham she'd forgotten to soak overnight before cooking) she discovered Elizabeth David's cookbooks, and from that moment on, only the breakfast boiled eggs were served without garlic.***) **G0V** *Lace.* Conran, S. London: Penguin Group, 1983, pp. 369-481. 2751 s-units, 41547 words

CR-40 (**AB9 195** ***Both of them were taken aback by the force with which she said it and she blushed red.***) **AB9** *Death of a partner.* Neel, Janet. London: Constable & Company Ltd, 1991, pp. ??. 2674 s-units, 40467 words.

CR-41 (**FS4 975** ***She flushed red, embarrassed by her own emotions.***) **FS4** *Shrine.* Herbert, J. Sevenoaks: New English Library, 1992, pp. 243-366. 2972 s-units, 38867 words.

CR-42 (**EFJ 198** ***Crazy, of course -- if he had caught any of the others doing such a crazy thing he would have laughed himself sick!***) **EFJ** *Carrie's war.* Bawden, Nina. Harmondsworth: Puffin, 1988, pp. 7-142. 3483 s-units, 41387 words.

CR-43 (**ECM 1758** ***Behind dosed doors Diana cried her eyes out with nervous exhaustion.***) **ECM** *Diana: her true story.* Morton, A. London: Michael O'Mara, 1993, pp. 1-90. 1894 s-units, 36532 words

NATIVE SPEAKER JUDGES

Elliott, Don. Texas, USA
(p.c via e-mail from *maese@ij.net* Date 22 June 2000 / 04.35)

Meadows, J.Richardson. Old Dominion University, Norfolk, Virginia.
(p.c via e-mail from *jmead001@odu.edu* Date 19 May 2000 /16.35)

Millar, George. (A retired English teacher)
(p.c via e-mail from *geomillar@hotmail.com* Date 19 May / 23.04)

Payne, Tom University of Oregon, USA
(p.c via e-mail from *tpayne@oregon.uoregon.edu* Date 01 June 2000 / 00.18)

Peltier, Casey. English Language Institute, George Mason University, Fairfax, Virginia, USA.. (p.c via e-mail from *caseyp@patriot.net* Date 15 May 2000 / 05.27

Roberts, Paul. University of Hertfordshire, UK
(p.c via e-mail from *p.roberts@herts.ac.uk* Date 09 June 2000/ 18.04)

Sandeen, Sue. Gainesville, Fl, USA
(p.c via e-mail from *Sandees32605@aol.com* Date 01 June 2000 / 23.08)

Stanley, Karen. Central Piedmont Community College North Carolina, USA
(p.c via e-mail from *kstanley@charlotte.infi.net* Date 10 June 2000 / 15.07)

Zante, Janis Van. Boulder, Colorado, USA
(p.c via e-mail from *jvzante@ix.netcom.com* Date 23 June 2000 / 08.30)