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PSYCH VERBS IN TURKISH: A STRUCTURAL AND SEMANTIC ANALYSIS

Pınar İBE

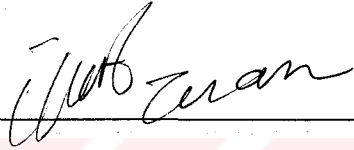Danışman
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YÜKSEK LİSANS TEZİ

Mersin, 2004

Mersin Üniversitesi Sosyal Bilimler Enstitüsü Müdürlüğüne,

Bu çalışma jürimiz tarafından İngiliz Dili ve Edebiyatı Anabilim Dalı'nda YÜKSEK LİSANS TEZİ olarak kabul edilmiştir.

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Yukarıdaki imzaların adı geçen öğretim elemanlarına ait olduklarını onaylarım.

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ÖZET

Bu çalışma, konu rolleri ve sözdizim konumları arasında düzenli bir örtüşmenin varlığını önvarsayan bağlama/ örtüşme kuramlarına evrensel bir biçimde aykırı davranış gösteren bir grup eylem olan ruh durumu eylemlerinin Türkçedeki görünümlerinin betimsel bir çözümlemesini sunar ve bu eylemler için özgün bir sınıflandırma önerir.

Çalışmanın ilk bölümü, sıradışı davranış gösteren bu eylemlerden bir gurubunun, bu davranışını açıklamaya çalışan, farklı ölçütlere dayandırılmış yapı ve anlama ilişkin yaklaşımları özetler.

Çalışmanın ikinci bölümü, Türkçe ruh durumu eylemlerini, üyelerinin konu rolleri, durum ekleri ve sözdizim konumlarını temel alan, önerilen bir sınıflandırma çerçevesinde inceler. Bu sınıflandırmaya göre, Türkçede, ilk ikisi geçişli, diğerleri farklı durum ekli geçişsiz dört gurup ruh durumu eyleminden söz edilebilir. Sorunlu ikinci gurup eylemler, gözlemlenen evrensel eğilimlere benzerlik gösterir. Yalnızca Deneyimleyen üyesine sahip dördüncü gurup eylemler ise, alanyazında ruh durumu eylemleri incelenmiş dillerin hiçbirinde yer almamaları sebebiyle Türkçeye özgü görünmektedir.

Çalışma Türkçede son derece verimli bir biçimde ruh durumu bildirme işlevi üstlenen bileşik yapıları, anlambilim ve durum temelli bir yaklaşımla inceler.

Çalışmanın son bölümü ise ruh durumu bildiren sıfatların türetim özelliklerini biçim ve anlam yönünden ele alır.

Türkçedeki ruh durumu eylemlerinin ettirgen, edilgen, dönüşlü, işteş ve bileşik yapılarda nasıl bir davranış sergilediğine ilişkin tüm tartışmaların temelini sözü edilen önerilen bu sınıflandırma oluşturur.

ABSTRACT

This study gives a descriptive account of psychological state verbs in Turkish which seem to be universally problematic for linking/ mapping theories that assume a unified mapping between the thematic roles and the syntactic positions; proposing an original classification.

The first section of the study summarizes the structural and semantic approaches which attempt to explain the unexpected behavior of a group of psych verbs based on different criteria.

In the second section, Turkish psych verbs are analyzed through the proposed classification based on the thematic roles, the case marking and the syntactic position of the arguments. According to the classification, there are four groups of psych verbs in Turkish; the first and the second are transitive and the others are intransitive with different case marked Theme objects. The problematic second group conforms to the observed universal tendencies. The fourth group with an only Experiencer argument; on the other hand, seems to be the only group which does not exist in other languages in the literature whose psych verbs are analyzed.

The compound forms which seem to be a very productive way of conveying psych senses in Turkish are also examined with a semantic and case marking based approach.

Lastly, the derivational properties of the psych adjectives are also examined both morphologically and semantically.

The mentioned proposed classification constitutes the basis of all discussions analyzing the behavior of Turkish psych verbs with respect to causativity, passivization, reflexivity, reciprocity and compound forms.

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INTRODUCTION

Background Information

The relationship between the syntactic and the semantic components of language has been one of the central issues and a matter of discussion in modern linguistics. The validity and the coverage of the generalizations related to these two components actually depend on a clear identification of the nature of the relationship between the two.

In fact, the discussion point is not the question of whether there is a relationship between the two or not but rather the *extent* of this interconnection. The proposed answers, depending on the theoretical framework within which they are presented, viewed the correlation between the syntactic and semantic realizations sometimes as tendencies and sometimes as rules.

With a significant departure from his previous commitment about the autonomy of syntax in GB, Chomsky focused on the relationship between the heads and their syntactic complements which he called the *thematic relations*. The notion of *thematic roles* was not something new at that time. It was first introduced by Fillmore and then Gruber and recently by Jackendoff who all have different claims at some crucial points.

Chomsky gives a more central position to thematic roles viewing their function as the derivation of the subcategorization frames. This departure from his prior position as to the autonomy of syntax was interpreted as an inevitable departure claiming that "...thematic roles are introduced into Chomsky's Government and Binding Theory only

because other syntactic conditions fail to block all the ill formed structures generated by the grammar" (Ravin, 1990:12).

After his acceptance of thematic relations, thematic roles have become much more popular and appeared in the theories which follow him (such as in the model of Lexical Functional Grammar (LFG)). Under Chomsky's view, deriving syntactic structures from semantics helped the linguistic theory in terms of simplicity and comprehensiveness since it supplied the linguistic theory with no need to formulate two sets of principles; one for syntactic transformations and the other for semantic combinations.

In the theory, reference to semantics is limited to Theta roles that are viewed as the only semantic notions which bear syntactic relevance. To mean to be syntactically relevant, a lexical item has to correspond to a syntactic behavior. Theta roles in the theory have an abstract syntactic nature which does not have any semantic content and the semantic information about lexical predicates is considered to be only in the form of thematic roles in the lexicon.

The theory assumes that there are two properties in the determination of Theta roles. The first is the properties that the lexical items have, and the second is the grammatical functions which link the Theta role of the head with its argument. That means it is possible to determine the syntactic configuration of a predicate from the thematic roles. This view brings the idea that thematic roles also correspond to syntactic relations between a verb and its complements. One of the current views is that the meaning of a verb completely determines the configuration of the thematic roles. Based on this view, Theta roles which express semantic relations between the predicates and their arguments were regarded as semantic primitives.

A *Projection Principle* was also introduced in order to link the lexical items to syntactic configurations. This principle assumes that once the lexical information is projected onto the sentence, it can not be changed or deleted by any of the transformational processes.

Together with the Theta Criterion and the Projection Principle, Chomsky proposes a set of other principles which complement each other. The first one is the *Principle of Full Interpretation*, when regarded from the point of view of predicate argument structure, states basically that there should not be any *superfluous* elements i.e. arguments of a predicate, in the interpretation of the sentences. This means the only elements that can possibly exist in a sentence are the elements which have to be there. This entails the *Principle of Economy* which requires the linguistic structures to be as economical as possible.

One of the criticisms about the theory was related to the syntactic and thematic correspondence. Unlike the assumptions of the theory, a thematic role could exist in the meaning of a verb without having a certain syntactic pattern as well as it was possible that there may be some thematic roles which were absent in the meaning of a certain verb though they were reflected in the syntactic structure of the sentence.

Another criticism was about the semantic contents of the thematic roles. Although the Theta Theory claimed that Theta roles express the semantic relation between predicates and their arguments, there is not anything about the semantic content of these Theta roles themselves in the theory since Chomsky uses Theta role labels just for syntactic purposes.

The other criticism is about the concept of *semantic class* which does not have any clear cut definition in the theory. Ravin observes that

.... The notion of semantic class is unclear- verbs have any number and kind of semantic markers in common, thus forming a continuum of semantic similarity ranging from complete dissimilarity to synonymy. It is not obvious how to break this continuum into distinct semantic classes (1990: 226).

Actually the theory does not offer any criteria to determine the semantic classes. Therefore, it is not obvious what criteria form semantic classes; whether synonymy, near synonymy or some other defined senses which exist in the meaning of some verbs will make lexical items share the same semantic class. In fact, the deliberate omission of semantic discussions in the theory in general is one of the main points of criticism as well as other criticisms such as about the criteria that make pragmatic decisions different from the semantic decisions of native speakers to reflect their intuition about grammaticality and acceptableness.

One of the other criticisms about the theory is that it bases itself mainly onto considerations of language acquisition. The first aim of the theory was to represent the universal principles and the nature of the linguistic competence. After Chomsky's shift of attention from the autonomy of the syntax, to the lexicon and the lexical information, during the course of the development of the theory, there has also been a shift of attention in the area of language acquisition. Recently, much of the language acquisition has been regarded as the acquisition of the features of lexical entries. As Chomsky himself points out "language acquisition is in essence a matter of determining lexical idiosyncrasies" (Cook, 1997:283).

In fact there are some other influential ideas concerning similar issues before and after Chomsky. It is apparent that discussions after Chomsky are either in the form of agreement or disagreement of his basic ideas.

One theory which accounts for the semantic relations between the predicates and their arguments at a syntactic level is Fillmore's *Case Theory*. He defines six cases in the theory; Agentive, Instrumental, Dative, Factitive, Locative and the Objective. These cases, for him, represent just the concepts which are syntactically relevant, so, they have little to do with the semantics. In his view, the lexicon does not contain any semantic information which inherently exists in the meaning of verbs.

There are also some criticisms about Fillmore's Case Theory. First, these cases seem to represent just an arbitrarily chosen set of semantic properties, so, the theory neglects some important meaning differences (such as the grouping inanimate objects and natural forces under the instrumental case). Moreover, the cases listed do not cover many semantic concepts inherent in the meanings of some predicates which causes him to ignore some semantic nuances. Therefore, Fillmore's Case Theory was regarded as an insufficient modal classifying some arbitrary semantic concepts into some other arbitrary categories.

The model proposed by Jackendoff differs from both Chomsky's and Fillmore's models in the underlying idea that it assumes two independent levels of autonomous representation; syntactic and semantic. He gives the primacy to motion verbs and sees them as the basis for the representation of all other predicates. He assigns five thematic roles in the analysis of the meaning of verbs as the; Theme, Source, Goal, Agent and Location and analyzes the semantic functions of all other verbs based on motion verbs.

There are also some criticisms and counter ideas related to the model. First, it is claimed that trying to force to capture the meaning of all predicates in terms of motion, restricts the semantic coverage of the theory because there are a number of human activities which do not involve the fundamental concepts of motion. Many lexical items such as the psych predicates express a more abstract kind of motion which has a different

semantic nature. The theory is also claimed to misinterpret the semantic facts expressed by the meaning of a number verbs. Secondly, it seems to be arbitrary to choose the motion verbs and positing a *GO function* as primary, and trying to label all other verbs simply by extending the notion of motion thus by giving the notion of motion some kind of a privileged semantic status. The third criticism is that the theory has accounted for only five thematic relations which are not convenient for the analysis of the meaning of some verbs. To conclude, according to the criticisms, Jackendoff was claimed to do wrong not only by using insufficient thematic role labels to analyze the verbs but also forcing them into an inconvenient motional framework.

As mentioned briefly, one of the criticisms for Chomsky's account related to thematic roles was that the theory did not offer an elaborate semantic description of their nature. The *MIT Lexicon Project Theory (MLP)* especially with Levin and Hovav shaped the discussions about the Theta roles in the Government and Binding framework in a slightly different way. The MLP linguists defend the idea that the semantic class that a verb belongs to determines its thematic relations, in other words, the thematic structure of a verb completely determines its syntactic behavior and the members of similar verb classes show similar argument alternations. The correlations among semantic classes, syntactic realizations of arguments, and the assignment of thematic roles are completely predictable. They propose two levels of lexical representations; the first one is the *Predicate Argument Structure (PAS)* and the second one is the *Lexical Conceptual Structure (LCS)*. There are *linking rules* which link these LCSs to the corresponding PASs. PASs are just like subcategorization frames and LCSs are more semantic in their nature. The roles in PASs are not marked as Agents, Patients etc. but they are structurally regarded as *external* or *internal*. The Theta marking processes correspond to these arguments are the *indirect* and

the *direct Theta marking*. When the violations as to the linking of arguments of some intransitive verbs came to be questioned, a distinction between two classes of intransitive verbs which are *unergatives* and *unaccusatives* were proposed.

In the analysis of the extent of the interaction between the syntactic and semantic components, the syntactic aspect has been a more investigated area in comparison to the semantic component especially in the Generative Grammar Tradition.

The idea that the verb meaning is the main determinant in the syntactic structure of sentences has caused the lexical semantics and especially the verb semantics to gain more significance. It has been claimed that the semantic properties of a verb i.e. some semantic concepts which are inherent in the meaning of verbs specify the syntactic structure that the verb necessitates. The most remarkable reflection of the role of semantics on the syntactic structure is observed in verb-argument relationships since the verb is the main determinant of the semantic roles that the arguments in the argument structure can bear. The verb determines both the number and the kind of arguments in a sentence. In this way it is in the central position in both the constitution and the interpretation of sentences.

Kageyama (1997) mentions two main lexical approaches which are the predicate-centered and the role-centered ones. Although the role-centered approaches labeled the arguments with such roles as Agent, Patient, Goal and Location etc., they did not say much about the meaning of the verb itself. The predicate centered approaches on the other hand assume that verbs have lexical conceptual meanings. This approach isolates the meaning of verbs from its cognitive aspects focusing on the structural properties.

The existence of some *linking rules* that link certain arguments which bear certain semantic roles onto certain syntactic positions, and the idea that there are regularities (*linking regularities*) that these rules have to obey, have led linguists to study

on possible *linking theories*. This idea has been claimed sometimes to mean that there is a linking between the semantic and the syntactic components and sometimes to mean that the two are completely interwoven.

The Purpose of the Study

A group of psychological verbs present a kind of problematic area for the mentioned linking or mapping theories according to the principle that thematically the most prominent or the highest argument should also be syntactically in the most prominent or the highest position. A significant number of the studies about *psych verbs* are about these linking rules and the problems that a group of verbs of these verbs pose.

This unusual behavior of psych verbs were sometimes regarded as a matter of difference in their deep structures and sometimes regarded as a matter of difference in their aspectual properties. Different approaches presented different explanations related to this so called irregularity or exceptionality. However one of the important questions to be answered is about the syntactic and semantic properties of this group of verbs in languages other than the most thoroughly investigated ones in the literature. Therefore the aim of this study is to describe the syntactic and semantic properties of these verbs in Turkish and therefore contribute to the universal linking rules finding out cross linguistic commonalities if there are any.

Apart from the universal linking rules, it has been expected that the present study may contribute to the description of Turkish grammar in some or other way with a clear identification of some of the syntactic and semantic properties of psych verbs which constitute a significant part of all verbs in Turkish that have received little or no attention

except for some of their semantic properties in traditional Turkish grammars. Therefore, the study aims at contributing to the literature not only because it investigates a group of verbs which are labeled in the literature as exceptional but also because it examines Turkish whose psych verbs has not been studied so far.

Research Questions

The syntactic and semantic properties of psych verbs are going to be investigated through the following questions:

1. Which verbs constitute the psych verb class in Turkish?

2. What kind of a verb classification can be proposed for Turkish psych verbs when their syntactic and semantic properties have been described?

3. What structural and semantic properties do the psych verbs in Turkish have in terms of their interaction with voice markers?

4. What are the compound psych verbs in Turkish?

5. What are the structural and semantic derivational properties of the adjectivalizations of psych verbs in Turkish?

Hypotheses

The following hypotheses are presupposed:

1. An analysis of the Dictionary of Turkish Language Institute will partially provide the data needed to create a database of psych verbs in Turkish.

2. There is a psych verb classification with similar properties in Turkish with the ones proposed in the literature for different languages when their syntactic and semantic properties have been described.

3. The exceptional behavior of psych verbs are also observed in their interaction with voice markers in Turkish parallel to the universal tendencies.

4. There are a number of compound psych verbs in Turkish which display similar structural properties with their non- psych counterparts.

5. The derivation of the psych adjectives does not display any idiosyncratic properties which differentiate them from general derivational patterns of Turkish.

Data Collection Techniques and Limitations

The data for the psych verbs, psych compounds, psych nouns and psych adjectives in Turkish is constituted of and limited to the verbs in the Dictionary of Turkish Language Institution Volume I and II (1988) and, the natural data needed for the identification of subtle semantic differences is constituted of both the sentences from electronic sources and of native speakers themselves.

The Method of Analysis

The data for psych verbs in Turkish is going to be analyzed according to their syntactic and semantic properties creating a database to examine through a set of specified criteria.

The methods of classification and description are going to be used with comparisons and contrasts with the studies of the psych verbs in different languages in the literature of which only the English translations will be given.

I. REVIEW OF LITERATURE

I. 1.   Argument Structure

Why are there a limited number of arguments cross linguistically? What is the restriction on the number of the arguments that a verb possibly can take? Why are there a limited number of theta roles? This section analyzes the proposed possible answers that constitute the fundamental concerns of argument structure theories.

The process of lexicalization is a language specific one in a way that it includes historical phenomena as well as cultural ones. In spite of the differences in the lexicons of different languages, there is the chance to express similar or sometimes even equal senses by combining these lexical items with others and forming more complex structures in different languages. Lexical items gain new meanings as a result of combinations of different senses, moreover, new lexical items are often introduced into languages.

If the lexical items themselves expressed every aspect of events that they denote, we would have as many lexical items as the number of all events in the world which is not possible. This is also the case with the psych verbs. There are innumerable psychological states of human beings each of which can be gradable in themselves. Thus from the point of view of the nature of human computational system, it seems impossible to denote each of these psychological states with a different lexical item. Rather we combine some lexical items with others or we modify them to convey a number of different senses.

Within the GB framework lexical structure has gained a more central role in syntactic description. In this tradition, phrase structure rules became more redundant and

started to be eliminated. Movement was started to be assumed simply as the checking of lexical features in syntax. *Lexical Inclusiveness* in the Minimalist Program proposed that the output representations are just the properties of lexical items in the lexicon. The derivation of sentences starts from these lexical items; which is the process called *numeration*. These lexical items carry the syntactic, semantic, morphological and phonological information. They *merge* together and create the constituent trees. When they move to new positions, certain lexical features of them are checked according to the checking requirements encoded in the lexicon.

Kageyama (1997) views verbs as the items which play the central role in the composition and interpretation of the sentences since they determine the number, the kind and the semantic properties of arguments that will exist in the sentence. In the analysis of verbs, three levels of lexical representations are proposed up to now; the *argument structure, lexical conceptual structure* and the *event structure*. Lexical semantic studies have recently focused on two approaches about the verb semantics and the syntax. They are the *role centered approaches* and the *predicate centered approaches*. In the predicate centered approaches the method of *predicate decomposition* is employed. Decompositions in Kageyama's terms, are the representations showing only the skeletons of the verbs' conceptual meanings (1997:5). These lexical conceptual representations are linked to syntactic structures by means of linking rules.

After the recognition that there are significant regularities between argument realizations of different predicates, the idea that the syntax of sentences is determined by the meaning of predicates has gained popularity. These regularities are called "linking regularities" and the rules which map semantic roles onto syntactic positions are called "linking rules" (Levin and Hovav, 1996:487). Some approaches assume that these

syntactic positions are unpredictable and some assume that they are partly predictable. Levin and Hovav (1996) argue that this mapping between the semantic representation and syntactic expression of the arguments of a predicate is fully predictable. They claim that the best way to find out the syntactically relevant aspects of the meaning of a predicate is to express the lexical semantic representation of predicates with a predicate centered approach. To achieve this, we need to find out the elements of core meaning of predicates which are essential in the linking of their arguments.

There are some cross linguistic differences in the mapping of arguments to syntactic positions. According to Levin and Hovav, languages may even differ in the linking of the arguments of two verbs which seem to be the translations of each other in two different languages. Languages may also differ in the weight of the value of some aspects of meaning that they give their arguments i.e. for the same argument, when one language gives weight to one semantic component, another language may give weight to another aspect of it.

Levin and Hovav mainly focused on the class-membership relations of arguments. Under their view, if we group verbs into semantically coherent classes, we can isolate the meaning components of a predicate relevant to syntax. Although some idiosyncracy is allowed, generally, much of the syntactic behavior of verbs can be determined by their membership in a semantic class. The basic suggestion is based on the idea that the meanings of verbs have some kind of an internal structure. These internal structures have some primitive elements. The similarities in the meanings of verbs are the results of these shared elements in the decomposition of primitives.

Manning (1996) views the argument structure as a syntactic representation. For him grammatical structure is a result of the *grammaticization* of discourse roles. For

example the notion of subject is the result of the grammaticization of the notion of topic or focus of an event. That means there is an association between the topicality and subjecthood. He states that we need two mappings between the gr-structure and a-structure. The first mapping is the argument projection which is based on the meaning of predicates. The second is the linking which links the argument structure to grammatical structure.

In recent years, event structure has also been seen as a modular component of argument structure. It is even claimed to be responsible for the linking of arguments to syntactic positions. Then, event structure was started to be represented in phrase structure. They put the elements of event structure in VPs or in functional phrases. These ideas led to the emergence of more syntactic analyses of the event structure.

Another property of event structure related to the argument structure is the distinction between the individual level predicates and stage level predicates. Kratzer argues that the stage level predicates have extra event arguments in their representations (Tenny and Pustejovsky, 1990:20).

In the theories of verb meaning it is usually assumed that meanings of verbs are multidimensional and the linking rules are sensitive to these dimensions. In the early theories it was advocated that verbs that refer to the same kind of event with same participants, display the same linking pattern. The verbs that do not conform to the standard linking pattern were regarded as *non canonical* or *marked*. They were thought to be rare in languages and difficult to acquire. Gropen and Pinker et al (1995) claim that these so called non canonical verbs are in fact more numerous than canonical ones and both are acquired at the same time.

Semantically, examining the argument structure of a verb is in a way examining the entities and their relationships of these entities with each other specified in the meaning of a verb. Ravin argues that

> The arguments are place holders for entities. Since predicates have as many arguments as there are entities represented in their meaning, whether these are syntactically realized or not, there are four types of relations logically possible for arguments and complements... (1990:160).

He then lists these linking possibilities as; first, there are arguments that inherently exist in the meaning of the verb but never have syntactic realizations, second, there are arguments which are inherent and compulsorily syntactically realized, third, there are arguments which are inherent but optionally realized, and the fourth there are some other syntactic arguments which do not correspond to semantic arguments (1990:168).

According to Raves, the syntactic complements do not always correspond to semantic arguments. On the contrary Chomsky has the claim that the grammaticality determines the meaningfulness. What Raves argues is that propositions can be both grammatical and meaningless at the same time or vice versa. In fact, the idea that lies behind all these arguments is the difference between the questions as to whether the syntactic and semantic components are autonomous or they are dependent on each other. The theories of argument structure mainly followed either of these approaches.

In *Cross-Linguistic Patterns of Linking* Valin (nd.) argues that the universal aspects of argument linking exist and the language specific variations are rather limited to a few number of possibilities. In the framework of Role and Reference Grammar, the linking between the syntax and semantics is achieved at two levels. One is the *lexical phase level* and the other is the *syntactic phase level*. Valin suggests that the universal phases are found in the syntactic phases of linking but cross-linguistic variations are found in the lexical phases of linking.

Wunderlich (nd.) argues that contrary to the assumptions, there are more argument linking types than the generalized ones. He claims that neither of these types belongs to UG but they are invented by cultural evolution. Some of these types are: *portmanteau type, active type, salience type, positional type* and the *inverse type*. He sees the inverse type as the most complex type since it maps two hierarchies on each other, such as psych verbs.

The following section is a brief analysis of the the significant approaches to the argument structure phenomena and the linking between the semantic arguments and the syntactic realizations.

"… what a theory of thematic roles should look like is analogous to that of the blind men examining the elephant, each touching a different part of its body" (1991:561) says Dowty criticizing the traditional accounts of thematic roles and proposing an original theory of his own called *Thematic Proto Roles and Argument Selection.*

What the earlier accounts on the same matter call; *thematic relations* (of Gruber), *deep structures and transformations* (of Chomsky), *subject selection rules* (of Fillmore), *template matching* (of Stowell), *universal alignment principle* (of Perlmutter and Postal), and *universal theta assignment principle* (of Baker), is called as *Argument Selectional Principles* by Dowty.

Dowty claims that semantic distinctions are results of distinctions in the real world. Thus, it is wrong to try to identify clear cut boundaries for these classes and to try to find out the limits of our cognitive ability by referring to those classes.

What he means by *argument selection* is not a kind of linking between the syntactic and semantic levels but a kind of constraint only on some lexical predicates out of a great number of others. What he means by *prototype* is not about individual lexical

items but rather a generalization about lexical meanings. The argument selection principles that he defines are only about two place predicates which have a subject and a true direct object. Moreover, he takes only the 'arguments' into consideration but not 'adjuncts'.

Dowty sees thematic roles as prototypes or *cluster concepts* and argues against viewing the thematic generalizations as equal with semantic and syntactic generalizations.

He defines five criteria (1990:572,573) for the properties of *Agent Proto Role* which are *volition, sentience/ perception, causing event or change of state of another participant, movement* and *the independent existence of the event described by the verb*. He defines another five criteria for the properties of a *Proto Patient Role* which are *change of state, incremental Theme, causally affectedness, relative stationariness* and the *dependent existence of the event described by the verb*.

The principles that he formulated as to the selections of arguments (1991:576) can briefly be explained like this:

1. The argument which has the most proto Agent properties is lexicalized as the *subject*.

2. The argument which has the most proto Patient properties is lexicalized as the *direct object*.

3. If there are two arguments which have the same number of proto agent and proto patient properties both of them can be lexicalized as *subjects/objects*.

4. If the predicate is a three place predicate, the argument which has the most proto patient properties is lexicalized as the direct object, and, the one which has the less proto patient properties is lexicalized as the *oblique object* or the *prepositional object*.

5. If there are two arguments which have the same number of proto patient properties both of them can be lexicalized as direct objects.

6. Some arguments may have none of these roles.

7. Some arguments may share the same role.

8. Some arguments may have the properties of both proto roles either in an equal or a partial degree.

Dowty states that these principles are just strong tendencies rather than clear cut rules. The combinations (1991:577) for the corresponding roles that he formulated can be summarized in the following table:

Agent	volition+ causation+ sentience+ movement
	volition+ causation
	volition
Experiencer	sentience
Instrument	causation+ movement
Theme	change+ (incremental Theme) + dependent existence+ (instrumental Theme)
Patient	change+ (incremental Theme) + dependent existence+ (causally affected)

Table 1. Dowty (1991) Thematic Roles and the Syntactic Realization Rules

For him, these roles and their argument selection principles determine the following role hierarchies (Dowty, 1990:578):

Agent> Instrument/ Experiencer> Patient > Source/ Goal

Causing Event> Caused Event

Moving Argument> Source/ Goal Argument

On the other hand, Hale and Keyser (2002) define argument structure as a lexical item's projection of its syntactic configuration which is limited both in variety and complexity among languages. Similarly the number of thematic roles associated with them is also very limited. They also claim that languages do not differ in their basic elements of argument structure.

They define two basic structures as the *complements* and the *specifiers* mentioning two argument structure types; *lp-monadic* (in which "lp" refers to the lexical

projection) which does not include a specifier but only a complement. On the other hand, *lp-dyadic* predicates have a specifier argument. They point out that the subject argument is not a specifier argument but rather an external argument. The specifier argument in their view is internal in the lexical projection and shared by both the transitive and the intransitive alternants since it is internal to the argument structure.

Alberti (1997) assumes that the internal structure of argument structures have two substructures. The first one is the *relative structure* which is about perspective of the speakers and the second one is the *absolute structure* which is the characteristics of a whole family of related argument structures.

For him, the thematic roles are abstractions over semantic structures. The important thing for an argument is not its thematic role but the position it occupies in the internal structure of argument structure. Similar to Grimshaw (1990), he emphasizes the importance of the ordering of arguments. The situation described by the verb is also important. What he calls as the *family* of an argument structure is different argument structure versions of the same verb. He claims that the internal structure of an argument structure can easily be calculated on the basis of the *family* of the verb. This rule is valid for canonical cases but there are also non canonical cases like psych verbs.

According to Alberti, the thing to do is to sort out the arguments which play the central role in the situation described by the verb. Sometimes each participant in the situation is not syntactically realized. He calls the overtly expressed arguments as *explicit* arguments and non-overtly expressed arguments as *implicit* arguments. Other arguments which are not the essential participants in the situation are called as *adjuncts*. Moreover, some verbs may have more than one argument structures. Alberti assumes that the argument version with a lesser number of arguments is prior to the version which has more

arguments. Therefore, speakers of a language have not only this knowledge but also have the knowledge of different argument structure versions and the knowledge of the use of one of these versions in different situations.

For Alberti, what Pesetsky's analysis makes clear is that in psychological predicates either the Theme can be superior to the Experiencer or the Experiencer can be superior to the Theme. Therefore, Alberti claims that it is not the thematic hierarchy that we should look for but the hierarchy of arguments in the argument structure family. Alberti adopts the argument hierarchy which was proposed by Larson and Baker:

Agent> Theme> Goal/ Benefactive/ Location

Baker *On the Structural Positions of Themes and Goals* points out that in some languages Themes are more prominent than Goals and in some other languages Goals are more prominent than Themes. Therefore it is not something easy to decide which one is derived and which one is basic.

Bresnan (1995) in *Lexicality and Argument Structure* proposes a theory of argument structure in LFG framework as opposed to other lexicalist frameworks such as of Levin and Hovav and Hale and Keyser. Her main argument is that in a scheme including the main components; lexical semantics, argument structure and syntactic structure, the redundant element is not the argument structure but the initial syntactic structure. That means, in the linking process of the arguments to the final syntactic positions, the underlying syntactic trees do not have any role and therefore they should be eliminated. The following schemes illustrate the status of the mentioned initial syntactic structures in other frameworks. The first one is of Hovav and Levin and the second one is of Hale and Keyser (Bresnan, 1995:4, 5):

22

Lexical Semantics
   ↕ **Lexicon**
Argument Structure
   ↕ **Syntactic Projection**
Initial Syntactic Structure
   ↕ **Syntactic Transformations**
Final Syntactic Structure

Lexical Primitives
   ↕ **Lexicon**
Initial Syntactic Structure
   ↕ **Syntactic Transformations**
Final Syntactic Structure
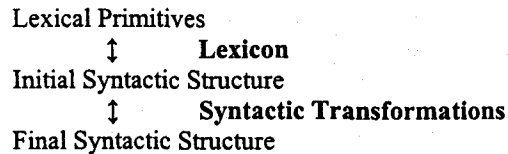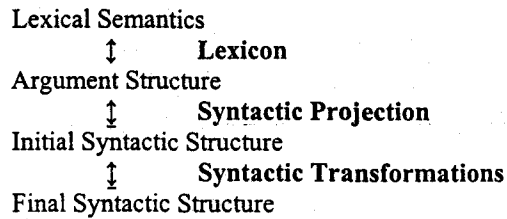
Figure 1. Bresnan (1995) Lexicalist Views on Argument Structure

The last schema of Bresnan represents both her LFG framework and other

lexicalist views:

Lexical Semantics
   ↕ **Lexico Semantic Projection**
Argument Structure
   ↕ **Lexico Syntactic Projection**
Final Syntactic Structure
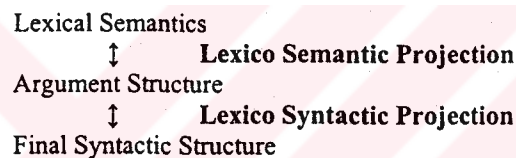
Figure 2. Bresnan (1995) The Argument Structure in LFG

She gives examples from Chichewa and English which support her view that

verbal processes for transitivity, intransitivity, causativity or passivization of verbs are

lexical morphological processes. Therefore, she claims that syntactic tree structures do not

have any functions in linking the arguments of verbs to their syntactic positions.

Another phenomenon which receives a great deal of discussion in the domain

of syntax semantics interface is the phenomenon of split intransitivity (unaccusative/

unergative distinction). The following section briefly analyzes some basic approaches to

unaccusative phenomenon.

I. 1. 1.   Transitivity and the Unaccusative Phenomenon

Unaccusative/ unergative distinction among languages have effects not only on agreement and case marking but also especially on subject object distinctions and therefore, has an important place in theories of argument structure.

According to the *Unaccusative Hypothesis* of Perlmutter (1978), some intransitive verbs have two different classes as unaccusatives and unergatives. Unergative verbs have an actual syntactic subject but unaccusative verbs have a derived subject which is an underlying syntactic object.

Burzio states that there is a relationship between the case marking and the argument structure (Hoekstra, 2000:55). There is also a correlation between the existence of accusative case and the external argument. Unergative possesses external arguments but not an internal accusative argument. Conversely, ergatives have internal arguments but not external ones.

Alberti (1997) points out that in intransitive verbs the subject is either associated with a patient like or an agent like grammatical function. The corresponding language types are either *ergative* or *accusative*. He argues that there is a third type of language (a mixed type) which assigns either an agentlike or a patientlike grammatical function to the subjects of intransitive verbs. Accusative languages mark their intransitive arguments with nominative case; just like the agent arguments of transitive verbs. Again in accusative languages some intransitive subjects behave like agents and some intransitive subjects behave like patients.

In some languages unaccusative and unergative verbs select different auxiliaries, so, it is easy to distinguish them from each other. Case assignment properties of

these two groups of verbs are also different from each other. Burzio says that unaccusative verbs do not have direct objects since they can not assign case for them but unergative verbs assign accusative case to their objects (Levin and Hovav, 1996:492). Levin and Hovav also suggest that *telicity* as an aspectual property does not always show unaccusativity since there are verbs which are both atelic and unaccusative.

According to Chomsky, there is a differentiation between AGRs and AGRo. The choice between the two is a matter of activation. Nominative- accusative languages activate AGRs but ergative- absolutive languages activate AGRo. AGRs is seen as related to Tense while AGRo is seen as related to V. Tense case is a property of all sentences but verb case is not; that is why accusative case is not always available for all verbs. This is claimed to be just a matter of asymmetry between the nominative and the accusative (Hoekstra, 2000:58).

As mentioned, there are also different conceptions as to what the argument structure is and at which level it should be analyzed. Manning (1996) argues for a distinction between the grammatical relations and the argument structure prominence. In Government and Binding literature, Grimshaw (1990) claims that argument structures are not sets or lists of arguments of a predicate. They have their own internal organizations, they affect the grammatical behavior of predicates and they are predictable from the key characteristics of the meaning of predicates. Some sort of prominence relations among the arguments are determined by the thematic and aspectual properties of each predicate.

Manning (1996) suggests six classes of treatments of ergativity which are the *syntactic accusativity analysis, ergative as passive analysis, absolutive subject as object analysis*, the *oblique analysis*, the *inverse analysis* and the *four relations analysis* (37).

Manning adopts the inverse analysis and assumes that there is an accusative organization for all languages at the level of argument structure.

He argues for the existence of at least three linking possibilities cross linguistically. What he calls *syntactic accusativity* displays the following mapping possibilities:

Gr- Structure	A- Structure
Subject	A-subject (agent)
Object	Patient

Table 1. Syntactic Accusativity

There are some languages which always use inverse mapping for transitive verbs. These languages are what he calls *syntactically ergative*:

Gr- Structure	A- Structure
Object	A-subject (agent)
Subject	Patient

Table 2. Syntactic Ergativity

He sees the argument structure as a syntactic level and valence changing operations as operations on this level.

In brief, the basic claim of Manning is that the syntactic representation has two levels of information which are the grammatical structure and the argument structure. According to him, there are two different mapping possibilities between these two levels. Manning introduces an Inverse Grammatical Relations Analysis and claims that these two levels pose different sort of constraints on syntax and linking of these two levels differ from one language to another.

Dowty (1991) sees the unaccusative/ unergative distinction as a grammatical distinction and deals with syntactic accusativity and semantic accusativity separately. In his analysis of thematic proto roles, Dowty predicted that his argument selection principles do not apply to syntactically ergative languages since they have an inverse correlation between the subject and object and thus between the proto agent and the proto patient.

However he claims that these principles can be applied in the same way just by means of a reversal. In ergative languages, the arguments with most proto patient properties are lexicalized as subjects and the arguments with the most proto agent properties are as objects. His observation is that the unaccusative verbs have arguments with patientlike meanings while unergative ones have arguments with agentlike meanings.

He argues that the most important proto property to distinguish between the unaccusatives and unergatives is *volition*. In his analysis, the verbs which have the arguments with the properties of sentience and volition are unergative verbs.

Examining "variable behavior verbs" which are the verbs that sometimes show unaccusative and sometimes ergative behavior, Levin and Hovav (1996) claim that unaccusative and unergative classes can be predicted semantically. Moreover they observe that these verbs most of the time have more than one meaning i.e. when they display unaccusative behavior, they have a different meaning and when they are unergative, they are associated with another meaning (Levin and Hovav, 1996:490, 491).

Chung (nd.) proposes a number of criteria to distinguish between the unaccusative and the unergative verbs. First, in terms of argument structure, unergative verbs take external arguments while unaccusative verbs do not. Second, he claims that in the events described by unaccusative verbs, the notion of *intention* is not involved; on the other hand, unergative verbs describe a kind of *willed intentionality*. Third, the nominal suffix –er is attached only to verbs which can take external arguments i.e. unergatives. Fourth, the resultative construction can only be used with unaccusative verbs but not with unergatives (12).

Nakipoğlu (1998) argues that Turkish is one of the languages which are sensitive to the unaccusative/ unergative distinction. She defines three classes of unaccusatives in Turkish which are the *endpoint, measure* and *path* unaccusatives.

She observes that semantic notions such as *agentivity, volition, control* and *delimitedness* are important for the unaccusative/ unergative distinction for Turkish intransitives too. Nakipoğlu uses adjectival passives as a diagnostic to distinguish between unaccusatives and unergatives in Turkish. For example, *–mIş* is incompatible with transitives and it modifies only the subjects of unaccusatives. Another adjective deriving suffix *–Ik* is also only compatible with unaccusative verbs. What Nakipoğlu (1988) observes for Turkish unaccusatives and unergatives can be summarized in the following table:

Unaccusatives	Unergatives
externally instigated	internally instigated
can not be passivized	can be passivized
delimited	non-delimited
the only argument is affected and changed	the only argument is affecting or instigating rather than affected
can never select an external argument	lack a direct internal argument
describe situations	describe activities

Table 3.   Nakipoğlu (1998) Unaccusatives and Unergatives

Another grammatical process which constitutes a significant part of the discussions in the psych verb literature is causativity. The following section briefly summarizes some of the basic discussions about causativity.

I. I. 2.   Voice Alternations and Causativity

The idea that the causative meaning has an affect on the realization of the arguments of a predicate supported the claim that the unusual realization of the arguments of the Experiencer object psych predicates is because of their causative semantics.

Therefore, psych verbs which constitute a borderline area for lexical semantic and syntactic studies have been analyzed mostly with reference to causativity.

Palmer (1994) sees causative constructions as derived from simple non causative sentences just like passive constructions which are derived from their active counterparts. Unlike passive constructions, causative ones add a subject Causer argument to the argument structure. Just like many languages which have morphological passive forms, some languages have morphological causative forms like Turkish. Other than morphological forms there are periphrastic forms which utilize a specific helping verb for causation. For example English does not have any grammaticalized causative morpheme but it rather uses periphrastic verbs.

There are four principles for causative constructions; first, there should be a morphological or periphrastic mark on the verb, second, there should be a Causer addition to the subject position, third, other arguments should be demoted, and fourth, there should of course be a causative meaning. For "demotion" Palmer adopts Comrie's (1976) hierarchy of grammatical relations (Palmer, 1994):

Subject> Direct Object> Indirect Object> Oblique Constituent

Palmer claims that the accusative case expresses direct causation which he calls *coercive causation* but the instrumental expresses indirect causation which he calls *noncoercive causation*. For him, dative case is used with *verbs of experience* whose subjects are typically animate non Agents.

He defines two types of causation which are the *manipulative causation* (lexical/ single event causation) and *directive causation.* Manipulative causation necessitates the physical movement of the Causer while directive causation does not.

In the causative constructions in Turkish, as mentioned, there is a demotion in the hierarchy of grammatical relations in which the subject (SU) is the highest, direct object (DO) is the second highest, the indirect object (IO) is the third highest and the oblique object is the least high. Zimmer (1988) argues that in Turkish causative constructions of intransitive verbs, the subject slot is filled and the Causee argument is assigned the next highest case appropriate (which is the case of the DO). This is what Zimmer refers to as "Syntactic Demotion Strategy (SDS)" (1988:217). Turkish is one of the languages that uses this strategy. Zimmer claims that in Turkish this rule does not apply regularly.

Turkish transitive verbs take accusative objects. With a small class of verbs which take dative case marked objects, the mentioned rule does not apply. Zimmer calls them as "case switching causatives" (219) exemplifying a similar process in French and emphasizing that case switching is possible in the process of causativization only for this small class of verbs. Therefore, we can neither see it with the verbs which have accusative objects nor change or switch the cases of NPs for topicalization purposes.

The discoursal effect of this process is similar to the passivization which topicalizes the direct object. In these sentences too, the surface DO is more topical, affected or patientlike element than the surface indirect object. Thus, Zimmer claims that Turkish, with these possibilities in case assignment, allows its speakers to convey some differences in the way they regard the roles of the elements in the sentence.

In brief, Zimmer's basic underlying claim is that there is a semantic flexibility in the assignment of cases according to the communicative needs of the speakers.

Zimmer's analysis of case switching causatives is in a sentential level and there is also a need for an analysis of the semantic concepts inherent in the meaning of such verbs. A detailed analysis of the relationships between the semantic and syntactic properties of these verbs would shed a light on the issue from a lexical point of view.

Levin and Hovav (1996) divide verbs into two groups in terms of their causativity as *internally caused eventualities* and *externally caused eventualities*. They define a linking rule which relates Causers with the deep structure subject position which they call a *Causer Linking Rule* (1996:501). For them, Agents and Causers are not the same arguments. However, since an Agent is also responsible for the eventuality of the verb, it is also a kind of Causer argument.

In decompositional approaches of verb meaning, Cause is a dyadic predicate which needs a Causer and a Causing Event. According to Levin and Hovav, the Causer argument may be an argument of an intransitive verb or a stative verb. Causer argument can also be an Agent as well as a natural force. Moreover, they identify unergative verbs as externally caused intransitives and unaccusatives as internally caused intransitives.

Levin and Hovav define another rule; the *Theme Linking Rule* which links the Theme argument to the deep structure argument position and argue that Theme Linking Rule has precedence over Causer Linking Rule (1996:502).

Holmes's (nd.) analysis is a Word Grammar (WG) analysis of the syntax and semantics of causative/inchoative alternation. In the WG analysis it is claimed that "... both causative and inchoative uses must be associated with independent lexical

representations since there are cases where both sides of the alternation have idiosyncratic semantic properties" (Holmes, nd.:327).

The idea that there are events having complex internal structures divided the Theme argument into two parts as the *inner event* and the *outer event*. According to Tenny and Pustejovsky the outer event relates to causation and agency, however, the inner event relates to telicity and the change of state (2000:7). Simply, the outer event causes the inner event. There are different linguistic approaches as to what causation represents. According to an approach, it represents the relationship between the two propositions. On the other hand, some approaches claim that it is the relationship between the two events and some others claim that it is between an Agent and an event. For example, Jackendoff sees it as a relation between an individual and an event or between a thing and an event. Dowty on the other hand, sees it as a relation between two propositions. In Grimshaw (1990) we see the *activity* as the outer causing event and the *state* as the inner event.

Another issue in question in the literature is the relationship between the Cause and the Agency. Both Causers and Agents are syntactically realized as subjects. However both can occur independently from each other. That means although these two notions often intersect, they should be represented separately. One other argument about agentivity is that most of the time Agents are regarded as volitional unlike Causers.

In the psych verb literature first we see Belletti and Rizzi (1988) who identify three classes of psych predicates in Italian. According to their classifications Class 1 verbs have nominative Experiencer subjects and accusative Theme objects (as in *John fears bears*, Class 2 verbs have nominative Theme subjects and accusative Experiencer objects (as in *The bears frightened John*), and Class 3 verbs have nominative Theme objects and dative Experiencer subjects (as in *Bears appeal to John*).

The mappings of the arguments of these three classes are; Class 1 verbs link the Experiencer role to the external argument. Class 2 verbs link the external argument to the object position licensing a Causer role with causative morphology as opposed to the Class 1 verbs which are non causative and stative. Nelson (nd.) argues that the difference between the two classes is due to the differences in causation and aspect as Grimshaw (1990) argues. The Class 3 psych verbs differ from the other two classes. They are similar to Class 1 verbs because they are stative too. They are similar to the Class 2 verbs because they assign nominative case to Subject and object case to Theme but they are not causative unlike Class 2 verbs.

Grimshaw (1990) argued that in causative psych predicates, the thematic role of the subject is not the Theme but the Causer and the Causers are ranked more highly than the Experiencers in the thematic hierarchy.

Fabienne (nd.) in *Object Experiencer Psych Verbs (OEPVs) and Causatives* with supporting data from French, argues that not all object Experiencer psych verbs are causatives. As known, causative verbs describe two events; namely, a causing event and a caused event. If all OEPVs are causatives they should describe a causing and a caused event but this is not the case for French OEPVs. The caused event is the mental event affecting the Experiencer. This event can be either dynamic or stative. Fabienne claims that some French OEPVs lack a causing event saying that only one class of OEPVs has two eventualities similar to causatives.

Pylkkanen (2000) in *Stativity and Causation* argues against the idea that stativity and causation are incompatible notions with evidence from a class of Finnish psych predicates which are stative both in their causative and non causative uses. Her first argument is that the Experiencer object predicates in Finnish are morphologically causative

but aspectually stative, just like non causative Experiencer subject predicates. Her second argument is that morphologically non causative psych verbs refer to *simple individual states (i-level)* but morphologically causative psych verbs refer to *complex stage level states (s-level)*. She demonstrates that causativity is compatible with stage level stativity but not with individual level stativity in Finnish. Pylkkanen assumes that this type of psych verbs are not derived from non causative psych verbs but rather they have their own external arguments. She adopts Pesetsky's approach that the subjects of frighten verbs have the Causer role but objects of fear verbs have the Target role and the Causer role is received from the causative morpheme not from the predicate itself.

I. 2.   Approaches to Psych Verbs

The domain of emotions is such a rich field that it may even include a number of other disciplines like linguistics, psychology, sociology and even anthropology.

Apart from its psychological and cultural aspects, a detailed linguistic analysis of psychological verbs and cross linguistic evidence from a variety of languages will provide a better understanding of the linguistic realizations of emotions and the nature of the lexicon.

This section analyzes some of the significant approaches to psych verbs in the psych verb literature. These approaches can be grouped under two general headings; structural and semantic/ aspectual.

I. 2. 1.   Structural Approaches to Psych Verbs

Among the structural approaches, Belletti and Rizzi (1988) is the most significant and mostly referred study which explains the exceptional behavior of a group of psych verbs from a syntactic point of view. Pesetsky (1987) focuses on the binding peculiarities observed with a group of psych verbs. Vanhoe (2002) analyzes Spanish psych verbs in LFG framework. Mulder (1992) analyzes ergative and unergative psych verbs in Dutch. Hale and Keyser examine the transitivity alternations of psych verbs in English. Ginnis analyzes the morphological restrictions on causative psych verbs in English and Kural (1996) analyzes Turkish psych verbs through elementary predicates. The following sections briefly summarize the mentioned structural approaches to psych verbs.

I. 2. 1. 1. Belletti and Rizzi (1998) and the Psych Verbs in Italian

Belletti and Rizzi (1988) analyze the so called problematic area of psych verbs which seem to constitute a resistance to the regular mapping of thematic roles to d-structures and identify three types of psych verbs in Italian which present different syntactic configurations:

(1) Gianni fears this.

(2) This worries Gianni.

(3) a. To Gianni pleases this.

    b. This pleases to Gianni.

They call these three classes as the *temere, preoccupare* and the *piacere* classes. The *piacere* class is different from the other two classes. It has a dative

Experiencer and a nominative Theme. This class allows both orderings of these two arguments unlike others.

Traditional studies view the *temere* class as the main structure from which other two structures were derived transformationally. Belletti and Rizzi propose that the d-structure configurations of these three classes are not so much different from each other. The first tree diagram is of the example (1) and the second is of (2) and (3):
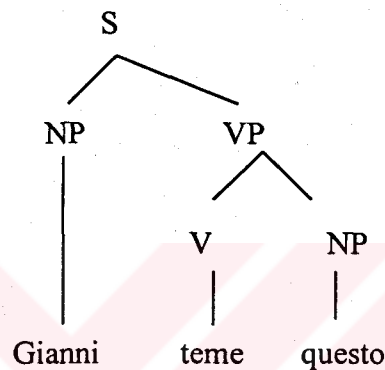
Figure 1. Belleti and Rizzi (1988) the *temere class*
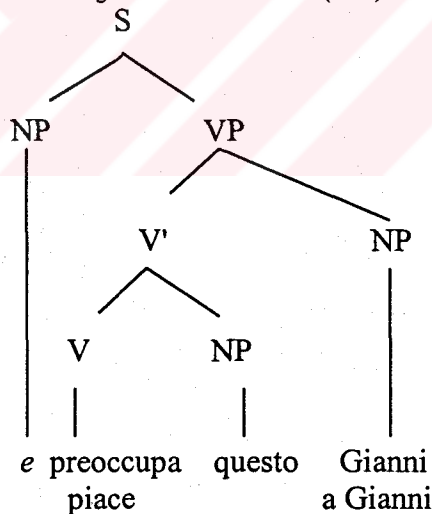
Figure 2. Belleti and Rizzi (1988) the *piacere and preoccupare classes*

The commonalities between these two diagrams are:

- Both verbs directly theta mark the Theme argument

- Verb+ Theme theta marks the Experiencer.

First they claim that the subject of the *preoccupare* class is not a deep subject but a derived subject. In order to prove this they use the anaphoric cliticization test. The assumption is that the deep subject can bind a reflexive clitic while the derived subjects can not. While the verbs in *temere* class are perfectly grammatical verbs of *preoccupare* class are not:

(4) Gianni himself fears.

(5) *Gianni himself worries.

With the addition of a human subject, a reciprocal and an adverb like *intentionally* or *voluntarily*, the structure becomes acceptable with a meaning that a human subject is intentionally causes a psychological state in the Experiencer:

(6) These two guys frighten each other <u>intentionally</u> every time that they have
                                                 ADV
the opportunity.

The conclusion is that if the Theme of a psychological verb is non-agentive then their subjects are derived.

Another test to prove the same claim is the causative construction test. Basing themselves on Burzio's ideas, Belletti and Rizzi claim that in Italian, whenever there is a derived subject, the structure can not be embedded under a causative construction. While it is possible for *temere* verbs to have acceptable counterparts embedded with a causative verb (7), it is not the case with the *preoccupare* class (8):

(7) This caused that Mario him feared even more.

(8) *This caused that Mario him worried even more.

Moreover, causative verbs can also have their VP complements. The observation is that *temere* verbs are possible with the infinitival verbs however, not all but most of the verbs of *preoccupare* class are not:

(9)   This will make (one) fear the president even more.

(10)   *This will make (one) attract the president even more.

Belletti and Rizzi observe that this behavior of *preoccupare* verbs with infinitival VPs is similar to unaccusative verbs.

Turning to their passivization behavior, Belletti and Rizzi claim that verbs of *preoccupare* class do not have syntactic passives. The possible passive sentences with these verbs are instances of adjectival passivization:

(11)   Gianni is disgusted by the corruption of this country.

(12)   Gianni is fascinated by this perspective.

because they:

- show typical adjectival morphology

- can not bear clitics (since only the verbs and therefore verbal passives can bear clitics)

- select the auxiliary *essere* 'be' (which is compatible with both adjectival and verbal passives) but not *venire* 'come' (which is compatible only with verbal passives)

- do not allow regular participial form:

(13)   *I am tired/ excited by his ideas.

- have irregular adjectival forms:

(14)   I am tired/ excited of his ideas.

Belletti and Rizzi see this as a result of a blocking principle which predicts that the existence of an irregular adjectival form blocks the regular adjectival participle formation (1988:313).

Another special characteristic of the verbs of *preoccupare* class is with respect to their behavior in the theory of Binding; the Experiencer argument of these verbs violates the c-command requirement for antecedent-anaphor relationship, binding an anaphor contained in the subject:

(27) *The gossips about <u>himself</u> describe <u>Gianni</u> better than any official biography.

(28) The gossips about <u>himself</u> worry <u>Gianni</u> more than anything else.

While the object of psych verbs can bind an anaphor which is contained in the subject they can not bind an anaphor which is the subject itself:

(29) Pictures of <u>himself</u> worry <u>him</u>.

(30) *<u>Himself</u> worries him.

Belletti and Rizzi claim that the subject of these verbs moves to the subject position from an internal VP position. They propose four different possible internal structures for this VP (1988:320):

1. A "flat triparite" structure:

```
            VP
          /  |  \
         V  Theme  Experiencer
```

Figure 3. Belletti and Rizzi (1988) a Flat Tripartite Structure

This can not be the right structure because the branching is not "binary".

2. The Theme is more prominent than the Experiencer:

```
            VP
           /  \
          V'   Theme
         /  \
        V   Experiencer
```
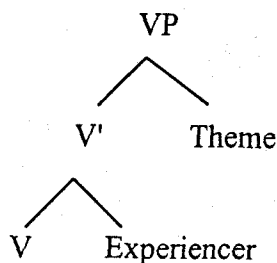
Figure 4.   Belletti and Rizzi (1988) Theme Prominent Structure

This is not the right structure because the Experiencer can not c-command the Theme.

3.   The Experiencer is more prominent than the Theme:
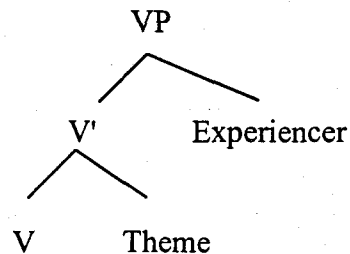
Figure 5.   Belletti and Rizzi (1988) Experiencer Prominent Structure

This is the only structure that is compatible with the evidence of Belletti and Rizzi.

4.   The Theme and the Experiencer form a small clause:
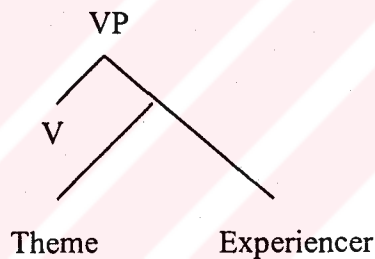
Figure 6.   Belletti and Rizzi (1988) Theme and Experiencer as a Small Clause

This can not be the right structure because there is no theta role for a small clause constituent.

The Experiencer argument of *preoccupare* class is in the object position but it:

- does not have the properties of canonical objects.

- is a kind of secondary object.

- is the sister of V'.

- is immediately dominated by VP.

- is not transparent to extraction unlike canonical objects:

- has some object properties (it receives accusative case)

Belletti and Rizzi claim that this accusative case is not the ordinary accusative case which we see in the object arguments of simple transitive verbs. The accusative case for them has two realizations which are structural and inherent. The general rule is this:

V is a structural case assigner iff it has an external argument.

The verbs of *preoccupare* class are not structural case assigners since they do not have external arguments. Therefore this accusative case is an inherent case. They observe that the auxiliary selection is also affected by this:

- If a verb takes *avere*, it has an external argument. If it has an external argument, it is a structural case assigner and has a deep subject.

- If a verb takes *essere*, it does not have an external argument. If it does not have an external argument, it is an inherent case assigner and it has a derived subject.

The third class is the *piacere* class. *Piacere* class has the following properties:

- Their Experiencer is in the inherent dative case.

- They select the auxiliary *essere*.

- Theme-Verb-Experiencer and Experiencer-Verb-Theme are possible orders.

- The most natural word order is the second one which seems to be unmarked.

- They are ergative verbs.

- Their subject position is non-thematic.

- Their Theme and the Experiencer are VP internal.

- Their Experiencer is higher than the Theme. (*higher* is to mean *c-commanding*)

- Either their Themes or their Experiencers should be in preverbal position. Both should not remain in the VP.

- Verb-Theme-Experiencer order is ungrammatical (as it is the case with the *temere* and *preoccupare* classes) which is fully grammatical with non-psych verbs:

(31)   *Please/ worry/ fear your ideas to Gianni.

(32)   Won the elections a student.

As a result Belletti and Rizzi draw the following conclusions from the analysis of three types of psych verbs in Italian:

- These three classes are identical to each other except for the selection of different inherent cases.

- The Experiencer is projected to a higher position than the Theme (1988:344).

- The lexical representations of three classes of psych verbs are (Belletti and Rizzi, 1988:344):

Class	Theta Grid	Case Grid
temere	[Experiencer, Theme]	[NOM, ACC]
preoccupare	[Experiencer, Theme]	[ACC, NOM]
piacere	[Experiencer, Theme]	[DAT, NOM]

Table 1.   Belletti and Rizzi (1988) Psych Verbs in Italian

- All s-structures which have an inherent case marked NP in their subject positions have a derived subject

- If a theta grid has both an Agent and an Experiencer, the external role is always given to the Agent.

- If there is no other highly ranked role than the Theme, or if the Theme is the only member in the theta grid, it can be chosen as the external argument. Otherwise a Theme can never be the external argument.

- According to these generalizations, the following verb classes would not be possible which:

   a.   are like *temere* class but with no external argument.

   b.   are like *preoccupare* class but with a simple transitive structure.

   c.   are like *piacere* class but with structural accusative case assigned to Theme.

   d.   are like *piacere* class but with *avere* as an auxiliary.

- According to these generalizations, the following verb classes would be possible which:

   a.   assign inherent case for both the Experiencer and the Theme

   b.   assign inherent case for the Theme and externalize the Experiencer

I. 2. 1. 2. Pesetsky (1987) and the Binding Problems with Experiencer Verbs

Among other peculiarities that Experiencer verbs pose, Pesetsky (1987) deals with anaphoric binding problems such as the following:

(1) Pictures of himself I know *John* likes *e*.

(2) Pictures of each other annoy *politicians*.

(3) Each other's health worried the *students*.

The problem is that the anaphors in the sentences (1), (2) and (3) are not c-commanded by the antecedents in italics. It is important to note that the violations like these are only seen with the verbs which assign the Experiencer theta role to its object.

Pesetsky observes that there is one more unusual property of Experiencer Object psych verbs; these verbs license an infinitival clause with *Tough Movement (TM)*. In these constructions PRO in the infinitival clause is controlled by the Experiencer argument of the matrix verb as in (4) and (5):

(4) *These pictures*(i) annoy *me*(j) [PRO(j) to have to look *e*(i)].

(5) War(i) frightens me(j) [PRO(j) to think about *e*(i)].

but with non-Experiencer predicates it is ungrammatical:

(6) *Bill(i) kicked me(j) [PRO(j) to have to look at *e*(i)].

Pesetsky observes another peculiarity related to the meaning of sentences with Experiencer arguments. In order to interpret a sentence like *John kissed Mary*, we just need to know if John kissed Mary or not. We do not need to know other circumstances about the mentioned event. However, in order to interpret such a sentence like *The article angered John* we need to know what exactly is the thing that angered him. He calls this as "expressively incompleteness" (1987:130). Moving on from this point, Pesetsky predicts that there are deleted infinitival clauses in these sentences which have undergone TM. For him, the clause deletion is due to the discoursal factors. Therefore, the sentences in (7) and (9) are clause deleted counterparts of (8) and (10):

(7)   Pictures of *each other* annoy the *politicians*.

(8)   [Pictures of *each other* (i)](j) annoy *the politicians*(i) [PRO(i) to look at [*e* (j)]].

(9)   Stories about *herself* generally pleased *Mary*.

(10)   [Stories about *herself*(i)] generally pleased *Mary*(i) [PRO(i) to hear [*e*]
(i)].

The anaphor inside the subjects is bound by the Experiencer object which is non c-commanding. Pesetsky's assumptions related to this phenomenon are:

- Experiencer Object psych predicates take an infinitive clause which undergoes TM.

- This infinitive clause can be omitted.

- PRO in the *tough* infinitive clause is controlled by the Experiencer.

- *e* in the *tough* infinitive clause is c-commanded by PRO.

- TM causes some connectivity effects.

- As a result of this connectivity effect, the subject NP which includes the anaphor acts as if it is in the position of *e*.

- The immediate antecedent of the anaphor is the PRO.

Pesetsky claims that Experiencer predicates have always Agent-Patient counterparts and that these Agent-Patient usages exclude TM. Thus, in non Experiencer sentences we neither see TMs nor peculiar binding effects:

(11)   Bill deliberately annoyed me (*to talk to).

(12)   The actor deliberately frightens the children (*to look at).

(13)   *Each other's friends deliberately annoyed/ frightened the party-goers by blowing smoke in their faces.

Pesetsky's claim that Experiencer psych predicates contain a deleted infinitival TM is only about the Experiencer predicates whose Experiencers surface as s-structure objects and does not include all Experiencer predicates.

Another claim is that if the sentence involves TM, the nominalization is ungrammatical:

(14)   *the book's annoyance of John.

(15)   *the book's amusement of children.

Nominalization is possible with the Agent-Patient versions of these verbs when they do not contain an infinitival clause:

(16)   Mary's (deliberate) annoyance of John.

(17)   Mary's (deliberate) amusement of children.

Another observation is that the *tough* infinitive clause excludes reflexives as in:

(18)   ?I disgusted myself.

(19)   ?I$_{(i)}$ disgusted myself$_{(i)}$ [PRO to think about e$_{(i)}$].

Pesetsky identifies two approaches as to the question of how many arguments these Experiencer verbs can have. According to the first approach, there are three arguments which are; an external NP, an Experiencer and an infinitive clause. The second approach does not regard the surface subject as an argument of the verb and identifies two arguments which are an Experiencer and an infinitive clause. Pesetsky notes that there are some verbs like *amuse* which require the existence of an infinitive clause "independent of TM":

(20)   It amuses Mary to read this book.

(21)   This book amuses Mary to read *e*.

(22)   *This book amuses Mary to read War and Peace.

These are similar to *raising structures*. The subject position may also be occupied with an expletive element:

(23)   It seems that book has been read.

(24)   That book seems to have been read.

(25)   *That book seems that War and Peace has been read.

When passivization is considered, Pesetsky observes that some nominalizations seem better than others with passives:

(26)   ??Bill was delighted by Fred.

(27)   Bill was delighted by Fred's visit.

(28)   ??Mary was amazed by my shoes.

(29)   Mary was amazed by my choice of shoes.

According to Pesetsky, (27) and (29) can be derived without TM. The reason of (26) and (28)'s seeming odd is because of the Causer argument. This argument can either refer to an action or an event. But here, a *shoe* is neither an event nor an action therefore, it can not be a theta marked argument of the verb but the *choice of shoe* can be.

Pesetsky notes some thematic and selectional differences between verbal, adjectival and nominal examples. Therefore, there should be a distinction between the *Cause of Emotion* and the *Target of Emotion*:

(30)   Bill was angry at the article in the Times.

(31)   The article in the Times angered Bill.

The sentence (31) differs from (30) in that the anger of Bill is not directed at the article but something in the article. However, when we use the adjectival form (30), we mean that the article itself is the object of his anger. Pesetsky claims that such pairs like *anger-angry, fear-frighten* are not simple lexical variants.

The non Experiencer NP is sometimes the Object of Emotion and sometimes the Cause although it is possible to think of a Cause also as the Object of Emotion as in (32):

(32)   Bill's behavior embarrassed Sue.

Pesetsky's prediction is that "... the noun and the adjective do not assign the Cause role because the related verb is a lexical causative ..." (1987:137). He points out that the causative verb can not assign the role of the Object of Emotion as, the ungrammaticality of (33) shows:

(33)   *The article in the Times angered Bill at the government.

To conclude, Pesetsky's main argument is that it is possible to explain the peculiar binding properties of Experiencer object psych verbs with connectivity effects and with the existence of TM in these verbs.

I. 2. 1. 3. Vanhoe (2002) and the Psych Verbs in Spanish

Vanhoe (2002) analyzes the syntactic properties of psychological verbs in Spanish in the framework of LFG. He distinguishes three classes of psych verbs in Spanish. Each of these types presents a different correspondence pattern according to their thematic roles and syntactic positions. The first group is the *temer* class which is similar to the *fear* class in English. The second group is *asustar* or *preoccupar* class which is similar to *frighten* class in English and the third class is *gustar* class with a dative Experiencer.

In three of these classes, there is an Experiencer who reacts to a Theme emotionally. Vanhoe argues that aspectually, the *temer* and the *gustar* classes are states but *preoccupar* class is achievement. States also differ in themselves; *temer* class behaves like ordinary transitive verbs but *gustar* class shows unaccusative behavior.

He modifies Dowty's proto Agent and proto Patient properties and analyzes three groups of psych verbs in Spanish according to them:

Group	Subject	Object
1	Secondary Agent	Secondary Patient
2	Primary Agent and Secondary Patient	Primary Patient and Secondary Agent
3	Secondary Patient	Secondary Agent (indirect object)

Table 2.   Vanhoe (2002) Psych Verbs in Spanish

Vanhoe discusses another phenomenon called "leismo" which means that a direct object may sometimes be marked with DAT. Most of the time it is optional, pragmatic or contextual in Spanish. However there are also some verbs in Spanish whose direct objects are obligatorily marked with DAT such as *interesar*. evidence

I. 2. 1. 4. Mulder (1992) and the Unergative and Ergative Psych Verbs

According to Belletti and Rizzi's analysis, the well known three types of psych verbs have similar underlying structural representations. Mulder (1992) states that these three sentences have radically different deep structures. The only similarity between them is that they all have an Experiencer argument. Other than this feature, these verbs have very little things in common.

He refers to the second type (frighten type) of verbs as s-psych verbs and the third group as o-psych verbs which have the following properties:

S- PSYCH CONSTRUCTIONS	O- PSYCH CONSTRUCTIONS
The Experiencer is the subject of the state of mind.	The Experiencer (the dative NP) is the subject of an inalienable possession construction and it functions as the possessor with a covert possessee.
The Theme is the causal subject.	The nominative Theme is the subject of an embedded small clause.
There is a similarity between the synthetic and periphrastic forms.	There is a variation between the synthetic and periphrastic forms.
Inversion with these verbs is ungrammatical except for topicalization purposes.	They are morphologically complex since they consist of an ergative matrix V, a possessive empty verb and a small clause complement of a verb.

Table 3.   Mulder (1992) s- psych verbs and o-psych verbs

Mulder argues that all s-psych verbs are VPs which are multi headed. He observes in Dutch that s-psych verbs have a reflexive counterpart, they can be agentive as in (1), reflexive as in (2) and causative as in (3):

(1) Teun interested the student for English. (agentive in Dutch)

(2) The student interested for English. (reflexive in Dutch)

(3) Linguistics interested the student the most. (causative in Dutch)

Mulder claims that in constructions like (1) there is the corporation of either a psych N or an ADJ into a causative V. In (2) the Experiencer argument is a "weak reflexive" and in (3) there is a reflexive interpretation of a PP (see that in this case the PP can not be realized overtly).

According to Mulder, the Experiencer argument is an argument who either possesses a mental state or is the subject of a psychological state (1992:122). However, this possession that we see between an Experiencer and a psych noun in psych verbs is *inalienable possession*. The Experiencer possesses the mental state which is represented by the psych N. It is in fact an obligatory complement but since it is an inalienable possession it is non-overt.

I. 2. 1. 5. Hale and Keyser (2002) on Psych Verbs

Hale and Keyser argue that, as it is the case with many transitive verbs, Experiencer Subject psych verbs can not participate in middle constructions. The following are their examples for that (14):

(1) * John's talent envies easily. (Everyone envies John's talent.)

(2) * French films love easily. (My kids love French films easily.)

On the other hand Experiencer Object psych verbs can form middle constructions as in:

(3) Politicians anger easily. (The truth anger politicians.)

(4) This colt frightens easily. (Loud noises frighten this colt.)

(5) I worry easily. (Economic down-turns worry me.)

(6) Children bore easily. (Adult talk bores children.)

One of the reasons for Experiencer subject psych verbs' not forming middles may be that the Experiencer is not affected by the action denoted by these verbs. In Experiencer Object verbs it is affected. Therefore the first group does not meet the *Affectedness Requirement*. Another explanation for these structures would be hidden in the semantic connection between the internal and external arguments. In the following examples, the psych nominals contain genitive nominals which refer to the Experiencer:

(7) Mary has my respect. (I respect Mary.)

(8) She has the boss's esteem. (The boss esteems her.)

(9) He has his children's love. (His children love him.)

Hale and Keyser claim that without these genitives, the Experiencer disappears as in *Mary has the respect* or *He has love*.

The paraphrases of the sentences above would be:

(10)   I give my respect to Mary.

(11)   The boss gives her his esteem.

(12)   His children give him their love.

Hale and Keyser assume that psych nouns are bare nouns which have a *part* relation to some *whole* entity. The following paraphrased examples show that the emotion (here *love*) is possessed by the external argument (Mary) not by the internal argument (the children) as it is the case with all Experiencer psych verbs:

(13)   Mary loves her children.

(14)   Mary gives her children her love.

This anaphoric properties of psych nouns are regarded by Hale and Keyser as the reason of the failure of Experiencer subject psych verbs to form middles because middle forms lack an external argument.

I. 2. 1. 6. Ginnis (nd.) on the Morphological Restrictions in Experiencer Predicates

Basing herself on Pesetsky (1990) Causer Target/ Subject Matter distinction, Ginnis gives examples from psych predicates which allow either an Experiencer or a *Suggestor* subject. She describes the Experiencer as the argument which undergoes the psychological state and the Suggestor as the argument which refers to the behavior described by the psychological state and claims that a predicate can not have both a Suggestor and T/SM arguments at the same time:

    (1) <u>Carol</u> was fearful <u>of earthquakes.</u>
       Experiencer   T/SM

    (2) <u>Carol's expression</u> was fearful.
          Suggestor

    (3) * <u>Carol's expression</u> was fearful <u>of earthquakes.</u>
          Suggestor   T/SM

Ginnis explains the ill formedness of (1) with synthetic causatives like *frighten* with a morphological restriction on causative elements.

In English, if possible, lexical causatives are inserted but if the verb has no synthetic causative, the default form is used. Ginnis states that the T/SM violation with synthetic causatives in English can be eliminated by using an "analytic default". These processes that she mentions can be summarized for English like this:

(Causative)	<->	**-ify**	in env. Root+ASP+_____	X: terr-, horr-
(Causative)	<->	**-en**	in env. Root+ASP+_____	Y: fright...
(Causative)	<->	**-**	in env. Root+ASP+_____	Z: please, disgust, anger...
(Causative)	<->	**make**	elsewhere	

The aspectual head (ASP) in her analysis is not recursive but rather the VP is recursive; one causative VP may take another causative VP as its complement, so, many languages like Turkish have multiple causative constructions.

I. 2. 1. 7. Kural (1996) on Elementary Predicates and Psych Verbs in Turkish

Kural (1996) identifies seven abstract elementary predicates for the syntactic representation which are:

1. Actor   ACT
2. Causative   CAUSE
3. Passive   PASS
4. Volitionality   VOL
5. Control   CONT
6. Inchoative   INCH
7. Beneficiary   BEN

Kural argues that there is a correlation between the Beneficiary and the Experiencer roles. He sees the Experiencer role as an "instantiation" of the Beneficiary role. He accepts the *for PP* in the specifier position of BEN as the Experiencer argument which experiences the mentioned benefit. He states that *John* in the following sentences is the Experiencer argument:

(1) The recent changes in the regulations benefited John.

(2) John benefited from the recent changes in the regulations.

The alternation above can also be seen in pairs like *fear/frighten* and *like/please:*

(3) The recent changes in the regulations worried John.

(4) John worried about the recent changes in the regulations.

Kural lists four basic thematic roles:

1. *Actor*: manipulates the event

2. *Experiencer*: internally responds to the event.

3. *Neutral*: remains outside the event.

4. *Patient*: undergoes a change of state as a result of the event.

He introduces two other phenomena inherent in these roles; *affectedness* and *protagonism*:

Affectedness	Protagonism
related to the *change of state*	related to *active participation*
actors and *Neutrals* are unaffected	protagonists actively determines the course of the events
Experiencers and *Patients* are affected	actors and Experiencers are protagonists
created arguments are not affected	Neutrals and Patients are nonprotagonists
destructed arguments are affected	
only the affected objects can possessivize	
affected arguments are allowed as the derived subjects of middles but unaffected arguments do not	
inflectional materials like modality and negation are irrelevant for affectedness	
contextual information is irrelevant for affectedness	

Table 4.   Kural (1996) Affectedness and Protogonism

These two properties can be combined with four basic thematic roles in the following way:

Actor	Unaffected	Protagonist
Experiencer	Affected	Protagonist
Neutral	Unaffected	Non-protagonist
Patient	Affected	Non-protagonist

Table 5.   Kural (1996) Affectedness, Protogonism and Thematic roles

Kural mentions two hierarchies about the mapping of these thematic arguments on to syntactic positions (1996:39):

1. *Affectedness Hierarchy: An unaffected role is mapped onto a higher argument.*

2. *Protagonism Hierarchy: A protagonist role is mapped onto a higher argument.*

He identifies ten possible thematic combinations for transitive dyadic verbs (Kural, 1996:40). Among these, the ones that include the Experiencer argument can be summarized in the following chart:

Actor-Experiencer	Few in number
	Unaffected subject and affected object
	Both are protagonists
	With verbs like *con, influence, irritate, ridicule, stimulate, train* etc.
Neutral-Experiencer	Causes a clash between the A and P hierarchies.
	The choice of subject depends on alternating individual verbs
	admire, envy, fear, hate, like, pity, resent, believe, hope, think, want, understand, need, taste take Experiencer subjects
	amuse, confuse, disgust, frighten, offend, please, satisfy take Neutral subjects
	Mostly take Experiencer subjects
Experiencer-Experiencer	A gap in the paradigm
	Two participants can not internally respond to the event
	Lack an independent event which would be responded.
Experiencer-Patient	A gap in the paradigm
	An Experiencer subject can not change the Patient's state

Table 6. Kural (1996) Thematic Combinations with the Experiencer Argument

Kural states that having a desire or thought is also a kind of change of state because state is not only something physical but also something mental or social. An Experiencer is an affected argument because it changes its mental attributes in some or other way. An Experiencer is a protagonist at the same time because "… the person who is enjoying or wanting something is engaged in a mental activity that determines the enjoying or the wanting" and an Experiencer mentally processes the event "…a person who is reminiscing or fantasizing about some situation must also be mentally constructing that situation" (Kural, 1996:38).

This assumption of Kural is criticized by Dikken (1996) claiming that such a sentence like:

(5) Sue believes in Santa Claus.

"...is perfectly true even Sue has always believed Santa Claus and will continue to believe in Santa Claus till the end of time" (Dikken, 1996:12) implying no change of state of mind of Sue at all.

Kural's reason for the absence of Experiencer- Experiencer verbs is that the Experiencer Subject makes the verb stative but Experiencer Object forces the verb to be eventive and the result is a clash between the two.

Neutral- Experiencer verbs are said to cause a clash between the two hierarchies because affectedness hierarchy says that the Neutral role should be mapped onto the higher argument, on the other hand, protagonism hierarchy says that the Experiencer role should be mapped onto the higher argument.

His observation is that in most of the world's languages the Experiencer argument occupies the subject position. Therefore we can say that there is a precedence relationship between the two hierarchies. Kural says that in this relationship the protagonism hierarchy takes the precedence. It links the Experiencer to the subject position. Only when protagonism can not determine, the affectedness hierarchy applies. Kural shows this precedence rule as:

Protagonism Hierarchy> Affectedness Hierarchy

He claims that Experiencer Subject Neutral Object verbs like *fear* can be analyzed with a simple VP structure like:

56

```
              VP
             /  \
           DP    V'
           |    /  \
           |   V    DP
           |   |    |
     Experiencer like NEUTRAL
```
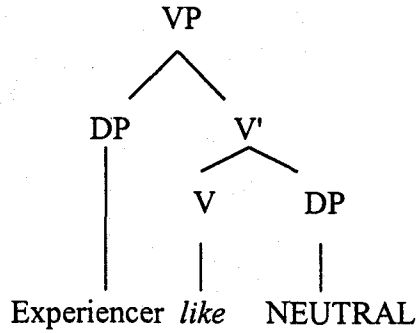
Figure 7. Kural (1996) Experiencer Subject Neutral Object Verbs

Neutral Subject Experiencer Object verbs have a different representation. Kural

argues that they are triadic verbs and there is a CAUSE which adds a Neutral argument:

```
              VP
             /    \
           PP      V'
           |      /  \
        NEUTRAL  V    VP
                 |   /  \
               CAUSE DP  V'
                        /  \
                       V    PP
                       |    |
                    please NEUTRAL
```
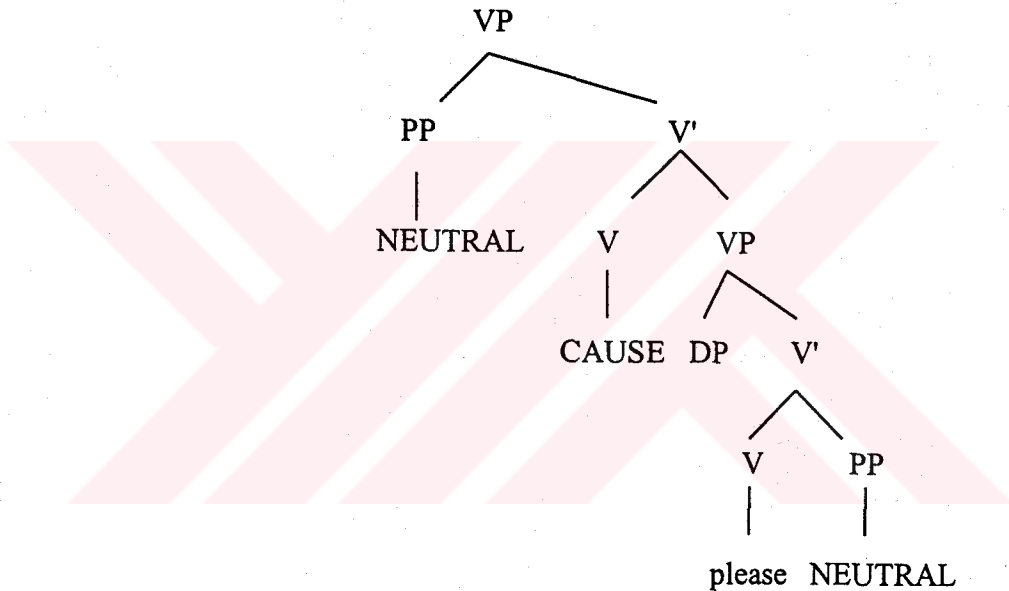
Figure 8. Kural (1996) Neutral Subject Experiencer Object Verbs

Here the Neutral argument in the specifier position of CAUSE initiates the

mental state of the Experiencer just like Pesetsky's *Subject Matter* and the Neutral

argument in the specifier position of the verb is just like Pesetsky's *Target of Emotion*.

Kural quotes Pesetsky's claim that the Causer argument is the Target when there is not a

Neutral argument as in:

(6) Suna Mehmet'i balıktan iğrendirdi.

If there was not an internal argument like *balıktan* the Causer in this sentence would be the Target *Suna*.

Kural takes all these as the evidence that this constraint is just related to surface structure because these two arguments can co occur when they are kept apart in the surface structure as in the periphrastic causatives in (7) and in verb particle constructions as in (8):

(7) Bill made Mary worry about his progress in the class.

(8) The lectures turned Bill on to classical music.

Kural explains the difference between the ungrammatical (10) and the grammatical (11) as the type of emotion that they denote:

(9)   Mehmet Suna'nın köpeğinden korktu.

(10)   *Suna Mehmet'i köpeğinden korkuttu.

(11)   Ahmet Ayşe'ye cazı sevdirdi.

His generalization is that psych verbs which refer to temporary emotions (such as *kederlen-, kız-, sevin-, şaşır-, utan-, ürk-* etc.) obey this restriction while verbs which refer to permanent emotions (such as *bez-, bunal-, gocun-, iğren-, imren-, kuşkulan-, öykün-, sev-* etc.) do not. In Kural's analysis the verb fear has a different status among these verbs because fear can be both a permanent property towards an object or it may be a temporary state "aroused anew in each situation" (1996:133).

I. 2. 2.   Semantic and Aspectual Approaches to Psych Verbs

In this section, first the aspectual approaches to psych verbs will be examined through the analyses of Grimshaw (1990), Tenny (1994), Voorst (1992), Filip (1996), Arad (nd.) and Levin and Hovav (2002). Then, other significant semantic approaches based on

non aspectual criteria will be overviewed through the analyses of Dowty (1991) and Hatory (1997). Wechsler (1995), Krifka (2001) and Kordoni (2000 and 2001) focus on the semantic concepts of *notion* and *underlying*, and, Dabrowska (1994) examines the case marking of Experiencer arguments in Polish.

I. 2. 2. 1. Grimshaw (1990) Prominence Theory and Psych Verbs

Grimshaw (1990) assumes that the argument structure has its own internal structure or organization and this organization is a reflection of the lexical semantics of the verb. Thus, the argument structure of a verb can be predictable from the general characteristics of the meaning of a verb. This assumption commits itself to the idea that the syntactic representation can be derived from the semantic representation.

She claims that there are prominence relations among the arguments of a given verb and, the argument structure is a representation of these prominence relations. These prominence relations are determined by two properties of verbs which are the *thematic* properties and the *aspectual* properties. The theory presents the external argument as the most prominent argument in thematic and aspectual dimensions which is equal to the d-structure subject. An argument is accepted to be either external or internal according to its relation to other arguments in the argument structure. The theory assumes the following hierarchy for the arguments:

(Agent (Experiencer (Goal/Source/Location (Theme))))

The hierarchy indicates that the Agent is the highest argument, and then comes the Experiencer, Goal, Source, Location and lastly the Theme. The most prominent

argument in the argument structure always occupies syntactically the most prominent position.

In this theory, the special status of psychological verbs is due to the mismatch between their thematic and aspectual properties. *Fear* class verbs and their prominence relations are like other agentive verbs. *Frighten* class verbs on the other hand do not meet expectations since their thematically the most prominent argument (Experiencer) does not occupy the syntactic subject position:

> *Fear*   (x   (y))
>   Exp.   Theme

> *Frighten* (x   (y))
>   Theme Exp.

Unlike Belletti and Rizzi (1988), Grimshaw (1990) argues that the Theme of a *frighten* verb is a d-structure subject. The idea defended in the theory is that these two classes of verbs have the same thematic prominence relations although they differ in the d-structure representation of their arguments. The mismatch is because of the difference in their aspectual properties. More specifically, *frighten* class verbs are causative but not stative while *fear* class verbs are stative, and do not have an event reading.

The result is that the causal status of an argument plays a role for this argument's syntactic realization either as a subject or as an object. Grimshaw regards this dimension as autonomous from the thematic dimension. She mentions two different kinds of dimensions; one *thematic,* the other *causal.* "Each of the two hierarchies imposes its own set of prominence relations on this collection of arguments..." (1990:24). The causal hierarchy is:

(Cause (Other (...)))

For *frighten* verbs, the first element in the thematic hierarchy corresponds to the second position in the causal hierarchy and vice versa.

For the *fear* class, the Experiencer argument, both thematically and aspectually the most prominent one but for *frighten* class the Theme is the aspectually the most prominent.

Grimshaw states that *frighten* type verbs cross linguistically seem to be more stable than the *fear* type. She defines another class of psych verbs whose semantics are similar to *fear* type verbs which can be regarded as unaccusatives (such as *concern* and *please*).

The underlying idea of the theory is that every argument has a prominence status relative to the other arguments in the mentioned two dimensions. The external argument is the one which is the most prominent in two dimensions. A verb can only have one external argument since only one argument can have maximal prominence. *Frighten* verbs are different from other causatives in that they have no external arguments. Therefore, they can not undergo such processes like nominalization or passivization which require the suppression of the external argument. Here, Grimshaw distinguishes between the two notions; the d-structure subject and the external argument. *Frighten* verbs have d-structure objects but not external arguments.

She also differentiates between causatives and unaccusatives. She states that *frighten* verbs have an argument which has a maximal aspectual prominence but not an external argument which has a maximal thematic prominence. The unaccusatives too, do not have an external argument since they do not have a first sub event. She claims that the only argument of unaccusative verbs is in the d-structure object not a subject. Although

both classes of verbs i.e. unaccusatives and *frighten* type verbs have internal arguments, Grimshaw says that the aspectual status of these arguments are different from each other.

I. 2. 2. 2. Tenny (1994) Aspectual Interface Hypothesis and Psych Verbs

According to Tenny (1994), the intersection or the visible side of the lexical semantics is the side of the aspectual properties which regulate much of the linking. These aspectual properties which are related to syntax are of a very limited kind. Specifically she sees *delimitedness* as the only aspectual property which plays a role in the syntax semantics interface. For her, delimitedness refers to an inherent endpoint of events. It depends not only on the verb but also the other elements in the verb phrase.

She argues that the internal arguments of stative verbs do not undergo any change or motion. They do not also have an internal temporal structure. They just describe states.

She demonstrates the difference between the *fear* and the *frighten* type verbs with the differences between their entailments as in (1) and (2):

(1) a. The truth frightened John <u>in five minutes.</u>   Entails that

   b. It took <u>five minutes</u> for John to become frightened.

   c. John was frightened <u>at the end of five minutes.</u>

(2) a. ?John feared the truth <u>in five minutes.</u>   Does not entail

   b. It took <u>five minutes</u> for John to fear the truth.

   c. John was feared <u>at the end of five minutes.</u>

She gives further evidence for the differences between these two classes by using *rate adverbials* to modify the argument that undergoes a change of state. In this way we can measure out the change of the changed argument as in:

(3) The truth interested John only <u>slowly</u>, since he was not imaginative by nature and was slow to see its implications.

A delimiting expression can also be used with a causative change of state verb to refer to the endstate of the internal argument as in:

(4) The movie frightened the children <u>to death</u>.

(5) * The movie feared the children <u>to death</u>.

Tenny describes the constraint related to the example (9) as the *Measure-Out Constraint* which states that only the direct internal arguments (not external arguments) can undergo a change of state and only they are able to measure out an event. The verbs whose Experiencers are the internal arguments can express a change of state but verbs whose Themes are the internal arguments can not. Only the verbs which have Theme subjects can be causative while Experiencer subject verbs can not (Tenny, 1994:67).

Tenny's argument related to psych verbs is that they conform to the aspectual restrictions on the internal and external arguments in the Aspectual Interface Hypothesis. Their internal arguments are also constrained by the *Measuring–Out Constraint*. She simply sees the Experiencer argument of a psych verb as an event participant which sometimes measure out and sometimes does not measure out events. As an internal argument, it measures out the event, as an external argument, it does not. The Theme argument of a psych verb, on the other hand, undergoes a change of state. If the Theme is the internal argument, the verb (Experiencer- Subject Theme- Object verb) is not a change of state verb; otherwise it is (67).

I. 2. 2. 3. Voorst (1992) and the Aspectual Semantics of Psych Verbs

Most of the theories about the aspectual properties of psych verbs including Grimshaw and Tenny claim that the differences between the classes of psych verbs and peculiar properties of the verbs of *frighten* class are due to the differences in their aspectual properties. Grimshaw sees *fear* type verbs as stative and *frighten* type verbs as causative. Unlike this common assumption, Voorst (1992) argues that there are not aspectual differences in the deep structures of these classes and therefore, the thing to do is to find out descriptions other than aspectual and thematic ones.

Voorst identifies four classes of psychological verbs in English and claim that even though there are some semantic differences among these classes; all of them behave similarly in the aspectual tests. His classification of psych verbs (1992:66, 67) can be summarized like this:

1. *Class 1 Psych Verbs*: Psychological uses of *action* verbs:

   He struck me as rather odd.

2. *Class 2 Psych Verbs*: Psychological verbs with an *intentional* subject:

   The clown tried to amuse me.

3. *Class 3 Psych Verbs*: Psychological verbs with a *non-intentional* subject:

   These experiences amused me tremendously.

4. *Class 4 Psych Verbs*: Psychological verbs of dislike type in which the subject is the centre of the psychological experience.

   These art-connoisseurs admire Van Gogh.

Voorst in the analysis of activity and accomplishment verbs reaches the following conclusions about psych verbs:

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- They do not allow *end reading. Begin reading* is also sometimes unacceptable since it is difficult to predict the exact moment of the occurrence of any kind of feelings.

- They allow the adverb *for X minutes* similar to activities and states.

- With the use of the adverb *almost*, all classes of psych verbs have the interpretation that *the event has failed to occur.*

- Unlike activities and accomplishments, individuation of the direct object of psych verbs does not affect their aspectual semantics.

- They do not imply a *process* leading to a change of state.

Voorst then, analyzes the behavior of psych verbs comparing them to the achievement and state verbs and observes that they (just like achievements and states) refer to the beginning of the state or event. With the adverb *in X minutes*, only a begin reading is possible for them.

Voorst distinguishes between the states and events analyzing the behavior of psych verbs and observes that:

- They describe a more permanent feeling without the progressive form. On the contrary, when the verb is in progressive, a less permanent feeling is conveyed.

- When their subjects can not be interpreted as agentive, these verbs are states.

- Their imperative form is better with an optative meaning and with an implied agentive subject rather than giving an order.

- They allow passivization unlike states.

- Unlike states, they allow adverbs which specify the intensity.

As a result, psychological verbs are not like accomplishment verbs because they do not imply a process. They are not also like activities because the *individuation* does not transform them into accomplishments. Lastly, they are not like states because they *take place* or *happen* unlike them. These all leads him to conclude that psychological verbs are achievements.

Another observation of Voorst is that manner adverbs such as *carefully* and *slowly* can be used with psych verbs with perfect grammaticality but these adverbs do not modify the psychological process. For example when we say:

(1) Peter carefully frightened the grizzly bear to chase it out of its backyard.

carefully does not refer to the performing the process of frightening.

Another important distinction is between *subjects denoting individuals* and *subjects denoting events*. In (2) the subject is the individual himself while in (3) the subject is not the individuals but something *about* the individuals:

(2) He demonstrated that the situation was getting worse each day.

(3) These kids demonstrated that the situation was getting worse each day. (the kids' starving appearance etc.)

The measurability that Voorst mentions is not the kind of measurability that of Tenny's. Voorst puts forward that psychological verbs are unmeasurable events since we can not talk about the existence of such a process which leads to final state. That means, just like achievement verbs, psych verbs do not have a *culmination point*.

Voorst adapts Ryle's (1949) classification of emotions expressed by psych constructions. He mentions three types of emotions:

1.   Inclinations: They refer to permanent emotional dispositions or traits of character.

2.   Moods: They are less permanent dispositions or "short term tendency words".

3.   Agitations: They are more or less lasting dispositions.

Voorst claims that "Constructions with psychological verbs are centered around moods and those containing psychological uses of accomplishments around inclinations underlying moods" (1992:90). For him, the reason for psychological verbs' not being accomplishments is that they are centered around *moods* which can be manipulated.

I. 2. 2. 4. Filip (1996) on the Psych Verbs in Czech

Filip challenges the principles in the Aspectual Interface Hypothesis giving evidence from psych verbs in Czech and English that telicity or measuring out the events can not be the basis for the syntax semantics interface.

Filip argues that only the psychological predicates which are achievements (the ones which refer to spontaneous changes of mental state) are telic. He gives examples from some psychological causatives (like *calm, disillusion, sadden, soothe, disarm* etc.) which do not entail a clear cut final stage. These verbs do not co occur with adverbs like *halfway* and therefore they are atelic as in:

(1)   ?The music halfway saddened John.

(2)   *The high-pitched noise halfway distracted her.

Filip argues against Tenny's test with incremental expressions like *a little bit,* saying that this expression relates only events as a whole not their increments or parts. For example when we say:

(3)   The music saddened John a little bit.

we do not mean the part of a larger event but we mean a kind of *lower intensity* of the whole psychological event.

In Czech Filip identifies three types of psych verbs:

1. Nominative Experiencer

2. Accusative Experiencer

3. Dative Experiencer

According to Filip there is a correlation between the case assignment and thematic roles:

- Nominative case of the Experiencer is associated with the existence of *sentience* and *volition*

- Accusative or dative case of the Experiencer is associated with the existence of a lack or lower degree of control

- Nominative Experiencers are either the *cause* of the event or they are volitional.

- Accusative Experiencers are either *causally affected* or *undergo a change of state*. Accusative Experiencer verbs can undergo passivization.

- Dative Experiencer verbs can not undergo passivization.

- Dative Experiencers are generally *beneficiaries*.

- Dative Experiencer verbs can not be modified with manner adverbs like *in a pleasant manner, passionately, bitterly* but they can be modified with degree or intensity adverbials like *a lot* and *a little*.

To conclude, Filip's main argument is that telicity or any other semantic property is not useful in explaining the linking properties of psych verbs in Czech.

I. 2. 2. 5.   Arad (nd.) on Psych Verbs

Arad (nd.) has two basic claims about the syntactic and semantic properties of psych verbs. The first one is that the different features that belong to Object-Experiencer (OE) verbs are only seen in their stative reading i.e. with an agentive reading these features do no exist. Her second claim is that OE psych verbs are not inherently psych but they are either formed from normal predicates or they do have also non-psych senses. The main argument is that the peculiar features of OE psych verbs belong to their stativity.

Arad shows that OE psych verbs have three readings which associate with different syntactic constructions. This shows that a great number of verbs have both a psych and a non-psych sense and even these senses have different readings in themselves.

The mentioned three readings are:

1. Agentive reading: There is an intentional Agent and a change of state in the Experiencer:

(1) Nina frightened Laura (to make her go away).

2. Eventive reading: There is an unintentional Agent and a change of state:

(2) The explosion/ noise/ thunderstorm frightened Laura.

3. Stative reading:

- There is neither an Agent nor a change of state in the Experiencer.

- The Experiencer experiences this mental state as long as she perceives the Stimulus.

- There is a kind of stative causation (unlike the other two readings in which there is an active causation).

- The stative Causer is not an external argument

- The stative Causer is not an affected argument.

- The stative Causer is an "external internal" argument (Arad, nd: 16).

- The stative Causer can only be generated under the specifier position of VP.

Arad notes that there are some verbs which allow only one of these readings. For example while the verb *frighten* allows three readings, verbs like *concern* and *worry* allow only stative readings. Arad's main prediction is that all of the psych properties exist only in the stative reading of OE verbs. In the agentive reading these verbs are like normal transitive verbs.

Another claim is that almost every argument position can be interpreted as an Experiencer. It can be a direct object, an indirect object or a PP. What determines the interpretation of an argument as an Experiencer or a Goal etc. is the verb and its arguments (Arad, nd: 13- 20).

Arad adopts Bouchard's (1995) assumption that all verbs can be interpreted as a psych verb if some conditions are met. For this, first there should be an animate argument which can be interpreted as an Experiencer and second, there should be an internal argument which can be interpreted as an emotion or a mental state (Arad, nd: 14).

I. 2. 2. 6. Levin and Hovav (2002) on Psych Verbs

Levin and Hovav (2002) claim that to decide whether an event with two sub events is a complex event or not, we should look at the temporal relations between the sub-events. Therefore the internal temporal constitution of an event which is an aspectual feature is relevant to argument expression.

They claim that mental verbs like *read, copy, memorize, translate, study, recite* and *perform* etc. are like accomplishments but they are not complex events. The object that is read is not affected by the reading activity. The reader in a way internalizes the text and gains a mental representation from it. They argue that these verbs have incremental objects like verbs of *consumption* rather than verbs of *change of state*. Their objects are measurable NPs, thus they are telic.

They analyze the mental verb *read* and say that it has two sub events. The first sub event is *scanning the text* and the second sub event is *forming a mental representation*. The point is that these two sub events may be temporally dependant because while the text is scanned, a mental representation is formed at the same time. Thus they do not regard these verbs as complex events (Levin and Hovav, 2002:15).

They further point out that incremental Themes of these verbs do not have to be syntactically expressed as the direct object as in (1):

(1) Kelly read/studied.

(2) Kelly read/studied from the textbook.

I. 2. 2. 7. Dowty (1991) on Proto Roles and Psych Verbs

Dowty (1991) mentions about an *indeterminacy* in argument selection with some verbs which he calls *lexical doublets*. These verbs have different argument configurations but they express the same relation. For example, verbs like *buy* and *sell, borrow* and *lend* do not distinguish between their *buyer* and *seller, borrower* and *lender* with respect to the properties of proto roles of their arguments.

Under his view, psychological predicates are also different kinds of doublets.

He classifies the following verbs (Dowty, 1991:579) into two groups as:

Experiencer-Subject	Stimulus-Subject
x likes y	y pleases x
x fears y	y frightens x
x supposes (that) S	(it) seems (to) x (that) S
x regards y (as) VP	y strikes x (as) VP
x is surprised at y	y surprises x
x is disturbed at y	y disturbs x

In the first group of verbs, Experiencer percepts the Stimulus therefore the Experiencer is "sentient/ perceiving" but in the second group Stimulus argument is the Causer of the "emotional reaction or cognitive judgment" of the Experiencer. Dowty argues that both of these arguments have "... a weak but apparently equal claim to subjecthood" (1991:579).

The first group of verbs are stative verbs but verbs in the second group are sometimes stative sometimes inchoative. The Experiencer has the proto patient properties when there is an inchoative interpretation but this is not the case for the statives. Therefore, according to Dowty's argument selection principles, this argument has the most proto patient properties (although both arguments have the same amount of proto agent properties) and it becomes the direct object.

Dowty in his proto role analysis of psychological verbs claims that the Experiencer Object verbs have a Stimulus/Causer argument which causes a cognitive judgment or emotional reaction in the Experiencer. The Experiencer argument is seen as the participant who undergoes a kind of change of state. He notes that the Experiencer argument has the perception of the Stimulus. This property is a proto Agent property for the Experiencer. The Stimulus on the other hand causes the Experiencer to perceive it

(which is also a proto Agent property for the Stimulus). This is which causes a conflicting mapping.

I. 2. 2. 8. Hatory (1997) and the LCSs of Psych Verbs

Hatori (1997) views psych verbs as ordinary transitive verbs in terms of *–able,* *–er* and middle formation as in the following examples:

(1) Sue frightened easily. (middle formation)

(2) excitable, irritable, upsettable (-able adjective formation)

(3) disturber, enchanter, flatterer, startler (-er noun formation)

Hatori observes that some verbs of change of location can be extended to more abstract semantic fields such as a change of state; therefore they both have the same LCSs such as the following ones:

(4) a. John drove his mother to the station.

    b. John drove his mother mad.

(5) a. The breeze moved the leaves slightly.

    b. The story of their sufferings moved us deeply.

(6) a. The branches touch the roof.

    b. Her kindness touched me profoundly.

Hatori observes in these examples that when these verbs are used with their psychological meaning they co-occur with such adverbs like *deeply, profoundly* etc. and they are also able to derive psych adjectives with *–ing* as in *moving* and *touching*.

Hatori suggests two approaches to analyze psych verbs. The first approach sees the Experiencer argument of these verbs as the *Location* or the *Goal*. The second approach sees it as the *Theme*.

According to the first approach the Experiencer can be either in the dative or in the oblique case. The examples in which the preposition *to* coming after some psych adjectives are presented as the evidence for that:

(7) The point was clear to me.

(8) They are interesting to the students of comparative literature.

The second approach that regards the Experiencer argument as the Theme sees *us* as the Theme and *film* and the *director* as the Agent:

(9)   The film frightened us.

(10)   The director sent us.

Another observation of Hatori is that psych verbs can co-occur with resultative expressions:

(11)   He awed them into obedience.

(12)   He was shamed out of bad habits.

(13)   His suffering distressed him into committing suicide.

Hatori's argument is that the verbs that are compatible with path expressions have the LCS with either GO or MOVE function. However, some other psych verbs can not co-occur with path expressions:

(14)   * The storyteller's jokes amused the children into giggling.

Hatori claims that in the LCS of these verbs, there is not a GO or MOVE function but a BE function, therefore, they do not refer to an emotional motion or an Experiencer that undergoes it. They have either a stative or an inchoative meaning. With

these verbs the Theme argument can be realized as a *with phrase* mostly in passive constructions:

(15)   The Chinese dinner satisfied Bill.

(16)   Bill was satisfied with the Chinese dinner.

He also gives examples from a few number of psych verbs which can be followed by both a *with* phrase and a *path* phrase. One of them is the verb *bore* and the verb *worry*:

(17)   ... a handsome engineer who bored me to tears with his tales of motorway maintenance.

(18)   You worry me to death with your chatting.

To sum up, Hatory's analysis of LCSs of EO psych verbs classifies them into two as one with a GO/ Move function and the other with a BE function.

There are some other psych verbs which are used with body parts. Here, the use of body part expressions (like head, mind, nerve, head, soul, stomach and chest etc.) gives a kind of metaphorical meaning. The observation is that identical body part nouns are used across languages. In a number of languages these body part expressions can be used as the Experiencer argument. This should be because humans conceptualize emotions very similarly cross linguistically.

I. 2. 2. 9. Wechsler (1995) *Notion Rule* and Psych Verbs

Wechsler (1995) introduces a concept called *notion* to define the semantic constraints on argument structure. He claims that this concept underlies the semantic

constraints even of psychological verbs which constitute a problematic class. He defines notions as *mental entities* or *concrete cognitive structures* (Wechsler, 1995:32).

In order to explain the semantic constraints on argument structure, he defines a set of notion rules. He analyzes the verbs in the following sentences (1), (2), (3) and (4):

(1) a. John wants the cat.

b. John has a notion of the cat.

c. * The cat has a notion of John.

(2) a. John likes Mary.

b. John has a notion of Mary.

c. * Mary has a notion of John.

(3) a. John fears Mary.

b. John has a notion of Mary.

c. * Mary has a notion of John.

(4) a. John is expecting Fred.

b. John has a notion of Fred.

c. * Fred has a notion of John.

He formulates the following *Notion Rule* for the psych verbs *want, like, fear* and *expect* in (1), (2), (3) and (4);

The individual (here John) has a notion of X (the object / content of his mental state) but this X does not have to have a notion of John necessarily. In each of the sentences the (b)s are entailed but the (c)s are not. Thus reverse entailments are not true.

For example in (1), in order to want the cat, John should have a notion of the cat but that does not mean that the cat should also have the notion of John.

Wechsler claims that this notion rule is also valid for the verbs of *perception*:

(5) John saw the cat.

    a. John has a notion of cat.

    b. *The cat has a notion of John.

Wechsler claims that *frighten* type verbs seem to violate the notion rule but they do not. They, like the *fear* type, are consistent with the notion rule. He emphasizes that frighten type verbs are eventive. They describe the causation of the mental state but they do not describe anything about the intentionality of the result state.

He distinguishes between Cause and Content saying that they are distinct concepts. However they may sometimes refer to the same entity as in:

(6) The dog frightened the baby.

Wechsler accepts the existence of some psych verbs as counter examples to the notion rule such as *concern* and *preoccupy*:

(7) *Toxic waste concerns the Senator deeply- he just happens to be unaware of its existence.

Wechsler says that *for an X to concern or preoccupy a Y, Y must have some notion of x*. He argues that these verbs are few in number, their number does not seem to increase and they are problematic for language learning.

I. 2. 2. 10.   Krifka (2001) on Psych Verbs

According to Croft (1991) one of the tests to distinguish between the Experiencer- Subject and Stimulus- Subject verbs is that only the second type of verbs allows *by phrases*. However Experiencer- Subject verbs use causal clauses instead of by-phrases as in (Krifka, 2001:11):

(1) John pleased his boss by coming in early everyday.

(2) a. *John was liked by his boss by coming in early everyday.

   b. John was liked by his boss because he came in early everyday.

Other than the known two groups, Krifka identifies two more classes of psychological verbs. The first group does not have a direct object but a Stimulus subject:

(3) The painting appealed to Mary.

The second group does not have a direct object too but has an Experiencer subject:

(4) The soldiers rejoiced about the victory.

Krifka claims that Experiencer- Stimulus verbs should also include perception verbs such as *see verbs* like *feel, hear, smell, taste, notice* etc. , *sight verbs* like *discover, examine, inspect, perceive* and verbs that refer to *propositional attitudes* like *know, believe, doubt* etc.

Krifka exemplifies that although Stimulus- Subject verbs refer to punctual changes, they can be used with the progressive tense:

(5) The storm was frightening the people.

but Experiencer-Subject verbs have a *stative* reading and can not be used with progressive:

(6) *The people were fearing the storm.

Krifka claims that although most of the Stimulus- Subject verbs in languages are often regarded as causatives, the kind of causation by a Stimulus is not actually causation since it does not undergo causative alternation as non psych verbs do:

(7) a. Someone broke the glass.

   b. The glass broke.

(8) a. Someone frightened John.

b. *John frightened.

According to Dowty's analysis, if the verb refers to a change of state, the Stimulus has a proto Agent property and it is realized as the syntactic subject. Similarly if the Experiencer has a *notion* of the Stimulus, the Experiencer has a proto Agent property and it is syntactically realized as the subject. What he means by notion is Wechsler's (1995) concept of notion which simply refers to knowing the entity which is the Cause of the experience.

Other differences between the Stimulus- Subject and Experiencer-Subject verbs are listed by Krifka (2001:13-15) as follows:

- Reciprocals reinforce the agentive reading of Stimulus-Subject verbs:

(9)   The children entertained us. (ambiguous between agentive and non agentive readings)

(10)   The children entertained each other. (only the agentive reading)

- In some languages such as Italian, Stimulus- Subject verbs can not be reflexive (since their subjects are derived subjects as argued by Belletti and Rizzi).

- The object of Stimulus- Subject verbs can bind anaphors within the subject.

- The subject has fewer subject properties than the object in Stimulus-Subject verbs (this pattern assigns some subject properties to the Stimulus such as syntactic position, verb agreement, case marking etc.).

- Experiencer-Subject verbs are regarded as the basic form but the number of Stimulus-Subject verbs is greater in (which is not the case in Turkish).

I. 2. 2. 11.   Kordoni (2000 and 2001) on the Psych Verbs in Modern Greek

Kordoni, (2000) provides evidence against the idea that the Experiencer Object psych verbs are causative constructions. Within the framework of Head Driven Phrase Structure Grammar (HDPSG), she identifies three classes of psych verbs in Modern Greek (MG).

The first class is similar to *fear* class in English. It includes verbs with an Experiencer Subject and a Theme Object. The second class just like the *frighten* class in English. It has a Theme or a Cause argument which is in the nominative case and which agrees with the verb. There is one more class of psych verbs in Modern Greek. This class of verbs has dative Experiencers and nominative Theme arguments.

Kordoni (2000) analyzes Modern Greek Experiencer- Subject psych verb constructions (MG ESPVCs) in the framework of Wechsler's Notion Rule. One of the claims that he proposed is the object arguments of MG ESPVCs are "semantically underspecified" (199). By *semantically underspecified* he means, in these constructions, the meaning of the verb does not pose any constraints over the object argument and it is nonspecific about the nature of this argument. In the following examples (1) and (2) Gianis has a notion of Mary in order to love or fear from him. However Mary can be either cognitive or non-cognitive and we need to have some other contextual information to be sure about that:

(1) a. O Gianis agapa tin Maria.
    John loves Mary.

b. John has a notion of Mary.

c. ?Mary has a notion of John.

(2) a. O Gianis fovate tin Maria.
       John fears Mary.

   b. John has a notion of Mary.

   c. ?Mary has a notion of John.

The conclusion that Kordoni (2000) reaches is the subject NPs of ESPVCs have a notion of the entity denoted by the object verb according to Wechsler's Notion Rule. The non cognitive participants of MG ESPVCs are syntactically realized as the object NP.

Dowty in his proto Agent and Patient property analyses also claimed that the experienced (stimulus) argument of ESPVCs has neither proto Agent nor proto Patient properties; therefore he claimed that they are semantically underspecified. In this way Dowty's and Kordoni's approaches are parallel to each other.

Grimshaw (1990) has also claimed that accusative Experiencer- Object psych verb constructions have two different readings; agentive and psychological.

Agentive reading is possible when the nominative argument is animate. This animate argument is interpreted as the deliberate and volitional Agent who causes the object Experiencer to experience the mentioned emotional state. With this reading the accusative Experiencer can not be doubled. In Greek, in such a sentence like (3):

(3) Giannis upsets Mary.

Giannis knows Mary (he has a notion of Mary), and Mary also has a notion of Giannis i.e. the individual denoted by the subject NP has a notion of the individual denoted by the object NP and vice versa.

When there is a causative reading the clitic on accusative Experiencer is doubled obligatorily. The interpretation is *there is something about Giannis that causes*

Mary to experience an emotional state. This sort of constructions is similar to what Grimshaw calls causative psych verb constructions as in (2):

(4) The thunderstorm frightened the child.

In both of these constructions *Giannis* and the *thunderstorm* do not have any notion of the argument experiencing the mental state i.e. *Mary* and *the child* are neither volitional nor intentional. They also do not participate in the mental state, they just cause it.

Thus, in these constructions only one of the participants is cognitive and the other participant is just the Causer. Therefore, these constructions can be regarded as normal causative constructions.

Grimshaw claims that ES psych predicates have their external arguments and therefore they can undergo passivization. Kordoni (2001) gives counter examples for this claim from MG ESPVCs. While (5) and (7) are grammatical in MG, (6) and (8) are not:

(5) His parents love John.

(6)* John is loved by his parents.

(7) Mary envied the neighbor's house.

(8) * The neighbor's house was envied by Mary.

He concludes that MG ESPVCs are neither passivized nor they are the passive forms of the corresponding EOPVCs. The experienced (stimulus) argument of them are realized either as the object of the sentence or the complement of a PP. The accusative NP does not behave like a normal object since it can not be passivized.

I. 2. 2. 12.   Dabrowska (1996) on the Dative and Nominative Experiencers in Polish

Dabrowska, (1994) in the analysis of the case marking of Experiencer predicates in Polish argues that mental experiences have two aspects whose properties can be summarized in the following table:

Conceptual aspect	Affective aspect
objective	subjective
conscious	irrational
public	personal
active ...	passive ...

Table 7.   Dabrowska (1994) The two Aspects of Mental Experiences

Dabrowska claims that we have a tendency to identify ourselves with the first aspect of mind rather than the second. Therefore, we tend to conceptualize ourselves as active, conscious and rational etc. rather than passive, unconscious and irrational with the effect of cultural values.

Dabrowska observes that some verbs in Polish have the Experiencer arguments either in nominative or in dative and there are also some verbs which allow both cases. She claims that semantic motivations behind the choice of case marking can be defined with reference to the concept of "sphere of awareness". Some of the basic characteristics which can be associated with these cases in her analysis can be summarized as follows:

NOMINATIVE EXPERIENCER	DATIVE EXPERIENCER
Is definite, concrete and active.	The participant is affected by a state or process occurring in his personal sphere.
Is with a participant who has Agentive properties	Foregrounds the sphere of awareness.
Foregrounds the Experiencer's active role.	Depicts the Experiencer as passive.
Backgrounds the sphere of awareness.	Portrays the Experiencer as the passive receiver of impulses.
Is used with predicates which refer to a definite desire, intention, determination or resolution.	Describes physiological drives and cravings which come from the instinct.
Emphasizes volitionality and control.	Describes effortless, unplanned, can't help situations.
Involves effort and action.	Focuses on the inner experiences of he Experiencer.

Table 8.   Dabrowska (1994) Nominative and Dative Experiencers

She accepts that these semantic properties do no not make all of the grammatical properties predictable. She just claims that grammatical forms are motivated by them. For her, the choice between the two cases "… has the effect of highlighting some aspects of the situation and hiding others" (1994:1047).

II.   ANALYSIS OF THE PSYCH VERBS IN TURKISH

II.   1. What is *Psych*?

This section presents a brief introduction to psych verbs in Turkish to clarify the basic assumptions of the study with an initial analysis of some semantic and morphological aspects of these verbs.

In the realm of psych verbs, there is a multitude of terms like *mental, cognitive* and *emotional*. The first two terms are commonly used interchangeably to refer to verbs connected with conscious mental processes such as *to know, to learn* and *to understand*. The term *emotional* on the other hand is a quality of verbs connected with feelings such as *love, like, hate, fear* etc. In some studies we see the verbs of one group under the title of the other group or sometimes it is the case that these verbs are altogether regarded as psych.

In fact it is not easy to distinguish between the two since mental and emotional domains seem to be interconnected in our daily lives too. Some activities have emotional bases as a point of initiation as opposed to other activities which have mental bases. Accordingly, some of the verbs that we examined in Turkish belong to mental domain such as *algıla-, anımsa-, anlamlandır-, ayrımla-, belle-, bilinçlen-, bil-, değerlendir-, düşün-, kap-, kavra-, kıvır-, öğren-, yor-* while some of them unquestionably correspond to the emotional domain such as *acı-, arzula-, bayıl-, beğen-, bunal-, çıldır-, güven-, iğren-, kaygılan-, kork-, önemse-, ümitlen-, üz-, zevklen-* and so on.

There are some other verbs which can be considered either as mental or emotional. Although it is almost for sure that a verb like *kavra-* belongs to the mental

domain and a verb like *beğen-* belongs to the emotional domain, a verb like *ilgilen-* can either be mental (for example if you are *interested in* a subject or an idea) or emotional (for example if you are interested in a boy or a girl to mean *to be attracted to*). It is again hard to say whether *benimse-* "to adopt" occurs in the emotional or the mental domain. *Şaşır-* "to be surprised" seems to belong to the mental domain if taken as an act of being surprised for something different from your existing *thoughts* related to this thing. If this act of being surprised is for something that is different from what you emotionally *expected* then the verb belongs to the emotional domain. The analysis of such verbs which can be regarded as fuzzy cases shows that some of them are semantically closer to the mental domain such as *afalla-, aldan-, apış-, ayart-, kan-, kur-, kuşkulan-, şaş-, uç-, yargıla-, zannet-* and some of them are semantically closer to the emotional domain such as *avun-, bağışla-, benimse-, ilgilen-, önemse-* .

The mental and the emotional domains, first, as we stated are indistinguishable and have some intersections, and second, verbs belonging to emotional and mental domains have structural correspondences rather than differences. Therefore we have enough reasons to regard both mental and emotional verbs as *psych*.

None of the studies in the psych verb literature offers a clear cut definition or at least attempt to define what a psych verb is. In their appendices there are neither lists of verbs that they accepted as *psych* nor a set of criteria specifying the features that these verbs possess or do not possess but it seems that a kind of consensus exists as to what they are. Therefore, before everything, we need to define what a psych verb is or at least what we take it to be in this study.

In order to be a psych verb, a verb should:

1. be semantically related to either the emotional or the mental domains i.e. it should describe an event occurring in one of these domains.

2. have an animate Experiencer argument who experiences the mental/emotional state.

3. lead to a change in the psychological state of the Experiencer.

II. 1. 1.   The *Experiencer* Argument

It is obligatory for a psych verb to have an Experiencer argument. Semantically, this argument experiences the mental/emotional state that the verb describes. This argument is regarded by Kural (1996) as an instance of the *beneficiary* argument.

The discussions on psych verbs are centered mostly on the structural positions of the thematic arguments *Experiencer* and the *Theme*. The syntactic position of the Experiencer argument is either the subject (mostly the subject) or the object position as it is the case in Turkish:

(1) Ali Ayşe'yi seviyor.
    Experiencer

(2) Ali Ayşe'yi üzüyor.
    Experiencer

The surface case marking properties of the Experiencer argument may vary according to the structural position that it occupies; it is nominative marked in the subject position and accusative marked in the object position.

The Experiencer argument is almost always an animate being. It is hard to think of any situations that an inanimate being experiences one of the mental/emotional states like *aldır-, çekin-, darıl-, duygulan-, hırslan-, hisset-, hüzünlen-, kaygılan-, köpür-, küs-, önemse-, pipiriklen-, sez-, sıkıl-, ümitlen-, yadırga-.*

Therefore the emotional domain is one of the unique belongings of human being and it is at least at that moment, not realistic to think of an inanimate being whose psychological state changes or which understands implied meanings etc. Moreover, even in such cases where the subject is not a nominal referring to an inanimate being, we tend to interpret it as animate.

II. 1. 2.   The *Theme* Argument

Semantically the Theme role is the most neutral or inactive thematic role among the other thematic roles, although it does not seem to be equally inactive in the following examples (1) and (2) with psych verbs:

(1) <u>The thunder</u> frightened the <u>baby.</u>
     Theme   Experiencer

(2) <u>The children</u> frightened the <u>baby</u>.
     Theme   Experiencer

(3) <u>Ali</u> talked to <u>Ayşe</u>.
   Agent   Theme

Animacy is also an important quality that affects the degree of activeness but the point of discussion should be whether to name the argument other than the Experiencer as *Theme* in dyadic psych verbs or not.

In (2) the nature of the Theme argument is different from the Theme argument of (3). In (2) the Theme is semantically the cause of the fear of the baby. Therefore this type of psych verbs are regarded as different from the Experiencer Subject type psych verbs in having a Causer argument.

Pesetsky (1996) decomposes the Theme role into two as the *Target of Emotion* and the *Subject Matter* which is an essential distinction to differentiate between the Theme arguments of the Experiencer subject and the Experiencer object verbs.

In Turkish, the Theme argument, parallel with the Experiencer argument is either in the subject or in the object position. The surface case marking properties of the Theme argument vary according to the structural position that it occupies; it is nominative in the subject position and either accusative or oblique case marked in the object position.

II. 1. 3.   The Input of Psych Verbalization

This section gives a brief morphological analysis of psych verbs in Turkish. Morphologically, psych verbs in Turkish are of three types:

1. non-derived simple base psych verbs

2. derived psych verbs

    a. from nouns

    b. from verbs

    c. from adjectives

    d. compound frozen forms

3. compound psych verbs

The majority of psych verbs are non- derived simple base verbs (the etymological analysis of each of which is not the concern here) such as *avun-, az-, bık-, bil-, coş-, düşün-, iğren-, imren-, inan-, kıskan-, kız-, kork-, şaş-, ürk-, üz- etc.*

In the second group, there are derived psych verbs. The psych verbs derived from *nouns* constitute the biggest group. The majority of them are derived from psych nouns with *–lAn*. Most of the time these verbs are intransitive:

Psych Noun+ *-lAn*= Psych Verb

PSYCH NOUN	-lAn	PSYCH VERB
acı	-lan	acılan- "to grieve"
gurur	-lan	gururlan- "to be arrogant"

hırs	-lan	hırslan- "to get angry"
hiddet	-len	hiddetlen- "to get furious"
hüzün	-len	hüzünlen- "to become sad"
ilgi	-len	ilgilen- "to be interested"
keyif	-len	keyiflen- "to get into a good mood"
kibir	-len	kibirlen- "to become arrogant"
zevk	-len	zevklen- "to take pleasure"

Table 1.   Psych Noun+ -lAn= Psych Verb

Some psych verbs are derived from nouns with –*lA*. However, this time the input noun can be either a psych or a non- psych noun:

Psych/ Non-Psych Noun+ -*lA*= Psych Verb

PSYCH/ NON-PSYCH NOUN	-lA	PSYCH VERB
arzu	-la	arzula- "to wish for"
büyü	-le	büyüle- "to charm"
etki	-le	etkile- "to influence"
ip	-le	iple- "to mind"
yabancı	-la	yabancıla- "to find smth. strange"
yargı	-la	yargıla- "to judge"

Table 2.   Psych/ Non-Psych Noun+ -lA= Psych Verb

The third group is the psych verbs derived from verbs. The base verb is either a psych verb as in *anla-m-lan-dır-, coş-ku-lan-, kız-ış-, san-gı-la-, şaş-ır-* or not a psych verb as in *al-dır-, bur-uk-laş-, çek-in-, duy-um-sa-, kap-tır-, oyna-t-*.

Psych verbs are derived by five means from base verbs. The first way is first to derive a psych noun (which mostly refers to a perception or at least implies it) with one of the following morphemes and then to derive the psych verb from these nouns mostly either with –*lA* or –*lAn*:

Verb -> Psych Noun -> Psych Verb

INPUT V	PSYCH NOUN	–lA/ -lAn	OUTPUT V
al	-gı	-la	algıla- "to perceive"
bil	-inç	-len	bilinçlen- "to become conscious"
coş	-ku	-lan	coşkulan- "to get excited"
duy	-gu	-lan	duygulan- "to be affected"
duy	-um	-sa	duyumsa- "to feel"
es	-in	-len	esinlen- "to be inspired"
kur	-gu	-la	kurgula- "imagine"
kur	-untu	-lan	kuruntulan- "to worry for no reason"
san	-gı	-la	sangıla- "to suppose"

Table 3.   Verb -> Psych Noun -> Psych Verb

The second way is first to derive a psych adjective (all of which are the modifiers of the Experiencer argument) mostly with –GIn and then to derive the psych verb either with –lAn or –lAş:

Verb -> Psych Adjective -> Psych Verb

INPUT V	PSYCH ADJECTIVE	–lAn/ –lAş	OUTPUT V
ay	-dın	-lan	aydınlan- "to be enlighted"
az	-gın	-laş	azgınlaş- "to get wild"
bez	-gin	-leş	bezginleş- "to be fed up with"
bur	-uk	-laş	buruklaş- "to be upset"
coş	-kun	-laş	coşkunlaş- "to get excited"
dal	-gın	-laş	dalgınlaş- "to become lost in thought"
ol	-gun	-laş	olgunlaş- "to become mature"
şaş	-kın	-laş	şaşkınlaş- "to be bewildered"

Table 4. Verb -> Psych Adjective -> Psych Verb

The third way to derive psych verbs from base verbs is to use the causative morpheme –(D)Ir, or –t:

Verb+ Seemingly Causative Morpheme= Psych Verb

INPUT V	CAUSATIVE MORPHEME	OUTPUT V
al	-dır	aldır- "to mind"
kap	-tır	kaptır- "to concentrate"
kaç	-ır	kaçır- "to lose one's mind"
kes	-tir	kestir- "to estimate"
oyna	-t	oynat- "to become insane"
şiş	-ir	şişir- "to embarrass"
uç	-ur	uçur- "to lose one's mind"

Table 5. Verb+ Causative Morpheme= Psych Verb

The fourth way to derive psych verbs from base verbs is to use the passive morpheme –Il deriving a reflexive sense:

Verb+ Seemingly Passive Morpheme= Psych Verb

INPUT V	PASSIVE MORPHEME	OUTPUT V
dur	-ul	durul-" to calm down"
ger	-il	geril- "to be tensed up"
kas	-ıl	kasıl- "to act high and mighty"
kır	-ıl	kırıl- "to be hurt"
sık	-ıl	sıkıl- "to get bored"
süz	-ül	süzül- "to be upset"
tut	-ul	tutul- "to fall in love"
vur	-ul	vurul- "to fall in love"

Table 6. Verb+ Passive Morpheme= Psych Verb

Lastly, the following morphemes; reciprocal *-Iş* and reflexive *–In* also derive psych verbs from base verbs:

Verb+ *-In/ -Iş*= Psych Verb

INPUT V	MORPHEME	OUTPUT V
al	-ın	alın- "to take offence"
çek	-in	çekin- "to become shy"
kız	-ış	kızış- "to get angry"
şiş	-in	şişin- "to get puffed up"
tut	-un	tutun- "to be obsessed"
yat	-ış	yatış- "to calm down"

Table 7.   Verb+ In/ Iş= Psych Verb

When we examine the sense relation between the base and the derived verb, the question of whether the causative, passive, reflexive and reciprocal morphemes add their original meaning to the input stem or they are just homophonous morphemes arises. Further data is going to show that most of them are *seemingly* causativization or passivization applications. Therefore, the mentioned suffixes can be regarded as derivational suffixes without any voice effect.

In the fourth group there are psych verbs derived from adjectives which do not have any other verbal counterparts, so, there is no other way of verbalizing them. Some of these verbs are derived mostly from borrowed stative psych adjectives with *–lAş*:

Psych Adjective+ *-lAş*= Psych Verb

PSYCH ADJECTIVE	-lAş	PSYCH VERB
ahmak	-laş	ahmaklaş- "to turn into a fool"
alık	-laş	alıklaş- "to be astounded"
aptal	-laş	aptallaş- "to become stupid"
çılgın	-laş	çılgınlaş- "to become mad"
hırçın	-laş	hırçınlaş- "to get ill tempered"
ifrit	-leş	ifritleş- "to get angry"
sakin	-leş	sakinleş- "to get calm"
salak	-laş	salaklaş- "to become stupid"
tedirgin	-leş	tedirginleş- "to become uneasy"
uysal	-laş	uysallaş- "to become complaisant"

Table 8.   Psych Adjective+ lAş= Psych Verb

Some of the verbs derived from adjectives are derived with the morpheme *–lAn* but the input adjective may not be a psych adjective as in the last one:

Psych/ Non-Psych Adjective+ -*lAn*= Psych Verb

PSYCH/NON PSYCH ADJECTIVE	-lAn	PSYCH VERB
aksi	-len	aksilen- "to be obstinate"
deli	-len	delilen- "to go mad"
dik	-len	diklen- "to get stubborn"
ters	-len	terslen- "to get befoulded"
yeşil	-len	yeşillen- "to like"

Table 9. Psych/ Non-Psych Adjective+ -(lAn)= Psych Verb

The difference between *–lAn* and *–lAş* verbs is that the former may occur with an optional dative marked argument although the latter are truly intransitive (see Kural (1996) for unaccusative vs. unergative distinction).

Some of these verbs are derived with *–sA* and the rest are the change of state verbs derived with *–Ar, -Al,* or *-An*:

Psych/ Non-Psych Adjective+ -*sA*= Psych Verb

PSYCH/NON PSYCH ADJECTIVE	-sA	PSYCH VERB
garip	-se	garipse- "to find smth. strange"
hafif	-se	hafifse- "to take smth. lightly"
ırak	-sa	ıraksa- "to consider smth. improbable"
üstün	-se	üstünse- "to consider smth. superb"

Table 10. Psych/ Non-Psych Adjective+ -sA= Psych Verb

Non-Psych Adjective+ -*Ar/ -Al*= Psych Verb

NON-PSYCH ADJECTIVE	-(Ar)/ (Al)	PSYCH VERB
kara	-r	karar- "to be upset"
mor	-ar	morar- "to be disgraced"
dar	-al	daral- "to get bored"

Table 11. Non-Psych Adjective+ -Ar/ Al= Psych Verb

Lastly there are some psych verbs which are derived from non native compound bases. These verbs are frozen forms therefore the helping verb and the noun component are merged into one verb form as in *hazzet-, hisset-, kahrol-*.

To conclude, there are 13 means for the derivation of psych verbs in Turkish which we can summarize in the following formulas:

1. Non-Derived Base -> Psych Verb

2. Psych Noun+ *-lAn*= Psych Verb

3. Psych/ Non-Psych Noun+ *-lA*= Psych Verb

4. Verb -> Psych Noun -> Psych Verb

5. Verb -> Psych Adjective -> Psych Verb

6. Verb+ Causative Morpheme= Psych Verb

7. Verb+ Passive Morpheme= Psych Verb

8. Verb+ Reciprocal/ Reflexive Morpheme= Psych Verb

9. Psych Adjective+ *-lAş*= Psych Verb

10. Psych/ Non-Psych Adjective+ *-lAn*= Psych Verb

11. Psych/ Non-Psych Adjective+ *-sA*= Psych Verb

12. Non-Psych Adjective+ *-Ar/ -Al*= Psych Verb

13. Compound Base -> Psych Verb

II. 1. 4.   Secondary Psych Senses

The analysis has shown that the majority of the psych verbs have psych senses as their primary meaning which we can refer to as *true* psych verbs which include *iğren-, imren-, hoşlan-, kork-, özen-, sinirlen-, şaş-, tiksin-, yıl-.*

Among the verbs in our data, there are no psych verbs that can be secondarily used in different senses other than their psych senses.

On the other hand, psych meanings of some verbs are their secondary meanings. Semantically these verbs primarily belong to other verb classes but extensions of meaning secondarily make them psych verbs. The following are some examples:

VERB	NON- PSYCH SENSE	PSYCH SENSE
alevlen-	to flame up	to get angry
bay-	to make someone faint	to bore
boz-	to damage/ harm	to embarrass
çatla-	to crack	can't stand
daral-	to become narrow/ shrink	to get bored
geril-	to be stretched	to be tensed up
ez-	to crush/ squash	to depress
kaptır-	to get caught	to concentrate
kıvır-	to curl/ twist	to get
köpür-	to foam	to get angry
parla-	to shine	to get angry
patla-	to burst	to give vent to one's feelings
salla-	to swing	to mind
soğu-	to get cold	to lose one's love/ desire
tak-	to attach	to mind
tozut-	to raise a dust	to go nuts
uçur-	to let smth. fly away	to go nuts
vurul-	to be hit/ shot	to fall in love
yan-	to burn	to burn with an emotion

Table 12. Verbs which have both psych and non psych senses

II. 2.   Psych Verb Types in Turkish

As discussed in previous chapters psych verbs are problematic for *linking/mapping* theories proposed for different languages in the literature. The cross-linguistic tendencies show that the unexpected mapping of these verbs is universal. Such differences in their syntactic and semantic behavior lead linguists define distinct classes of psych verbs on different bases. Belletti& Rizzi (1988) focused on different surface markings of thematic roles. Levin (1993) classified these verbs with respect to transitivity

alternations. Grimshaw (1990) and Tenny (1994) have used aspectual criteria in order to explain the different syntactic behavior that these verbs display.

With the aim of providing a partial description related to their semantic and syntactic properties, first, we will propose a classification for Turkish psych verbs. Our claim is that there are four types of psych verbs in Turkish when we consider the syntactic position and the surface case markings of thematic arguments. The following configurations are based commonly on accepted thematic roles the *Experiencer* and the *Theme*.

In the first group there is an Experiencer argument in the subject position. As expected, this argument is nominative case marked. In the object position there is a Theme argument and again as expected, this argument is accusative case marked just like ordinary Agent Patient verbs.

If we reverse the thematic roles of the first group, we get the second group. These are the verbs whose subjects are nominative case marked Themes and objects are accusative case marked Experiencers.

The third group consists of verbs which have a nominative case marked Experiencer in the subject position and a Theme argument in the object position just like the first group. The difference is that the Theme argument here is not accusative but oblique case marked.

The verbs of the fourth group are different from the other three groups in that they do not have a Theme argument but just a nominative case marked Experiencer argument in the subject position.

From now on, we are going to refer to verbs of these four classes as *Type 1, Type 2, Type 3(a/ b) and Type 4* psych verbs in Turkish as the following table illustrates:

TYPE	SUBJECT	OBJECT
1	Experiencer (NOM.)	Theme (ACC.)
2	Theme (NOM.)	Experiencer (ACC.)
3	Experiencer (NOM.)	Theme (OBL.)
3a	Experiencer (NOM.)	Theme (DAT.)
3b	Experiencer (NOM.)	Theme (ABL.)
4	Experiencer (NOM.)	Ø

Table 1.   Psych Verb Types in Turkish

The following sections analyze each of these types according to their input of verbalization, surface case marking and the syntactic distribution of their non sentential arguments.

II. 2. 1.   Type 1 Psych Verbs

The verbs in this group correspond to commonly called *fear type* psych verbs of Grimshaw (1990) and Tenny (1994) in English, and *temere class* of Belletti& Rizzi (1988) in Italian. The mapping of the thematic roles and syntactic positions do not pose any problems for linking theories since they differ in no way from ordinary transitive dyadic predicates. The Experiencer is in the subject position and the Theme is in the object position. The surface case marking of arguments also corresponds to what is expected from a transitive dyadic predicate; a nominative subject and an accusative object:

(1) Ben bu konuyu anladım.
     Experiencer   Theme
        (NOM)   (ACC)
     I understood this subject.

(2) Ayşe bu işi çok arzuluyor.
     Experiencer Theme
        (NOM)   (ACC)
     Ayşe wishes for this job very much.

(3) <u>Ayşe</u> <u>Ali'yi</u> beğeniyor.
Experiencer Theme
  (NOM)   (ACC)
Ayşe likes Ali.

(4) <u>Ayşe</u> <u>Ali'yi</u> istiyor.
Experiencer Theme
  (NOM)   (ACC)
Ayşe wants Ali.

(5) <u>Ali</u> <u>karısını</u> kıskanıyor.
Experiencer Theme
  (NOM)   (ACC)
Ali envies his wife.

(6) <u>Öğretmen</u> <u>öğrencileri</u> küçümsüyor.
    Experiencer   Theme
     (NOM)   (ACC)
  The teacher looks down on the students.

(7) <u>Çocuk</u> <u>annesini</u> özlüyor.
    Experiencer Theme
     (NOM)   (ACC)
The child misses his mother.

(8) <u>Kadın</u> <u>bu adamı</u> seviyor.
    Experiencer   Theme
     (NOM)   (ACC)
The woman loves this man.

(9) <u>Ali</u> <u>ailesini</u> umursamıyor.
Experiencer Theme
  (NOM)   (ACC)
Ali does not care about his family.

(10)   <u>Yaşlılar</u> <u>gençleri</u> çok yadırgıyor.
          Experiencer   Theme
           (NOM)   (ACC)
          Old people consider the young people strange.

The input for the Type 1 psych verbalization is of five types:

1. a non-derived/ simple base: *beğen-, belle-, bil-, dile-, iste-...*

2. a verb: *an-ım-sa-, anla-m-lan-dır-, kes-tir-, kur-gu-la-, um-ur-sa-...*

3. a noun: *arzu-la-, hesap-la-, ip-le-, önem-se--, yargı-la-...*

4. an adjective: *ağır-sa-, garip-se-, hafif-se-...*

5. a compound base: *aff-et-, var-say-, zan-net-...*

A Type 1 psych verb can semantically be either mental as in *algıla-, anımsa-, kap-, kavra-, öğren-* or emotional as in *beğen, kıskan, özle, sev, yadırga.*

II. 2. 2.   Type 2 Psych Verbs

These verbs which correspond to *frighten type* psych verbs of Grimshaw (1990) and Tenny (1994) in English, and *preoccupare class* of Belletti& Rizzi (1988) in Italian are the problematic group for the linking theories since they map the Experiencer role to the object position and the Theme role to the subject position. Therefore the Theme is nominative and the Experiencer is accusative marked. That Type 2 psych verbs in Turkish map their Experiencer and Theme roles in the same way with the other analyzed languages shows this unexpected behavior to be a universal one. Moreover, in Turkish, (as it is the case with most of the other languages) these verbs are limited in number. Some of the verbs in the following examples require a form of support to emphasize the psych sense such as a degree adverbial (*çok, fena* etc.) or an instrumental PP. These verbs are either secondary psych uses such as *boğ-, boz-, büyüle-, kır-, sars-* as in (3), (4), (5), (8), (9) or a non native compound *cezbet-* as in (6) but not true lexical psych verbs like *üz-* in (10). This shows that most of the Type 2 verbs have somewhat a derived psych sense.

(1) Ali Ayşeyi ayarttı.
   Theme Experiencer
   (NOM)   (ACC)
   Ali seduced Ayşe.

(2) Konuşmacı dinleyicileri baydı.
   Theme   Experiencer
   (NOM)   (ACC)
   The speaker bored the audience.

(3) Ayşe Ali'yi üç yıldır kıskançlığı ile boğdu.
   Theme Experiencer
   (NOM)   (ACC)
   Ayşe made Ali fed up with her jealousy for three years.

(4) <u>Ali</u> <u>Ayşe'yi</u> fena bozdu.
   Theme Experiencer
   (NOM)   (ACC)
   Ali embarrassed Ayşe badly.

(5) <u>Kadın</u> <u>adamı</u> tanıştıkları ilk saniyede büyüledi.
   Theme Experiencer
   (NOM)   (ACC)
   The woman charmed the man the first second that they met.

(6) <u>Ayşe</u> <u>Ali'yi</u> sakinliği ile cezbetti.
   Theme Experiencer
   (NOM)   (ACC)
   Ayşe charmed Ali with her calmness.

(7) <u>Ayşe</u> <u>Ali'yi</u> çok etkiledi.
   Theme Experiencer
   (NOM)   (ACC)
   Ayşe influenced Ali very much.

(8) <u>Babam</u> <u>beni</u> çok kırdı.
   Theme   Experiencer
   (NOM)   (ACC)
   My father hurt me very much.

(9) <u>Ayşe</u> <u>Ali'yi</u> gidişiyle sarstı.
   Theme Experiencer
   (NOM) (ACC)
   Ayşe gave Ali a shock with her going.

(10)   <u>Ayşe</u> <u>Ali'yi</u> üzdü.
   Theme Experiencer
   (NOM)   (ACC)
   Ayşe made Ali upset.

According to their input of verbalization, similar to Type 1, there are five sources for this process:

1. a non-derived/ simple base: *boz-, kır-, sars-, üz-...*

2. a verb: *ayar-t-, kışkır-t-...*

3. a noun: *büyü-le-, etki-le-...*

4. an adjective: *ergin-le-.*

5. a compound base: *cezb-et-.*

These verbs too, can be either mental as in *aydınlat-, sına-* or emotional as in *bay-, boğ-, boz-, büyüle-, etkile-.*

II. 2. 3. Type 3 Psych Verbs

These are intransitive verbs. Similar to Type 1 verbs they have an Experiencer argument as the subject but they have a Theme argument as the indirect object. What is different is the oblique case marking of the Theme argument. We can regroup the verbs of Type 3 with respect to their case marking in the following way:

1. *Type 3a*: For Type 3 verbs with *dative* marked Themes which are the greatest in number.

2. *Type 3b*: For Type 3 verbs with *ablative* marked Themes which are less great in number than Type 3 a.

II. 2. 3. 1. Type 3a Psych Verbs

These verbs have *dative* marked Themes. The dative Theme semantically is a kind of *goal* or *cause* of the mentioned mental or emotional state. These verbs optionally allow a *source* or a *secondary cause* argument:

(1) <u>Ayşe Ali'ye</u> acıdı.
Experiencer Theme
(NOM)   (DAT)
Ayşe felt pity for Ali.

(2) <u>Ayşe Ali'ye</u> darıldı.
Experiencer Theme
(NOM)   (DAT)
Ayşe put out with Ali.

(3) <u>Ali Ayşe'ye</u> çok güveniyor.
Experiencer Theme
(NOM)   (DAT)
Ali trusts Ayşe very much.

(4) <u>Ayşe arkadaşına</u> imreniyor.
Experiencer   Theme
(NOM)   (DAT)
Ayşe longs for her friend.

(5) Ayşe kadere inanıyor.
Experiencer   Theme
 (NOM)   (DAT)
Ayşe believes the faith.

(6) Ali yalanımıza kandı.
Experiencer   Theme
 (NOM)   (DAT)
Ali was fooled with our lie.

(7) Ali bize kırıldı.
Experiencer Theme
 (NOM) (DAT)
 Ali was offended at us.

(8) Ali bize kızdı.
Experiencer Theme
(NOM) (DAT)
Ali got angry with us.

(9) Ali Ayşe'ye küstü.
Experiencer Theme
(NOM) (DAT)
Ali put out with Ayşe.

(10)   Gençler şimdi Tarkan gibi pop yıldızlarına özeniyor.
       Experiencer   Theme
       (NOM)   (DAT)
      Young people consider popstars like Tarkan as a model nowadays.

Mostly, the verbs of Type 3a are emotional as in *beğen-, gücen-, heveslen-, inan-, kırıl-, tutul-, vurul-* however; there are mental verbs too such as *aldan-, kan-, şaşır-*.

When we look at the inputs of the verbalization process we see that the five sources for the other two groups are valid for Type 3a verbs too:

1. a non-derived/ simple base: *dal-, imren-, inan-, kan-, kız-, küs-, özen-, yüksün-...*

2. a verb: *al-ın-, bay-ıl-, boz-ul-, kap-tır-, kır-ıl-, tut-ul-...*

3. a noun: *cezbe-len-, dert-len-, efkar-lan-, hüzün-len-, odak-lan-, öfke-len-, ümit-len-...*

4. an adjective: *aksi-len-, deli-len-, dik-len-, ters-len-, yeşil-len-, zor-sun-...*

5. a compound base: *kahr-ol- and sabr-et-*.

II. 2. 3. 2. Type 3b Psych Verbs

These verbs have *ablative* marked Themes which may be interpreted as the *source* or the *cause* of the mental or emotional state.

(1) <u>Adam</u> <u>hakaretlerden</u> bezmişti.
   Experiencer   Theme
   (NOM)   (ABL)
   The man was fed up with the insults.

(2) <u>Çocuklar</u> <u>sebze yemeğinden</u> bıktı.
   Experiencer   Theme
   (NOM)   (ABL)
   The children were fed up with vegetable meals.

(3) <u>Ali</u> <u>kalabalıktan</u> çekindi.
   Experiencer   Theme
   (NOM)   (ABL)
   Ali was ashamed of the crowd.

(4) <u>Ayşe</u> <u>Ali'den</u> hoşlanıyor.
   Experiencer   Theme
   (NOM)   (ABL)
   Ayşe likes Ali.

(5) <u>Herkes</u> bu sıralar <u>depremden</u> korkuyor.
   Experiencer   Theme
   (NOM)   (ABL)
   Everyone fears the earthquake nowadays.

(6) <u>Polis</u> <u>adamın karısından</u> kuşkulanıyor.
   Experiencer   Theme
   (NOM)   (ABL)
   The police are suspected of the man's wife.

(7) <u>Öğrenciler</u> <u>bu dersten</u> soğumuştu.
   Experiencer   Theme
   (NOM)   (ABL)
   The students have lost their interest in this course.

(8) <u>Ali</u> <u>balıktan</u> tiksinir.
   Experiencer   Theme
   (NOM)   (ABL)
   Ali feels disgust for the fish.

(9) <u>Adam</u> <u>kimseden</u> utanmıyor.
   Experiencer   Theme
   (NOM)   (ABL)
   The man is not ashamed of anyone.

(10)   <u>Ayşe</u> <u>rüzgar sesinden</u> bile ürküyordu.
   Experiencer   Theme
   (NOM)   (ABL)
   Ayşe was scared even of the sound of the wind.

Mostly these verbs are emotional such as *bık-, bunal-, hoşlan-, iğren-, soğu-* though they may be mental in a lesser number such as *kuşkulan-, şüphelen-.*

These verbs allow only animate beings to be their subjects as in *bunal-, kaygılan-, utan-, ürk-, yıl-* but not inanimate ones.

The mentioned five inputs are also valid for this class:

1. a non-derived/ simple base: *bık-, bunal-, kork-, tiksin-, usan-* ...

2. a verb: *çek-in-, es-in-len-, sık-ıl-, um-ut-lan-* ...

3. a noun: *huy-lan-, kaygı-lan-, kuşku-lan-, şüphe-len-* ...

4. an adjective: *dar-al-, hoş-lan-, hoş-laş-* ...

5. a compound base: *haz-z-et-.*

Nilsson (1985) uses the term predicates of "mental reaction" for the psych verbs and analyzes them as two groups; one requiring the ablative and the other allative (dative) case. In her analysis, the first group consists of verbs like *bık-, usan-, soğu-, nefret et-* and the second group consists of verbs like *bayıl-, doy-* etc.

She claims that verbs of mental reaction which take the allative case like *darıl-, güven-, inan-* have an object which can be qualified as an *abstract goal.* These verbs describe *an attitude of X towards Y.*

The other group which take the ablative like *duygulan-, umutlan-, yorul-* describe *a certain reaction of X due to Y* and therefore, the object can be qualified as an *abstract source* or *a point of reference.*

Nilsson puts forward that there are some other verbs which allow both the allative and the ablative cases to be their objects including *dertlen-, emin ol-, gücen-, incin- , kaygılan-, memnun ol-, razı ol-, utan-.*

Nilsson observes that this choice between the two cases is sensitive to the temporal properties. For her (1) expresses a single future event whereas (2) expresses an enduring certainty (1985:115):

(1) Derhal dediğimi <u>yapacağına</u> eminim.
   (DAT)
   I am sure that he will immediately do as I say.

(2) Derhal <u>toparlanacağımdan</u> eminim.
   (ABL)
   I was sure that I would immediately pull myself together.

In such cases where the ablative and the allative cases seem to be the alternatives of each other, Nilsson observes the following differences (1985: 116):

1. Ablative has a wider field of application than the allative (as (3) shows).

2. Ablative relates to continuous events or repeated instances

3. Ablative relates to events whose time component is quite indefinite, therefore, there is a *less specified/ more diversified* relation.

4. Allative refers to a *more specified* relation.

5. Allative notes a *future* action (as (4) and (5) show).

6. Ablative notes either a *factual* or a *potential* action (as (6) and (7) show).

(3) Ben <u>arkadaşımdan</u> eminim.
   (ABL)
   I feel certain about my friend.
   *Ben <u>arkadaşıma</u> eminim.
   (DAT)

(4) Yanınıza <u>girmeye</u> utanıyor.
   (DAT)
   He is bashful to come up to you.

(5) Sokağa <u>çıkmaya</u> korkuyor.
   (DAT)
   He is afraid to go out.

(6) Utanıyorum <u>istemekten</u> ama...
   (ABL)
   It embarrasses me to ask for but...

(7) Gelmeyi <u>düşünmekten</u> bile korkuyordu.
   (ABL)

Even the thought of coming scared him.

This alternative choice between the two case markings of the same verb is not just a feature of mental predicates. Nilsson gives examples from other groups of verbs which allow for the same choice (1985: 117).

(8) a. Kardeşim İzmir'de yerleşti.
          (ABL)

b. Kardeşim İzmir'e yerleşti.
        (DAT)

Nilsson (1985) sees this freedom in the choice of case marking as a language specific phenomenon and argues that this may be independent of lexical meaning but it is rather related to the interpretation of the context and the "speaker's perception of the relationship between the entities" (117).

In our analysis of Type 3a and 3b psych verbs, we have seen that both of these case markings may imply a kind of *cause* of the mental/ emotional state of the Experiencer. This is the reason why we added the notion of *cause* as a meaning component of both the dative and the ablative marked arguments.

According to our analysis, in fact, the following examples may entail different semantic interpretations with ablative and dative:

(9) Ali yurtdışına gitmeye korkuyor.
   (NOM)   (DAT)

(10)   Ali yurtdışına gitmekten korkuyor.
        (NOM)   (ABL)

In (10) Ali has gone to abroad before, has experienced something there and his fear is related to the result of the activity that he already knows. However, in (9), this is the first time that he will go to abroad and his fear is not related to the result (which is unknown at that moment) but related to the event itself which may have potential (guessed, expected or heard) unwanted results to be experienced.

There are two more intransitive psych verbs but they are not grammatically significant to form a type on their own:

There is only one verb in our data that requires for a *locative* marked Theme argument; *yanıl-*. This is a mental verb whose input is a non-derived/ simple base:

(1) <u>Ayşe</u> <u>bu konuda</u> çok yanılıyor.
Experiencer   Theme
(NOM)   (LOC)
    Ayşe was mistaken about this point.

There are seven verbs which have *instrumental* case marked Themes. All of these verbs are semantically emotional type and all require for animate subjects.

(1) <u>Ayşe</u> <u>eski hatıralarla</u> avunuyor.
Experiencer   Theme
(NOM)   (INST)
    Ayşe consoles herself with the old memories.

(2) <u>Adam</u> <u>oğlunun başarısıyla</u> gururlanıyordu.
Experiencer   Theme
(NOM)   (INST)
    The man was proud of the success of his son.

(3) <u>Ayşe</u> <u>Ali ile</u> ilgileniyor.
Experiencer   Theme
(NOM)   (INST)
    Ayşe is attracted to Ali.

(4) <u>Kız</u> <u>güzelliği ile</u> kibirleniyordu.
Experiencer   Theme
(NOM)   (INST)
    The girl was arrogant of her beauty.

One of the verbs in this class is derived from a simple base ; *avun-*, one of them is derived from a verb; *şiş(in)-*, four verbs are derived from nouns; *alaka(lan)-*, *gurur(lan)-*, *ilgi(len)-*, *kibir(len)-* and only one verb is derived from an adjective; *şen(len)-*.

II. 2. 4.　　Type 4 Psych Verbs

These verbs are distinct from the other intransitive verbs of Type 3 since they do not have a Theme argument. Therefore the only argument that they have is a nominative Experiencer which are mostly expressed in passive in English. This group of psych verbs does not correspond to any of the defined psych verb classes in other languages. Therefore it seems to exist only in Turkish.

(1) Ayşe afalladı.
Experiencer
(NOM)
Ayşe was bewildered.

(2) Kalabalık coştu.
Experiencer
(NOM)
The crowd cheered.

(3) Ayşe son günlerde dalgılaştı.
Experiencer
(NOM)
Ayşe became lost in thoughts recently.

(4) Dedem yaşlandıkça duruldu.
Experiencer
(NOM)
My grandfather calmed down as he got old.

(5) Ben bu ortamda çok geriliyorum.
Experiencer
(NOM)
I am tensed up very much in this atmosphere.

(6) Bebek huysuzlaştı.
Experiencer
(NOM)
The baby got uncomfortable.

(7) Babam çabuk parlar.
Experiencer
(NOM)
My father gets furious quickly.

(8) Bu kız iyice uçurdu.
Experiencer
(NOM)
This girl really went insane.

(9) <u>Kadın</u> bir türlü yatışmıyordu.
Experiencer
(NOM)
The woman could not be calmed down in any way.

(10)   <u>Annem</u> düne oranla biraz yumuşadı.
Experiencer
(NOM)
My mother became a little more tolerant compared to yesterday.

Only a few number of these verbs are mental such as *ahmaklaş-, aptallaş-, salaklaş-* as well as *alıklaş-, bilinçlen-, tozut-, uç-, uçur-* etc. The rest of the Type 4 verbs are emotional such as *coşkulan-, coş-, kudur-, parla-, uysallaş-, ürkekleş-* etc.

The four inputs for the verbalization are as follows:

1. a non-derived base: *afalla-, apış-, az-, bat-, bit-, coş-, çök-, dol-, sin* ...

2. a verb: These verbs are mostly derived with *-lAn* or *–lAş* either from nouns such as *coş-ku-lan-, bil-inç-len-* or from adjectives such as *coş-kun-laş-, şaş-kın-laş-, dur-gun-laş-.* There are also other verbs like *dur-ul-, ger-il-, kası-n/ l-, süz-ül-, yat-ış-* which directly derive from verbs with seemingly voice suffixes.

3. a noun: These verbs are derived from nouns with *–lAn* such as *akıl-lan-, diş-len-, gam-lan-, hırs-lan-, his-len-*...

4. an adjective: These verbs are derived from adjectives with *–lAş* such as *ahmak-laş-, çılgın-laş-, hırçın-laş-, sakin-leş-, tedirgin-leş-* ...

As the above analysis shows there are four basic types of psych verbs with similar derivational patterns in Turkish. The first and the second type are transitive and the others are intransitive; one with a dative, one with an ablative and one with a null Theme argument.

II. 3.   Voice and Psych Verbs in Turkish

Although there are some common logical constraints for voice, there are no universal structures which are uniform among different languages.

Voice in Turkish changes the surface case marking of arguments. Traditional grammar books define voice as a property of verbs with respect to their subjects and objects. Thus, voice is analyzed from two different points of view.

According to their subjects there are four types of voices and four types of verbs which belong to these types; *active, passive, reflexive and reciprocal*. According to their objects, verbs are of two types which are *transitives* and *intransitives*:

VOICE IN TURKISH	
According to the properties of the subject	**According to the properties of the object**
Active Passive Reflexive Reciprocal	Transitive Intransitive

Table 1.   Voice in Turkish

Voice suffixes in Turkish can also function as derivational suffixes and this sometimes causes confusions. The very often confusion is among the passive and the reflexive voice markers. This is sometimes regarded as a result of the fact that one suffix has the mentioned both functions in the old Turkish. In some cases only the phonological conditions determine the attachment of the suffixes.

Tietze (1989) argues that there is an ongoing merge of passive and the reflexive forms in Turkish i.e. some verbs which have the reflexive marking have a passive meaning and vice versa. Therefore overt morphological marking does not always correspond to the semantic functions. His basic claim is that all of the verbs with the morpheme –Il were passive in their origin and some of them acquired a reflexive meaning thereafter. The following psych verbs from his list have the passive morpheme –Il but a "medioreflexive"

meaning (1989:287). Nakipoğlu (1988) regards them as reflexives. These verbs do not have *–(I)n* forms; *boğul-, bozul-, ezil-, süzül-, üzül-, vurul-, yıkıl-..*

In the other group in his list, there are verbs possessing the two forms (some of which have psych meanings):

VERB	-Il	-(I)n
çek- "to pull"	çekil- "to be pulled"	çekin- "to hesitate"
ger- "to stretch"	geril- "to get nervous"	gerin- "to be proud of"
tak- "to attach"	takıl- "to make a joke"	takın- "to adopt"
tut- "to hold"	tutul- "to fall in love"	tutun- "to insist"

Table 2.   Tietze (1989) Medioreflexive verbs

II. 3. 1.   Psych Verbs and Transitivity in Turkish

According to Taylan (nd.), Turkish psych verbs constitute a separate group of intransitive verbs. She claims that psychological verbs are the only intransitive verbs which take complements:

	Transitive verbs	Intransitive verbs	
		Psychological verbs	Other Intransitive verbs
Subject	+	+	+
Direct object complement	+	-	-
Other type of complement	-	+	-
Adjunct	+	+	+

Table 1.   Psych Verbs and Other Intransitives

In our analysis, of the four types of psych verbs in Turkish, only the Type 1 and Type 2 are transitive and the rest are intransitive:

TYPE	TRANSITIVE	INTRANSITIVE
1	+	-
2	+	-
3a	-	+
3b	-	+
4	-	+

Table 2.   Transitivity in Turkish Psych Verbs

It is possible in Turkish optionally to delete the arguments of Type 3a and 43b whenever the discoursal factors allow. The following verbs of Type 3a for example allow the deletion of their dative marked Themes requiring mostly (but not always) an adverbial support (*iyice, fena* etc.):

TYPE	VERB	With (DAT)	Optional Deletion of (DAT)
3a	çıldır-	Adam bu tavırlara çıldırıyor. (The man gets mad because of these attitudes.)	Adam resmen çıldırıyor. (The man really gets mad.)
3a	dal-	Ayşe derse dalmış. (Ayşe became lost in the lesson.)	Ayşe iyice dalmış. (Ayşe was deeply lost.)
3a	köpür-	Öğretmen çocuklara köpürdü. (The teacher got angry at the students.)	Öğretmen fena köpürdü. (The teacher got angry badly.)
3a	patla-	Patron bize patladı. (The boss exploded on us.)	Patron sonunda patladı. (The boss exploded at the end.)

Table 3. Optional Argument Deletion of Base Type 3a Verbs

These verbs of Type 3a are most of the time derived with either *–lAn* or *-lAş*:

TYPE	NOUN/ ADJECTIVE+- (lAn)/ -(lAş)	With (DAT)	Optional Deletion of (DAT)
3a	duy-gu-lan-	Ayşe filme duygulandı. (Ayşe was affected by the film.)	Ayşe duygulandı. (Ayşe was affected)
3a	huy-suz-lan-	Bebek gürültüye huysuzlandı. (The baby became uncomfortable because of the noise.)	Bebek huysuzlandı. (The baby became uncomfortable.)
3a	sev-da-lan-	Ali Ayşe'ye sevdalandı. (Ali felt in love with Ayşe.)	Ali sevdalandı. (Ali felt in love.)
3a	aksi-len-	Dede torunlarına aksilendi. (The grandfather became obstinate to his grandchildren.)	Dede aksilendi. (The grandfather became obstinate.)
3a	deli-len-	Kocası bu sözlere delilendi. (Her husband went insane for these words.)	Kocası delilendi. (Her husband went insane.)
3a	dik-le-	Adam patronuna diklendi. (The man got stubborn to his boss.)	Adam diklendi. (The man got stubborn.)
3a	heves-len-	Çocuklar tatile heveslendi. (The children desired for the holiday.)	Çocuklar heveslendi. (The children became desirous.)
3a	hüzün-len-	Ayşe bu şarkılara hüzünleniyor. (Ayşe becomes sad because of these songs.)	Ayşe hüzünleniyor. (Ayşe becomes sad.)
3a	keyif-len-	Annem mutluluğumuza keyiflendi. (My mother took pleasure of our happiness.)	Annem keyiflendi. (My mother took pleasure.)
3a	ters-len-	Ali babasına terslendi. (Ali got befouled to his father.)	Ali terslendi. (Ali got befouled.)
3a	duy-ar-sız-laş-	Çocuk hakaretlere duyarsızlaştı. (The child was desensitized with the insults.)	Çocuk duyarsızlaştı. (The child was desensitized.)

Table 4. Optional Argument Deletion of Derived Type 3a Verbs

There are also verbs of Type 3b which allow the optional deletion of their ablative Themes:

TYPE	VERB		
3b	endişe-len-	Ailesi hastalığından endişeleniyor. (Her family worries about her illness.)	Ailesi endişeleniyor. (Her family worries.)
3b	gocun-	Ayşe sözlerimden gocundu. (Ayşe took offense at my words.)	Ayşe gocundu. (Ayşe took offence.)

3b	huy-lan-	Ali adamın tavırlarından huylandı. (Ali got uneasy with the man's attitudes.)	Ali huylandı. (Ali got uneasy.)
3b	kaygı-lan-	Ailesi hastalığından kaygılanıyor. (Her family worries about her illness.)	Ailesi kaygılanıyor. (Her family worries.)
3b	onur-lan-	Ali bu davranıştan çok onurlandı. (Ali felt honored very much with this behavior.)	Ali çok onurlandı. (Ali felt honored very much.)
3b	soğu-	Arkadaşları ondan soğudu. (His friends lost their love for him.)	Arkadaşları soğudu. (His friends lost their love.)

Table 5.   Optional Argument Deletion of Type 3b Verbs

II. 3. 2.   Psych Verbs and Causativity in Turkish

Causativity can be regarded as a transitivizing operation which makes intransitive verbs transitive adding a Causer argument to the argument structure. If the verb is already a transitive verb, the causativity has the function of increasing the degree of the transitivity of the verb.

There are two types of causativity in Turkish; morphological and periphrastic. Periphrastic causatives are formed with predications like *sağla-*, *neden ol-* etc. Morphological causatives on the other hand uses one of the causative suffixes *–(D)Ir*, and *-(I)t*. The affix to be attached is determined by the phonological conditions.

Multiple causation is also possible in Turkish. Theoretically there is no limit to the addition of the Causer arguments but, as the number of the Causers and Causees increase, it gets harder to interpret the causative events semantically. Thus, there is a semantic restriction (though not logical) on the number of the Causers to be added, not just for psych causatives but for all causative events. Therefore, the addition of Causer arguments is limited with the causative events which can be interpretable. It may also have discoursal and stylistic functions but beyond the interpretability boundary, multiple causation is a vacuous application.

This section analyzes the relationship between the psych verb types in Turkish and causativity. The analysis shows that morphologically there are five causativity types valid for all psych verb classes:

1.   Morphological Causatives: They utilize one of the phonologically determined causative morphemes.

   1. 1.   There are psych verbs that can be causativized which we will refer to as *(+) Caus.*

   1. 2.   There are psych verbs only the causative forms of which have psych meanings which we will refer to as *Only Caus.*

   1. 3.   There are verbs that can be causativized but the causative form and the non-causative form of the verb have different meanings which are both psych which we will refer to as *Diff. Psych.*

   1. 4.   There are psych verbs only the non-causative forms of which have psych meanings which we will refer to as *Only Non Caus.*

   1. 5.   There are psych verbs that can not be causativized which we will refer to as *(-) Caus.*

2.   Periphrastic causatives: They utilize one of the predications like *sağla-* and *neden ol-.*

II. 3. 2. 1.   Morphologically Causative Psych Verbs

II. 3. 2. 1. 1.   Type 1 Psych Verbs and Morphological Causativity

Type 1 has psych verbs which belong to five of the mentioned classes:

(+) CAUS.	ONLY CAUS.	DIFF. PSYCH	NON- CAUS.	(-) CAUS.
affet –(DIr)-	anlamlan -(DIr)-	çak≠ çak -(DIr)-	anla –(t)-	algıla –(t)-
anımsa –(t)-	oyna –(t)-	kap≠ kap -(DIr)-	iste –(t)-	arzula –(t)-
bağışla –(t)-	ye -(DIr)-		kıvır –(t)-	dile –(t)-
beğen –(DIr)-	bat –(Ir)-			garipse –(t)-
benimse –(t)-	çık –(Ir)-			kötümse –(t)-
düşün –(DIr)-				kurgula –(t)-
hatırla –(t)-				önemse –(t)-
hisset –(DIr)-				öngör –(DIr)-
kavra –(t)-				san –(DIr)-
kıskan –(DIr)-				um –(DIr)-
sev –(DIr)-				varsay –(DIr)-
sez –(DIr)-				yargıla –(t)-
unut –(DIr)-				zannet –(DIr)-

Table 1.   Type 1 Psych Verbs and Causativity

In the first class there are psych verbs which can be causativized such as:

(1) a. Ali Ayşe'yi affetti.
   Experiencer   Theme
     (NOM)   (ACC)
     Ali forgave Ayşe.

b. Ali Ayşeyi Ahmet'e affettirdi.
   Causer   Theme   Experiencer
   (NOM)   (ACC)   (DAT)
   Ali made Ahmet forgive Ayşe.

c. Ali Ahmet'e Ayşe'yi affettirdi.
   Causer Experiencer   Theme
   (NOM)   (DAT)   (ACC)
   Ali made Ahmet forgive Ayşe.

d. Ali Ayşe'yi affettirdi.
   Causer   Theme
   (NOM)   (ACC)
   Ali made Ayşe be forgiven.

e. *Ali Ahmet'e affettirdi.
     Causer Experiencer
     (NOM)   (DAT)
   *Ali made Ahmet forgive.

f. Ali kendini Ayşe'ye affettirdi.
   Causer   Theme   Experiencer
   (NOM)   (ACC)   (DAT)
   Ali made himself be forgiven by Ayşe.

g. Ali Ayşe'ye kendini affettirdi.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ali made himself be forgiven by Ayşe.

h. Ali kendini affettirdi.
Causer Theme
(NOM) (ACC)
Ali made himself be forgiven.

(2) a. Ali bu fikri benimsedi.
Experiencer Theme
(NOM) (ACC)
Ali adopted this idea.

b. Ali Ayşe'ye bu fikri benimsetti.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ali made Ayşe adopt this idea.

(3) a. Ayşe Türk kahvesini sevdi.
Experiencer Theme
(NOM) (ACC)
Ayşe loved the Turkish coffee.

b. Ahmet Ayşe'ye Türk kahvesini sevdirdi.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ahmet made Ayşe love the Turkish coffee.

c. Ali Ayşe'yi sevdi.
Experiencer Theme
(NOM) (ACC)
Ali loved Ayşe.

d. ? Ahmet Ali'ye Ayşe'yi sevdirdi.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ahmet made Ali love Ayşe.

(4) a. Ali kötü haberi sezdi.
Experiencer Theme
(NOM) (ACC)
Ali felt the bad news.

b. Ali Ayşe'ye kötü haberi sezdirdi.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ali implied the bad news to Ayşe.

(5) a. Ali eski günleri unuttu.
Experiencer Theme
(NOM) (ACC)
Ali has forgotten the past.

b. Ali Ayşe'ye eski günleri unutturdu.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ali made Ayşe forget the past.

In (1a), the verb *affet-* has a nominative subject and an accusative object. In the causative form (1b), a *Causer* argument is added to the subject position, the Theme is still accusative but the Experiencer is dative.

(1c) shows that the reversal order of the Theme and the Experiencer is also possible keeping the case marking of the thematic arguments the same. Whichever argument is in the preverbal position, it is the focused one. In (1d), we see that the Causer argument and the accusative marked Theme argument can be used without the Experiencer. This accusative Theme can also be a reflexive pronoun with or without the dative Experiencer as in (1f) and (1g). However, the Causer and the Experiencer without the Theme is ungrammatical as in (1e). The English counterpart missing a Theme argument is also ungrammatical. All these can be formulated as:

Type 1 Psych Construction	Type 1 Causative Psych Construction
Experiencer + Theme (NOM) (ACC)	Causer+ Experiencer+ Theme (NOM) (DAT) (ACC)
	Causer + Theme+ Experiencer (NOM) (ACC) (DAT)
	Causer+ Theme (NOM) (ACC)
	* Causer+ Experiencer (NOM) (DAT)

Table 2.   Type 1 Causative Psych Construction

(3b) also seems to be more acceptable than (3d). The verb *sev₁-* in (3b) means "changing one's attitude in a more positive way" but *sev₂-* in (3c) and (d) means "to have romantic feelings for someone or to feel attracted to someone".

However, there are some exceptions to the causativity rules above. In the following sentences, there are psych verbs which have a nominative Causer and an accusative Theme ((6)- (12) sentences). These sentences are normally interpreted as if there is an implied Experiencer argument. This dative marked Experiencer is optional ((b) examples).

(c) and (d) examples suggest the two alternative interpretations of (a)s. In (c)s, there is a nominative Causer and a genitive Theme with a periphrastic causative which nominalizes the verb. In (d)s, there is a nominative Causer and a genitive Theme with an optional Experiencer. Here, similarly, there is a periphrastic causative nominalizing the passivized verb. This kind of a passive interpretation can also be observed in the English translations of the sentences.

From (6) to (12) of the following, all sentences normally accept the interpretation (d) rather than (c):

(6)a. Ali Ayşe'yi affettirdi.
   Causer Theme
   (NOM)   (ACC)
   Ali made Ayşe be forgiven.

b. Ali Ayşe'yi herkese affettirdi.
              Experiencer
              (DAT)

c. *Ali Ayşe'nin affetmesini sağladı/ neden oldu.

d. Ali Ayşe'nin (herkes tarafından) affed(il)mesini sağladı/ neden oldu.

(7)a. Ali Ayşe'yi anımsattı.
   Causer Theme
   (NOM)   (ACC)
   Ali made Ayşe be remembered.

b. Ali Ayşe'yi herkese anımsattı.
              Experiencer
              (DAT)

c. *Ali Ayşe'nin anımsamasını sağladı/ neden oldu.

d. Ali Ayşe'nin (herkes tarafından) anımsa(n)masını sağladı/ neden oldu.

(8)a. Ali Ayşe'yi bağışlattı.
   Causer Theme
   (NOM)   (ACC)
   Ali be Ayşe be forgiven.

b. Ali Ayşe'yi herkese bağışlattı.
              Experiencer
              (DAT)

c. *Ali Ayşe'nin bağışlamasını sağladı/ neden oldu.)

d. Ali Ayşe'nin (herkes tarafından) bağışla(n)masını sağladı/ neden oldu.

(9)a. Ali Ayşe'yi beğendirdi.
Causer   Theme
(NOM)   (ACC)
Ali made Ayşe be liked.

b. Ali Ayşe'yi herkese beğendirdi.
Experiencer
(DAT)

c. *Ali Ayşe'nin beğenmesini sağladı/ neden oldu.

d. Ali Ayşe'nin (herkes tarafından) beğen(il)mesini sağladı/ neden oldu.

(10)a. Ali Ayşe'yi benimsetti.
Causer   Theme
(NOM)   (ACC)
Ali made Ayşe be accepted.

b. Ali Ayşe'yi herkese benimsetti.
Experiencer
(DAT)

c. *Ali Ayşe'nin benimsemesini sağladı/ neden oldu.

d. Ali Ayşe'nin (herkes tarafından) benimse(n)mesini sağladı/ neden oldu.

(11)   a. Ali Ayşe'yi sevdirdi.
Causer   Theme
(NOM)   (ACC)
Ali made Ayşe be loved.

b. Ali Ayşe'yi herkese sevdirdi.
Experiencer
(DAT)

c. *Ali Ayşe'nin sevmesini sağladı/ neden oldu.

d. Ali Ayşe'nin (herkes tarafından) sev(il)mesini sağladı/ neden oldu.

(12)   a. Ali Ayşe'yi unutturdu.
Causer   Theme
(NOM)   (ACC)
Ali made Ayşe be forgotten.

b. Ali Ayşe'yi herkese unutturdu.
Experiencer
(DAT)

c. *Ali Ayşe'nin unutmasını sağladı/ neden oldu.

d. Ali Ayşe'nin (herkes tarafından) unut(ul)masını sağladı/ neden oldu.

However, in (13a) and (14a) Ayşe is an accusative Experiencer not a Theme unlike (6)- (12) above. Therefore (b)s are unacceptable and the normal interpretations are (c)s but not (d)s:

(13) a. Ali Ayşe'yi düşündürdü.
Causer Experiencer
(NOM) (ACC)
Ali made Ayşe think.

b. *Ali Ayşe'yi herkese düşündürdü.
Causer Experiencer Theme
(NOM) (ACC) (DAT)

c. Ali Ayşe'nin düşünmesini sağladı/ neden oldu.

d. *Ali Ayşe'nin (herkes tarafından) düşün(ül)mesini sağladı/ neden oldu.

(14) a. Ali Ayşe'yi kıskandırdı.
Causer Experiencer
(NOM) (ACC)
Ali made Ayşe envy.

b. *Ali Ayşe'yi herkese kıskandırdı.
Causer Experiencer Theme
(NOM) (ACC) (DAT)

c. Ali Ayşe'nin kıskanmasını sağladı/ neden oldu.

d. *Ali Ayşe'nin (herkes tarafından) kıskan(ıl)masını sağladı/ neden oldu.

The conclusion could be that the verbs in (13) and (14) are not the causative forms of the verbs *kıskan-* and *düşün-* rather they are separate lexical entries which belong to Type 2 psych verbs:

(15) a. Ali Ayşe'yi kıskandı. (Type 1)
Experiencer Theme
(NOM) (ACC)

b. Ali Ayşe'yi kıskandırdı. (Type 2)
Theme Experiencer
(NOM) (ACC)

c. Ali Ayşe'yi düşündü. (Type 1)
Experiencer Theme
(NOM) (ACC)

d. <u>Ali</u> <u>Ayşe'yi</u> düşündürdü. (Type 2)
Theme Experiencer
(NOM) (ACC)

For these verbs, the rule above can be restated adding the last two formulas:

Type 1 Psych Construction	Type 1 Causative Psych Construction
<u>Experiencer</u> + <u>Theme</u> (NOM) (ACC)	<u>Causer</u>+ <u>Experiencer</u>+ <u>Theme</u> (NOM) (DAT) (ACC)
	<u>Causer</u> + <u>Theme</u>+ <u>Experiencer</u> (NOM) (ACC) (DAT)
	<u>Causer</u>+ <u>Theme</u> (NOM) (ACC)
	* <u>Causer</u>+ <u>Experiencer</u> (NOM) (DAT)
	<u>Causer</u>+ <u>Experiencer</u> (NOM) (ACC)
	*<u>Causer</u>+ <u>Experiencer</u>+ <u>Theme</u> (NOM) (ACC) (DAT)

Table 3. Type 1 Causative Psych Construction (Revised)

There are some verbs of Type 1 which can not be causativized:

(1) a. <u>Ayşe</u> <u>Ali'yi</u> arzuladı.
Experiencer Theme
(NOM) (ACC)
Ayşe desired for Ali.

b. *<u>Ahmet</u> <u>Ayşe'ye</u> <u>Ali'yi</u> arzulattı.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
*Ahmet made Ayşe desire for Ali.

(2) a. <u>Ayşe</u> <u>evliliği</u> diledi.
Experiencer Theme
(NOM) (ACC)
Ayşe wished for marriage.

b. *<u>Ali</u> <u>Ayşe'ye</u> <u>evliliği</u> diletti.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
*Ali made Ayşe wish for marriage.

(3) a. <u>Ali</u> <u>bu davranışları</u> garipsedi.
Experiencer Theme
(NOM) (ACC)
Ali found these behaviors strange.

b. *<u>Ayşe</u> <u>Ali'ye</u> <u>bu davranışları</u> garipsetti.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
*Ayşe made Ali find these behaviors strange.

(4) a. <u>Ali</u> <u>bu dersi</u> hafifsedi.
Experiencer Theme
(NOM) (ACC)
Ali took this course lightly.

b. *Arkadaşları Ali'ye bu dersi hafifsetti.
Causer   Experiencer Theme
(NOM)   (DAT)   (ACC)
*His friends made Ali take this course lightly.

(5) a. Ayşe ailesini her zaman önemsedi.
Experiencer   Theme
(NOM)   (ACC)
Ayşe has always cared about his family.

b. *Ali Ayşe'ye ailesini önemsetti.
Causer Experiencer   Theme
(NOM) (DAT)   (ACC)
*Ali made Ayşe care about her family.

When the Causer is inanimate, causative forms of these verbs especially with a

generic Experiencer seem more acceptable (although they are not perfect):

(6) a. ?Bu reklam bana kola içmeyi arzulatıyor.
Causer   Experiencer Theme
(NOM)   (DAT)   (ACC)
This commercial makes me desire for cola.

b. Bu reklam insana kola içmeyi arzulatıyor.
Causer   Experiencer Theme
(NOM)   (DAT)   (ACC)
This commercial makes people desire for cola.

(7) ?Onların mutluluğu Ali'ye evliliği diletti.
Causer   Experiencer Theme
(NOM)   (DAT)   (ACC)
Their happiness caused Ali to wish for marriage.

(8) ?Gördüklerim ve duyduklarım bana da bu davranışları garipsetti.
Causer   Experiencer   Theme
(NOM)   (DAT)   (ACC)
What I had seen and heard caused me too to find these behaviors strange.

(9) ?Sınavda aldığı iyi notlar Ali'ye bu dersi hafifsetti.
Causer   Experiencer Theme
(NOM)   (DAT)   (ACC)
Good grades that he got made Ali take this course lightly.

(10) ?Ayşe'nin telkinleri Ali'ye ailesini önemsetti.
Causer   Experiencer Theme
(NOM)   (DAT)   (ACC)
Ayşe's consolations made Ali care about his own family.

II. 3. 2. 1. 2.   Type 2 Psych Verbs and Morphological Causativity

As we mentioned in the previous chapters, there is a universality in the unexpected behavior of Type 2 psych verbs. Sometimes the aspectual properties were seen as the reason for this. The most thoroughly discussed of these properties is the *causation* which is assumed to be inherent in the meaning of these verbs.

Our analysis of Type 2 psych verbs in Turkish shows that none of these verbs can be used causatively:

(+) CAUS.	ONLY CAUS.	DIFF. PSYCH	NON- CAUS.	(-) CAUS.
Ø	ayar –(t)- avu –(t)-- kışkır –(t)-	Ø	Ø	All of the Type 2 verbs

Table 4.   Type 2 Psych Verbs and Causativity

Therefore, the assumption that the semantic notion of causation is inherent in the meaning of these verbs seems to be valid in Turkish too as the ungrammaticality of the following causative counterparts demonstrate:

(1) a. <u>Konuşmacı dinleyicileri</u> baydı/ sıktı.
        Theme   Experiencer
        (NOM)   (ACC)
    The speaker bored the audience.

    b. *<u>Adam konuşmacıya dinleyicileri</u> baydırdı/ sıktırdı.
        Causer   Theme   Experiencer
        (NOM)   (DAT)   (ACC)
    *The man made the speaker bore the audience.

(2) a. <u>Ayşe Ali'yi</u> herkesin önünde bozdu.
        Theme Experiencer
        (NOM)   (ACC)
    Ayşe humiliated Ali in front of everyone.

    b. *<u>Ahmet Ali'ye Ayşe'yi</u> herkesin önünde bozdurdu.
        Causer   Theme   Experiencer
        (NOM)   (DAT)   (ACC)
    *Ahmet made Ali humiliate Ayşe in front of everyone.

Another use of *boz-* as a compound with a possessive psych noun like *keyfini/ moralini* etc. in causative is acceptable:

c. Ayşe Ali'nin moralini bozdu.
Theme   Experiencer
(NOM)   (ACC)
Ayşe depressed Ali.

d. Ahmet Ayşe'ye Ali'nin moralini bozdurdu.
Causer   Theme   Experiencer
(NOM) (DAT)   (ACC)
Ahmet made Ayşe depress Ali.

(3) a. Ayşe Ali'yi çok etkiledi.
Theme   Experiencer
(NOM)   (ACC)
Ayşe affected Ali deeply.

b. *Ahmet Ayşe'ye Ali'yi çok etkiletti.
Causer   Theme Experiencer
(NOM) (DAT) (ACC)
*Ahmet made Ayşe affect Ali deeply.

(4) a. Ayşe Ali'yi kırdı.
Theme Experiencer
(NOM) (ACC)
Ayşe hurt Ali.

b. *Ahmet Ali'ye Ayşe'yi kırdırdı.
Causer   Theme Experiencer
(NOM) (DAT) (ACC)
*Ahmet made Ali hurt Ayşe.

(5) a. Ayşe Ali'yi sarstı.
Theme Experiencer
(NOM) (ACC)
Ayşe gave Ali a shock.

b. *Ahmet Ayşe'ye Ali'yi sarstırdı.
Causer   Theme Experiencer
(NOM) (DAT)   (ACC)
*Ahmet made Ayşe give Ali a shock.

(6) a. Ayşe Ali'yi üzdü.
Theme Experiencer
(NOM) (ACC)
Ayşe depressed Ali.

b. *Ahmet Ali'ye Ayşe'yi üzdürdü.
Causer   Theme Experiencer
(NOM) (DAT) (ACC)
*Ahmet made Ali depress Ayşe.

In fact there is not either a phonological or a semantic restriction to causativize these verbs. A verb like üzdür- is both phonologically and semantically possible (as the possibility of a periphrastic causative like *üzülmesini sağla-* (which will be discussed in the related chapter) demonstrates). Thus, the restriction seems to be related to only the morphological causativity.

Most of the Type 2 verbs above have primarily a non psych/ physical sense. When these are used in their first sense it is possible to causativize them; like *sık- /sık-tır-, boz- / boz-dur-, kır- / kır-dır-* etc.

There are only 3 verbs of Type 2 whose bases seem to be inseparable from the causative morpheme:

(1) a. *Ali Ayşe'yi ayardı.
 Theme Experiencer
 (NOM) (ACC)

 b. *Ahmet Ali'ye Ayşe'yi ayarttı.
 Causer Theme Experiencer
 (NOM) (DAT) (ACC)
 Ahmet made Ali seduce Ayşe.

 c. Ali Ayşe'yi ayarttı.
 Theme Experiencer
 (NOM) (ACC)
 Ali seduced Ayşe.

 d. Ahmet Ayşe'nin ayartılmasını sağladı/ neden oldu.

(2) a. *Ali Ayşe'yi aydınladı.
 Theme Experiencer
 (NOM) (ACC)

 b. *Ahmet Ali'ye Ayşe'yi aydınlattı.
 Causer Theme Experiencer
 (NOM) (DAT) (ACC)
 Ahmet made Ali enlighten Ayşe.

 c. Ali Ayşe'yi aydınlattı.
 Theme Experiencer
 (NOM) (ACC)
 Ali enlightened Ayşe.

 d. Ahmet Ayşe'nin aydınlanmasını sağladı/ neden oldu.

(3) a. <u>Ali</u> <u>Ayşe'yi</u> kışkırdı.
  Theme Experiencer
  (NOM) (ACC)

 b. *<u>Ahmet</u> <u>Ali'ye</u> <u>Ayşe'yi</u> kışkırttı.
   Causer Theme Experiencer
   (NOM) (DAT) (ACC)
 Ahmet made Ali incite Ayşe.

 c. <u>Ali</u> <u>Ayşe'yi</u> kışkırttı.
  Theme Experiencer
  (NOM) (ACC)
 Ali incited Ayşe.

 d. Ahmet Ayşe'nin kışkırmasını sağladı/ neden oldu.

In (1), (2) and (3) above the base verbs can not be used without the causative morpheme as in (1a), (2a) and (3a). The normal causative construction with the addition of a nominative Causer argument is also ungrammatical as in (1b), (2b) and (3b). The only possibility is the usual Type 2 construction; a nominative Theme and an accusative Experiencer ((1c), (2c) and (3c) with a causative semantic interpretation as in (1d), (2d) and (3d).

The grammatical and ungrammatical examples lead to the following rule for Type 2 causative psych constructions:

Type 2 Psych Construction	Type 2 Causative Psych Construction
Theme + Experiencer (ACC) (NOM)	* Causer+ Theme+ Experiencer (NOM) (DAT) (ACC)
	Theme + Experiencer (ACC) (NOM)

Table 5. Type 2 Causative Psych Construction

Therefore, the only possibility to express causativity is to use the Type 2 psych verbs in a normal psych construction. Thus we argue that these lexical causatives do not permit for further morphological causativization which means that all of the causativity rules for Type 1 verbs are invalid for Type 2 verbs.

II. 3. 2. 1. 3.   Type 3a Psych Verbs and Morphological Causativity

Type 3a psych verbs have also verbs belonging to five of the classes mentioned

above:

(+) CAUS.	ONLY CAUS.	DIFF. PSYCH	NON- CAUS.	(-) CAUS.
çıldır –(t)- darıl –(t)- duygulan –(DIr)- efkarlan –(DIr)- gücen –(DIr)- heveslen –(DIr)- huysuzlan –(DIr)- inan –(DIr)- kız –(DIr)- küs –(DIr)- öfkelen –(DIr)- özen –(DIr)- sabırsızlan –(DIr)- sinirlen –(DIr)-	al –(DIr)-	Ø	dal –(DIr)- köpür –(t)- patla –(t)- tellen –(DIr)	güven –(DIr)- kır–(DIr)- şaşakal –(DIr)- takıl –(DIr)- vurul –(DIr)-

Table 6.   Type 3a Psych Verbs and Causativity

The causativization with Type 3a verbs is the reverse procedure of the

causativization with Type 1 verbs:

Type 1 causativization:	Type 3a causativization:
1a. Ali Ayşe'yi affetti. Experiencer Theme (NOM) (ACC) Ali forgave Ayşe.	1b. Ali Ayşe'ye inandı. Experiencer Theme (NOM) (DAT) Ayşe believed Ali.
2a. Ahmet Ayşeyi Ali'ye affettirdi. Causer Theme Experiencer (NOM) (ACC) (DAT) Ahmet made Ali forgive Ayşe.	2b. Ahmet Ali'yi Ayşe'ye inandırdı. Causer Experiencer Theme (NOM) (ACC) (DAT) Ahmet made Ali believe Ayşe.
3a. Ahmet Ali'ye Ayşe'yi affettirdi. Causer Experiencer Theme (NOM) (DAT) (ACC) Ahmet made Ali forgive Ayşe.	3b. Ahmet Ayşe'ye Ali'yi inandırdı. Causer Theme Experiencer (NOM) (DAT) (ACC) Ahmet made Ali believe Ayşe.

Table 7.   Type 1 and Type 3a Causative Psych Construction (Comparison)

Recall that the causativization of Type 1 verbs is simply the addition of a

nominative Causer argument and the dative marking of the Experiencer argument ((1a) and

(2a)). If we exchange the order of the Experiencer and the Theme keeping the case

marking of the thematic roles the same, the difference is nothing more than the *emphasis*.

This is also valid for Type 3a causatives ((3a) and (3b)).

When we causativize Type 3a verbs, similarly a nominative Causer argument is added to the subject position. The dative Theme argument does not change but the Experiencer is accusative marked ((1b) and (2b)).

One difference between Type 1 and 3a in terms of causativization is that Type 1 verbs allow the optional deletion of the dative Experiencer argument (4a) but Type 3a verbs do not (4b). Moreover, Type 1 verbs do not allow the deletion of accusative Theme argument (5a) but Type 3a verbs do allow the deletion of the dative Theme (5b):

Type 1 causativization	Type 3a causativization
4a. <u>Ahmet Ayşe'yi</u> affettirdi. Causer Theme (NOM) (ACC) Ahmet made Ayşe be forgiven.	4b. *<u>Ahmet Ayşe'ye</u> inandırdı. Causer Theme (NOM) (DAT) *Ahmet made Ayşe be believed.
5a. *<u>Ahmet Ali'ye</u> affettirdi. Causer Experiencer (NOM) (DAT) *Ahmet made Ali forgive.	5b. <u>Ahmet Ali'yi</u> inandırdı. Causer Experiencer (NOM) (ACC) Ahmet made Ali believe.

Table 8.   Type 1 and Type 3a Causative Psych Construction (Differences)

As expected, verbs of Type 1 do not allow the deletion of the accusative argument in a causative structure since an accusative marked argument is what these verbs necessitate in non causative structures. The unexpected point is that although a Type 3a verb requires for a dative marked argument in a non causative structure, it is ungrammatical with a dative argument in causative structure and requires for an accusative argument. This shows that causativity is not sensitive to argument structure and that it necessitates the existence of an accusative argument no matter what the verb takes in non causative structure.

The following sentences (6) and (7) are the verbs of Type 3a that can be causativized. (6c) and (7c) show that these verbs allow the deletion of dative Theme argument:

(6) a. <u>Ali Ayşe'ye</u> darıldı/ gücendi/ küstü.
Experiencer   Theme
(NOM)   (DAT)
Ali put out with Ayşe.

b. <u>Ahmet</u> <u>Ali'yi</u> <u>Ayşe'ye</u> darılttı/ gücendirdi/ küstürdü.
  Causer Experiencer   Theme
  (NOM) (ACC)   (DAT)
Ahmet made Ali.

c. <u>Ali</u> <u>Ayşe'yi</u> darılttı/ gücendirdi/ küstürdü.
  Causer Experiencer
  (NOM) (ACC)

(7) a. <u>Ali</u> <u>Ayşe'ye</u> kızdı/ öfkelendi/ sinirlendi.
  Experiencer   Theme
  (NOM)   (DAT)
  Ali got angry with Ayşe.

b. <u>Ahmet</u> <u>Ali'yi</u> <u>Ayşe'ye</u> kızdırdı/ öfkelendirdi/ sinirlendirdi.
  Causer Experiencer   Theme
  (NOM) (ACC)   (DAT)
Ahmet made Ali angry at Ayşe.

c. <u>Ali</u> <u>Ayşe'yi</u> kızdırdı/ öfkelendirdi/ sinirlendirdi.
  Causer Experiencer
  (NOM)   (ACC)
Ali made Ayşe angry.

There are two ways of looking at the verb forms in (6c), (7c) and (8c). From the first point of view (c) sentences imply a deleted dative reflexive pronoun coindexed with the Causer:

(8) <u>Ali</u> <u>Ayşe'yi</u> <u>(kendine)</u> darılttı/ gücendirdi/ küstürdü/ kızdırdı/ öfkelendirdi/
  Causer Experiencer   Theme
  (NOM) (ACC)   (DAT)
  sinirlendirdi/ özendirdi.

From the second point of view, these verbs are lexical causatives of Type 2 where the subject is interpreted either as a Causer or as a Theme:

(9) <u>Ali</u> <u>Ayşe'yi</u> darılttı/ gücendirdi/ küstürdü/ kızdırdı/ öfkelendirdi/
  Causer/ Theme Experiencer
    (NOM)   (ACC)
  sinirlendirdi/ özendirdi.

The following rules can be suggested for the causativization of Type 3a psych verbs. The first two rules are invalid for some Type 3a verbs as mentioned above:

Type 3a Psych Construction	Type 3a Causative Psych Construction

Experiencer + Theme
  (NOM)   (DAT)
	Causer+ Experiencer+ Theme
	  (NOM) (ACC) (DAT)

	Causer+ Theme+ Experiencer (NOM) (DAT) (ACC)

	*Causer+ Theme (NOM) (DAT)
	Causer+ Experiencer (NOM) (ACC)

Table 9.   Type Type 3a Causative Psych Construction

II. 3. 2. 1. 4.   Type 3b Psych Verbs and Morphological Causativity

The most thoroughly discussed phenomenon in the literature of psych verbs is the psychological causativity and the representative verbs *fear/ frighten* which are *kork-/ korkut-* in Turkish. Göksel (1993) claims that these verbs are not different from ordinary one place predicates. The only difference is in their causative form which results from the ablative marking in Turkish. She claims that the ungrammaticality of such a sentence like:

(1) *Zehra beni Namık'tan korkuttu.

is because of the impossibility of using a psych causative with an ablative which itself expresses a kind of causality. According to her, not only for psych causatives but also for all causatives, it is ungrammatical to use causal ablative arguments in causative constructions. Therefore she regards (2) as ungrammatical as well as (1):

(2) *Tetanoz John'u hastalıktan öldürdü.

   *Tetanus killed John with disease.

In our analysis of Type 3b psych verbs, such examples are not ungrammatical since it is not uninterpretable to regard *Zehra/ Tetanoz* as the Causer, *beni/ John'u* as the Experiencer and the ablative marked *Namık'tan/ hastalıktan* as the Theme. It is possible to construct a causal chain in which one Causer causes the other Causer which causes another event as in the following example:

(3) Kirli su Ayşe'yi dizanteriden öldürdü.
        Causer   Experiencer   Theme
        (NOM)   (ACC)   (ABL)
        Dirty water killed Ayşe with dysentery.

It is also possible for an animate outside Causer to cause an Experiencer experience a psychological state. In this case, there are both a Causer argument and an ablative Theme argument which is a more direct cause of the emotional state of the Experiencer:

(4) <u>Annesi çocuğu doktordan</u> korkuttu.
    Causer Experiencer Theme
    (NOM)   (ACC)   (ABL)
    Her mother made the child fear the doctor.

The preverbal focus makes the sentence sound more acceptable:

(5) <u>Çocuğu doktordan annesi</u> korkuttu.
    Experiencer Theme   Causer
    (ACC)   (ABL)   (NOM)

In all such examples in this study, the Theme expresses the *direct Causer* of the event and the Causer expresses a *secondary, indirect* or an *outside Causer*.

The majority of the verbs of Type 3b can be causativized:

(+) CAUS.	ONLY CAUS.	DIFF. PSYCH	NON- CAUS.	(-) CAUS.
bez –(DIr)- bık –(DIr)- bunal –(t)- çek –(DIr)- iğren –(DIr) kork –(t)- kuşkulan –(DIr)- soğu –(t)- şüphelen –(DIr)- tiksin –(DIr)- usan –(DIr)- utan –(DIr)-	Ø	Ø	Ø	sıkıl –(DIr)-

Table 10. Type 3b Psych Verbs and Causativity

As the following examples (1) - (3) shows, a nominative or accusative Causer is added, Experiencer is accusative marked and the ablative marked Theme stays the same. However, (b) sentences become much more acceptable when the Causer follows the Theme as the Experiencer in the subject position ((c) sentences) due to the focusing of the preverbal element. (d) and (e) alternatives are not ungrammatical but in (d)s, there is not a specific *source* of the mental/ emotional state of the Experiencer, therefore, there is a

generality. In (e)s, there is not a specific *Experiencer* of the mental/ emotional state and, therefore, a *generic* Experiencer is interpreted, so, the optional deletion does not cause ungrammaticality but only an information gap.

(1) a. <u>Ali</u> <u>Ayşe'den</u> bıktı/ usandı.
    Experiencer   Theme
    (NOM)   (ABL)
    Ali was fed up with Ayşe.

    b. <u>Bu davranışlar</u> <u>Ali'yi</u> <u>Ayşeden</u> bıktırdı/ usandırdı.
        Causer   Experiencer   Theme
        (NOM)   (ACC)   (ABL)
    Such behaviors of herself made Ali fed up with Ayşe.

    c. <u>Ali'yi</u> <u>Ayşe'den</u> bu davranışlar bıktırdı/ usandırdı.
    Experiencer   Theme   Causer
    (ACC)   (ABL)   (NOM)

    d. <u>Bu davranışlar</u> <u>Ali'yi</u> bıktırdı.   (generally)
        Causer   Experiencer
        (NOM)   (ACC)

    e. <u>Bu davranışlar</u> <u>Ayşe'den</u> bıktırdı. (everybody)
        Causer   Theme
        (NOM)   (ABL)

(2) a. <u>Ali</u> <u>tavuktan</u> iğrendi/ tiksindi.
    Experiencer   Theme
    (NOM)   (ABL)
    Ali was disgusted with chicken.

    b. <u>Bu lokanta</u> <u>Ali'yi</u> <u>tavuktan</u> iğrendirdi/ tiksindirdi.
        Causer   Experiencer   Theme
        (NOM)   (ACC)   (ABL)
    This restaurant made Ali disgusted with chicken.

    c. <u>Ali'yi</u> <u>tavuktan</u> <u>bu lokanta</u> iğrendirdi/ tiksindirdi.
    Experiencer   Theme   Causer
    (ACC)   (ABL)   (NOM)

    d. <u>Bu lokanta</u> <u>Ali'yi</u> iğrendirdi/ tiksindirdi. (generally)
        Causer   Experiencer
        (NOM)   (ACC)

    e. <u>Bu lokanta</u> <u>balıktan</u> iğrendirdi/ tiksindirdi.   (everybody)
        Causer   Theme
        (NOM)   (ABL)

(3) a. <u>Ali</u> <u>Ayşe'den</u> kuşkulandı/ şüphelendi.
    Experiencer   Theme
    (NOM)   (ABL)
    Ali was suspected of Ayşe.

b. Polis Ali'yi Ayşe'den kuşkulandırdı/ şüphelendirdi.
    Causer Experiencer Theme
    (NOM) (ACC)   (ABL)
The police made Ali suspected of Ayşe.

c. Ali'yi Ayşe'den polis kuşkulandırdı/ şüphelendirdi.
Experiencer   Theme   Causer
  (ACC)   (ABL)   (NOM)

d. Polis Ali'yi kuşkulandırdı. (generally)
   Causer Experiencer
   (NOM) (ACC)

e. Polis Ayşe'den kuşkulandırdı.   (everybody)
  Causer   Theme
  (NOM)   (ABL)

The (d) examples from (1) to (3) demonstrate a similar case with the cases in other verb types. The causative forms of these verbs can either be regarded as having a deleted optional ablative Theme or they can be regarded as separate entries which belong to Type 2:

(1) Ali Ayşe'yi bıktırdı/ iğrendirdi/ tiksindirdi/ kuşkulandırdı/ şüphelendirdi/ korkuttu/ ürküttü/ utandırdı.

The latter treatment of these verbs (as Type 2 verbs) correspond to the universal treatment since in all of the languages analyzed in the psych verb literature (English, Italian, French, Spanish, Finnish, Polish, Greek etc.), these verbs belong to the second class named as *frighten type* verbs.

In the examples above the ablative expresses the *source* of the mental/ emotional state. Therefore, the rules for Type 3b causativization can be stated as:

Type 3b Psych Construction	Type 3b Causative Psych Construction
Experiencer + Theme (NOM) (ABL)	Causer+ Experiencer+ Theme (NOM) (ACC) (ABL)
	Causer + Theme+ Experiencer (NOM) (ABL) (ACC)
	Experiencer+ Theme+ Causer (ACC) (ABL) (NOM)
	Causer+ Experiencer (NOM) (ACC)
	Causer+ Theme (NOM) (ABL)

Table 11. Type 3b Causative Psych Construction

II. 3. 2. 1. 5. Type 4 Psych Verbs and Morphological Causativity

(+) CAUS.	ONLY CAUS.	DIFF. PSYCH	NON- CAUS.	(-) CAUS.
az –(DIr)- bilinçlen –(DIr)- coş –(DIr)- eğlen –(DIr)- heyecanlan –(DIr)- kudur –(t)- sakinleş –(DIr)- yatış –(DIr)-	kaç –(Ir)-	Ø	dol –(DIr)- don –(DIr)- kabar –(t)-	apış –(DIr)- durul –(t)- kubar –(t)- süzül –(t)- yırtıl –(t)-

Table 12. Type 4 Psych Verbs and Causativity

The only argument of the Type 4 verbs is the Experiencer. Causativization adds one more argument to the following intransitive sentences which is a nominative Causer. Therefore causativization process turns all of the intransitive psych verbs of Type 4 into transitive Type 2 verbs:

(1) a. <u>Çocuklar</u> azdı.
      Experiencer
      (NOM)
The children got wild.

b. <u>Çocuklar</u> azıttı.
    Experiencer
    (NOM)
The children got wild.

c. <u>Ablası çocukları</u> azdırdı.
   Causer   Experiencer
   (NOM)   (ACC)
Their sister made the children out of control.

(2) a. <u>Kalabalık</u> coşuyor.
     Experiencer
     (NOM)
The crowd cheers.

b. <u>Şarkıcı kalabalığı</u> coşturuyor.
   Causer   Experiencer
   (NOM)   (ACC)
The singer cheers the crowd.

(3) a. <u>Ayşe</u> heyecanlanıyor.
    Experiencer
    (NO M)
Ayşe gets excited.

b. <u>Ali Ayşe'yi</u> heyecanlandırıyor.
  Causer Experiencer
  (NOM) (ACC)
Ali makes Ayşe excited.

(4) a. <u>Annem</u> sakinleşiyor/ yatışıyor.
        Experiencer
         (NOM)
My mother calms down.

b. <u>Babam</u> <u>annemi</u> sakinleştiriyor/ yatıştırıyor.
   Causer   Experiencer
   (NOM)   (ACC)
My father makes my mother calm down.

The following formula summarizes the only way of causativizing the Type 4 verbs:

Type 4 Psych Construction	Type 4 Causative Psych Construction
Experiencer (NOM)	Causer+ Experiencer (NOM) (ACC)

Table 13. Type 4 Causative Psych Construction

In this section, we analyzed the causativity properties of Type 1, 2, 3a, 3b and 4 psych verbs in Turkish. The analysis has shown that in a causative construction, some verbs which belong to other verb classes behave like lexical causatives of Type 2. In all of these verbs the subject can either be regarded as a Causer or as a Theme as the Table 14 shows. On the other hand, the following Table 1 on pages XIX and XX summarize the causativity properties of all psych verb types in Turkish:

TYPE	PSYCH CONSTRUCTION	POSSIBLE CAUSATIVE CONSTRUCTIONS	SAMPLE SENTENCE	UNACCEPTABLE CAUSATIVE CONSTRUCTIONS	SAMPLE SENTENCE
TYPE 1	Experiencer + Theme (NOM) (ACC)	Causer+ Experiencer+ Theme (NOM) (DAT) (ACC)	Ali Ahmet'e Ayse'yi affettirdi. Causer Experiencer Theme (NOM) (DAT) (ACC) (Ali made Ahmet forgive Ayse.)	* Causer+ Experiencer (NOM) (DAT)	* Ali Ahmet'e affettirdi. Causer Experiencer (NOM) (DAT) (*Ali made Ahmet forgive.)
		Causer + Theme+ Experiencer (NOM) (ACC) (DAT)	Ali Ayseyi Ahmet'e affettirdi. Causer Theme Experiencer (NOM) (ACC) (DAT) (Ali made Ahmet forgive Ayse.)	*Causer+ Experiencer+ Theme (NOM) (ACC) (DAT)	
		Causer/ Theme+ Experiencer (NOM) (ACC) = Type 2	Ali Ayse'yi kiskandirdi. Causer/Theme Experiencer (NOM) (ACC)		
		Causer+ Theme (NOM) (ACC)	Ali Ayse'yi affettirdi. Causer Theme (NOM) (ACC) (Ali made Ayse be forgiven.)		
TYPE 2	Theme + Experiencer (NOM) (ACC)	Theme + Experiencer (NOM) (ACC)	Ayse Ali'yi üzdü. Theme Experiencer (NOM) (ACC) (Ayse depressed Ali.)	* Causer+ Theme+ Experiencer (NOM) (DAT) (ACC)	*Adam konusmaciya dinleyicileri bayidirdi/ siktirdi. Causer Theme Experiencer (NOM) (DAT) (ACC) (*The man made the speaker bore the audience)
TYPE 3a	Experiencer + Theme (NOM) (DAT)	Causer+ Experiencer+ Theme (NOM) (ACC) (DAT)	Ahmet Ali'yi Ayse'ye inandirdi. Causer Experiencer Theme (NOM) (ACC) (DAT) (Ahmet made Ali believe Ayse.)	*Causer+ Theme (NOM) (DAT)	*Ahmet Ayse'ye inandirdi. Causer Theme (NOM) (DAT) (*Ahmet made Ayse be believed.)
		Causer+ Theme+ Experiencer (NOM) (DAT) (ACC)	Ahmet Ayse'ye Ali'yi inandirdi. Causer Theme Experiencer (NOM) (DAT) (ACC) (Ahmet made Ali believe Ayse.)		
		Causer/ Theme+ Experiencer (NOM) (ACC) = Type 2	Ali Ayse'yi kizdirdi. Causer/Theme Experiencer (NOM) (ACC) (Ali made Ayse angry.)		
TYPE 3b	Experiencer + Theme (NOM) (ABL)	Causer+ Experiencer+ Theme (NOM) (ACC) (ABL)	Bu lokanta Ali'yi tavuktan iğrendirdi. Causer Experiencer Theme (NOM) (ACC) (ABL) (This restaurant made Ali disgusted with chicken.)		

		Experiencer + Theme+ Causer (NOM) (ABL) (ACC)	Ali'yi tavuktan bu lokanta iğrendirdi. Experiencer Theme Causer (ACC) (ABL) (NOM) (This restaurant made Ali disgusted with chicken.)
		Causer/ Theme+ Experiencer (NOM) (ACC) = Type 2	Ahmet Ali'yi utandırdı. Causer/Theme Experiencer (NOM) (ACC) (Ahmet embarrassed Ali.)
		Causer+ Theme (NOM) (ABL)	Bu lokanta balıktan iğrendirdi. Causer Theme (NOM) (ABL) (This restaurant made Ali disgusted.)
TYPE 4	Experiencer (NOM)	Causer+ Experiencer (NOM) (ACC) = Type 2	Babam annemi sakinleştiriyor/ yatıştırıyor. Causer Experiencer (NOM) (ACC) (My father makes my mother calm down.)

Table 1.   Summary of the Causativity Properties of Turkish Psych Verbs

TYPE	VERB	CAUSATIVE
Type 1	düşün- kıskan-	<u>Ali</u> <u>Ayşe'yi</u> düşündürdü/ kıskandırdı. Causer/ Theme Experiencer (NOM) (ACC)
Type 3a	aldan- darıl- gücen- kan- kız- küs- öfkelen- özen- sinirlen- şaşır-	<u>Ali</u> <u>Ayşe'yi</u> aldattı/ darılttı/ gücendirdi/ kandırdı/ Causer/Theme Experiencer (NOM) (ACC) küstürdü/ kızdırdı/ öfkelendirdi/ özendirdi/ sinirlendirdi/ şaşırttı.
Type 3b	bık- çatla- iğren- kork- kuşkulan- şüphelen- tiksin- ürk- usan- utan-	<u>Ali</u> <u>Ayşe'yi</u> bıktırdı/ çatlattı/ iğrendirdi/ korkuttu/ Causer/ Theme Experiencer (NOM) (ACC) kuşkulandırdı/ şüphelendirdi/ tiksindirdi/ürküttü/ usandırdı/ utandırdı.
Type 4	All of the Type 4 verbs	<u>Babam</u> <u>annemi</u> sakinleştiriyor/ yatıştırıyor. Causer/ Theme Experiencer (NOM) (ACC)

Table 14. Psych Verbs which Behave like the Lexical Causatives of Type 2

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II. 3. 2. 2. Periphrastic Causative Psych Verbs

In Turkish, causativity can be expressed with periphrastic constructions as well as by lexical means. Morphological causativity is a verbal process though periphrastic causativity is a nominal one. *Sağla-* and *neden ol-* are the most often used predications of these constructions.

With non psych verbs the DAT marked Actor/ Doer/ Agent of the non causative construction gets the GEN marking and the causation event with the nominalized verb (with *–mA*) takes the accusative case for *sağla-* (1b) and dative case for *neden o -* (1c):

(1) a. <u>Ali Ayşe'ye kitabı</u> okuttu.
Causer Causee Theme
(NOM) (DAT) (ACC)

b. <u>Ali Ayşe'nin kitabı okumasını</u> sağladı.
Causer Causee   Theme
(NOM) (GEN)   (ACC)

c. <u>Ali Ayşe'nin kitabı okumasına</u> neden/ neden oldu.
Causer Causee   Theme
(NOM) (GEN)   (DAT)

Stylistic variations changing the syntactic position of the arguments are also possible.

This section briefly analyzes the interrelationships between the psych verb types, morphological causativity and periphrastic causativity in Turkish.

II. 3. 2. 2. 1. Type 1 Psych Verbs and Periphrastic Causativity

As mentioned, <u>Causer+ Experiencer</u> order was ungrammatical for Type 1
(NOM.)   (DAT.)

psych verbs without the existence of an accusative Theme . Since a periphrastic causative construction does not alter the thematic roles, the ungrammaticality of (1a) can not be ruled out by (1b):

(1) a. *Ali Ahmet'e affettirdi.

   b. *Ali Ahmet'e affetmesine neden oldu.

All of the verbs of Type 1 which can be morphologically causativized can also be used in periphrastic constructions. As mentioned in the previous section, except for two verbs, all of the causativizable Type 1 verbs have similar semantic interpretations in the periphrastic causative construction:

(2) a. Ali Ayşe'yi unutturdu.
   Causer   Theme
   (NOM)   (ACC)
   Ali made Ayşe be forgotten.

   b. Ali Ayşe'yi herkese unutturdu.
                    Experiencer
                    (DAT)

   c. *Ali Ayşe'nin unutmasını sağladı/ neden oldu.

   d. Ali Ayşe'nin (herkes tarafından) unut(ul)masını sağladı/ neden oldu.

Unlike the other verbs Type 1, the two exceptional verbs of this type which behave like Type 2 verbs do not have passive interpretations with an optional Experiencer *by phrase* in their causative forms:

(3) a. Ali Ayşe'yi düşündürdü.
   Causer Experiencer
   (NOM)   (ACC)
   Ali made Ayşe think.

   b. *Ali Ayşe'yi herkese düşündürdü.
   Causer Experiencer Theme
   (NOM) (ACC)   (DAT)

   c. Ali Ayşe'nin düşünmesini sağladı/ neden oldu.

   d. *Ali Ayşe'nin (herkes tarafından) düşün(ül)mesini sağladı/ neden oldu.

(4)a. <u>Ali</u> <u>Ayşe'yi</u> kıskandırdı.
      Causer Experiencer
      (NOM)   (ACC)
Ali made Ayşe envy.

    b. *<u>Ali</u> <u>Ayşe'yi</u> <u>herkese</u> kıskandırdı.
       Causer Experiencer   Theme
       (NOM)   (ACC)   (DAT)

    c. Ali Ayşe'nin kıskanmasını sağladı/ neden oldu.

    b. *Ali Ayşe'nin (herkes tarafından) kıskan(ıl)masını sağladı/ neden oldu.

Type 1 verbs which can not be morphologically causativized are acceptable in periphrastic causative constructions (although they are not perfect). The observed tendency is to use mental verbs often with *sağla-* as in (5d):

(5)a. <u>Ali</u> <u>bu sorunu</u> öngördü.
    Experiencer   Theme
    (NOM)   (ACC)
  Ali anticipated this problem.

    b. *<u>Ahmet</u> <u>Ali'ye</u> <u>bu sorunu</u> öngördürdü.
       Causer Experiencer Theme
       (NOM)   (DAT)   (ACC)
  Ahmet made Ali anticipate the problem.

    c. ?<u>Ahmet</u> <u>Ali'nin</u> <u>bu sorunu</u> öngörmesine neden oldu.
       Causer Experiencer Theme
       (NOM)   (GEN)   (ACC)

    d. <u>Ahmet</u> <u>Ali'nin</u> <u>bu sorunu</u> öngörmesini sağladı.
       Causer Experiencer Theme
       (NOM)   (GEN)   (ACC)

On the other hand, emotional verbs tend to be used with *neden ol* rather than *sağla*:

(6) a. <u>Ayşe</u> <u>Ali'yi</u> arzuladı.
    Experiencer Theme
    (NOM)   (ACC)
  Ayşe desired Ali.

    b. <u>Ahmet</u> <u>Ayşe'ye</u> <u>Ali'yi</u> arzulattı.
       Causer Experiencer Theme
       (NOM)   (DAT)   (ACC)
  Ahmet made Ayşe desire Ali.

    c. ? <u>Ahmet</u> <u>Ayşe'nin</u> <u>Ali'yi</u> arzulamasını sağladı.
       Causer Experiencer Theme
       (NOM)   (GEN)   (ACC)

c. <u>Ahmet Ayşe'nin Ali'yi</u> arzulamasına neden oldu.
    Causer   Experiencer   Theme
    (NOM)   (GEN)   (ACC)

The underlying semantic reason may be due to the semantic difference between *sağla-* and *neden ol-*. The former implies a conscious effort of the Causer to make the Experiencer experience the psych state. On the other hand the latter implies a nonconscious act (or not an act at all) of the Causer.

This argument may be linked to the assumption that emotional activities are less controllable than the mental ones. Therefore, mental leanings may be controllable by outside agents by physically or consciously doing something but it is not easy for an outside Causer to have the control over the emotional inclinations of someone. Only the existence of a Causer or something that it does unconsciously causes the Experiencer to experience an emotional state.

II. 3. 2. 2. 2. Type 2 Psych Verbs and Periphrastic Causativity

As we mentioned in the previous sections, all of the Type 2 verbs are inherently causative and they can not be further causativized. That means all of the Type 2 verbs are lexical causatives and they can not be causativized morphologically:

(1) a. <u>Konuşmacı dinleyicileri</u> baydı/ sıktı.
      Theme   Experiencer
      (NOM)   (ACC)
   The speaker bored the audience.

b. *<u>Adam konuşmacıya dinleyicileri</u> baydırdı/ sıktırdı.
    Causer   Theme   Experiencer
    (NOM)   (DAT)   (ACC)
   *The man made the speaker bore the audience.

However, it is possible to use all of the Type 2 verbs in periphrastic causative constructions with the verb passivized and with a reflexive interpretation as in (2d) and

(3d). That demonstrates our claim that the restriction on the causativity of these verbs is neither phonological nor semantic but a morphological one:

(2) a. <u>Ayşe Ali'yi</u> üzdü.
Theme Experiencer
(NOM) (ACC)
Ayşe depressed Ali.

b. *<u>Ahmet Ali'ye Ayşe'yi</u> üzdürdü.
Causer Theme Experiencer
(NOM) (DAT) (ACC)
*Ahmet made Ali depress Ayşe.

c. Ahmet Ali'nin Ayşe'yi üzmesine neden oldu.

d. <u>Ayşe Ali'nin</u> üzülmesine neden oldu.
Causer Experiencer
(NOM) (GEN)

(3) a. <u>Ayşe Ali'yi</u> kırdı.
Theme Experiencer
(NOM) (ACC)
Ayşe hurt Ali.

b. <u>Ahmet Ali'ye Ayşe'yi</u> kırdırdı.
Causer Theme Experiencer
(NOM) (DAT) (ACC)
*Ahmet made Ali hurt Ayşe.

c. Ahmet Ali'nin Ayşe'yi kırmasına neden oldu.

c. <u>Ali Ayşe'nin</u> kırılmasına neden oldu.
Causer Experiencer
(NOM) (GEN)

As mentioned, some of the Type 2 verbs seem to be inseparable from their causative morphemes. If we accept the –t morpheme attached to these verbs as the causative morpheme, the semantic interpretations of the following periphrastic causatives are reflexive:

(3) a. *<u>Ali Ayşe'yi</u> kışkırdı.
Theme Experiencer
(NOM) (ACC)
Ali incited Ayşe.

b. *<u>Ahmet Ali'ye Ayşe'yi</u> kışkırttı.
Causer Theme Experiencer
(NOM) (DAT) (ACC)
Ahmet made Ali incite Ayşe.

c. Ali Ayşe'yi kışkırttı. .
Theme Experiencer
(NOM)   (ACC)
Ali incited Ayşe.

d. Ali Ayşe'nin kışkırmasına neden oldu.
Causer Experiencer
(NOM)   (GEN)

(4) a. *Ali Ayşe'yi aydınladı.
Theme Experiencer
(NOM)   (ACC)

b. *Ahmet Ali'ye Ayşe'yi aydınlattı.
Causer   Theme   Experiencer
(NOM)   (DAT)   (ACC)
Ahmet made Ali enlighten Ayşe.

c. Ali Ayşe'yi aydınlattı.
Theme Experiencer
(NOM)   (ACC)
Ali enlightened Ayşe.

d. Ali Ayşe'nin aydınlanmasını sağladı.
Causer Experiencer
(NOM)   (GEN)

II. 3. 2. 2. 3.   Type 3a Psych Verbs and Periphrastic Causativity

All of the Type 3a verbs that can be causativized can also be used in periphrastic psych constructions:

(1) a. Ali Ayşe'ye darıldı/ gücendi/ küstü.
Experiencer Theme
(NOM)   (DAT)
Ali put out with Ayşe.

b. Ahmet Ali'yi Ayşe'ye darılttı/ gücendirdi/ küstürdü.
Causer Experiencer   Theme
(NOM) (ACC)   (DAT)
Ahmet made Ali.

c. Ali Ayşe'yi darılttı/ gücendirdi/ küstürdü.
Causer Experiencer
(NOM)   (ACC)

d. Ali Ayşe'nin darılmasına/ gücenmesine/ küsmesine neden oldu.
Causer Expeeriencer
(NOM)   (GEN)

The only Type 3a verb *aldır* which is not a psych verb without the causative morpheme can not be used in a periphrastic psych construction. However all of the Type 3a verbs whose non causative forms are psych are acceptable as periphrastic causatives:

(1) a. <u>Ayşe bu elbiseye</u> bayıldı. (psych)
   Experiencer   Theme
    (NOM)   (DAT)
   Ayşe liked this dress greatly.

b. *<u>Ali Ayşe'yi bu elbiseye</u> bayıltt.
  Causer Ezxperiencer   Theme
  (NOM) (ACC)   (DAT)
   Ayşe made Ali like this dress.

c. <u>Ali Ayşe'nin bu elbise'ye</u> bayılmasına neden oldu.
  Causer Experiencer   Theme
  (NOM) (GEN)   (DAT)

There are a few number of verbs of Type 3a which can not be causativized. These verbs can perfectly be causativized in a periphrastic construction:

(3) a. *<u>Ahmet Ali'yi Ayşe'ye</u> güvendirdi.
    Causer Experiencer   Theme
    (NOM) (ACC)   (DAT)
    Ahmet made Ali trust Ayşe.

b. <u>Ahmet Ali'nin Ayşe'ye</u> güvenmesini sağladı.
    Causer   Experiencer Theme
    (NOM)   (GEN)   (DAT)

(4) a. *<u>Ahmet Ali'yi Ayşe'ye</u> kırıldırdı.
    Causer Experiencer   Theme
    (NOM) (ACC)   (DAT)

b. <u>Ahmet Ali'nin Ayşe'ye</u> kırılmasına neden oldu.
    Causer   Experiencer Theme
    (NOM)   (GEN)   (DAT)

II. 3. 2. 2. 4.   Type 3b Psych Verbs and Periphrastic Causativity

All Type 3b verbs can be used in periphrastic psych constructions. Most of the verbs of Type 3b that we examine have some kind of negative semantic content on the part of the Experiencer and they sound much more acceptable with *neden ol-* which led us to

notice that *neden ol-* is more compatible with negative psych events while *sağla-* is compatible with positive ones:

(1) a. <u>Bu davranışlar</u> <u>Ali'yi</u> <u>Ayşeden</u> bıktırdı/ usandırdı.
        Causer   Experiencer   Theme
        (NOM)   (ACC)   (ABL)
      Such behaviors of herself made Ali fed up with Ayşe.

b. <u>Bu davranışlar</u> <u>Ali'nin</u> <u>Ayşe'den</u> bıkmasına neden oldu.
        Causer   Experiencer   Theme
        (NOM)   (GEN)   (ABL)

There is only one Type 3b verb which can not be causativized; *sıkıl*. This verb can also be causativized in a periphrastic construction:

(2) a. *<u>Ahmet</u> <u>Ali'yi</u> <u>Ayşe'den</u> sıkıldırdı.
      Causer   Experiencer   Theme
      (NOM)   (ACC)   (ABL)

b. <u>Ahmet</u> <u>Ali'nin</u> <u>Ayşe'den</u> sıkılmasına neden oldu.
     Causer   Experiencer   Theme
     (NOM)   (ACC)   (ABL)

II. 3. 2. 2. 5.   Type 4 Psych Verbs and Periphrastic Causativity

Type 4 verbs that can be morphologically causativized can also be causativized periphrastically. Other groups of Type 4 verbs whose either non causative or only the causative forms are psych can also be used periphrastically. The non causativizable verbs of Type 4 can be causativized too if used in periphrastic constructions (although they do not sound perfectly acceptable):

(1) a. <u>Ali</u> duruldu.
      Experiencer
      (NOM)
      Ali calmed down.

b. *<u>Ayşe</u> <u>Ali'yi</u> durulttu.
      Causer Experiencer
      (NOM) (ACC)
     Ayşe made Ali calm down.

c. Ayşe Ali'nin durulmasına neden oldu.
Causer Experiencer
(NOM)   (GEN)

This brief analysis shows that first, all types of psych verbs in Turkish can be used in periphrastic constructions no matter whether they are lexically or morphologically causative.

Second, it became clear that all of the verbs of Type 1, 2, 3 and 4 which can not be causativized for this or that reason, can be causativized in periphrastic constructions.

Third, it seems that *sağla-* constructions mostly refer to positive psych events on the part of the Experiencer and *neden ol-* constructions refer to rather negative ones.

Lastly, it is anticipated that *sağla-* constructions with the implication of a conscious effort are more compatible with mental events while *neden ol-* constructions which imply a non conscious/ accidental cause are more compatible with emotional ones.

II. 3. 2. 3. Causativity and the Permissive Reading

As exemplified in the section above, all types of psych verbs that can be morphologically causativizable and non-causativizable can be used in periphrastic psych constructions. The periphrastic causative is a kind of paraphrase of the morphological counterpart just as it is the case with non-psych causatives. When the morphological counterpart is negated, the periphrastic paraphrase has a permissive reading:

(1) a. Ailesi Ayşe'yi okuttu.

b. Ailesi Ayşe'yi okutmadı.

c. Ailesi Ayşe'nin okumasına izin vermedi.
Her parents did not let Ayşe go on her education.

With a few number of psych verbs, this permissive reading is more significant than the others. Ignoring the thematic relations, in the following sentences, (c)s are the periphrastic permissive paraphrases of the morphological (b)s. For the purposes of focus and emphasis, the dative argument can move to the preverbal position:

(2) a. <u>Ali</u> <u>bize</u> <u>Ayşe'yi</u> unutturdu.
Causer Experiencer Theme
(NOM) (DAT) (ACC)
Ali made us forgive Ayşe.

b. <u>Ali</u> <u>bize</u> <u>Ayşe'yi</u> unutturmadı.
Causer Experiencer Theme
(NOM) (DAT) (ACC)

c. <u>Ali</u> <u>Ayşe'nin</u> (bizim tarafımızdan) unutulmasına izin vermedi.
Causer   Theme
(NOM)   (GEN)
Ali did no let Ayşe to be forgotten (by us).

(3) a. <u>Ali</u> <u>Ayşe'yi</u> <u>bize</u> küstürdü.
Causer Experiencer Theme
(NOM) (ACC) (DAT)
Ali made Ayşe put up with us.

b. <u>Ali</u> <u>Ayşe'yi</u> <u>bize</u> küstürmedi.
Causer Experiencer Theme
(NOM) (ACC) (DAT)

c. <u>Ali</u> <u>Ayşe'nin</u> <u>bize</u> küsmesine izin vermedi.
Causer Experiencer Theme
(NOM) (GEN) (DAT)
Ali did not let Ayşe put up with us.

In the following example, a Type 2 verb which is assumed to be an inherently causative verb can not be causativized (4a) but the negative form (4b) seems to be acceptable with a corresponding permissive periphrastic paraphrase (4c):

(4) a. *<u>Ali</u> <u>Ayşe'yi</u> <u>herkese</u> üzdürdü.
Causer Experiencer   Theme
(NOM) (ACC)   (DAT)
Ali made Ayşe be depressed by everyone.

b. <u>Ali</u> <u>Ayşe'yi</u> <u>kimseye</u> üzdürmedi.
Causer Experiencer   Theme
(NOM) (ACC)   (DAT)

c. <u>Ali</u> <u>Ayşe'nin</u> (kimse tarafından) üzülmesine izin vermedi.
Causer Experiencer
(NOM)   (GEN)
Ali did not let anyone depress Ayşe.

II. 3. 2. 4.　　　　Control, Causativity and the Psych Events

As mentioned and tested before, emotional activities seem to be less controllable than the mental ones. Emotional activities are generally regarded vaguely as personal matters which can not be induced or created in other people. Control can be considered as two types with respect to the controller:

1. internal/ self control

2. external/ outer control

In fact, the semantic distinction between the two seems not to create a structural distinction. That means if a psych event is not self controllable, it can not be controlled by an outer agent too and vice versa. Therefore, the point is being either controllable or non-controllable.

Imperative test can be used as a diagnostic to determine the controllability of psych events. The analysis shows that all of the psych verbs in their imperative form require either an adverbial or an NP marked with the case that the verb normally requires. However, the test is not sensitive to the type of the psych verb (and therefore not to the case of the complement) but rather sensitive to the meaning of the verb. Since imperative suggests a kind of order/ advice and since an advice generally implies a positive or useful suggestion on the part of the addressee, psych verbs with a positive meaning can be used in an imperative form:

(1) İyice öğren.
Learn well.

(2) Yaptıklarından utan.
Be ashamed of what you did.

(3) Başarılarınla gururlan.
Be proud of your successes.

(4) Anılarla avun.
Console yourself with the memories.

(5) Biraz hırslan/ neşelen.
Cheer a little.

Most of the other psych verbs with a positive meaning can also be used in the imperative form but with a different meaning (which is more controllable than the original psych meaning):

(1) Tanrıya inan.
Believe in God.
Accept the existence of the God.

(2) Ülkeni sev.
Love your country.
Be devoted to your country.

(3) Olumlu düşün.
Think positive.
Look at it in a more positive way.

(4) Önce başarmayı iste.
First, want to succeed.
First, intend to succeed.

(5) Bize acı.
Feel pity for us.
Be good to us.

(6) İstenmediğini anla.
Understand that you are not wanted.
Realize that you are not wanted.

(7) Sevildiğini bil.
Know that you are loved.
Realize that you are loved.

(8) Bu köpekten kork.
Be afraid of this dog.
Watch out this dog.

When the verb has a negative meaning, the imperative should be negated too (which will mean a positive advice):

(9) a. ?Kocanı kıskan.
Envy your husband.

b. Kocanı kıskanma.
Do not envy your husband.

(10) a. ?Çalışmaktan bık.
Get sick of studying.

b. Çalışmaktan bıkma.
Do not get sick of studying.

(11) a. ?Balıktan iğren.
Disgust with the fish.

b. Balıktan iğrenme.
Do not disgust with the fish.

It may be possible to use some non controllable emotional events in the imperative form with the implication that a physical act or a series of physical acts are done to evoke the emotional state on the Experiencer:

(9) Onu üz.
Make him depressed (by doing something/ saying something etc.)

In fact *üz-* is inherently a causative verb and the controllability phenomenon with this meaning is closely related to causativity. If the psych event is a controllable event, it can be causativized but if the event is a non-controllable one, the causative form seems rather odd. If the event is a non controllable one but there is still a causative form, this implies that there is a physical act or a series of physical acts involving in the causative event to evoke the emotional state on the Experiencer:

At this point there is another distinction; an Experiencer can experience the emotional state because of either of the following:

1. a conscious or an unconscious activity of someone or something or

2. only the existence of someone or something

causes the psych state in the Experiencer

In English most of the psych verbs which are stative can not be used progressively and therefore, (10) may have two possible interpretations; (a) referring to a habitual disposition and (b) referring to the moment of speech:

(10) I fear the dog.
Experiencer   Theme

    a. The existence of a dog frightens me even if it does do anything to me at all/ I always fear the dogs/ I have a phobia of dogs.

    b. The dog is looking at me and barking and this frightens me (at that moment).

However in Turkish, the habitual psych state is used with the aorist and there is not a restriction on the progressiveness of stative psych events:

(11) a. Köpekten korkarım.   (habitual psych state)
The existence of a dog frightens me even if it does do anything to me at all/ I always fear the dogs/ I have a phobia of dogs.

    b. Köpekten korkuyorum.   (moment of speech)
The dog is looking at me and barking and this frightens me (at that moment).

In the causative constructions, when there is not an aorist or the progressive to indicate the habituality or the moment of speech, (12) is unacceptable with the interpretation (a) but acceptable with the interpretation (b):

(12) Annem beni doktordan korkuttu.
    Causer Experiencer Theme
    (NOM)   (ACC)   (ABL)

    a. *My mother made me feel the emotional state of fearing the doctor.

    b. My mother said something/ did something (consciously or unconsciously) to make me fear the doctor.

In (10) and (11), the dog is the direct cause of the fear. However, in (12) the mother is the indirect Causer but the doctor is the direct Causer of the fear. It is enough for a direct Causer just to exist to make the Experiencer experience the emotional state. On the

other hand, the existence of an indirect Causer is not enough as a condition to make the Experiencer experience the emotional state. He/ she has to do something physically for the psych event to occur as the unacceptability of (12a) indicates.

The ambiguity can be resolved if *annem* is emphasized as a Causer occupying the preverbal position:

(13) a. <u>Annem beni doktordan</u> korkuttu. (Ambiguous)
     Causer Experiencer Theme
     (NOM)   (ACC)   (ABL)

    b. <u>Beni doktordan annem</u> korkuttu. (Non-ambiguous)
     Experiencer Theme   Causer
     (NOM)   (DAT)   (NOM)

II. 3. 3.   Psych Verbs and Passivization in Turkish

Passivization process in Turkish deletes or absorbs the subject argument which can either be expressed by an optional *tarafından* (by phrase) or left unexpressed. Therefore, passive is referred to as a *thematic role absorber* or *intransitivizer*. In the case of psych verbs, it is the Experiencer argument that is optionally deleted and it is only the Theme argument that survives in the surface:

	TRANSITIVE PSYCH VERBS	OTHER TRANSITIVE VERBS
DELETED ARGUMENT	Subject or Object Experiencer Argument	Subject Argument
SURVIVIG ARGUMENT	Subject or Object Theme Argument	Object Argument

Table 1.   Passivization in Psych Verbs

(1) a. <u>Ali Ayşe'yi</u> beğendi.
    Experiencer Theme
    (NOM)   (ACC)
    Ali liked Ayşe.

    b. <u>Ayşe (Ali tarafından)</u> beğenildi.
    Theme   Experiencer
    (NOM)
    Ayşe was liked by Ali.

As a result of the multifunctionality of the inflectional and derivational suffixes in Turkish, there are cases in which some forms do not correspond to specified semantic functions. This is significant especially in the case of reflexive and passive morphemes. As argued by Tietze (1989) one form may have the semantic function of the other. Thus, this two phenomena need to be analyzed with reference to each other.

II. 3. 3. 1.   Type 1 Psych Verbs and Passivization

The phonological conditions determine the attachment of either –*(I)l* or –*(I)n* to give a passive meaning. –*(I)l* is attached to the ones which end with a consonant:

VERB	MORPHEME	FUNCTION
beğen-	-Il	passive
düşün-	-Il	passive
kıskan-	-Il	passive
san-	-Il	passive
sev-	-Il	passive
um-	-Il	passive
unut-	-Il	passive
varsay-	-Il	passive

Table 2.   Type 1 Psych Verbs with –Il

and –*(I)n* is attached to others which end either with a vowel or a lateral:

VERB	MORPHEME	FUNCTION
arzula-	-(I)n	passive
algıla-	-(I)n	passive
belle-	-(I)n	passive
bil-	-(I)n	passive
hatırla-	-(I)n	passive
kavra-	-(I)n	passive
özle-	-(I)n	passive
umursa-	-(I)n	passive

Table 3.   Type 1 Psych Verbs with –(I)n

Among these, only the mental verb *anla-* is passivized not as *anla(n)-* but as *anla(ş)(ıl)-*:

(1) a. <u>Ali</u> <u>Ayşe'nin niyetini</u> anladı.
    Experiencer   Theme
     (NOM)   (ACC)
     Ali understood Ayşe's intention.

    b. *Ayşe'nin niyeti (Ali tarafından) anlandı.

    c. <u>Ayşe'nin niyeti</u> (<u>Ali tarafından</u>) anlaşıldı.
       Theme   Experiencer
       (NOM)

Most of the time it is the case that if the verb has primarily a non psych meaning, all of the voice suffixes give their original meaning to the first sense of the verb. Therefore, the passive counterparts of the following verbs are non psych:

VERB	MORPHEME	PASSIVE
çak- "to understand"	-Il	çakıl- "to be nailed"
çıkar- "to understand"	-Il	çıkarıl- "to be taken out"
kıvır- "to understand"	-Il	kıvrıl- "to curl"
kur- "to imagine"	-Il	kurul- "to settle"
salla- "to care"	-(I)n	sallan- "to swing"

Table 4.   Type 1 Passive non psych Verbs

Sometimes both the active and the passive counterparts have psych meanings but they are different from each other:

VERB	PASSIVE
çöz- "to solve"	çözül- "to relax"
kap- "to understand"	kapıl- "to give oneself to smth."
tak- "to care"	takıl- "to kid"

Table 5.   Type 1 Passive and Active Psych Verbs

II. 3. 3. 2.   Type 2 Psych Verbs and Passivization

Except for two verbs *büyüle-* and *etkile-*, all of the other verbs of Type 2 take the passive morpheme *–(I)l* and have a reflexive meaning. However, these reflexive counterparts can also be regarded as passive constructions with deleted by phrases:

(1) a. <u>Ayşe</u> <u>beni</u> büyüledi.
      Theme Experiencer
      (NOM) (ACC)
    Ayşe charmed me.

    b. ?<u>Ben</u>   <u>(Ayşe tarafından)</u> büyülendim.
       Experiencer   Theme
       (NOM)
      I was charmed by Ayşe.

    c. *<u>Ben</u> <u>Ayşe'ye/ Ayşe'den</u> büyülendim.
    Experiencer   Theme
     (NOM)   (DAT/ ABL)

(2) a. <u>Ayşe</u> <u>beni</u> etkiledi.
      Theme Experiencer
      (NOM) (ACC)
    Ayşe attracted me.

    b. ?<u>Ben</u> <u>(Ayşe tarafından)</u> etkilendim.
       Experiencer   Theme
       (NOM)
      I was attracted by Ayşe.

    c. <u>Ben</u> <u>Ayşe'den</u> etkilendim.
    Experiencer Theme
     (NOM)   (ABL)
    I was attracted by Ayşe.

(3) a. <u>Ayşe</u> <u>beni</u> baydı.
      Theme Experiencer
      (NOM) (ACC)
    Ayşe bored me.

    b. ?<u>Ben</u> <u>(Ayşe tarafından)</u> bayıldım.
       Experiencer   Theme
       (NOM)
     ?I was bored by Ayşe.

    c. <u>Ben</u> <u>Ayşe'ye</u> bayıldım.
    Experiencer Theme
     (NOM)   (DAT)
    I loved Ayşe very much.

(4) a. <u>Ayşe</u> <u>beni</u> boğdu.
      Theme Experiencer
      (NOM) (ACC)
    Ayşe annoyed me.

    b. ?<u>Ben</u> <u>(Ayşe tarafından)</u> boğuldum.
       Experiencer   Theme
       (NOM)
      I was annoyed by Ayşe.

c. *Ben <u>Ayşe'ye/ Ayşe'den</u> boğuldum.
Experiencer   Theme
 (NOM)   (DAT/ ABL)

(5) a. <u>Ayşe beni</u> bozdu.
     Theme Experiencer
     (NOM)   (ACC)
Ayşe embarrassed me.

   b. ?<u>Ben (Ayşe tarafından)</u>bozuldum.
     Experiencer   Theme
     (NOM)
I was embarrassed by Ayşe.

   c. <u>Ben Ayşe'ye</u> bozuldum.
Experiencer   Theme
  (NOM)   (DAT)
I felt disconcerted because of Ayşe.

(6) a. <u>Ayşe beni</u> kırdı.
     Theme Experiencer
     (NOM)   (ACC)
Ayşe hurt me.

   b. ?<u>Ben (Ayşe tarafından)</u> kırıldım.
     Experiencer   Theme
     (NOM)
I was hurt by Ayşe.

   c. <u>Ben Ayşe'ye</u> kırıldım.
Experiencer   Theme
  (NOM)   (DAT)
I felt offended because of Ayşe.

(7) a. <u>Ayşe beni</u> sarstı.
     Theme Experiencer
     (NOM)   (ACC)
Ayşe gave me a shock.

   b. ?<u>Ben (Ayşe tarafından)</u> sarsıldım.
     Experiencer   Theme
     (NOM)
I was shocked by Ayşe.

   c. *<u>Ben Ayşe'ye/ Ayşe'den</u> sarsıldım.
Experiencer   Theme
(NOM)   (DAT/ ABL)

(8) a. <u>Ayşe beni</u> üzdü.
     Theme Experiencer
     (NOM)   (ACC)
Ayşe depressed me.

   b. ?<u>Ben (Ayşe tarafından)</u> üzüldüm.
     Experiencer   Theme
     (NOM)
I was depressed by Ayşe.

c. <u>Ben</u> <u>Ayşe'ye</u> üzüldüm.
Experiencer Theme
(NOM)   (DAT)
I felt sorry for Ayşe.

(1)- (8) indicates that passive interpretations do not sound as well as reflexive ones (without the parenthesized by phrases).

Sentences from (1a) to (8a) imply the direct causation inherent in the meaning of Type 2 verbs. In these sentences, the Theme does something to make the Experiencer experience the emotional/ mental state described by the verb. However in (b) sentences:

- the argument indicated with *by phrase* is also a kind of *Causer* of the event

- but this argument does not actively participate in the event

- this argument is just a *Stimulus* for the Experiencer

- therefore, there is a reflexive meaning rather than a passive one

- thus, (b)s do not have a high degree of acceptability

Some of the Type 2 verbs may be used as Type 3a verbs as in (3c), (5c), (6c) and (8c) and some others may be used as Type 3b verbs as in (2c) when the passive morpheme is attached. Such verbs as *büyüle-, boğ-* and *sars-* can not have dative or ablative arguments in their passivized forms as the ungrammaticality of (1c), (4c) and (7c) shows.

Only the ablative (2c) is the exact paraphrase of (2b). This may be the result of the ablative case marking of the by phrase in Turkish. (3b) and (3c), (5b) and (5c), and, (6b) and (6c) are not exact paraphrases of each other. As the English translations indicate, (b) sentences are passive but (c) sentences are not. Therefore, all these verbs have reflexive meanings not passive.

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II. 3. 3. 3. Type 3a Psych Verbs and Passivization

Some verbs of Type 3a take the passive morpheme without any difference in meaning:

VERB	MORPHEME	FUNCTION	VERB
ay- (to be awaken)	-Il	reflexive	ayıl- (to be awaken)

Only the passive morpheme attached forms of some Type 2 verbs belong to Type 3a:

VERB	MORPHEME	FUNCTION	VERB
bay-	-Il	reflexive	bayıl-
boz-	-Il	reflexive	bozul-
kır-	-Il	reflexive	kırıl-
tak-	-Il	reflexive	takıl-
tut-	-Il	reflexive	tutul-

Table 6. Active Type 2- Passive Type 3a verbs

Some Type 3a verbs are not separable from their passive morphemes such as *darıl-*, and some others have non psych meanings in their passive forms such as *yont* (to mean to interpret) and *yontul-* (to mean to be educated).

Since subjectless sentences are ungrammatical in English (as EPP states), the Experiencer has to be added to the English translations of (b)s of the following, but in Turkish, leaving only the dative Theme on the surface is grammatical (1b)- (8b):

(1) a. <u>Ailesi Ayşe'ye</u> güvendi.
    Experiencer   Theme
    (NOM)   (DAT)
    Her family trusted Ayşe.

   b. <u>Ayşe'ye</u> güvenildi.
     Theme
     (DAT)
    Ayşe was trusted by her family.

(2) a. <u>Herkes ona</u> imrendi.
    Experiencer   Theme
    (NOM)   (DAT)
    Everyone was jealous of her.

b. <u>Ona</u> imrenildi.
Theme
(DAT)
She was envied by everyone.

(3) a. <u>Halk</u> <u>bu palavralara</u> inandı.
Experiencer   Theme
(NOM)   (DAT)
People believed these lies.

b. <u>Bu palavralara</u> inanıldı.
Theme
(DAT)
These lies were believed by the public.

(4) a. <u>Öğrenciler</u> <u>bu zorluklara</u> katlandı.
Experiencer   Theme
(NOM)   (DAT)
The students coped with these difficulties.

b. <u>Bu zorluklara</u> katlanıldı.
Theme
(DAT)
These difficulties were coped with by the students.

(5) a. <u>Çocuklar</u> <u>bu ödeve</u> çok özendi.
Experiencer   Theme
(NOM)   (DAT)
The children took great pains with this homework.
b. <u>Bu ödeve</u> çok özenildi.
Theme
(DAT)
This homework was taken great pains by the students.

(6) a. <u>Bu cevaba</u> <u>herkes</u> çok şaşırdı.
Experiencer   Theme
(NOM)   (DAT)
Everyone was surprised with this answer.

b. <u>Bu cevaba</u> çok şaşırıldı.
Theme
(DAT)
This answer surprised everyone.

(7) a. <u>Kardeşleri</u> <u>hastalığına</u> çok telaşlandı.
Experiencer   Theme
(NOM)   (DAT)
Her brothers worried a lot about her illness.
b. <u>Hastalığına</u> çok telaşlanıldı.
Theme
(DAT)
She was worried about a lot because of her illness.

(8) a. <u>Halk</u> <u>ekonomideki gelişmelere</u> ümitlendi.
Experiencer   Theme
(NOM)   (DAT)
The public became hopeful about the economical improvements.

b. Ekonomideki gelişmelere ümitlenildi.
      Theme
      (DAT)
It was the economical improvements that people were hopeful about.

II. 3. 3. 4.   Type 3b Psych Verbs and Passivization

The passive morphemes give the following verb a reflexive meaning:

VERB	MORPHEME	FUNCTION
sık-	-Il	reflexive

Table 7.   Type 3b verbs with Passive Morphemes with a Reflexive Meaning

One verb of Type 3b; *bunal-* can not be separated from its passive morpheme and there is also one verb of Type 3b which has two different meanings in its *–(I)n* and *–Il* forms:

VERB	PASSIVE
çek- "to suffer from/ to tolerate"	çek-il-"to be suffered from/ to be tolerated"
	çek-in- "to hesitate"

There is a similar case of Type 3b with the Type 3a in terms of the translation of the passive sentences with deleted Experiencer arguments (which are ungrammatical in English but acceptable in Turkish):

(1) a. Herkes soğuklardan bıktı.
    Experiencer   Theme
    (NOM)   (ABL)
Everyone was fed up with the cold weather.

b. Soğuklardan bıkıldı.
    Theme
    (NOM)
People were fed up with the cold weather.

(2) a. Çocuklar doktordan korkar.
    Experiencer   Theme
    (NOM)   (ABL)
The children fear the doctors.

b. Doktordan korkulur.
    Theme
    (NOM)
People fear the doctors.

(3) a. <u>Herkes</u> <u>ondan</u> kuşkulandı.
   Experiencer Theme
    (NOM) (ABL)
  Everyone was suspected of him.

  b. <u>Ondan</u> kuşkulanıldı.
    Theme
    (ABL)
  He was being suspected of.

(4) a. <u>Çocuklar</u> <u>bizden</u> utandı.
   Experiencer Theme
  The children were afraid of us.

  b. <u>Bizden</u> utanıldı.
    Theme
    (ABL)
  We were being ashamed of.

II. 3. 3. 5.   Type 4 Psych Verbs and Passivization

The following verbs in their psych senses are generally used with the passive morpheme but they have a reflexive meaning:

VERB	MORPHEME	FUNCTION	VERB
dur-	-Il	reflexive	durul-
ger-	-Il	reflexive	geril-
kas-	-Il	reflexive	kasıl-
süz-	-Il	reflexive	süzül-
yırt-	-Il	reflexive	yırtıl-

Table 8. Type 4 Passive Verbs with a Reflexive Meaning

It is not easy to draw a line between the verbs of Type 4 and the verbs which have an optional (mostly the dative and sometimes the ablative) argument. Some of the Type 4 verbs can be used with an optional dative argument. When these verbs are used together with their dative arguments with the meaning of an implied *goal* or *cause,* it is acceptable to passivize them. In the other case where the verb is used as a Type 4 verb with only an Experiencer argument, the passivized form is unacceptable.

II. 3. 4.   Psych Verbs and Reflexivity in Turkish

Reflexivity in Turkish is a widely discussed phenomenon since Turkish voice suffixes, can also function as derivational suffixes. This multifunctionality sometimes causes confusions. The very often confusion is among the passive and the reflexive voice markers. In some cases phonological conditions determine the attachment of either of these.

II. 3. 4. 1.   Type 1 Psych Verbs and Reflexivity

Normally the Agent and the Patient arguments of a reflexive verb are coreferential. Therefore, only the reflexive pronoun *kendi* can be the object of an intransitive reflexive verb.

There are four verbs of Type 1 to which the reflexive morpheme *–(I)n* can be attached. However, these morphemes do not give a reflexive meaning to the original psych meaning but rather they produce separate entries which are sometimes psych and sometimes non psych:

INPUT VERB	TYPE	MORPHEME	OUTPUT VERB	MEANING	TYPE
dile-	Type 1	–(I)n	dilen-	non psych	-
iste-	Type 1	–(I)n	isten-	psych	Type 4
salla-	Type 1	–(I)n	sallan-	non psych	-

Table 1.   Some Type 1 verbs and Reflexivity

Another instance is the attachment of the reflexive morpheme to the Type 1 verb *sev-* which produces another verb *sevin-* that belongs to Type 3a:

(1) Ali Ayşe'yi sevdi.
Experiencer   Theme
   (NOM)   (ACC)
      Ali loved Ayşe.

(2) <u>Ali bu habere</u> sevindi.
Experiencer   Theme
(NOM)   (DAT)
      Ali is pleased with this news.

Although *sevin-* seems to be derived from its Type 1 counterpart with the reflexive *–(I)n*, it would not be wrong to regard it as a separate entry; *sev-* with an accusative animate/animate and *sevin-* with an inanimate optional dative Theme. Similarly *iste-* can be seen as a transitive verb with an accusative animate/animate Theme and *isten-* as an intransitive verb with a unique Experiencer argument.

There are also some psych verbs of Type 1 whose bases seem to be inseparable from the reflexive morpheme such as *kıskan-, öğren-* etc.

As a result, ruling out the only seemingly reflexive verbs of Type 1 shows that there are no originally reflexive psych verbs which belong to Type 1.

II. 3. 4. 2.   Type 2 Psych Verbs and Reflexivity

As the following table exemplifies, some Type 2 verbs allow the reflexive morpheme to be attached to give a reflexive meaning such as *büyüle-, etkile-* etc. However, most often, the passive morpheme gives a reflexive meaning:

VERB	MORPHEME	FUNCTION	MEANING	SAMPLE SENTENCE
büyüle-	-(I)n	reflexive	reflexive	<u>Ayşe</u> <u>beni</u> büyüledi. Theme Experiencer (NOM) (ACC) (Ayşe charmed me.)
				<u>Ben</u> büyülendim. Experiencer (NOM) (I was charmed.)
etkile-	-(I)n	reflexive	reflexive	<u>Ayşe</u> <u>beni</u> etkiledi. Theme Experiencer (NOM) (ACC) (Ayşe attracted me.)
				<u>Ben</u> etkilendim. Experiencer (NOM) (I was attracted.)

bay-	-Il	passive	reflexive	Ben Ayşe'den etkilendim. Experiencer Theme (NOM) (ABL) (I was attracted by Ayşe.) Ayşe beni baydı. Theme Experiencer (NOM) (ACC) (Ayşe bored me.)
				Ben bayıldım. Experiencer (NOM) (I was bored.)
				Ben Ayşe'ye bayıldım. Experiencer Theme (NOM) (DAT) (I liked Ayşe very much.)
boğ-	-Il	passive	reflexive	Ayşe beni boğdu. Theme Experiencer (NOM) (ACC) (Ayşe annoyed me.)
				Ben boğuldum. Experiencer (NOM) (I was annoyed.)
boz-	-Il	passive	reflexive	Ayşe beni bozdu. Theme Experiencer (NOM) (ACC) (Ayşe embarrassed me.)
				Ben bozuldum. Experiencer (NOM) (I was embarrassed.)
				Ben Ayşe'ye bozuldum. Experiencer Theme (NOM) (DAT) (I felt disconcerted because of Ayşe.)
kır-	-Il	passive	reflexive	Ayşe beni kırdı. Theme Experiencer (NOM) (ACC) (Ayşe hurt me.)
				Ben kırıldım. Experiencer (NOM) (I am hurt.)
				Ben Ayşe'ye kırıldım. Experiencer Theme (NOM) (DAT) (I felt offended because of Ayşe.)
sars-	-Il	passive	reflexive	Ayşe beni sarstı. Theme Experiencer (NOM) (ACC) (Ayşe gave me a shock.)
				Ben sarsıldım. Experiencer (NOM) (I was shocked.)
üz-	-Il	passive	reflexive	Ayşe beni üzdü. Theme Experiencer (NOM) (ACC) (Ayşe distressed me.)
				Ben üzüldüm. Experiencer (NOM) (I was disteressed.)
				Ben Ayşe'ye üzüldüm. Experiencer Theme (NOM) (DAT) (I was distressed for Ayşe.)

Table 2. Type 2 Verbs and Reflexivity

Among these verbs, only the verb *etkile-* can be used as a Type 3b verb when the reflexive morpheme is attached. *Boz-, kır-* and *üz-* can also be used with optional dative arguments when *–Il* is attached. However *–Il* gives them a reflexive meaning rather than a passive one. All of the other Type 2 verbs turn to be Type 4 verbs with an only Experiencer argument in their reflexive form. This may raise the question of whether *–(I)n* added to *etkile-* gives a passive or a reflexive meaning to the verb. (1d) shows that although the Theme is a kind of Causer, the event is not a passive (1d) but a reflexive one (1b/c):

(1) a. <u>Ayşe</u>   <u>beni</u> etkiledi.
     Theme   Experiencer
     (NOM)   (ACC)
    Ayşe attracted me.

b. <u>Ben</u> etkilendim.
Experiencer
 (NOM)
I am attracted.

c. <u>Ben</u>   <u>Ayşe'den</u> etkilendim.
Experiencer   Theme
 (NOM)   (ABL)
I am attracted to Ayşe.

d. *<u>Ben</u> <u>Ayşe tarafından</u> etkilendim.
Experiencer   Causer
 (NOM)
*I was attracted by Ayşe.

II. 3. 4. 3.   Type 3a Psych Verbs and Reflexivity

Type 3a verbs which are derived from nouns with *–lAn* have reflexive meanings such as *alevlen-, ateşlen-, delilen-, dertlen-, diklen-, duygulan-, efkarlan-, heveslen-, huysuzlan-, hüzünlen-, keyiflen-, neşelen-, öfkelen-, sevdalan-, terslen-, zevklen-* etc. These verbs may have either optional dative Themes or they can be used only with an Experiencer argument as Type 4 verbs.

Other than *–lAn* forms, following forms have also reflexive meanings although the reflexive morpheme seem to be inseparable from the verb root such as *aldan-, gücen-, güven-, imren-, inan-, kan-, özen-, üşen-, yüksün-, zorsun-* etc.

II. 3. 4. 4.   Type 3b Psych Verbs and Reflexivity

If we regard *–lAn* as a morpheme which derives intransitive reflexive verbs, similar to Type 3a, there are also Type 3b verbs of this kind such as *endişelen-, esinlen-, hoşlan-, kuşkulan-, onurlan-, şüphelen-, umutlan-* etc.

Just like verbs of Type 3a, there a few number of verbs of Type 3b which are inseparable from their seemingly reflexive morphemes such as *gocun-, iğren-, tiksin-, usan-, utan-, yıpran-* etc.

There is one verb of Type 3b which have different psych meanings with and without the reflexive morpheme:

VERB	BARE	REFLEXIVE
çek-	<u>Ali</u> <u>bu dertten</u> çok çekti. Experiencer Theme (NOM) (ABL) Ali suffered from this problem a lot.	<u>Ali</u> <u>Ayşe'den</u> çok çekindi. Experiencer Theme (NOM) (ABL) Ali was really ashamed of Ayşe.

II. 3. 4. 5.   Type 4 Psych Verbs and Reflexivity

All of the intransitive verbs of Type 4 derived with *–lAn* have reflexive meanings like *akıllan-, bilinçlen-, büyüklen-, coşkulan-, dişlen-, gamlan-, heyecanlan-, hışımlan-, kurtlan-* etc.

There is one verb of this type which has different psych meanings with and without the reflexive morpheme:

VERB	BARE	REFLEXIVE
kas	Ali kendini bu iş için çok kastı. Experiencer (NOM) Ali forced himself very much for this work.	Ali çok kasındı. (böbürlendi) Experiencer (NOM) Ali was very full of self importance.

As the reflexive pronoun indicates, there is a reflexive meaning even in the case where there is not a reflexive morpheme.

Other than these, there are some verbs of Type 4 like *eğlen-, tüken-* etc. whose bases can not be separable from the reflexive morpheme.

As we mentioned above there are a number of verbs of this kind which can not be separated from their seemingly reflexive morphemes, the etymological reason of which is not the concern here:

TYPE	VERB
Type 1	kıskan-
Type 1	öğren-
Type 3a	aldan-
Type 3a	gücen-
Type 3a	güven-
Type 3a	imren-
Type 3a	inan-
Type 3a	kan-
Type3a	özen-
Type3a	üşen-
Type 3a	yüksün-
Type 3a	zorsun-
Type 3b	gocun-
Type 3b	iğren-
Type 3b	tiksin-
Type 3b	usan-
Type 3b	utan-
Type 3b	yıpran-
Type 4	eğlen-
Type 4	tüken-

Table 3.   Seemingly Reflexive Psych Verbs

II. 3. 5. Psych Verbs and Reciprocity

The data shows that although a few number of psych verbs in the data allow the reciprocal morpheme to be attached, in general, these verbs do not have a reciprocal meaning. Semantically this may be due to the reason that psych activities are personal matters which can not be done reciprocally or cooperatively:

(1) a. <u>Ali ile Ayşe</u> <u>birbirlerini</u> özlediler.
      Experiencer   Theme
      (NOM)   (ACC)
    Ali and Ayşe missed each other.

    b. ?<u>Ali ile Ayşe</u> özleştiler.
        Experiencer
        (NOM)

Some psych verbs can be used with the reciprocal morpheme but the meaning is not reciprocal. Therefore (2c) seems more acceptable than (2b):

(2) a. <u>Ali</u> <u>Ayşe'ye</u> kızdı.
   Experiencer Theme
   (NOM)   (DAT)

    b. ?<u>Ali ile Ayşe</u> <u>birbirlerine</u> kızıştılar.
      Experiencer   Theme
      (NOM)   (DAT)
    Ali and Ayşe got angry with each other.

    c. <u>Ali</u> <u>Ayşe'ye</u> kızıştı.
   Experiencer Theme
   (NOM)   (DAT)

Some other verbs have different meanings with and without the reciprocal:

(3) a. <u>Ali ile Ayşe</u> <u>birbirlerini</u> anladılar.
      Experiencer   Theme
      (NOM)   (ACC)
    Ali and Ayşe understood each other.
    b. <u>Ali ile Ayşe</u> anlaştılar.
      Experiencer
      (NOM)
    Ali and Ayşe got along well with each other.

(4) a. <u>Ali ile Ayşe</u> <u>birbirlerini</u> seviyorlar.
      Experiencer   Theme
      (NOM)   (ACC)
    Ali and Ayşe love each other.

b. <u>Ali ile Ayşe</u> sevişiyorlar.
　Experiencer
　(NOM)
Ali and Ayşe are making love.

There are some reciprocal psych forms in the Old Turkish like säv- iş- to mean *to like to love one another*.

In all of the examples, the reciprocal pronoun *birbiri* is the Theme argument and the two participants are regarded as one Experiencer argument. Regarding them as separate Experiencers is ungrammatical. Kural's reason for the absence of Experiencer-Experiencer verbs is that the Experiencer subject makes the verb stative but Experiencer object forces the verb to be eventive and the result is a clash between the two.

Moreover, if we regard them as separate arguments, it causes the violation of the Theta Criterion:

(5) *<u>Ali</u> ile <u>Ayşe</u> anlaştılar.
Experiencer Experiencer
　(NOM)　　(NOM)
Ali and Ayşe underdstood each other.

II. 4.　　Compound Psych Uses in Turkish

There are two ways of expressing psych events in Turkish; first by lexical means and second by compound constructions. There are 31 helping verbs which are the components of these compound constructions; *alın-, al-, at-, bağla-, besle-, boşalt-, çek-, davran-, dön-, dur-, duy-, düş-, edin-, et-, geçir-, gel-, getir-, git-, gör-, göster-, kal-, kapıl-, kesil-, ol-, tut-, tutul-, uğra, uyandır-, var-, ver-, yap-*.

These helping verbs can either be combined with an adjective, a noun or a complex nucleus.

II. 4. 1. Compound Psych Verbs which Derive with a Nominative Psych Nominal

Most of the compound constructions are combined with a nominative psych nominal and a helping verb.

A psych nominal together with the helping verb *bağla-* produces a Type 3a compound psych verb:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
ümit	nominative	bağla-	psych	Type 3a

(1) <u>Ali bu işe</u> ümit bağladı.
Experiencer Theme
(NOM)   (DAT)
    Ali hopes for this job.

A psych nominal with *besle* produces a Type 3a psych verb too:

(2) <u>Ayşe Ali'ye</u> derin bir sevgi besliyor.
Experiencer Theme
(NOM)   (DAT)
    Ayşe loves Ali deeply.

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
nefret	nominative	besle-	psych	Type 3a
sevgi	nominative	besle-	psych	Type 3a
umut	nominative	besle-	psych	Type 3a
ümit	nominative	besle-	psych	Type 3a

Table 2.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (2)

The helping verb *çek-* can be compounded with a nominative nominal becoming a Type 4 psych verb which can be used with an optional purpose clause:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
acı	nominative	çek-	psych	Type 4
işkence	nominative	çek-	psych	Type 4

Table 3.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (3)

(3) a. <u>Ali</u> çok acı çekiyor.
Experiencer
(NOM)
    Ali feels great pain.

b. <u>Ali Ayşe için</u> çok acı çekti.
Experiencer Theme
  (NOM)   (PURP.)
Ali felt great pains for Ayşe.

The most productive helping verb which can be compounded with almost all psych nouns is *duy-*. There is not a significant meaning difference between the psych compounds with *duy-* and their lexical counterparts:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
acı	nominative	duy-	psych	Type 4
arzu	nominative	duy-	psych	Type 3a
gurur	nominative	duy-	psych	Type 3b
heyecan	nominative	duy-	psych	Type 4
ilgi	nominative	duy-	psych	Type 3a
istek	nominative	duy-	psych	Type 3a
özlem	nominative	duy-	psych	Type 3a
utanç	nominative	duy-	psych	Type 3b

Table 4.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (4)

(4) <u>Ayşe</u> çok heyecan duydu/ heyecanlandı.
Experiencer
  (NOM)
Ali felt a great excitement.

(5) <u>Ayşe</u> <u>dilbilime</u> ilgi duyuyor/ ile ilgileniyor.
Experiencer Theme
  (NOM)   (DAT)
Ayşe is interested in linguistics.

(6) <u>Ayşe</u> <u>söylediklerinden</u> utanç duyuyor/ utanıyor.
Experiencer Theme
  (NOM)   (ABL)
Ayşe feels ashamed for what she says.

The helping verb *et-* produces four different types of compound psych verbs either from bare nominals:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
alay	nominative	et-	psych	Type 3d
aldırış	nominative	et-	psych	Type 3a
arzu	nominative	et-	psych	Type 1
cüret	nominative	et-	psych	Type 3a
endişe	nominative	et-	psych	Type 3b
heves	nominative	et-	psych	Type 3a
telaş	nominative	et-	psych	Type 3a
umut	nominative	et-	psych	Type 1
ümit	nominative	et-	psych	Type 1

Table 5.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (5)

or from the ones derived with –lIk:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
aksilik	nominative	et-	psych	Type 4
arsızlık	nominative	et-	psych	Type 4
cadılık	nominative	et-	psych	Type 4
çocukluk	nominative	et-	psych	Type 4
densizlik	nominative	et-	psych	Type 4
mızmızlık	nominative	et-	psych	Type 4

Table 6.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (6)

(7) <u>Ali</u> <u>bu günleri</u> umut etti.
Experiencer Theme
  (NOM)   (ACC)
    Ali hoped for these days.

(8) <u>Çocuklar</u> <u>dondurmaya</u> heves etti.
    Experiencer   Theme
      (NOM)   (DAT)
    The children had a fancy for the ice cream.

(9) <u>Doktorlar</u> <u>kanamasından</u> endişe etti.
    Experiencer   Theme
      (NOM)   (ABL)
    The doctors worried about her bleeding.

(10)   <u>Çocuklar</u> <u>kilosuyla</u> alay etti.
      Experiencer   Theme
        (NOM)   (INST)
      The children made fun of her weight.

(11)   <u>Bebek</u> mızmızlık ediyor.
      Experiencer
        (NOM)
      The baby is grousing.

The following psych nominals with *geçir-* derive Type 4 compound psych verbs:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
buhran	nominative	geçir-	psych	Type 4
bunalım	nominative	geçir-	psych	Type 4
cinnet	nominative	geçir-	psych	Type 4

Table 7.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (7)

(11)   <u>Kadın</u> sonunda cinnet geçirmiş.
      Experiencer
        (NOM)
      The woman got out of her mind at the end.

There are some compound psych verbs with *gel-*+ nominative psych nouns. This combination produces Type 4 verbs however; the Experiencer argument of these verbs is not nominative but dative:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
bay	nominative	gel-	psych	Type 4a
fenalık	nominative	gel-	psych	Type 4a
sinir	nominative	gel-	psych	Type 4a

Table 8.   Compound Psych Verbs Which Derive with a Nominative Psych Nominal (8)

(12)   <u>Bana</u> fenalık geldi.
          Experiencer
          (DAT)
          I feel bored/ fainted.

These verbs show that our classification of psych verbs in Turkish should be revised to include the compound uses. Therefore, there is another class which we will call as Type 4a. Type 4a is valid only for a group of compound verbs. These verbs have only an Experiencer argument just like Type 4 verbs but different from them, their Experiencer is not nominative but dative marked just like the dative argument of Type 3a verbs:

TYPE	SUBJECT	OBJECT
4a	Experiencer (DAT)	Ø

Göster- can also be combined with a psych noun but this time a different situation emerges as to the type of the compound psych verb. In these cases the dative marked object argument is not a Theme but an Experiencer and the nominative marked subject is a Theme. Therefore, another type should be added to our classification of psych verbs. This type is also valid for a number of compound uses whose case marking is just like Type 3a verbs whereas the order of the Theme and the Experiencer is just like Type 2 verbs. This will be referred as Type 2a verbs:

TYPE	SUBJECT	OBJECT
2a	Theme (NOM)	Experiencer (DAT)

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
ilgi	nominative	göster-	psych	Type 2a
sevgi	nominative	göster-	psych	Type 2a
yakınlık	nominative	göster-	psych	Type 2a

Table 9. Compound Psych Verbs Which Derive with a Nominative Psych Nominal (9)

(13)   <u>Kadın bu çocuklara</u> yeterince sevgi göstermemiş.
        Theme   Experiencer
        (NOM)   (DAT)
        The woman did not love these children enough.

(14)   <u>Komşular bize</u> çok yakınlık gösterdi.
        Theme Experiencer
        (NOM)   (DAT)
        The neighbors showed us a great hospitality.

Similarly, *ver-* with a psych noun sometimes produces Type 3a verbs in terms of dative case marking while they are Type 2 verbs in terms of the position of the Experiencer argument. Although they are Type 2a verbs, some other compound psych verbs with *ver-* are Type 3a verbs:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
bıkkınlık	nominative	ver-	psych	Type 2a
daral	nominative	ver-	psych	Type 2a
heyecan	nominative	ver-	psych	Type 2a
önem	nominative	ver-	psych	Type 3a
tepki	nominative	ver-	psych	Type 3a

Table 10. Compound Psych Verbs Which Derive with a Nominative Psych Nominal (10)

(15)   <u>Ali Ayşe'ye</u> daral/ heyecan/ bıkkınlık verdi.
        Theme Experiencer
        (NOM)   (DAT)
        Ali bored Ayşe.

(16)   <u>Ali Ayşe'ye</u> önem verdi.
        Experiencer   Theme
        (NOM)   (DAT)
        Ali cared about Ayşe.

A psych nominal with *uyandır-* produces a similar case which we will call as Type 2b psych verbs such as the following ones which have locative Experiencers and nominative Themes just like the order in Type 2 as (17a) and (18a) shows. *Uyandır-* can also be used without the causative morpheme appearing either with a dative Theme or a purpose clause as in (17b), (17c) and (18b), (18c):

TYPE	SUBJECT	OBJECT
2b	Theme (NOM)	Experiencer (LOC)

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
ilgi	nominative	uyandır-	psych	Type 2b
merhamet	nominative	uyandır-	psych	Type 2b
nefret	nominative	uyandır-	psych	Type 2b
sevgi	nominative	uyandır-	psych	Type 2b
şevkat	nominative	uyandır-	psych	Type 2b

Table 11. Compound Psych Verbs Which Derive with a Nominative Psych Nominal (11)

(17)　　　a. Bu tip konular bende aşırı ilgi uyandırıyor.
　　　　　　　Theme　　　Experiencer
　　　　　　　(NOM)　　　(LOC)
　　　　　This kind of subjects interest me a lot.

　　　　　b. Bu tip konulara (karşı) bende aşırı bir ilgi uyanıyor.
　　　　　　　Theme　　　　　　Experiencer
　　　　　　　(DAT)　　　　　　(LOC)
　　　　　c. Bu tip konular için bende aşırı bir ilgi uyanıyor.
　　　　　　　PURP. CL.　　　　Experiencer
　　　　　　　　　　　　　　　　(LOC)

(18)　　　a. Sokak çocukları kiminde merhamet kiminde nefret uyandırıyor.
　　　　　　　Theme　　　Experiencer
　　　　　　　(NOM)　　　(LOC)
　　　　　Homeless children make some feel pity and some others feel hate.

　　　　　b. Sokak çocuklarına karşı insanlarda merhamet uyanıyor.
　　　　　　　Theme　　　　　　Experiencer
　　　　　　　(DAT)　　　　　　(LOC)
　　　　　c. Sokak çocukları için insanlarda merhamet uyanıyor.
　　　　　　　PURP. CL.　　　　Experiencer
　　　　　　　　　　　　　　　　(LOC)

The helping verb *yap-* can be combined with either bare psych nouns:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
baskı	nominative	yap-	psych	Type 2a
cilve	nominative	yap-	psych	Type 3a

Table 12. Compound Psych Verbs Which Derive with a Nominative Psych Nominal (12)

or with nouns derived with –lIk. When it is used with a psych noun derived

with –lIk, it produces Type 4 psych verbs:

NOMINAL	CASE	HELPING VERB	SENSE	
ahmaklık	nominative	yap-	psych	Type 4
çapkınlık	nominative	yap-	psych	Type 4

çocukluk	nominative	yap-	psych	Type 4
serserilik	nominative	yap-	psych	Type 4
sululuk	nominative	yap-	psych	Type 4
şımarıklık	nominative	yap-	psych	Type 4
terbiyesizlik	nominative	yap-	psych	Type 4

Table 13. Compound Psych Verbs Which Derive with a Nominative Psych Nominal (13)

(19)   Kız bazen çok şımarıklık yapıyor.
        Experiencer
        (NOM)
        The girl sometimes spoils a lot.

However when it is used with bare psych nominals it produces either a Type 3a as in (20) or a Type 2a psych verb as in (21):

(20)   Ali Ayşe'ye cilve yapıyor.
        Experiencer Theme
        (NOM)   (DAT)
        Ali flirts with Ayşe.

(21)   Ali Ayşe'ye baskı yapıyor.
        Theme Experiencer
        (NOM) (DAT)
        Ali pressures on Ayşe.

The analyses in this section have shown that most of the compound psych verbs in Turkish are constructed by combining a nominative psych nominal with such helping verbs as *bağla-, besle-, çek-, duy-, et-, geçir-, göster-, uyandır-, ver-* and *yap-*:

Nominative psych nominals+ One of the helping verbs above= A compound psych verb

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The output compound psych verb can belong to one of the specified psych verb classes; Type 1, 3a, 3b, 4 or to three new classes; 2a, 2b and 4a (as variants of Type 2 and 4) which should be added to the existing four psych verb types.

II. 4. 2.   Compound Psych Verbs which Derive with an Accusative Psych Nominal

Compared to the compound psych verbs derived with nominative nominals, accusative ones are lesser in number. For example *çek-* can be used with a genitive+ accusative marked psych noun similar to a Type 1 psych verb:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
acısını	accusative	çek-	psych	Type 1
hasretini	accusative	çek-	psych	Type 1
özlemini	accusative	çek-	psych	Type 1

Table 14. Compound Psych Verbs Which Derive with an Accusative Psych Nominal (1)

(1) Ali yıllarca Ayşe'nin hasretini çekti.
  Experiencer   Theme
    (NOM)   (ACC)

  Ali yearned for Ayşe for long years.

Without genitive marking, these helping verbs can be used with nominative psych nominals as *acı çek-, özlem çek-, hasret çek-* etc.

The following genitive+ accusative psych constructions are used with *yerine*; they become Type 4 compound psych verbs with *gel* and they can also be used with *getir-* (which is inherently causative) together with *yerine* as in (3):

(2) Ali'nin keyfi yerine geldi.
        Theme
        (NOM)
  Ali cheered again.

(3) Ayşe Ali'nin keyfini yerine getirdi.
    Causer   Theme
    (NOM)   (ACC)
    Ayşe made Ali cheer again.

NOMINAL	CASE	HELPING VERB	SENSE
keyfi(ni)/ neşesi(ni) yerine	dative	gel-/ getir-	psych

Table 15. Compound Psych Verbs Which Derive with an Accusative Psych Nominal (2)

Kes- can also be used with an accusative psych noun as a Type 3b verb:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
ümidi	accusative	kes-	psych	Type 3b

Table 16. Compound Psych Verbs Which Derive with an Accusative Psych Nominal (3)

(4) <u>Ali Ayşe'den</u> ümidi kesti.
Experiencer Theme
 (NOM)   (ABL)
    Ali gave up his hopes for Ayşe.

The following accusative nominals can be combined with the verb *tut-* which produces the following expressions that require a genitive Experiencer. This is a variant of Type 4 which will be called as Type 4b thereafter:

TYPE	SUBJECT	OBJECT
4b	Experiencer (GEN)	Ø

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
çocukluğu	accusative	tut-	psych	Type 4
iyiliği	accusative	tut-	psych	Type 4
yardımseverliği	accusative	tut-	psych	Type 4

Table 17. Compound Psych Verbs Which Derive with an Accusative Psych Nominal (4)

(5) <u>Ali'nin</u> iyiliği tuttu.
    Experiencer
     (GEN)
    Ali became such a kind hearted person.

Therefore, there are only three helping verbs; *çek-, kes-, gel-, getir-* and *tut-* which can be used with an accusative nominal to produce a compound psych verb. The output verbs belong to Type 1, Type 3b or a proposed new class called Type 4b.

II. 4. 3.   **Compound Psych Verbs which Derive with a Dative Psych Nominal**

Al- as a helping verb produces non psych compound constructions when combined with a nominative or accusative nominal. When it is used with a dative psych nominal it either produces Type 1 or Type 2 compound psych verbs:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
hedef	nominative	al-	non psych	-
önlem	nominative	al-	non psych	-
nasibini	accusative	al-	non psych	-
alaya	dative	al-	psych	Type 2
üstüne	dative	al-	psych	Type 1
ciddiye	dative	al-	psych	Type 1

Table 18. Compound Psych Verbs Which Derive with a Dative Psych Nominal (1)

(1) Ali Ayşe'yi ciddiye almadı.
Experiencer Theme
  (NOM)   (ACC)
    Ali did not take Ayşe seriously.

(2) Ali Ayşe'yi alaya aldı.
  Theme Experiencer
  (NOM)   (ACC)
    Ali made fun of Ayşe.

Al- can produce another Type 1 verb when the reflexive morpheme is attached to the verb:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
üstüne	dative	alın	psych	Type 1

Table 19. Compound Psych Verbs Which Derive with a Dative Psych Nominal (2)

(3) Ayşe herşeyi üstüne alınıyor.
Experiencer Theme
  (NOM)   (ACC)
    Ayşe takes everything as offence.

The compound of dative psych nouns with *düş-* results in Type 4 compound psych verbs:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
aşka	dative	düş-	psych	Type 4
bunalıma	dative	düş-	psych	Type 4

Table 20. Compound Psych Verbs Which Derive with a Dative Psych Nominal (3)

(4) <u>Ayşe</u> son zamanlarda iyice bunalıma düştü.
   Experiencer
   (NOM)
      Ayşe has been in a real depression recently.

There are other instances where the Experiencer is in the object position. The difference from the Type 2 is in the case marking. When the following dative psych nominals are used with *gel*, the Experiencer is either a genitive marked nominal (5a) or an overt possessive adjective. This type of compound psych verbs will be named as Type 2c verbs which are another instantiation of Type 2 verbs:

TYPE	SUBJECT	OBJECT
2c	Theme (NOM)	Experiencer (GEN)

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
dalgınlığına	dative	gel-/ getir-	psych	Type 2c
şaşkınlığına	dative	gel-/ getir-	psych	Type 2c

Table 21. Compound Psych Verbs Which Derive with a Dative Psych Nominal (4)

(5) a. <u>Sorduğu soru</u> şaşkınlığıma geldi.
         Theme
         (NOM)
      I was in a rather dumfounded mood when she asked the question.

   b. <u>Sorduğu soru benim</u> şaşkınlığıma geldi.
         Theme   Experiencer
         (NOM)   (GEN)

With *getir-* which is causative itself, there is a Causer, an accusative Theme and again a genitive Experiencer:

(6) <u>Ali bu soruyu</u> şaşkınlığıma getirdi.
   Causer   Theme
   (NOM)   (ACC)
   Ali deliberately asked this question when I was in such a dumfounded mood.

The following genitive+ dative psych nouns with *git-* produce Type 2c psych verbs too:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
garibine	dative	git-	psych	Type 2c
gücüne	dative	git-	psych	Type 2c
hoşuna	dative	git-	psych	Type 2c
tuhafına	dative	git-	psych	Type 2c

Table 22. Compound Psych Verbs Which Derive with a Dative Psych Nominal (5)

(7) <u>Ali'nin sözleri</u> <u>Ayşe'nin</u> hoşuna gitti.
    Theme   Experiencer
    (NOM)   (GEN)
   Ayşe liked what Ali said.

Kapıl- and *uğra-* with dative psych nouns produce Type 4 compound psych verbs:

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
cezbeye	dative	kapıl-	psych	Type 4
heyecana	dative	kapıl-	psych	Type 4
telaşa	dative	kapıl-	psych	Type 4
ümide	dative	kapıl-	psych	Type 4

Table 23. Compound Psych Verbs Which Derive with a Dative Psych Nominal (6)

(8) <u>Ayşe</u> birden telaşa kapıldı.
Experiencer
(NOM)
   Ayşe suddenly panicked.

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
dumura	dative	uğra-	psych	Type 4
şaşkınlığa	dative	uğra-	psych	Type 4

Table 24. Compound Psych Verbs Which Derive with a Dative Psych Nominal (7)

(9) <u>Ayşe</u> bu haberi duyunca dumura uğradı.
Experiencer
(NOM)
   Ayşe became stupefied when heard the news.

The following compound psych verbs with *var-* require genitive marked Themes. This presents another instance which will be regarded as Type 5 that does not correspond any of the proposed types:

TYPE	SUBJECT	OBJECT
5	Experiencer (NOM)	Theme (GEN)

NOMINAL	CASE	HELPING VERB	SENSE	TYPE
ayrımına	dative	var-	psych	Type 5
farkına	dative	var-	psych	Type 5

Table 25. Compound Psych Verbs Which Derive with a Dative Psych Nominal (8)

(10)   <u>Ali</u> <u>gerçeklerin</u> farkına vardı.
       Experiencer   Theme
        (NOM)   (GEN)
         Ali realized the truths.

(11)   <u>Ali</u> <u>bu olayların</u> ayrımına vardı.
       Experiencer   Theme
        (NOM)   (GEN)
         Ali figured out these events.

II. 4. 4.   Compound Psych Verbs which Derive with a Complex Nucleus

The following compound psych verbs consist of two verbs one of which is a psych verb derived with –*Ip* and the other is one of the helping verbs *at-*, *git-* and *kal-*. These helping verbs reinforce the meaning of the psych component:

PSYCH VERB	HELPING VERB	SENSE	TYPE
dalıp	git-	psych	Type 3a
unutup	git-	psych	Type 1
apışıp	kal-	psych	Type 4
donup	kal-	psych	Type 4
şaşırıp	kal-	psych	Type 3a

Table 26. Compound Psych Verbs Which Derive with a Complex Nucleus (1)

(1) <u>Ayşe</u> <u>eski günleri</u> unutup gitti.
   Experiencer   Theme
    (NOM)   (ACC)
    Ayşe has already forgotten the old days.

(2) <u>Ayşe</u> <u>uzaklara</u> dalıp gitti.
   Experiencer   Theme
    (NOM)   (DAT)
    Ayşe become lost in thoughts looking far away.

(3) <u>Ayşe</u> donup kaldı.
   Experiencer
    (NOM)
    Ayşe was paralyzed.

II. 4. 5.   Compound Psych Verbs which Derive with an Adjective

The helping verb can be combined with a psych adjective as well as a psych noun. The resulting compound verb can be a Type 1 verb as in the following:

ADJECTIVE	HELPING VERB	SENSE	TYPE
aşağı	gör-	psych	Type 1
büyük	gör-	psych	Type 1
hor	gör-	psych	Type 1
küçük	gör-	psych	Type 1
yeğ	tut-	psych	Type 1

Table 27. Compound Psych Verbs which Derive with an Adjective (1)

(1) Ali kendini (herkesten)büyük görüyor.
   Experiencer
    (NOM)
     Ali is full of self conceit.

(2) Ali Ayşe'yi hor görüyor.
Experiencer Theme
 (NOM)   (ACC)
    Ali looks down upon Ayşe.

or it can be a Type 2 verb with an accusative Experiencer:

ADJECTIVE	HELPING VERB	SENSE	TYPE
alakadar	et-	psych	Type 2
mutlu	et-	psych	Type 2

Table 28. Compound Psych Verbs which Derive with an Adjective (2)

(3) Bu konu beni alakadar ediyor.
   Theme Experiencer
  (NOM) (ACC)
 This subject interests me.

(4) Ayşe Ali'yi mutlu ediyor.
   Theme Experiencer
  (NOM) (ACC)
  Ayşe makes Ali happy.

The following are Type 3a compound psych verbs derived with adjectives:

ADJECTIVE	HELPING VERB	SENSE	TYPE
aşık	ol-	psych	Type 3a
bağımlı hale	gel-	psych	Type 3a
ifrit	ol-	psych	Type 3a

Table 29. Compound Psych Verbs which Derive with an Adjective (3)

(5) Ali Ayşe'ye aşık oldu.
Experiencer Theme
(NOM)   (DAT)

There are also compound psych verbs which belong to Type 3b in which the ablative expresses the cause/ reason of the psych event:

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ADJECTIVE	HELPING VERB	SENSE	TYPE
deliye	dön-	psych	Type 3b
çılgına	dön-	psych	Type 3b
şaşkına	dön-	psych	Type 3b
mutlu	ol-	psych	Type 3b
tedirgin	ol-	psych	Type 3b

Table 30. Compound Psych Verbs which Derive with an Adjective (4)

(6) <u>Ayşe öfkeden</u> deliye döndü.
Experiencer Theme
(NOM) (ABL)
   Ayşe got mad wih anger.

(7) <u>Ayşe herşeyden</u> mutlu olur.
Experiencer Theme
(NOM) (ABL)
   Everything makes Ayşe happy.

(8) <u>Ayşe bu sesten</u> tedirgin oldu.
Experiencer Theme
(NOM) (ABL)
   This sound made Ayşe restless.

Lastly, there are Type 4 compound psych verbs derived with adjectives:

ADJECTIVE	HELPING VERB	SENSE	TYPE
çekingen	davran-	psych	Type 4
utangaç	davran-	psych	Type 4
akıllı	dur-	psych	Type 4
uslu	dur-	psych	Type 4
bozum	ol-	psych	Type 4
samimi	ol-	psych	Type 4
tuhaf	ol-	psych	Type 4

Table 31. Compound Psych Verbs which Derive with an Adjective (5)

(9) <u>Kız</u> utangaç davrandı.
Experiencer
(NOM)
   The girl behaved shamefully.

(10)   <u>Çocuklar</u> uslu durdu.
Experiencer
(NOM)
   The children stayed quiet.

(11)   <u>Ayşe</u> bozum oldu.
Experiencer
(NOM)
   Ayşe was embarrassed.

The analysis of compound psych verbs has shown that the proposed classification for lexical psych verbs in Turkish does not cover compound configurations

properly. Therefore the classification rules for psych verb types in Turkish should be rewritten for compound psych verbs adding the six types; Type 2a, 2b, 2c, 4a, 4b and 5:

TYPE	SUBJECT	OBJECT	TYPE
1	Experiencer (NOM)	Theme (ACC)	Lexical
2	Theme (NOM)	Experiencer (ACC)	Lexical
2a	Theme (NOM)	Experiencer (DAT)	Compound
2b	Theme (NOM)	Experiencer (LOC)	Compound
2c	Theme (NOM)	Experiencer (GEN)	Compound
3a	Experiencer (NOM)	Theme (DAT)	Lexical
3b	Experiencer (NOM)	Theme (ABL)	Lexical
4	Experiencer (NOM)	Ø	Lexical
4a	Experiencer (DAT)	Ø	Compound
4b	Experiencer (GEN)	Ø	Compound
5	Experiencer (NOM)	Theme (GEN)	Compound

Table 32. A New Classification for Turkish Psych Verbs Including Compound Forms

Compound psych verbs can be regarded as a result of an incorporation process. When the thematic arguments of non psych senses of these helping verbs are examined, it is observed that there are two types of incorporation; one is Theme Incorporation and the other is Goal Incorporation as the following table exemplifies:

	NOMINAL	CASE	HELPING VERB	TYPE	NON PSYCH	PSYCH
1 **Goal Incorporation**	alaya	dative	al	Type 2	Ali Ayşe'yi eve aldı. Agent Theme Goal (NOM) (ACC) (DAT)	Ali Ayşe'yi alaya aldı. Theme Experiencer (NOM) (ACC)
	ciddiye/üstüne	dative	al	Type 1		Ali Ayşe'yi ciddiye aldı. Experiencer Theme (NOM) (ACC)
	üstüne	dative	alın	Type 1	-	Ali herşeyi üstüne alınıyor. Experiencer Theme (NOM) (ACC)
2 **Theme Incorporation**	ümit	nominative	bağla	Type 3a	Ali ağaca ip bağladı. Agent Goal Theme (NOM) (DAT) (NOM)	Ali bu işe ümit bağladı. Experiencer Theme (NOM) (DAT)
3 **Theme Incorporation**	sevgi/ nefret/ umut/ ümit	nominative	besle	Type 3a	Ali kedi besliyor. Agent Theme (NOM) (NOM) *Ali Ayşe'ye kedi besliyor. Agent Goal Theme (NOM) (DAT) (NOM)	Ali Ayşe'ye derin bir sevgi besliyor. Experiencer Theme (NOM) (DAT)
4 **Theme Incorporation**	acı/ işkence	nominative	çek	Type 4	Ali kura çekiyor. Agent Theme (NOM) (NOM)	Ali çok acı çekiyor. Experiencer (NOM)
	hasretini/ acısını/ özlemini	accusative	çek	Type 1/5	Ali ipi çekiyor. Agent Theme (NOM) (ACC)	Ali Ayşe'nin hasretini çekiyor. Experiencer Theme (NOM) (GEN) (POSS.) (ACC)
5 **Goal Incorporation**	bunalıma/ aşka	dative	düş	Type 4	Ali yere düştü. Patient Goal (NOM) (DAT)	Ali bunalıma düştü. Experiencer (NOM)
6 **Theme Incorporation**	acı/ heyecan	nominative	duy	Type 4	Ali bir ses duyuyor. Agent Theme (NOM) (NOM)	Ali çok acı duyuyor. Experiencer (NOM)
	ilgi/ arzu/ istek/ özlem	nominative	duy	Type 3a		Ali anlambilime ilgi duyuyor. Experiencer Theme (NOM) (DAT)
	utanç/ gurur	nominative	duy	Type 3b	Ali yan odadan sesler duyuyor. Agent Source Theme (NOM) (ABL) (NOM)	Ali söylediklerinden utanç duyuyor. Experiencer Theme (NOM) (ABL)

# / Category	Noun	Case	Verb	Type	Example (middle)	Example (right)
7	alay	nominative	et	Type 3d	-	Ali Ayse'yle alay etti. Experiencer (NOM) — Theme (INST.)
	endişe	nominative	et	Type 3b		Doktorlar kanamasından endişe etti. Experiencer (NOM) — Theme (ABL)
	heves/ aldırış/ cüret/ telaş	nominative	et	Type 3a		Çocuklar dondurmaya heves etti. Experiencer (NOM) — Theme (ABL)
	umut/ arzu/ ümit	nominative	et	Type 1		Ali bu günleri umut etti. Experiencer (NOM) — Theme (ACC)
	akıllılık/ aksilik/ arsızlık/ cadılık/ çocukluk/ densizlik/ mızmızlık	nominative	et	Type 4		Ali akıllılık ediyor. Experiencer (NOM)
8 Theme Incorporation	cinnet/ buhran bunalım	nominative	geçir	Type 4	Kadın kötü bir hastalık geçirmiş. Patient (NOM) — Theme (NOM)	Kadın sonunda cinnet geçirmiş. Experiencer (NOM)
9	fenalık/ sinir/ bay	nominative	gel	Type 4a	Bize misafir geldi. Goal (DAT) — Agent (NOM)	Bize fenalık geldi. Experiencer (DAT)
Goal Incorporation	dalgınlığına/ şaşkınlığına	dative	gel/ getir	Type 2c	Ayse evime geldi. Agent (NOM) — Goal (DAT)	Sorduğu soru Ayse'nin dalgınlığına geldi. Theme (NOM) — Experiencer (GEN) (POSS) (DAT)
10 Goal Incorporation	garibine/ gücüne/ hoşuna/ tuhafına	dative	git	Type 2c	Ali Ayse'nin okuluna gitti. Agent (NOM) — Goal (DAT)	Ali'nin sözleri Ayse'nin hoşuna gitti. Theme (ACC) — Experiencer (NOM)
11 Theme Incorporation	ilgi/ sevgi/ yakınlık	nominative	göster	Type 2a	Komşular bize ev/ evi gösterdi. Agent (NOM) — Beneficiary (DAT) — Theme (NOM/ ACC)	Komşular bize çok yakınlık gösterdi. Experiencer (NOM) — Theme (DAT)
12 Goal Incorporation	heyecana/ telaşa/ ümide	dative	kapıl	Type 4	Ayse akıntıya kapıldı. Agent (NOM) — Goal (DAT)	Ayse birden telaşa kapıldı. Experiencer (NOM)

# / Category	Noun	Case	Verb	Type	Example (Non-Psych)	Example (Psych)
13 Theme Incorporation	ümidi	accusative	kes	Type 3b	Ali maaşımızdan bu parayı kesti. Agent (NOM) Source (ABL) Theme (ACC)	Ali Ayşe'den ümidi(n)i kesti. Experiencer (NOM) Theme (ABL)
14 Theme Incorporation	iyiliği/ çocukluğu/ yardımseverliği	accusative	tut	Type 4b	Ali'nin dileği tuttu. Agent (GEN) Theme (ACC)	Ali'nin iyiliği tuttu. Experiencer (GEN)
15	ilgi/ merhamet/ nefret/ sevgi/ şevkat	nominative	uyandır	Type 2b	-	Bu tip konular bende aşırı ilgi uyandırıyor. Theme (NOM) Experiencer (LOC)
16 Theme Incorporation	farkına/ ayrımına	dative	var	Type 5	Ali Ankara'ya vardı. Agent (NOM) Goal (DAT)	Ali gerçeklerin farkına vardı. Experiencer (NOM) Theme (GEN)
17 Theme Incorporation	bıkkınlık/ daral/ heyecan	nominative	ver	Type 2a	Ali Ayşe'ye para verdi. Agent (NOM) Goal (DAT) Theme (NOM)	Ali Ayşe'ye bıkkınlık verdi. Theme Experiencer (NOM) (DAT)
	önem/ tepki	nominative	ver	Type 3a		Ali Ayşe'ye önem verdi. Experiencer Theme (NOM) (DAT)
18 Theme Incorporation	baskı	nominative	yap	Type 2a	Ayşe Ali'ye kek yapıyor. Agent Beneficiary Theme (NOM) (DAT) (NOM)	Ali Ayşe'ye baskı yapıyor. Theme Experiencer (NOM) (DAT)
	cilve/ naz	nominative	yap	Type 3a		Ali Ayşe'ye cilve yapıyor. Experiencer Theme (NOM) (DAT)
	ahmaklık/ çocukluk/ sululuk/ şımarıklık/ terbiyesizlik	nominative	yap	Type 4	Ayşe çok güzel kek yapıyor. Agent Theme (NOM) (NOM)	Ayşe bazen şımarıklık yapıyor. Experiencer (NOM)

Table 2. Summary of the Psych and Non-Psych Compound Forms

II. 5.   Psych Adjective Derivation

This section analyzes the adjectives which have psychological senses. The analysis shows that morphologically, psychological state adjectives can be classified into five groups according to their roots which enter as the input of the adjectivalization process. These are:

1. those which have *verbal roots*

2. those which have *adjectival roots*

3. those which have *nominal roots*

4. those which are *non-derived* in any way

5. those which are used as *compound forms*

On the other hand, semantically, there are two participants in the event described by the psychological verb. First, there is a *Stimulus* which is a simple *animate* or *inanimate NP*, an *act* or a *psychological event* which stimulates the Experiencer to experience the psychological state. Second, there is an animate *Experiencer* who experiences the mentioned psychological state:

Experiencer   Psychological State Verb   Stimulus
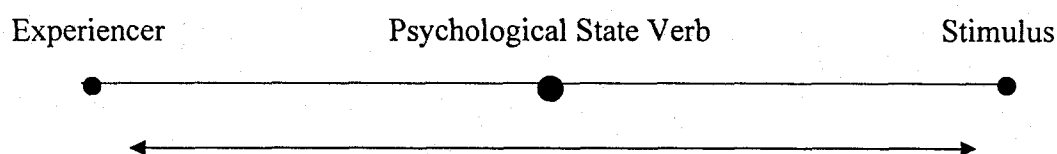
Figure 1.   The Experiencer Stimulus Interaction

The derivation of psychological adjectives is assumed to include the following stages:

*   The Stimulus stimulates the psychological state in the Experiencer.

*   The Experiencer experiences the psychological state stimulated by the Stimulus.

As a result of this bidirectional interrelationship:

- The Experiencer gains some qualities through the effect of the Stimulus and these qualities are expressed by a modifying psych adjective.

- The Stimulus gains some qualities through the effect of the Experiencer and these qualities are expressed by a modifying psych adjective.

Therefore, semantically, there are two main types of psych adjectives to which a third one which have the both functions could be added:

1. those which *modify the Experiencer* argument

2. those which *modify the Stimulus* argument

3. those which *modify both* the Experiencer and the Stimulus arguments

II. 5. 1.   Psych Adjectives Derived from Verbal Roots

In this group derived from verbal roots, first there are psych adjectives which modify the Experiencer argument.

-GAn is one of the morphemes which derive Experiencer modifying psych adjectives from the psych verbs:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
alın-	-GAn	alıngan
az-	-GAn	azgın
bay-	-GAn	baygın
bez-	-GAn	bezgin
bil-	-GAn	bilgin
çekin-	-GAn	çekingen
dal-	-GAn	kalgın
diren--	-GAn	direngen
iğren-	-GAn	iğrengen
kasıl-	-GAn	kasılgan
kırıl-	-GAn	kırılgan
kız-	-GAn	kızgın
süz-	-GAn	süzgün
üz-	-GAn	üzgün
yetin-	-GAn	yetingen
yıl	-GAn	yılgın

Table 1.   Psych Adjectives Derived with –Gan

-GI + cI/ lI/ sIz and *-gIç* also derive psych adjectives which modify the

Experiencer:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
bil-	-GI + cI/ lI/ sIz	bilgici bilgili bilgisiz
duy-	-GI + cI/ lI/ sIz	duygulu duygusuz
say-	-GI + cI/ lI/ sIz	saygılı saygısız
sev-	-GI + cI/ lI/ sIz	sevgili
sez-	-GI + cI/ lI/ sIz	sezgili
üz-	-GI + cI/ lI/ sIz	üzgülü

Table 2.   Psych Adjectives Derived with -GI + cI/ lI/ sIz

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
bil	-gIç	bilgiç

Table 3.   Psych Adjectives Derived with –gIç

-Ik is one of the most productive morphemes which derive psych adjectives

from psych verbs. All of the following adjectives modify the Experiencer:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
don-	-Ik	donuk
gücen-	-Ik	gücenik
kop-	-Ik	kopuk
kudur-	-Ik	kuduruk
şımar-	-Ik	şımarık
sırnaş-	-Ik	sırnaşık
uç-	-Ik	uçuk
uyan-	-Ik	uyanık
uyuş-	-Ik	uyuşuk
yılış-	-Ik	yılışık
yırt-	-Ik	yırtık
yıvış-	-Ik	yıvışık

Table 4.   Psych Adjectives Derived with –Ik

-IntI + (lI/ sIz) produces the following adjective forms from the psych verbs:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
kas-	-IntI + (lI/ sIz)	kasıntı
düşün-	-IntI + (lI/ sIz)	düşüntülü
tak-	-IntI + (lI/ sIz)	takıntılı takıntısız
ürk-	-IntI + (lI/ sIz)	ürküntülü
üz-	-IntI + (lI/ sIz)	üzüntülü

Table 5.   Psych Adjectives Derived with —IntI + (lI/ sIz)

-Inç + lI/ sIz also derives psych adjectives which are the modifiers of the Experiencer argument except for the last two which can also be used as the modifiers of the Stimulus:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
bil-	-Inç + lI/ sIz	bilinçli bilinçsiz
inan-	-Inç + lI/ sIz	inançlı inançsız
iste-	-Inç + lI/ sIz	istençli istençsiz
kork-	-Inç + lI/ sIz	korkunç
sev-	-Inç + lI/ sIz	sevinçli

Table 6.   Psych Adjectives Derived with -Inç + lI/ sIz

-Iş + lI/ sIz and *-It + lI/ sIz* are other morphemes which derive Experiencer modifying psych adjectives:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
anla-	-Iş + lI/ sIz	anlayışlı anlayışsız
kavra-	-Iş + lI/ sIz	kavrayışlı kavrayışsız
var-	-Iş + lI/ sIz	varışlı "clever"

Table 7.   Psych Adjectives Derived with -Iş + lI/ sIz

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
um	-It + lI/ sIz	umutlu umutsuz

Table 8.   Psych Adjectives Derived with -It + lI/ sIz

-Ar + lI/ sIz, -cA + lI/ sIz and *-DA + lI* also derive the following psych adjectives which modify the Experiencer:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
duy-	-Ar + lI/ sIz	duyarlı duyarsız
um-	-Ar + lI/ sIz	umarsız

Table 9.   Psych Adjectives Derived with -Ar + lI/ sIz

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
düşün-	-cA + lI/ sIz	düşünceli düşüncesiz

Table 10. Psych Adjectives Derived with -cA + lI/ sIz

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
sev-	-DA + lI	sevdalı

Table 11. Psych Adjectives Derived with -DA + lI

There is only one psych adjective in our data which seem to be derived from a psych verb with the morpheme –sI:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
sin-	-sI	sinsi

Table 12. Psych Adjectives Derived with -sI

Similarly, there is just one example for the following two psych adjectives both of which modify the Experiencer:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
yan-	-Ar döner	yanar döner

Table 13. Psych Adjectives Derived with -Ar döner

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
şaş-	-kaloz	şaşkaloz

Table 14. Psych Adjectives Derived with -kaloz

The above analysis shows that there are fourteen morphemes which derive psych adjectives modifying the Experiencer from verbal roots.

On the other hand, the following morphemes derive psych adjectives which modify the Stimulus argument which as we mentioned can be one of the following:

a. a simple NP referring either to an animate or an inanimate thing

b. an act

c. an event

-DIR/ -t + IcI and *Il/ n + mA + dIk* are the only morphemes which derive just Stimulus modifying psych adjectives from psych verbs:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
bez-	-DIR/ -t + IcI	bezdirici
alçal-	-DIR/ -t + IcI	alçaltıcı
aldan-	-DIR/ -t + IcI	aldatıcı
bık-	-DIR/ -t + IcI	bıktırıcı
bunal-	-DIR/ -t + IcI	bunaltıcı
daral-	-DIR/ -t + IcI	daraltıcı

eğlen-	-DIR/ -t + IcI	eğlendirici
gücen-	-DIR/ -t + IcI	gücendirici
güven-	-DIR/ -t + IcI	güvendirici
inan-	-DIR/ -t + IcI	inandırıcı
kan-	-DIR/ -t + IcI	kandırıcı
kışkır-	-DIR/ -t + IcI	kışkırtıcı
ürper-	-DIR/ -t + IcI	ürpertici
usan-	-DIR/ -t + IcI	usandırıcı
yanıl-	-DIR/ -t + IcI	yanıltıcı

Table 15. Psych Adjectives Derived with -DIR/ -t + IcI

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
bil-	- Il/ n + mA + dIk	bilindik bilinmedik
tanı-	- Il/ n + mA + dIk	tanındık
um-	- Il/ n + mA + dIk	umulduk umulmadık

Table 16. Psych Adjectives Derived with - Il/ n + mA + dIk

In the third group, there are some morphemes which allow the derivation of both the Experiencer and the Stimulus modifying adjectives such as *–An* and *-Il + mA + mIş*:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
uyar-	-An	uyaran "stimulating"
sev-	-An	seven

Table 17. Psych Adjectives Derived with –An

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
alış-	-Il + mA + mIş	alışılmış alışılmamış
sev-	-Il + mA + mIş	sevilmiş sevilmemiş

Table 18. Psych Adjectives Derived with -Il + mA + mIş

While the second adjective derived with *-DIR/ -t + Ik + CI* modifies the Experiencer, the first one with *-DIR/ -t + Ik* modifies the Stimulus:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
uy-	-DIR/ -t + Ik + CI	uyduruk uydurukçu

Table 19. Psych Adjectives Derived with -DIR/ -t + Ik + CI

Similarly, the following first adjective refers to a Stimulus while the others generally refer to Experiencers:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
geril-	-Im + lI + sIz	gerilimli
		gerilimsiz
doy-	-Im + lI + sIz	doyımlu
		doyumsuz
güd-	-Im + lI + sIz	güdümlü
		güdümsüz
sev-	-Im + lI + sIz	sevimli
		sevimsiz
uy-	-Im + lI + sIz	uyumlu
		uyumsuz

Table 20. Psych Adjectives Derived with -Im + lI + sIz

The last adjective that follows, modifies usually an Experiencer but the rest modify the Stimulus:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
kavra-	-Il/ n + An/ mAz/ mAyan	kavranılmaz
bil--	-Il/ n + mAz/ mAyan	bilinen
		bilinmez
		bilinmeyen
sık-	-Il/ n + mAz/ mAyan	sıkılmaz

Table 21. Psych Adjectives Derived with -Il/ n + An/ mAz/ mAyan

Except for the first and the last adjectives derived with *-Im/ n/ GI + sAl*, all of the others modify the Stimulus:

INPUT VERB	MORPHEME	PSYCH ADJECTIVE
duy-	-Im/ n/ GI + sAl	duygusal
		duyumsal
düşün-	-Im/ n/ GI + sAl	düşünsel
eğit-	-Im/ n/ GI + sAl	eğitsel
		eğitimsel
kavra-	-Im/ n/ GI + sAl	kavramsal
kur-	-Im/ n/ GI + sAl	kurgusal
sez-	-Im/ n/ GI + sAl	sezgisel
uy-	-Im/ n/ GI + sAl	uysal

Table 22. Psych Adjectives Derived with -Im/ n/ GI + sAl

Apart from fourteen morphemes which derive psych adjectives modifying the Experiencer from verbal roots, we identified two morphemes which derive psych adjectives referring just to Stimulus. The analysis has also shown that there are six morphemes which allow the derivation of the adjectives modifying both the Experiencers and the Stimulus. The next section analyzes the psych adjectives derived from adjectival roots.

II. 5. 2. Psych Adjectives Derived from Adjectival Roots

The above classification dividing the adjectives as modifying either Experiencers or Stimulus is also valid for the adjectives which have adjectival roots (which are very few in number).

In the first group there are Experiencer modifying adjectives derived with –*msAr, -llk* and *-CI*:

INPUT ADJECTIVE	MORPHEME	PSYCH ADJECTIVE
iyi	-msAr	iyimser
kara	-msAr	karamsar
kötü	-msAr	kötümser

Table 23. Psych Adjectives Derived with -msAr

INPUT ADJECTIVE	MORPHEME	PSYCH ADJECTIVE
aşağı	-llk	aşağılık

Table 24. Psych Adjectives Derived with -llk

INPUT ADJECTIVE	MORPHEME	PSYCH ADJECTIVE
yaltak	-CI	yaltakçı

Table 25. Psych Adjectives Derived with -CI

In the second group, there are psych adjectives which modify only the Stimulus:

INPUT ADJECTIVE	MORPHEME	PSYCH ADJECTIVE
dar	-Al + t + IcI	daraltıcı

Table 26. Psych Adjectives Derived with -Al + t + IcI

INPUT ADJECTIVE	MORPHEME	PSYCH ADJECTIVE
ırak	-sAk	ıraksak (unexpected)

Table 27. Psych Adjectives Derived with -sAk

II. 5. 3. Psych Adjectives Derived from Nominal Roots

A similar classification shows that adjectives in this class correspond to the mentioned three groups. All of the following adjectives are derived from psych nominals.

In the first group, there are four morphemes which derive psych adjectives which modify the Experiencer. *-CI, -In* and *–kar* are the most productive ones:

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
alay	-CI	alaycı
iddia	-CI	iddiacı
tahrik	-CI	tahrikçi
tenkit	-CI	tenkitçi
ülkü	-CI	ülkücü
velvele	-CI	velveleci
yardak	-CI	yardakçı

Table 28. Psych Adjectives Derived with –CI

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
tepki	-In	tepkin
tutku	-In	tutkun

Table 29. Psych Adjectives Derived with –In

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
cüret	-kar	cüretkar
cilve	-kar	cilvekar
sitem	-kar	sitemkar
tatmin	-kar	tatminkar
tövbe	-kar	tövbekar

Table 30. Psych Adjectives Derived with –kar

The less productive one is the following, with which we have only one

example:

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
hatır	-şinas	hatırşinas

Table 31. Psych Adjectives Derived with –şinas

The second group of morphemes produces Stimulus modifying psych adjectives

such as *–i, -sAl* and *–DAn*:

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
his	-i	hissi
kast	-i	kasti
keyif	-i	keyfi
tahmin	-i	tahmini
vicdan	-i	vicdani

Table 32. Psych Adjectives Derived with –i

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
onur	-sAl	onursal
içgüdü	-sAl	içgüdüsel
sezgi	-sAl	sezgisel
tepki	-sAl	tepkisel
ülkü	-sAl	ülküsel
us	-sAl	ussal

Table 33. Psych Adjectives Derived with –sAl

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
iç	-DAn	içten
gönül	-DAn	gönülden
kalp	-DAn	kalpten
yürek	-DAn	yürekten

Table 34. Psych Adjectives Derived with –Dan

In the last group, there are morphemes which derive both Stimulus and Experiencer modifying psych adjectives:

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
etki	-lA + IcI	etkileyici
iğne	-lA + IcI	iğneleyici

Table 35. Psych Adjectives Derived with - lA + IcI

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
ilgi	-nç	ilginç

Table 36. Psych Adjectives Derived with -nç

In this group, there are two morphemes which produce a great number of psych adjectives of this kind. These are the most productive psych adjective deriving morphemes from nominal roots; -lI and –sIz. These morphemes are the positive- negative counterparts of each other and almost all nominals which allow one of them allow the other too to be attached:

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE	MODIFIES THE
acı	-lI	acılı	Both
arzu	-lI	arzulu	Experiencer
efkar	-lI	efkarlı	Experiencer
endişe	-lI	endişeli	Experiencer
etki	-lI	etkili	Both
gurur	-lI	gururlu	Experiencer
hırs	-lI	hırslı	Experiencer
hüzün	-lI	hüzünlü	Experiencer
iç	-lI	içli	Both
ilgi	-lI	ilgili	Both
kapris	-lI	kaprisli	Experiencer
kasvet	-lI	kasvetli	Experiencer
kaygı	-lI	kaygılı	Experiencer
keyif	-lI	keyifli	Experiencer
kibir	-lI	kibirli	Experiencer
kuşku	-lI	kuşkulu	Experiencer
özen	-lI	özenli	Both
özenti	-lI	özentili	Experiencer
sabır	-lI	sabırlı	Experiencer
şevk	-lI	şevkli	Experiencer

sinir	-lI	sinirli	Experiencer
şüphe	-lI	şüpheli	Both
tutku	-lI	tutkulu	Experiencer
ümit	-lI	ümitli	Both
us	-lI	uslu	Experiencer
zevk	-lI	zevkli	Both

Table 37. Psych Adjectives Derived with -lI

INPUT NOUN	MORPHEME	PSYCH ADJECTIVE
yüz	-sIz	yüzsüz
ar	-sIz	arsız
ciddiyet	-sIz	ciddiyetsiz
edep	-sIz	edepsiz
ilgi	-sIz	ilgisiz
özen	-sIz	özensiz
sabır	-sIz	sabırsız
teklif	-sIz	teklifsiz "intimate"
ümit	-sIz	ümitsiz
zevk	-sIz	zevksiz

Table 38. Psych Adjectives Derived with -sIz

II. 5. 4. Non- Derived Psych Adjectives

In this group, there are psych adjectives which are non derived with any of the mentioned morphemes. All of these verbs except *garip* modify only the Experiencer:

NON-DERIVED ADJECTIVE	POSSIBLE VERB FORM	
	-lAş	-lAn
ahmak	+	-
aksi	-	+
alçak	+	-
aşık	-	-
garip	+	-
hafif	+	-
haylaz	+	-
hırçın	+	-
küs	-	-
muzip	+	-
sakin	+	-
salak	+	-
samimi	+	-
şapşal	+	-
şen	-	+
sersem	-	-
sert	+	-
şirret	+	-
sivri	+	-

ters	-	+
ukala	+	-
uyuz	-	+
vakur	-	-
yaltak	-	+
zevzek	+	+

Table 39. Non- derived Psych Adjectives

Mostly these verbs have verbal counterparts with either –lAş or –lAn. Among these *aşık* can be verbalized with either of the helping verbs *et* or *ol* and *sersem* is verbalized with –lA. *Küs* has the same form with its verbal counterpart and *vakur* can not be verbalized with any of the helping verbs.

II. 5. 5.   Compound Psych Adjectives

Adjectival compounds have also lexical counterparts. Some of them are derived with –lAş:

ADJECTIVE	HELPING VERB	TYPE		VERB	TYPE
çekingen	davran-	Type 4	-lAş	çekingenleş-	Type 4
utangaç	davran-	Type 4	-lAş	utangaçlaş-	Type 4
çılgına	dön-	Type 3b	-lAş	çılgınlaş-	Type 4
şaşkına	dön-	Type 3b	-lAş	şaşkınlaş-	Type4
bağımlı hale	gel-	Type 3a	-lAş	bağımlılaş-	Type 3a
ifrit	ol-	Type 3a	-lAş	ifritleş-	Type 4
tedirgin	ol-	Type 3b	-lAş	tedirginleş-	Type 4
samimi	ol-	Type 4	-lAş	samimileş-	Type 4
tuhaf	ol-	Type 4	-lAş	tuhaflaş-	Type 4

Table 40. Psych Adjectives Verbalized with -lAş

Some of these verbs are derived with –lAn:

ADJECTIVE	HELPING VERB	TYPE		VERB	TYPE
deliye	dön-	Type 3b	-lAn	dellen-	Type 3a
akıllı	dur-	Type 4	-lAn	akıllan-	Type 4
uslu	dur-	Type 4	-lAn	uslan-	Type 4
alakadar	et-	Type 2	-lAn	alkalan-	Type 3c
mutlu	et-	Type 2	-lAn	mutlandır-	Type 2
büyük	gör-	Type 1	-lAn	büyüklen-	Type 4
mutlu	ol-	Type 3b	-lAn	mutlan-	Type 4

Table 41. Psych Adjectives Verbalized with –lAn

Some are derived with –*lA*:

ADJECTIVE	HELPING VERB	TYPE		VERB	TYPE
aşağı	gör-	Type 1	-lA	aşağıla-	Type 2
hor	gör-	Type 1	-lA	horla-	Type 2
yeğ	tut-	Type 1	-lA	yeğle-	Type 1

Table 42. Psych Adjectives Verbalized with -lA

A few number of complex nucleus verbs are first adjectivalized and then verbalized with –*lAş*:

ADJECTIVE	HELPING VERB	TYPE		VERB	TYPE
dalıp	git-	Type 3a	adj + -lAş	dalgınlaş-	Type 4
unutup	git-	Type 1	adj + -lAş	unutkanlaş-	Type 4
donup	kal-	Type 4	adj + -lAş	donuklaş-	Type 4
şaşırıp	kal-	Type 3a	adj + -lAş	şaşkınlaş-	Type 4

Table 43. Lexical Counterparts of Complex Nucleus Verbs (1)

The following verbs are lexicalized with none of the mentioned morphemes and *aşık ol-* does not have a lexical counterpart:

ADJECTIVE	HELPING VERB	TYPE		VERB	TYPE
küçük	gör-	Type 1	-msA	küçümse-	Type 1
bozum	ol-	Type 4	-l	bozul-	Type 3a
apışıp	kal-	Type 4	-	apış-	Type 4
aşık	ol-	Type 3a	-	-	Type 3a

Table 44. Lexical Counterparts of Complex Nucleus Verbs (2)

CONCLUSION

The study aimed at providing a descriptive account of some structural and semantic aspects of Turkish psych verbs which were not thoroughly analyzed for their own sake in Turkish.

Section I. 1. summarized the basic discussions about the argument structure focusing first on the transitivity and the unaccusative phenomenon and second, on the voice alternations and the causativity which are the basic subjects discussed in the psych verb literature.

Section I. 2., presented a brief summary of the approaches to psych verbs under two general headings; structural approaches and semantic/ aspectual approaches.

Section II. 1. gave a brief introduction to psych verbs in Turkish. An analysis of the Dictionary of Turkish Language Institute (1988) partially provided the data needed to create a database of psych verbs in Turkish which answers the first research question of the study.

In this section, first, the criteria of being a psych verb, the properties of the Experiencer and the Theme arguments of a psych verb were identified. Then, the inputs of psych verb verbalization which are non- derived bases, derived verbs and compound forms were exemplified with the verbs from the data. Lastly, the secondary psych uses in Turkish which have both psych and non psych senses were also exemplified.

Section II. 2. proposed a classification for psych verbs in Turkish. According to this classification; the thematic roles, the case marking and the syntactic position of the arguments have shown that there are four types of psych verbs in Turkish. In this section these types were introduced and exemplified with an analysis of their inputs of verbalization. Thus the second hypothesis of the study which claims that Turkish psych verb classes have similar properties with the ones proposed in the literature for different languages was proven to be true.

Section II. 3. analyzed the interaction of voice markers and psych verbs in Turkish according to their transitivity, causativity, passivization, reflexivity and reciprocity. The third hypothesis of the study that the exceptional behavior of psych verbs are also observed in their interaction with voice markers in Turkish parallel to the universal tendencies was also proven to be true.

Transitivity analysis shows that only the Type 1 and Type 2 psych verbs are transitive and the others are intransitive.

Section II. 3. 2. focused on the interaction between the causativity and psych verbs in two main sections; morphological causativity and periphrastic causativity. It was exemplified that psych verbs similar to other verb classes have their own five sub classes with respect to morphological causativity. Some psych verbs can morphologically be causativized, some can not; some psych verbs have psych meanings only in their causative form, some have only in their non causative form; and lastly, some psych verbs have different meanings in their causative and non causative forms which are both psych.

Causativity analysis shows that Type 2 verbs have an inherent causative meaning. However the restriction on the further causativization of these verbs is neither phonological nor semantic but rather morphological. Other than type 2 verbs themselves, some of the Type 1, most of the Type 3a and all of the Type 3b Type 4 verbs behave just like Type 2 verbs in their causative forms. These verbs can either be regarded as instances of different causative variants of their own types or as separate lexical entries which belong to Type 2.

Periphrastic causativity shows that these verbs have different semantic interpretations from the causative interpretations of the true members of Type 1, Type 3a and Type 3b. Sağla- constructions mostly refer to positive psych events on the part of the Experiencer and *neden ol-* constructions refer to rather negative ones. Moreover, *sağla-* constructions with the implication of a conscious effort are more compatible with mental events while *neden ol-* constructions which imply a non conscious/ accidental cause are more compatible with emotional ones.

This section has also analyzed the semantic notions of *control* and the *permissive reading* and concluded that if a psych event is not self/ internally controllable, it can not be controlled by an outer/ external agent and vice versa. If the psych event is a controllable event, it can be causativized but if the event is a non-controllable one, then the causative form seems rather odd. If the event is a non controllable one but there is still a causative form, this implies that there is a physical act or a series of physical acts involving in the causative event to evoke the emotional state on the Experiencer. Moreover, it was concluded that when the morphological counterpart of a psych verbs is negated, the periphrastic paraphrase has a permissive reading.

Sections II. 3. 3. and II. 3. 4. show that most of the psych verbs with the passive morpheme –Il have a reflexive meaning and the argument indicated with *by phrase* is also a kind of *Causer* of the event. However, this argument does not actively participate in the event since it is just a S*timulus* for the Experiencer.

Section II. 3. 5. has shown that although a few number of psych verbs in the data allow the attachment of the reciprocal morpheme, in general, these verbs do not have a reciprocal meaning. Semantically, this is due to the reason that psych activities are personal matters which can not be done reciprocally or cooperatively.

Section II. 4. shows that in Turkish, psychological states are expressed with compound forms as well as by lexical means. There are a number of compound psych verbs in Turkish which display similar structural and semantic properties with their non-psych counterparts which was the fourth hypothesis of the study proven to be true.

Turkish uses 31 helping verbs for this purpose. Most of the time, the lexical form and its compound counterpart have the same meanings. According to their components, compound psych verbs can be derived with a nominative, accusative or a dative nominal or they can be derived with a complex nucleus or an adjective.

Due to the argument structure properties of the helping verb, compound forms may be claimed to add six new classes to our existing classification of psych verbs. The argument structures of all of the compound forms are consistent with the argument structure of their non psych counterparts in that they either incorporate the Theme or the Goal arguments into the compound.

The last section analyzed the derivational properties of the adjectives which have psychological senses. Morphologically, their input can be a verbal, an adjectival or a nominal root. Alternatively, they may be non- derived in any way or they may be

compound forms. The derivation of psych adjectives does not display any idiosyncratic properties which differentiate them from general derivational patterns of Turkish as the fifth hypothesis of the study claims.

On the other hand, semantically, there are two main types of psych adjectives to which a third one which have the both functions could be added; those which *modify the Experiencer* argument, those which *modify the Stimulus* argument and those which *modify both* the Experiencer and the Stimulus arguments.

Possible further studies analyzing the application of the proposed syntactic tests to Turkish psych verbs and also the aspectual analysis of the properties of these verbs are going to help to gain new insights as to the nature of Turkish psych verbs which still need to be checked against the crosslinguistic findings.

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