A CORPUS ANALYSIS OF MULTIPLE NEGATION IN TURKISH

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2019

A CORPUS ANALYSIS OF MULTIPLE NEGATION IN TURKISH

Thesis submitted to the

Institute of Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Linguistics

by

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Boğaziçi University

2019

DECLARATION OF ORIGINALITY

I, Can Özbey, certify that

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ABSTRACT

A Corpus Analysis of Multiple Negation in Turkish

This study investigates double negative constructions (DNCs) in Turkish that incorporate an inner verbal negation followed by an outer sentential negation with respect to their pragmatic properties in a general corpus linguistics framework. In order to find such marked constructions, we have compiled a corpus and conducted a collocational analysis to observe which tense, agreement marker, verbs and discourse markers that follow the sentential negation operator *değil* are more prevailingly employed in DNCs. The asymmetrical distribution of DNCs in the context of specific grammatical and lexical elements designates the use of multiple negation as a mitigation device. Such contexts in which multiple negation leads to understatement are revealed by an elaborate empirical investigation, which indicates that the use of impersonalization and certain type of lexical elements are significantly affiliated with multiple negation. It is observed that the verbs and the majority of post-*değil* elements are semantically associated with the cognitive, perceptive or emotive stance of the author. The correlation between impersonalization and particular semantic characteristics of the lexical items constitutes a strong basis in explaining the pragmatic effects of the phenomenon of multiple negation.

ÖZET

Türkçedeki Çoklu Olumsuzluğun bir Derlem Analizi

Bu çalışmada Türkçede tümcesel olumsuzluk operatörü *değil* ile fiil öbeğine ait olumsuzluk ekinin birlikte kullanımıyla oluşan çift olumsuz yapılara (ÇOY) ait edimbilimsel özellikler, derlem dilbilimi çatısı altında incelenmiştir. Bu doğrultuda, öncelikle, belirgin kullanım alanlarına sahip bu yapıların bulunabileceği geniş bir derlem oluşturulmuş ve toplanan veride yürütülen istatistiksel birliktelik analizi vasıtasıyla hangi kip, şahıs eki, fiil ve söylem belirteçlerinin *değil* operatörü ile birlikte daha çok oranda kullanıldıkları araştırılmıştır. ÇOY içinde kullanılan bu dilbilgisel ve sözlüksel unsurların asitmetrik bir dağılım sergilemesi, çoklu olumsuzlamanın bir arıksama ve yumuşatma aracı olarak da işlev gördüğü savınının ileri sürülmesine neden olmuştur. Bu sav, detaylı bir ampirik incelemeyle ortaya koyulan kişisizleştirme ve belirgin anlamsal sınıflarda yer alan fiil kullanımının çoklu olumsuzlukla kuvvetli bir ilişkiye sahip olması doğrultusunda savunulmuştur. Bu bağlamda, ÇOY'da öne çıkan fiil ve *değil*-sonrası birimlerin anlamsal olarak yazarın bilişsel, algısal ve duygusal duruşuyla ilişkili olduğu gözlemlenmiştir. Sonuç olarak, kişisizleştirme ile sözlüksel unsurların ayırt edilen anlamsal özellikleri arasında gözlenen bağdaşımların, çoklu olumsuzluğun edimsel etkilerinin anlaşılmasında önemli bir kaynak oluşturduğu görülmüştür.

ACKNOWLEDGEMENTS

To those who persevere without a word

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ABBREVIATIONS

AGR   Agreement

DN   Double Negation

DNC   Double Negative Construction

LC   Law of Contradiction

LDN   Law of Double Negation

LEM   Law of Excluded Middle

LOGL   Log-likelihood

LQN   Law of Quantifier Negation

NC   Negative Concord

NEG   Negation

NLP   Natural Language Processing

SN   Single Negation

SNC   Single Negative Construction

CHAPTER 1

INTRODUCTION

In this thesis, pragmatic implications of the negative marker *'değil'*, which also operates as a verbal predicate, are investigated within double negative constructions as to how the semantics behind the corresponding affirmative is transformed. As early as 1917, Jespersen (1917) talks about how adjectives with negative prefixes that are negated again such as "*not unhappy*" differ from their positive counterparts. The most conspicuous effect of using a double negative is the weakening of the positive meaning that is conveyed. For instance, the state of being *not unhappy* does not necessarily refer to the state of being *happy*. Likewise, a common expression in Turkish "*Fena değil!*" (*Not Bad!*), is often used to refer to a preferable situation that is nevertheless not good enough in order for a speaker to simply utter "*İyi!*" (*Good!*).

Horn (1989), elaborates on the asymmetrical semantics of double negation (DN) pointing out how these constructions are considered to violate the Law of the Excluded Middle and, consequently, the Double Elimination principles in first-order logic. Both linguists and philosophers have speculated on the motivation behind the use of DN that does not conform to the logical axioms. Givon (1978), for example, approaches this problem from a pragmatic viewpoint, claiming that every negative statement emerges from a denial of its affirmative counterpart. In this respect, it can be assumed that a double negative statement involves a negative presupposition being denied by the speaker. The sentence (1) is an example of denying a presupposition:

1

(1) Ne   kadar para harcadığını   bilmiyor   değilim

How   much money spend+Past Part+Acc know+NEG+Prog   NOT+1st sg

'It is not that I do not know how much money s/he has spent'

However, there are particular cases where DN occurs independently of a denial of presupposition such as the example (2):

(2) Ne   kadar para harcadığını   merak etmiyor   değilim

How   much money spend+Past Part+Acc wonder+NEG+Prog NOT+1st sg

'It is not that I do not wonder how much money s/he has spent'

In (1), there is a denial of presupposition that the speaker does not actually know how much money has been spent, whereas in (2), it is not obligatory that a certain presupposition be present as to whether the speaker wonders how much money has been spent or not. We will address the case (1) as 'a denial of a presupposition' and the case (2) as 'an understatement' where the multiple negation is applied so as to mitigate the meaning of the whole expression. In this respect, we will investigate double negative constructions in Turkish within two main categories[1]:

● Denials (Strong or Weak)
● Understatements

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[1] Metalinguistic double negation may be considered to be another category as in 'Anlamıyor değil; dinlemiyor' (Not that s/he does NOT understand; s/he does not listen). However, we omitted metalinguistic negation in our corpus analysis due to its extreme rarity in double negative constructions.

The aim of this thesis is to elaborate on the pragmatics of multiple negatives in Turkish by means of an analysis of a large corpus as to how these expressions are used as pragmatic stance markers and which grammatical constraints concern the realization of these constructions. Before delving into the realm of collocational analysis, we will first distinguish negative concord from double negation, then briefly go over ambiguity of negation on both semantic and syntactic terms in order to form a ground for the dichotomy of strong and weak denials.

1.1 Negative concord

Negative concord (NC) is a well-studied phenomenon in the field of both syntax and semantics. It occurs when two negative elements resolve into a single one. Languages that have this property are called NC languages and those that do not DN languages. Zeijlstra (2008) demonstrates this distinction by providing an example from Dutch and Italian respectively:

(3)   a. Jan belt niet niemand

           Jan call NEG nobody

           DN reading: 'Jan calls somebody'

      b. Gianni non ha telefonato a nessuno

           Gianni NEG have call   to nobody

           NC reading: 'Gianni didn't call anybody'

In Dutch, two negative elements cancel each other resulting in an affirmative statement, whereas in Italian, *non* is in concord with the n-word 'nobody' yielding a single negative statement. NC languages are further divided into two groups; i.e.,

strict and non-strict NC languages (Giannakidou, 2000). Turkish shows similar properties as strict NC languages in that the verbal negative marker *-mA* is always obligatory no matter at which syntactic positions n-words are found. NC reading in Turkish is illustrated the example (4):

(4)   a. Ali kimseyi aramadı

          Ali nobody call+NEG+Past

          NC reading: 'Ali didn't call anybody'

       On the other hand, some languages exhibit both NC and DN readings when there are multiple negative elements in a statement. The example (5) from French shows this ambiguity (Corblin et al., 2004):

(5)   Personne n'a   rien   dit

        Nobody   have nothing   say+Past

        1. DN reading: 'Everybody said something'

        2. NC reading: 'Nobody said anything'

        In Turkish, however, only NC reading is possible in similar constructions:

(6)   Kimse   hiçbir şey   söylemedi

        Nobody   any   thing   say+NEG+Past+Agr

        1. DN reading: [Unattested]

         2. NC reading: 'Nobody said anything'

Although Turkish has no ambiguity unlike French when multiple n-words such as *kimse (nobody)* and *hiçbir (any)* are incorporated with a negated predicate as in (6), it has a particular case of ambiguity when specific n-words are used together with both verbal and sentential negation. We will exploit this ambiguity in the following parts of this chapter in order to form a syntactic basis to explain the dichotomy of denial, i.e., weak and strong denial.

1.2 The semantic ambiguity of negation

Aristotle was the first to formulate a logical framework for the phenomenon of negation, as Horn (1989) puts it *primus inter pares*[2]. The system of oppositions that Aristotle has found is still of relevance for modern theories that aim to elucidate the expression of negation in natural language. As we will see in this section, the two types of opposition between terms, namely contradiction and contrariety, exhibit parallelism with the dichotomy of internal and external negation within presuppositions. Before investigating presuppositions though, we will first go over the two important principles of Aristotelian logic presented in *Metaphysics* in order to establish a basis whereby ambiguity of negation manifests itself:

- The first principle is the Law of Contradiction (LC), which simply states that nothing can both be true and false at the same time: $\neg \exists x (Px \land \neg Px)$.
- The second principle is the Law of Excluded Middle (LEM), which simply states that everything is either true or false: $\forall x (Px \lor \neg Px)$.

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[2] *Latin.* First among equals.

These two basic principles bear another law, namely the Law of Double

Negation (LDN), which is closely related to the main motivation of this research.

LDN can easily be derived from LEM, in that for $\forall x(\neg Px \lor \neg\neg Px)$ to hold, double

negative expression $\neg\neg Px$ must be equivalent to Px, that is, $\neg\neg Px = Px$. If LDN

holds, LC and LEM become complementary rules by the Law of Quantifier

Negation (LQN), which can be stated as $\sim(\forall x)\phi(x) \Leftrightarrow (\exists x)\sim\phi(x)$. In other words,

LC and LEM can be translated to each other by LQN as in the case of contradictory

opposites. Therefore, both LC and LEM hold for contradictory opposition as stated

in *De Interpretatione* that at least one of two contradictions must be true, or

equivalently that one of them is true and the other one is false. Strictly speaking, LC

necessitates that two oppositions cannot both be true, whereas LEM necessitates

that two oppositions cannot both be false. In this respect, the violation of LEM in

contrary oppositions is directly associated with the violation of LDN. Considering

Px for which LEM is violated, we have the expression $\neg\forall x(Px \lor \neg Px)$,

implicating that the combination of *P* with *not P* does not generate *all P*. When

LQN is applied to this expression, we attain the expression $\exists x(\neg Px \land \neg\neg Px)$,

which implies that there exists an interjection of *not P* and *not not P*. If $\neg\neg Px$

resolves into Px by LDN, the resultant expression $\exists x(\neg Px \land Px)$ will violate LC.

Here, we adopt Aristotle's idea that *P* and *not P* never coincide, thus in no

circumstances can LC be violated. Consequently, LDN must not to convert *not not

P* to *P,* where LEM does not hold, in order for LC to hold. We consider such

dichotomy of opposition between contradiction and contrariety defined by Aristotle

to be the most fundamental phenomenon for the justification of distinguishing

between LDN and LQN at operator level. Reexamining the expression where LEM

is violated, we denote the quantifier negation with tilde sign as $\sim\forall x(Px \lor \neg Px)$.

Now, when LQN is applied to this expression, we get $\exists x(\sim Px \wedge \sim(\neg Px))$ which is true without violating LC as the expression $\sim(\neg Px)$ does not resolve into P.
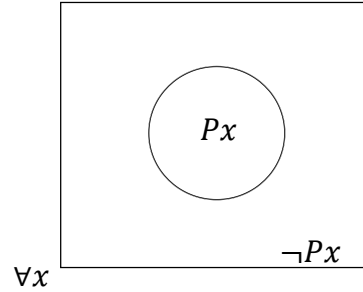
Figure 1. Contradictory opposition
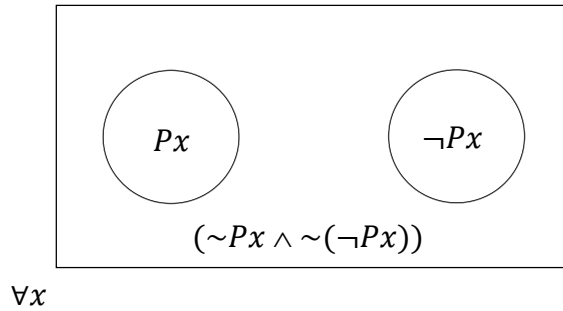
Figure 2. Contrary opposition

Van Der Wouden (1996) touches upon the violation of LEM for contrary oppositions and how contradicting the contrary of P does not end up with P, that is, $\sim(\neg Px) \neq P$.

The following examples given in (7) taken from the same article are intended to emphasize the distinction between the two oppositions with respect to LEM. The first one involves contradictory adjectives *odd-even*, whereas the second one involves contrary adjectives *rich-poor*. The author draws attention to the oddness of the first example where the contradictory opposition is forced to comprise an in-between truth value.

(7)   a. This number is neither odd nor even (*it is somewhere in between)

        b. These people are neither rich nor poor (they are somewhere in between)

    It is important to note that we have now implicitly distinguished *not P* from *not-P* by establishing two types of oppositions[3] depicted in Figure 1 and 2. This dualism manifests itself through more recent terminologies suggested by various scholars such as nexal vs. special negation (Jespersen, 1917), sentential vs. constituent negation (Klima, 1964), weak vs. strong negation (Von Wright, 1959), outer vs. inner negation (Westerstahl, 2005). Westerstahl argues that the modern equivalent of what is known as the Aristotelian square of opposition is applicable to natural language to a greater degree as it characterizes the forms of negation in a more complete scheme. The classical and modern squares are both illustrated in Figure 3.

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[3] Another notable difference between contrary and contradictory adjectives lies in how degree modifiers interact with them. Bolinger (1972) distinguishes *non-degree* adjectives from *degree* adjectives in that the former is typically not eligible to be modified by certain modifiers such as *very, regular, sort of,* etc. If such a modifier is incorporated with a *non-degree* adjective, a metaphorical meaning arises due to presupposition of its negation (Lakoff, 1972). A similar semantic change is also observed in Turkish:

-    *O   çok   ölü.*
     He/she   very   dead
     'He/she is very dead.'

Strange though it may sound, the sentence above may be semantically valid with a presupposition that there exists a group of dead individuals compared to which a person stands out exceptionally dead, probably, by the way how he/she has died. Or, simply, the adjective *dead* is metaphorically used instead*,* where the corresponding sense (*useless, drunk, etc.*) would be gradable. This is due to the contradictory nature of the adjective *ölü* (dead) in that the violation of LEM compels it to be ungradable.
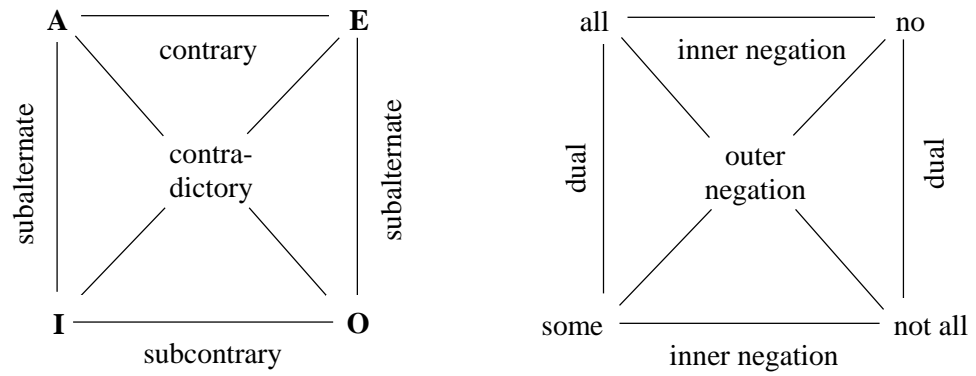
Figure 3. Classical and modern square of oppositions (Westerstahl, 2005)

Most notably, contradictory and contrary oppositions are replaced with outer and inner negation respectively in the modern version. In this respect, the meaning of the word *opposition* becomes syntactically more informative. That is, inner and outer negation variation is not obliged to be confined to the distinction of only term and predicate denial as in below:

- A is not-B (inner negation, term level)
- A is not B (outer negation, predicate level)

This dualism may emerge at higher syntactic levels such as in between two CPs:

- A is not B (inner negation, predicate level)
- It is not that A is B (outer negation, predicate level)

We have already discussed why the expression *not not-P* (predicate-term level) is not necessarily equivalent to *P*. Then, it is the same reason why the

expression *it is not that not P* (predicate-predicate level) is not necessarily equivalent to *P*, for LDN may not be applicable when the both types of opposition come together: $\sim(\neg Px) \neq P$. To make things clearer or even vaguer perhaps, let us consider a case of what would empirically be quite a marked construction:

(8)   It is not that it is not not-P

With the use of the verb *be* here, we only intend to draw attention to the hierarchy of oppositions by simplifying the sentence structure. In fact, predicates with the verb *be* are more likely to form a contradictory opposition rather than a contrary one unless used dependently of contexts.[4] Therefore, we generalize the verb inside the relative clause as shown in (9).

(9)   It is not that it not-V not-P

First, let us assume that LEM holds for *P* that *not-P* and *P* cannot both be false. Given that *P* yields contradictory opposition such as an adjectival pair *evli-bekar (married-unmarried)*, we investigate as to whether *V not-P* and *V P* can both be false or not. To test it, consider the verb *görünmek (to seem)* in the statements given in (10):

(10)   a. Evli   görünüyor.

          Married   seem+Prog+Agr

          'He/she seems married'

---

[4] That is, 'It is not that it is not not-P' is naturally equivalent to 'it is not-P' if we ignore the pragmatic effects.

b. Bekar   görünüyor.

Unmarried   seem+Prog+Agr

He/she seems unmarried'

Indeed, one can be either married or unmarried without having to seem neither married nor unmarried. So, both of the sentences above can be false. Apparently, some verbs may transform contradictory terms into contrary predicates. If we were to use *olmak (to be)*, however, we would have contradictory predicates where *V not-P* and *V P* could not both be false and *not-V not-P* would be equivalent to *V P* by LDN as in (11):

(11) a. Evli   olmuyorlar.

Married   be+NEG+Prog+Agr

'They do not happen to be married' = 'They happen to be unmarried'

b. Bekar   olmuyorlar.

Unmarried   be+NEG+Prog+Agr

'They do not happen to be unmarried' = 'They happen to be married'

Reexamining the expression (9), if we represent it as $\sim(\neg(-Px))$, in which the leftmost negation refers to the outermost one, two evident transformations will occur resulting in $\sim(Px)$ and $(-Px)$. We attain $\sim(Px)$ where the negated verb behaves as in (11) forming a contradictory predicate[5], whereas $(-Px)$ is attained when LDN is applied to the outermost negative operators in $\sim(\neg(-Px))$. Let us consider another example from Turkish in the form of (9):

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[5] That is, LDN is applicable to the inner expression: $\neg(-Px) = Px$

11

(12)   Yetersiz   görünmüyor   değil.

   Inadequate   seem+NOT+Prog+Agr   NOT

   'It is not that it does not seem inadequate.'

   1. 1st reading $\sim(Px)$: Yeterli görünüyor değil. ('It is not that it seems

   adequate.')

   2. 2nd reading $(-Px)$: Yetersiz görünüyor. ('It seems inadequate.')

   Here, the question is whether there exists a 3rd reading for (12) such that $\sim(\neg(-Px)) \neq -Px$ and $\neg(-Px) \neq Px$, considering that predicate-predicate level double negatives such as *merak etmiyor değilim (it is not that I do not wonder)* are ubiquitous in Turkish within particular contexts. Notably, these contexts do not entirely comprise of denials of a negative presupposition.[6] Thus, our intuition is that there must be another reading in which LEM is violated for the outermost negation that unfolds a room for contrary predicates akin to that of terms. This claim has, in fact, strong similarities to Vergahen's view of the dual mental space subject to sentential negation (Vergahen, 2005). To demonstrate the existence of such a reading, we first define the contrary predicates in (12) just as we have done in (10):

$$Px = Yeterli \; g\ddot{o}r\ddot{u}n\ddot{u}yor \; ('it \; seems \; adequate')$$
$$-Px = Yetersiz \; g\ddot{o}r\ddot{u}n\ddot{u}yor \; ('it \; seems \; inadequate')$$

   By this definition, we have disposed the first reading in (12), i.e., $\sim(Px)$, since LEM cannot be applied to the expression $\neg(-Px)$, which may have a middle value:

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[6] These contexts are elaborated in Chapter 4.

(13)   Ne yeterli ne de yetersiz görünüyor.

        'It seems neither adequate nor inadequate.'

Thus, the expression $\sim(\neg(-Px))$ may also be interpreted as a denial of (13). We have already formalized the logical representation of the in-between truth value for $\neg(-Px)$ as $(\neg Px \wedge \neg(-Px))$ depicted in Figure 2. Negating this expression with the outermost *değil* yields $\sim(\neg Px \wedge \neg(-Px))$, which can be translated as:

(14) $(\sim(\neg Px) \vee \sim(\neg(-Px)))$

What (14) implicates can be seen more explicitly if we negate (13) with *değil:*

(15)   Ne yeterli ne de yetersiz görünmüyor değil.

        'It is not that it seems neither adequate nor inadequate.'

Alternatively, we can paraphrase (15) as:

(16)   Yeterli görünmüyor değil; yetersiz de görünmüyor değil.

        'It is not that it does not seem adequate; it is not that it does not seem

        inadequate either'

If apply the outer LDN transformation that leads to the second reading in (12), i.e., $(-Px)$, we can paraphrase (16) as in (17):

(17)   Yeterli görünüyor; yetersiz de görünüyor.

'It seems adequate; it seems inadequate too.'

Obviously, (17) violates LC, for it is equivalent to $(Px \land (-Px))$. At this point, we claim that the violation of LC in case of contrary predicates is legitimate, and it is not affected by whether the adjective used is contradictory or not. In other words, (16) and (17) would be still valid even if a contradictory adjective such as *evli (married)* was used. The most essential implication of the violation of LEM in (16) and LC in (17) is that the statement (12) is intrinsically ambiguous because it operates both verbal and sentential negation.

Furthermore, it is not only the case of contraries where LEM is violated. Vacuous terms, e.g., irreferential subjects, may also create negative contexts in which LEM is violated in the sense that two contradictory oppositions can both be false. However, this should be distinguished from the case of contraries, because expressions without referable subjects never have a truth value being True. The statement *'Socrates is not-ill[7]'* implies *'Socrates is well'* considering that LEM holds for contradictory oppositions, of which *sick* and *well* are. If *Socrates* does not exist, on the other hand, the truth value of both statements *'Socrates is not-ill'* and *'Socrates is not-well'* will be False due to the irreferential subject. Yet, these statements do not imply that *'Socrates is neither ill nor well, he is somewhere in between'* as would be the case of contraries for denotable terms. The reason why LEM does not hold for vacuous contexts is not that there exist in-between truth values, but rather that the existence of irreferential terms is not presupposed in

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[7] Example used in Categories and De Interpretatione

negative statements as opposed to affirmatives.[8] Horn refers to this asymmetry explicitly: "Thus affirmations, with either positive or negative predicate terms, entail the existence of their subjects, while negations (predicate denials) do not" (Horn, 1989, p. 103). Horn's standpoint seems to be contrasted with Frege's, in that the latter claims that the truth value of a statement with irreferential terms should not be considered on equivalent grounds (Frege, 1892).

1.3 The syntactic ambiguity of negation

Ambiguity of polarity in sentences with negative quantifiers can only be scope related in Turkish as to which negative clause bears NC. This statement is clarified by the following sentence (18) that has a negative quantifier as an object, an affixal negation on the verb, and a sentential negation respectively:

(18)   Hiçbirini   sevmiyor   değilim.

        Any+Poss+Acc   like+NEG+Prog   NEG+Agr

        1. 1st reading: 'It is not that I do not like any of them' (I like some of them)

        2. 2nd reading: 'It is not that I like any of them' (I like them all)

Here, we find two different readings with contrastive polarities depending on whether the negative quantifier is in concord with the embedded clause or the matrix clause. The first reading is attained when we have negative concord in the narrow scope, i.e., between the quantifier and the verb. This is simply illustrated as in the following scope hierarchy:

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[8] Aristotle did not offer a presuppositional account for irreferentiality, but the preliminaries he presented led to various modern approaches to the problem in the context of presupposition.

[CP [CP [NP [NEG Hiçbirini]]   [VP [NEG sevmiyor]]]   [NEG değilim]]

$$[[\text{NEG} \qquad\qquad \text{NEG}] \qquad \text{NEG}]$$

$$\xrightarrow{\hspace{4cm}}$$
Neg concord
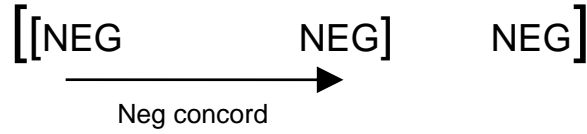
The second reading, on the other hand, is attained when we have negative

concord in the wider scope between the quantifier and the negative marker *değil*

constituting the matrix clause. Being more marked than the one with the narrow

scope, this reading becomes more comprehensible by placing stress on the negative

quantifier *hiçbiri*[9]. The scope structure is illustrated below:

[CP [NP [NEG Hiçbirini]]   [CP [VP [NEG sevmiyor]]   [NEG değilim]]]

$$[\text{NEG} \qquad\qquad\qquad [\text{NEG} \qquad \text{NEG}]]$$

$$\xrightarrow{\hspace{5cm}}$$
Neg concord
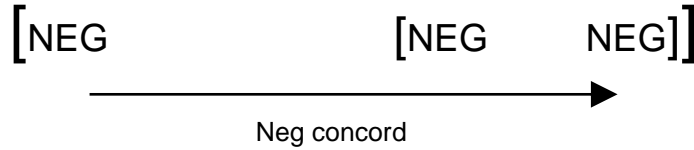
Semantic translation of the first reading in predicate logic will be

$\neg(\neg\exists x(Lx))$, which can be simplified into $\exists x(Lx)$ by LDN yielding the meaning

that *there exist some being liked.* As for the second reading, the translation will be

$\neg\exists x(\neg Lx)$, which is equivalent to $\forall x(\neg(\neg Lx))$[10] by LQN, and consequently to

$\forall x(Lx)$ by LDN[11] yielding the meaning that *everybody is liked.* It is worth noting

that only two negation operators are used in this semantic transformation, although

there exist three negative elements in (18), approving negative concord that takes

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[9] More explicitly, this reading can be conceived as the negated counterpart of the statement *'Hiçbirini seviyor değilim'* where the negative quantifier is obliged to be in concord with the sentential negative marker *'değil'*.

[10] Note that this intermediate phase would semantically correspond to the statement *'Hepsini sevmiyor değilim'* in wide scope reading although never attested in so-called form.

[11] This is true if only if the law of double negation holds for (*Lx*), such that the statements *sevmiyor değilim (it is not that I do not like)* and *seviyorum (I like)* refer to the same meaning.

place within different scope configurations so that the corresponding readings will be attested.

Here, one can justifiably ask as to why we start, in the first place, with the transformations $\neg(\neg\exists x(Lx))$ and $\neg\exists x(\neg Lx)$ for the corresponding readings: 'From what and how were these representations transformed?'. To answer this question, we approach this problem from a presuppositional perspective assuming that the presuppositions of the both readings are logically or *'semantically'* the same and the speaker denies this presupposition by introducing a NEG operator '*değil*' to it. The presupposition must have such a logical structure as $(\neg\exists x(Lx))$ or $\forall x(\neg Lx)$, that it induces the reading *'no one is liked'*. Obviously, NEG attaches to the whole expression $(\neg\exists x(Lx))$ for the first reading, whereas it attaches to the inner expression (Lx) for the second. This way, the alternation of the semantic scope of NEG *'değil'* with respect to the negative quantifier can be formulated based on a common presuppositional ground. Moreover, the denial leading to the first reading is weak, that is, it denies the presupposition only partially, admitting that *there still exist some not being liked.* The second denial, however, is strong, denying the presupposition to the fullest extent yielding the reading that *there do not exist some not being liked,* i.e. *everybody is being liked.* This implicates that negative propositions that are quantified with a negative polarity item can be denied either by completely rejecting the truth value of the presupposition or by only partially admitting it. The dichotomy of strong and weak denials becomes even more evident when the particle *de* is incorporated in different syntactic positions to resolve the ambiguity. Consider the sentences given in (19) and (20).

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(19) Hiç   de   sevmiyor   değilim.

Any   too   like+NEG+Prog   NEG+Agr

1. 1st reading: 'It is not that I do not like it at all' (I somewhat like it) –WEAK

2. 2nd reading: 'It is not that at all I do not like it' (I quite like it) –STRONG

(20) Hiç   sevmiyor   da   değilim.

Any   like+NEG+Prog   too   NEG+Agr

1. 1st reading: 'It is not that I do not like it at all' (I somewhat like it) –WEAK

2. *2nd reading: 'It is not that at all I do not like it' (I quite like it) –STRONG

In (19), where the particle *de* follows the negative polarity item *hiç,* both weak and strong denial readings are possible. However, in (20), where the particle *de* follows the verbal phrase, only the weak denial reading is possible. This dichotomy also exists for the case of gradable negative adjectives such as in *'hiç (de) önemsiz (de) değil' (not unimportant at all)*. It is important that we first demonstrate the existence of weak and strong type of denials in syntactic terms before we distinguish understatements from denials. The case of understatement will be elaborated in Chapter 4 with illustrative examples from our corpus in comparison with the case of denials as to how they semantically differ from the latter.

1.4 Thesis organization

In the subsequent chapters, we will first describe our corpus and the statistical method employed for the analysis of collocations in Chapter 2. Then, we analyze how tense and agreement (AGR) markers are distributed in terms of how they are

affiliated with DN in Chapter 3, and how impersonalization manifests itself as a result. Lastly, in Chapter 4, we look at the distribution of lexical items, namely, verbs and post-*değil* elements in order to further explore the pragmatic implications of DN.

CHAPTER 2

DATA AND METHODOLOGY

Corpora play a crucial role in supporting a linguistic claim with an empirical
evidence. The use of a corpus can be quite beneficial especially in two ways. First,
it provides nonarbitrary constructions that yield unbiased judgements as to
grammaticality. Second, substantial inferences can be made by means of statistically
analyzing a large amount of textual data. As such, corpus-based studies have
become more prevalent with the increase of publicly available data coupled with the
advancements in the field of computational linguistics. Today, researchers have
access to tools that have advanced query schemes by which they can retrieve
sentences with respect to certain syntactic constraints (Levy, 2006). However, such
resources both in terms of ubiquity of textual data and capabilities of processing the
data are not evenly distributed across languages. For instance, there are plenty of
Treebanks constructed in English such as Penn Treebank (Marcus et al., 1993),
CCGbank (Hockenmaier et al., 2007), etc., and various speech corpora, e.g., WSJ
corpus (Paul et al., 1992) and DCPSE (Aarts et al., 2006). Speech corpora are
particularly important as they provide conversational context that is more
proliferous when investigating such a marked construction as multiple negation.
However, speech corpora in Turkish are scarce, and the existing ones such as STC
(Spoken Turkish Corpus) (Ruhi et al., 2010) would not be comprehensive enough to
contain sufficient amount of relevant instances. As for written corpora in Turkish,
although there exist such Treebanks as Turkish National Corpus abbreviated as
TUD (Aksan et al, 2014), METU-Sabanci Treebank (Say et al., 2002) and
TSCorpus (Sezer B. & Sezer T., 2013), these corpora are not likely to contain

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marked negative contexts that we aim to attain, as they mostly contain formal texts. Therefore, we have compiled our own corpus the content of which was extracted from a website that is built on anonymous user contribution consisting of approximately 990 million of words. It adopts the genre of a dictionary in a loose sense. The entries are mostly comments on a wide spectrum of topics ranging from current global events to local individuals or entities. The tone is typically critical and highly opinionated. In other words, subjectivity is a more prominent feature of these texts than objectivity.

The writing style of the corpus is quite diverse that not only are there informative entries written in formal language, but also informal ones that are close to natural speech including slang, swearing and taboo words. As a result, the corpus provides us with a wide-ranging hence reliable source to detect constructions as marked as those comprising multiple negation.

2.1 Data extraction

Extracting the contexts in which a specific linguistic structure occurs requires particular preprocessing techniques depending both on the characteristics of the corpus and the underlying properties of the target construction. If contexts with the aorist inflection were to be found, for example, one would need a sophisticated parser that is capable of discerning the correct underlying form from various surface forms. As the aorist also reveals itself in adjectivals and proper nouns, the surface form must be disambiguated as to whether it constitutes an adjective, a noun or a predicate. This process is known as morphological disambiguation (Oflazer & Kuruöz, 1994), which is a critical phase before extracting higher level information such as syntactic dependencies or semantic relations. It was reported that out of all

distinct Turkish words from a corpus consisting of web-based news articles, 42.1 percent of them have morphological ambiguity (Yüret, 2006). Indeed, this level of ambiguity of Turkish texts indicates the indispensability of the disambiguation process when it is necessary to parse the whole text. Yet, there may also well be the case where only constructions with no or low ambiguity are required to be parsed. Then, a simple one-to-one mapping between the surface form and the underlying form can be postulated, and consequently, simpler yet effective parsing mechanisms can be applied. Fortunately, as a result of their highly restricted contexts, multiple negative constructions in the structural shape of '*verb+Neg+Tense+Agr değil*', exhibits a low degree of morphological ambiguity except for the aorist. Therefore, in the subsequent chapter, in which the frequencies of the multiple negative constructions are analyzed, the aorist is omitted in order not to make erroneous inferences.

As it is mostly unproblematic in our case to directly associate surface forms to the contexts that are to be retrieved, regular expressions are used for data extraction purposes. These expressions are basically a sequence of characters and symbols that compose a search pattern that extracts the matching part of a text stream. They are quite effective especially when processing highly inflected languages and have become one of the main mechanisms to identify linguistic patterns in general corpus linguistics framework (Weisser, 2016) and can be directly employed to solve specific Natural Language Processing (NLP) problems such as text classification (Bui & Zeng-Treitler, 2014; Özbey & Dinçsoy, 2019) and sentence boundary detection (Grefenstette & Tapanainen, 1994). The advantages of using regular expressions can be stated as follows:

- Preprocessing the text, e.g., tokenization, case conversion, is no longer needed, and the text stream is seamlessly searched in its raw form.

- Common misspellings such as Turkish character transitions (ı/i, ö/o, ü/u, ş/s, ç/c, ğ/g), phonetic substitutions, duplications and omissions can be normalized via regular expressions to a certain extent. For instance, the negative operator *değil* may appear as *degil, değiil, deil, diil,* etc., all of which can be captured by a single pattern: /d[ei][ğg]?i+l/.

- Certain markers such as *de (too)* and *bile (even)* that may intervene in collocations can be detected by regular expressions as in "… *bilmiyor da değilim.*"

- Syntactic ambiguities can be resolved by regular expressions to some extent. To illustrate, one of the most frequent ambiguities occur when the question clitic *-mI* follows *değil*, where *değil* does not operate as a constituent of the matrix clause as in *"… bilmiyor değil mi (… does not know, does s/he)".* Here, escaping the following clitic with a negative lookahead, i.e. /d[ei][ğg]?i+l(?!\s*mi)/, prevents the pattern from capturing the wrong structure with a high degree of accuracy.

- Such grammatical units as stems, agreement markers, tense, adverbs, discourse markers, etc. can be extracted from the encompassing context by means of capturing groups. This way, collocations between double negative constructions (DNCs) and various grammatical elements are investigated without difficulty.

The patterns used to extract linguistic features for progressive, simple past, evidential past and future tense in DNCs are respectively given in Figures 4-7.

(?:^|\s)(([a-zğüşıçö]+\s+(?=d[ae]\s|bile\s))?[a-zğüşıçö]+\s+[a-zğüşıçö]+m[ııuü]yor?(((d|mu[şs])?u)?m|([sd]|mu[şs]s)un(uz)?|(mu[şs])?u?z|duk?|mu[şs]|(du|mu[şs])?l[ae]r(d[iı]|m[iı][şs])?)?(\s*d[ae])?\s+d(?:e[ğg]?|i)il((mi[şs])?|(d|mi[şs])?i[mz]|dik?|([ds]|mi[şs]s)in(iz)?|(di|mi[şs])?ler(di|mi[şs])?)?(?!\s*m[iı])(\s+[a-züğşçöı]+)?)?(?=[^a-züğşçöı]|\$)

Figure 4. The pattern to extract linguistic features for progressive tense

(?:^|\s)(([a-zğüşıçö]+\s+(?=d[ae]\s|bile\s))?[a-zğüşıçö]+\s+[a-zğüşıçö]+(m[ae]d[ıi](m|n([ıı]z)?|k|l[ae]r)?)(\s*d[ae])?\s+d(?:e[ğg]?|i)il((mi[sş])?|(d|mi[şs])?i[mz]|dik?|([ds]|mi[şs]s)in(iz)?|(di|mi[şs])?ler(di|mi[şs])?)?(?!\s*m[iı])(\s+[a-züğşçöı]+)?)?(?=[^a-züğşçöı]|\$)

Figure 5. The pattern to extract linguistic features for simple past tense

(?:^|\s)(([a-zğüşıçö]+\s+(?=d[ae]\s|bile\s))?[a-zğüşıçö]+\s+[a-zğüşıçö]+(m[ae]m[ıi][şs](t?[ıi]m|[st][ıi]n([ıı]z)?|[ıı]z|t[ıi]k?|(t[ıi])?l[ae]r(d[ıi])?)?)?(\s*[dt][ae])?\s+d(?:e[ğg]?|i)il((mi[sş])?|(d|mi[şs])?i[mz]|dik?|([ds]|mi[şs]s)in(iz)?|(di|mi[şs])?ler(di|mi[şs])?)?(?!\s*m[iı])(\s+[a-züğşçöı]+)?)?(?=[^a-züğşçöı]|\$)

Figure 6. The pattern to extract linguistic features for evidential past tense

(?:^|\s)(([a-zğüşıçö]+\s+(?=d[ae]\s|bile\s))?[a-zğüşıçö]+\s+[a-zğüşıçö]+m([ae]y[ae]|[iı])c[ae][kğg]((?<=[ğg])(t?[ıi]|m[ıi][şs][ıi])?m|((t[ıi]|m[ıi][şs]s?[ıi])?n|[ts][ıi]n([ıı]z)?)|(?<=[ğg])[ıi]?z|m[ıi][şs][ıi]z|(t[ıi]k?|m[ıi][şs])|(t[ıi]|m[ıi][şs])?l[ae]r(t[ıi]|m[ıi][şs])?)?(\s*[dt][ae])?\s+d(?:e[ğg]?|i)il((mi[şs])?|(d|mi[şs])?i[mz]|dik?|([ds]|mi[şs]s)in(iz)?|(di|mi[şs])?ler(di|mi[şs])?)?(?!\s*m[iı])(\s+[a-züğşçöı]+)?)?(?=[^a-züğşçöı]|\$)

Figure 7. The pattern to extract linguistic features for future tense

The capturing groups of these expressions not only return the verb stems but also agreement markers both on the verb and the negative marker *değil*, the word following *değil*, which generally happens to be an adverb, and the markers preceding the verb stems, which helps clarify the semantics of the whole expression. After retrieving all the surface forms, we grouped different combinations of these features to obtain the collocational frequencies. An example is given in Table 1,

where the most frequent combinations of the verb stem, the word preceding the stem and the word following *değil* in DNCs with progressive tense are listed in descending order. The empty marker ('') indicates that there exists no post-*değil* element that immediately follows *değil* for that particular instance. In other words, *değil* is not followed by an alphanumerical character preceded by a space character.

Table 1. 16 Most Frequent Contextual Features of Değil in DNCs in Progressive Tense

RANK	PRE-STEM	STEM	POST-*DEĞİL*	FREQUENCY
1	'merak'	'et'	''	1690
2	'diye'	'düşün'	''	972
3	'de'	'düşün'	''	321
4	'hak'	'ver'	''	244
5	'diye'	'kork'	''	193
6	'da'	'ol'	''	174
7	'da'	'düşün'	''	164
8	'aklıma'	'gel'	''	154
9	'de'	'ol'	''	148
10	'hoşuma'	'git'	''	112
11	'diye'	'düşün'	'insan'	107
12	'merak'	'et'	'hani'	105
13	'insan'	'düşün'	''	98
14	'olduğunu	'düşün'	''	93
14	'da'	'gel'	''	91
15	'de'	'gel'	''	91
16	'akla'	'gel'	''	67

As in the example given in Table 1, frequencies of any combination of the contextual features in DNCs can be found in a similar manner. In the next section, we show how collocational frequencies are exploited so as to induce the degree of association between certain type of grammatical units and DNCs.

2.2 Collocations

The collocational analysis of the sentential negation operator *değil* and the negated inner element, e.g., a verb or an adjective, is carried out by means of calculating the log-likelihood ratio. It is a widely used technique to measure the strength of an association between two units (Baron et al. 2009) and is favored over conventional methods such as Chi-square tests, as it provides a more accurate measure for sparse features, which are ubiquitous in language processing problems (Dunning, 1993). Particularly in corpus-based pragmatics, the analysis of log-likelihood ratio is key to deducing interconnection between language use and more abstract concepts, i.e., historical contexts, social roles, etc. (Archer & Culpeper, 2009). Using the statistic, Babanoğlu (2014) showed how Turkish and Japanese speakers, who learn English as a second language, employ pragmatics markers significantly more than native English speakers. Likewise, Buysse (2011) revealed the discourse markers that English learner Dutch students predominantly use by applying log-likelihood tests. Bruce and Wiebe (1999) calculated the log-likelihood ratios to induce the degree of correlation between certain semantic type of adjectives and subjectivity. Kiss and Strunk (2006) use the statistic to measure the collocational dependencies between punctuation marks and the preceding word for the sentence boundary detection problem. More generally, log-likelihood ratios with respect to consecutive words have been analyzed in the NLP literature to detect compounds and multi-word

expressions (Su et al., 1994; Pantel & Lin, 2001). In a similar vein, we investigate

collocations as to which negated verbs are more strongly linked to *değil* in order to

explain the illocutionary force in using DNCs. This is accomplished by

investigating the semantics of verbs that have the highest log-likelihood ratios. The

lexical items that are most associated with DNCs are more elaborately discussed in

Chapter 4.

A contingency table is constructed to attain the log-likelihood ratios. For

this, frequencies of collocations *f(XY),* f*(~XY), f(X~Y),* and *f(~X~Y)* are computed,

where *X* denotes the negated verb, *Y* denotes the negation operator *değil*, and the

tilde indicates the absence of the following element. More specifically, *f(~XY)*

stands for the frequency of all possible collocations of *Y* except for *X*, whereas

f(~X~Y) stands for the frequency of the collocations of all elements excluding *X* and

Y, which is typically a big number in large text collections. The following

expression is used to calculate the statistic:

$$LogL(XY) = 2(q1(XY) - q2(XY) + q3(XY))$$

where

$$q1(XY) = f(XY) \log f(XY) + f(\sim XY) \log f(\sim XY) + f(X \sim Y) \log f(X \sim Y)$$
$$+ f(\sim X \sim Y) \log f(\sim X \sim Y)$$

$$q2(XY) = \big(f(XY) + f(\sim XY)\big)\log\big(f(XY) + f(\sim XY)\big)$$

$$+ \big(f(X\sim Y) + f(\sim X\sim Y)\big)\log\big(f(X\sim Y) + f(\sim X\sim Y)\big)$$

$$+ \big(f(XY) + f(X\sim Y)\big)\log\big(f(XY) + f(X\sim Y)\big)$$

$$+ \big(f(\sim XY) + f(\sim X\sim Y)\big)\log\big(f(\sim XY) + f(\sim X\sim Y)\big)$$

$$q3(XY) = \big(f(XY) + f(\sim XY) + f(X\sim Y)$$

$$+ f(\sim X\sim Y)\big)\log\big(f(XY) + f(\sim XY) + f(X\sim Y) + f(\sim X\sim Y)\big)$$

An example is given in Table 2, where the collocational frequencies of the verb *düşün (to think)* inflected with the negative suffix *–mA* and the progressive tense marker *–Iyor* respectively and the operator *değil*, e.g., *düşünmüyor değilim (not that I think),* are shown (*X = düşün+-mA+-Iyor, Y = değil*).

Table 2. Collocational Frequencies of Düşün-mA-Iyor and Değil

	Y	$\sim Y$
X	2795	50730
$\sim X$	7657637	982533771

Using the frequencies in the table, the log-likelihood ratio $LogL(XY)$ is calculated as 6021.72, which is significant[12] with *p = 0.001* (99.9% confidence level). On the other hand, the log-likelihood ratio of the verb *çık (to get out)* with the same inflections is calculated as 0.0315, which is not significant with *p = 0.1*.

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[12] The significance test of the λ ratio is conducted using chi-squared distribution with 1 degree of freedom.

This indicates that the verb *düşün* has a much stronger collocational relation with *değil* than the verb *çık*. In this manner, we have calculated the log-likelihood ratio of all verbs used in DNCs in order to see which negated verbs are more affiliated with *değil*. Rather than excluding both type of negative markers as in the previous example, we will calculate log-likelihood ratios based on the frequencies of the single negative constructions. This means that DN is considered to be manifested by *değil* on a negated verb, and in this respect, *f(~X~Y)* will denote the frequencies of negated verbs other than *(Y)* that are not again negated by *değil*. Specifically, in Chapter 4, we provide verbs with the highest log-likelihood ratio grouped by tense, namely, progressive, past, evidential past and future. This will give us an idea as to how certain type of verbs and other lexical items stand out in DNCs with regards to tense.

CHAPTER 3

STRUCTURAL PROPERTIES OF DNCs

In this chapter, we investigate two grammatical units, namely, tense and agreement, in DNCs and provide a detailed account of how they are associated with DN through collocational analysis. In this respect, inferences made in this chapter form a basis for the pragmatic implications of DN, as tense provides information on temporality and modality, and agreement gives an idea on the semantic role of the speaker. Therefore, it is beneficial to first understand the affiliation of tense and agreement with DN before we explore the lexical space.

3.1 Distribution of tense

In this section, we group all single and double negative constructions by tense and analyze the collocational frequencies. The examples (21), (22), (23) and (24) illustrate 4 different tense, e.g., progressive, past, evidential and future, in DNCs.

(21) Hoşuma gitmiyor değil.

fine-GEN(1st sg)-DAT go-NEG-PROG-AGR(3rd sg)   not

'It is not that it does not please me'

(22) Canımı sıkmadı değil.

life-GEN(1st sg)-ACC bother-NEG-PAST-AGR(3rd sg) not

'It is not that it did not bother me'

(23) Fark etmemiş değilim.

notice-NEG-EVID not-AGR(1st sg)

'It is not that I have not noticed (it)'

(24) Ses çıkarmayacak değilim.

make sound-NEG-FUT not-AGR(1st sg)

'It is not that I will not make a sound'

In Table 3, the frequencies of DNCs attested in the corpus with respect to single negative ones grouped by tense are given. The last column shows the total number of single negation (SN) and DN use.

Table 3. Frequencies of Single and Double Negative Instances by Tenses

	Progressive	Past	Evidential	Future	All Tenses
Single Negation	3467467 45.00%	227297729. 50%	1028307 13.35%	936301 12.15%	7705052
Double Negation	23158 58.20%	15627 39.28%	594 1.49%	408 1.03%	39787
Double Negation Ratio	0.66%	0.68%	0.06%	0.04%	0.51%

In the table, the first row represents the rate of SN use for each tense. The corresponding percentage values are calculated by dividing the frequencies of SN use in each tense by the total number of SN instances attested in the corpus. Likewise, the second row represents the rate of DN use for each tense, and the percentage values are calculated in a similar manner. The third row, on the other hand, represents the DN ratio, which is calculated by dividing frequencies of DN

use in each tense by the total number of all negated instances in the corpus, be it SN or DN. It is not surprising that DNCs are quite marked comprising only of 0.51% of all negated instances, as the markedness of DN is an acknowledged phenomenon supported by corpus studies carried out in various languages such as Afrikaans, English, and French (Larrivée, 2016). Also, it is worth noting that the use of DN in evidential past and future (~0.05%) are far scarcer than progressive and past (~0.67%). In the same way, the percentage of SN use in evidential and future (~12-13%), considerably drops when it comes to DN use (~1-1.5%). Because of this asymmetry, we calculate the log-likelihood ratios of the collocations of DNCs and tenses in order to see which tense has the highest degree of association with DNCs. To do so, a contingency table is constructed for each tense to calculate the statistic. The collocational frequencies required for the contingency table for progressive tense is given in Table 4. In the table, *X* denotes the negated progressive tense, and *Y* denotes sentential negation operator *değil* within negative contexts, where *değil* forms a DNC. In other words, the association between tense and DN is induced in the context of SN, that is, DN is assumed to be dependent upon SN and be realized with the introduction of *değil* that negates the presumed SN context. Accordingly, in Table 4, *f(XY)* denotes the frequency of DNCs in progressive tense, *f(X~Y)* denotes the frequency of single negative constructions (SNCs) in progressive tense, *f(~XY)* denotes the frequency of all DNCs except progressive tense and *f(~X~Y)* denotes the frequency of all SNCs except progressive tense.

Table 4. Collocational Frequencies of Negated Progressive and DN

	Y	$\sim Y$
X	23158	3467467
$\sim X$	16629	4237585

The log-likelihood of the given contingency table is calculated as 2770.85, which is quite high and significant with 99.9% confidence level. This means that SNCs in progressive tense are collocated with *değil* more than expected. This implies that the progressive tense is highly associated with DN.

In the same manner, contingency tables for the past, evidential and future tense are respectively given in Table 5-7.

Table 5. Collocational Frequencies of Negated Past and DN

	Y	$\sim Y$
X	15627	2272977
$\sim X$	24160	5432075

Table 6. Collocational Frequencies of Negated Evidential Past and DN

	Y	$\sim Y$
X	594	1028307
$\sim X$	39193	6676745

Table 7. Collocational Frequencies of Negated Future and DN

	Y	*~Y*
X	408	936301
~X	39379	6768751

The log-likelihood ratios of the collocations of each negated tense and DN are given in Table 8. A negative ratio implies that a collocation occurs less than what is expected.

Table 8. Log-Likelihood Ratios of Each Tense with DN

	Progressive	Past	Evidential	Future
Log-Likelihood Ratio	2742.37	1723.39	-7422.24	-7350.90

As seen from the table, the progressive and past tense have significantly high level of association with DN, whereas the evidential and futures tense have significantly low level of association. Although both progressive and past tense have a strong collocational relationship with DN, the progressive tense appears to have the strongest affiliation with DN as it has the highest log-likelihood ratio. It should also be noted that significantly low degrees of association observed for the evidential and future tense do not imply that DNCs with them are ungrammatical or unattested. On the contrary, such DNCs are attested in our corpus and manifest specific semantic and pragmatic properties, which are more elaborately discussed in Chapter 4, where the differences among tenses become more evident.

3.2 Distribution of AGR morphemes

In this section, we investigate the distribution of AGR morphemes in DNCs. First, we examine the location of the AGR morpheme in general and then analyze the collocational propensities of each person AGR marker in DNCs.

There are two options available for the subject AGR morpheme to occur. It can be attached either to the verb or to the sentential negation operator *değil.* In (25) and (26), this variation is illustrated in a DNC.

(25) Bunu   tahmin et-me-di-m   değil

    this-ACC   guess-NEG-PAST-AGR(1st sg)   not

    'It is not that I didn't expect this'

(26) Bunu   tahmin et-me-di   değil-im

    this-ACC   guess-NEG-PAST   not-AGR(1st sg)

    'It is not that I didn't expect this'

The overall distribution of the subject AGR morpheme seems to be more or less equal with 47.3% and 52.61% for AGR on verb and on *değil* respectively. However, this first impression is misleading because when we consider each tense one by one, strong tendencies emerge. In Table 9, the location distribution of the subject AGR marker is given for 4 tenses. The omission of the 3rd person singular AGR marker while counting the AGR frequencies by location is due to the lack of any structural indicator of the morpheme as it has an empty surface form.

Table 9. Frequencies of Agreement Locations in DNCs (3rd Per. Sing. is omitted)

	Progressive	Past	Evidential	Future	All Tenses
Agreement on Verb	684 6.46%	8577 99.62%	11 5.50%	27 11.74%	9299 47.39%
Agreement on *DEĞİL*	9899 93.54%	33 0.38%	189 94.50%	203 88.26%	10324 52.61%

As seen from the table, the behavior of agreement of simple past tense in terms of location differs considerably from other tenses in that the majority of the instances have AGR on the verb (~99.62%), whereas it is exactly the opposite for the rest. This anomaly, we claim, is due to the irregular behavior of the past tense inflectional paradigm (Taylan, 2015) rather than being related to DN. While in past tense, the subject AGR is overwhelmingly preferred on the verb, for the rest of the tenses, the subject AGR is mostly marked on *değil*. Here, a further investigation is needed to account for the asymmetry with respect to the location of AGR markers. Especially in the case of progressive tense, it is unclear as to why AGR marker predominantly appears on *değil*, for no salient semantic difference from the other option exists, and similar type of lexical elements seem to encompass *değil* in both cases.

As it remains unclear as to how the location of AGR markers plays a role in DNCs, we continue our analysis by investigating the distribution of each AGR marker grouped by tense for both SN and DNCs. Table 10 shows the distribution of person AGR morphemes according to tense in SNCs. Each cell in the table contains the frequency of a person AGR marker with a specified tense and a percentage value calculated column-wise, i.e., the rate of use of AGR morphemes in a given

tense. In the last column, the overall distribution of AGR markers and their rate of use are shown.

Table 10. Frequencies of Person AGR Morphemes in SNCs[13] by Tenses

	Progressive	Past	Evidential	Future	All Tenses
1st Person Singular	1357485 39.15%	877580 38.61%	87742 8.53%	178516 19.07%	2501323 32.49%
2nd Person Singular	109199 3.15%	89922 3.96%	13296 1.29%	59894 6.40%	272311 3.53%
3rd Person Singular	1553371 44.80%	951151 41.85%	860062 83.64%	611428 65.30%	3976012 51.60%
1st Person Plural	208374 6.01%	200853 8.82%	16254 1.58%	39058 4.17%	464539 6.03%
2nd Person Plural	83606 2.41%	66689 2.93%	7320 0.71%	23896 2.55%	181511 2.36%
3rd Person Plural	155432 4.48%	86782 3.82%	43633 4.24%	23509 2.51%	309356 4.01%

When we look at the percentage values of AGR markers, the most salient difference lies in how 1st and 3rd person singular person AGR markers are distributed over tenses. The rate of 1st person is high in progressive (39.15%) and past tense (38.61%), whereas it is much lower in evidential (8.53%) and future tense (19.07%). The 3rd person, however, has a reverse situation in that its rate of use is much higher in evidential (83.64%) and future tense (65.30%) than that of progressive (44.80%) and past (41.85%). The distribution of AGR markers in DNCs is computed in a similar way and presented in Table 11.

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[13] Here, recall that by SNCs we refer to constructions that lack the sentential negation operator *değil* but carry the verbal negative marker –mA.

Table 11. Frequencies of Person AGR Morphemes in DNCs by Tenses

	Progressive	Past	Evidential	Future	All Tenses
1st Person Singular	9552 41.25%	7833 49.26%	133 22.39%	84 20.59%	17602 43.94%
2nd Person Singular	48 0.21%	36 0.23%	4 0.67%	6 1.47%	94 0.23%
3rd Person Singular	12592 54.37%	7009 44.85%	393 66.17%	179 43.87%	20173 51.04%
1st Person Plural	634 2.74%	673 4.23%	31 5.22%	104 25.49%	1442 3.60%
2nd Person Plural	58 0.25%	13 0.08%	2 0.34%	13 3.19%	86 0.21%
3rd Person Plural	274 1.18%	63 0.40%	31 5.22%	22 5.39%	390 0.97%

Again, we observe a similar behavior of the 1st person singular AGR marker, the rate of which is considerably higher in progressive (41.25%) and past tense (49.26%) than that of evidential (22.39%) and future (20.59%). However, the 3rd person singular AGR marker appears to be more evenly distributed over tenses than in SNCs. At this point, we combine the frequencies of AGR markers attained for in SNCs (Table 10) and DNCs (Table 11) in order to find out which AGR markers have strong collocational affiliations, whether negative or positive, with DN. As we have constructed contingency tables in the previous section regarding tense affiliation of DN, we calculate collocational frequencies of each AGR marker with DN in order to infer agreement affiliation of DN. First, we provide the general propensity of AGR markers with respect to DN by taking into account the overall frequencies given in the last column of Table 10 and Table 11. Then, we elaborate our analysis by investigating collocational frequencies of AGR markers by each

tense. In Table 12, contingency sub-tables of each AGR marker incorporating

overall frequencies independent of tense are given. The corresponding log-

likelihood ratios that indicate DN affiliation of each AGR marker are shown in

Table 13.

Table 12. Collocational Frequencies of AGR Markers and DN

1st Sg.	Y	$\sim Y$	1st Pl.	Y	$\sim Y$
X	17602	2501323	X	1442	464539
$\sim X$	22185	5203729	$\sim X$	38345	7240513
2nd Sg.	Y	$\sim Y$	2nd Pl.	Y	$\sim Y$
X	94	272311	X	86	181511
$\sim X$	39693	7432741	$\sim X$	39701	7523541
3rd Sg.	Y	$\sim Y$	3rd Pl.	Y	$\sim Y$
X	20173	3976012	X	390	309356
$\sim X$	19614	3729040	$\sim X$	39397	7395696

Table 13. Log-Likelihood Ratios of AGR Markers with DN

	1st Sg.	2nd Sg.	3rd Sg.	1st Pl.	2nd Pl.	3rd Pl.
Log-Likelihood Ratio	2381.41	-2153.52	-12.84	-467.99	-1306.16	-1347.96

As seen from Table 13, the only AGR marker that has a positive ratio (2381.41) is the 1st Per. Sg. AGR. This indicates that this morpheme exceptionally possesses a strong collocational affinity with DN. As for other AGR markers, they all have negative collocational affinity. Noteworthily, having log-likelihood ratio of -12.84, the 3rd Per. Sg. AGR has a relatively low degree of negative association with DN. In order to explain what accounts for this variance among markers in terms of how strongly they are negatively affiliated with DN, we continue our analysis by separately examining each tense. Table 14 shows collocational frequencies of AGR markers in progressive tense.

Table 14. Collocational Frequencies of AGR Markers and DN in Progressive Tense

1st Sg.	Y	$\sim Y$	1st Pl.	Y	$\sim Y$
X	9552	1357485	X	634	208374
$\sim X$	13606	2109982	$\sim X$	22524	3259093
2nd Sg.	Y	$\sim Y$	2nd Pl.	Y	$\sim Y$
X	48	109199	X	58	83606
$\sim X$	23110	3358268	$\sim X$	23100	3383861
3rd Sg.	Y	$\sim Y$	3rd Pl.	Y	$\sim Y$
X	12592	1553371	X	274	155432
$\sim X$	10566	1914096	$\sim X$	22884	3312035

In Table 15, log-likelihood ratios calculated by the frequencies given in Table 14 are shown for each AGR marker.

Table 15. Log-Likelihood Ratios of AGR Markers with DN in Progressive Tense

	1st Sg.	2nd Sg.	3rd Sg.	1st Pl.	2nd Pl.	3rd Pl.
Log-Likelihood Ratio	42.24	-1117.52	846.84	-541.57	-746.00	-820.40

Remarkably, there are two AGR markers having a significantly high degree of positive association with DN, namely the 1st Per. Sg. and 3rd Per. Sg. AGR morphemes, the latter retaining the highest ratio with 846.84. This is mainly due to two reasons. First, the thematic role of the author may not change although the verb is inflected with 3rd Per. Sg. AGR marker. This transformation is mostly reflected by a 1st Per. Sg. case-marking unfolding on a noun such as in *aklıma gelmiyor değil (not that it does not come to my mind)*, *aklımdan geçmiyor değil (not that it does not pass through my mind), hoşuma gitmiyor değil (not that it does not please me)*; or by incorporating a 1st Per. Sg. pronoun in the predicate such as in *bana rahatsızlık vermiyor değil (not that it does not give me inconvenience), beni üzmüyor değil (not that it does not upset me)*. Here, from a mere syntactic perspective, it may be tempting to assume that the semantic role of the author shifts from being *agent* to *patient*. However, we speculate that the semantic role of the author does not change, as it remains to be *experiencer*. This is because the majority of the verbs used in DNCs in progressive tense denote psychological states, i.e., PSYCH-VERBS, as put by Belletti and Rizzi (1988). In Chapter 4, we will provide a more detailed account of what type of verbs are predominantly incorporated in DNCs and show that psychological verbs are indeed quite prevalent in progressive tense.

The second reason why the 3rd Per. Sg. AGR marker stands out in DNCs in progressive tense is related to the use of impersonalization, by which the experiencer role of the author is implicitly conveyed such as *akla gelmiyor değil (not that it does not come to mind), merak etmiyor değil insan (not that one does not wonder), düşündürtmüyor değil (not that it does not make one think)*, etc. Impersonalization, in the most general sense, denotes the case where the subject becomes non-referential and manifests itself in various constructions across languages such as those incorporating an impersonal pronoun as subject, e.g., *insan[14]* in Turkish, or *man* in German, an expletive subject, which is semantically null, or an experiencer subject which is inflected with a dative or an accusative in some languages (Siewierska, 2008). The last category is of relevance particularly because we establish an interesting parallelism between languages that specifically grammaticalize impersonalization only when the subject bears an experiencer theta role and Turkish, which incorporates impersonal *insan* quite commonly in DNCs in progressive tense where the subject theta role is mostly experiencer. This issue will again be touched upon in Chapter 4 in more detail.

We continue our analysis of AGR markers in DNCs with the past tense, collocational frequencies of which are given in Table 16.

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[14] The Turkish impersonal *insan* differs from *man* in that the latter does not designate discourse referents in any case (Gast & Auwera, 2013), while the former often denotes the author in DNCs in progressive tense. The non-referential use of *insan* is also common particularly with the aorist, i.e., *insan burada iyi koşar (one jogs well here)* (Nakipoğlu-Demiralp, 2001).

Table 16. Collocational Frequencies of AGR Markers and DN in Past Tense

1st Sg.	Y	~Y	1st Pl.	Y	~Y
X	7833	877580	X	673	200853
~X	7794	1395397	~X	14954	2072124
2nd Sg.	Y	~Y	2nd Pl.	Y	~Y
X	36	89922	X	13	66689
~X	15591	2183055	~X	15614	2206288
3rd Sg.	Y	~Y	3rd Pl.	Y	~Y
X	7009	951151	X	63	86782
~X	8618	1321826	~X	15564	2186195

When we look at the log-likelihood ratios in Table 17, we a similar result to that of progressive tense. The 1st Per. Sg. and the 3rd Per. Sg. AGR markers have significantly high degree of association with DN while it is the opposite for the rest.

Table 17. Log-Likelihood Ratios of AGR Markers with DN in Past Tense

	1st Sg.	2nd Sg.	3rd Sg.	1st Pl.	2nd Pl.	3rd Pl.
Log-Likelihood Ratio	845.05	-978.12	57.27	-480.24	-808.26	-799.34

One important difference in the case of past tense is that the highest ratio is attained by the 1st Per. Sg. with 845.05 contrary to the progressive tense with which

the 3rd Per. Sg. had the highest ratio with 846.84. This variation is primarily due to considerable decrease of use of the impersonal *insan* in the past tense in comparison with the progressive tense. For instance, we have detected more than 250 instances where *insan* is incorporated in DNCs in progressive tense such as *düşünmüyor değil insan (not that one does not think)*[15], whereas we could not detect one in the past tense such as *düşünmedi değil insan* (not that one did not think)* although the verb *düşün- (to think)* is the most common verb in both tenses. This essentially implies that incorporation of the impersonal *insan* is related to temporality, e.g., whether the event has occurred in the present or past, as least in the context of DNCs and that it is substantially favored in the present tense, which is expressed by the progressive tense marker.

The next tense to be analyzed is the evidential past tense. We provide collocational frequencies of AGR markers in evidential past tense in Table 18. When we examine the log-likelihood ratios in Table 19, we observe a different pattern than those found in progressive and past tense. The 1st Per. Sg. again has a high degree of affiliation with DN with a ratio of 105.06, however, we also observe a significantly high ratio of 31.61 in the 1st Per. Pl. and a significantly low ratio of -107.80 in the 3rd Per. Sg. The rest of the AGR markers stay within the bounds of <-3.84, 3.84> at 95% confidence interval with 1 degree of freedom. This means that the rate of use of 2nd Per. Sg., 2nd Per. Pl. and 3rd Per. Pl. AGR markers in DNCs in evidential past tense does not significantly diverge from that found in SNCs.

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[15] Here, we consider all possible variations in which *düşün* and *insan* are collocated in DNCs such as *insanı düşündürtmüyor değil (not that it does not make one think), düşünmüyor da değil insan (not that one does not think either)*, etc.

Table 18. Collocational Frequencies of AGR Markers and DN in Evidential Past Tense

1st Sg.	Y	~Y	1st Pl.	Y	~Y
X	133	87742	*X*	31	16254
~*X*	461	940565	~*X*	563	1012053
2nd Sg.	Y	~Y	2nd Pl.	Y	~Y
X	4	13296	*X*	2	7320
~*X*	590	1015011	~*X*	592	1020987
3rd Sg.	Y	~Y	3rd Pl.	Y	~Y
X	393	860062	*X*	31	43633
~*X*	201	168245	~*X*	563	984674

Table 19. Log-Likelihood Ratios of AGR Markers with DN in Evidential Past Tense

	1st Sg.	2nd Sg.	3rd Sg.	1st Pl.	2nd Pl.	3rd Pl.
Log-Likelihood Ratio	105.06	-2.16	-107.80	31.61	-1.47	1.30

We also consider that implications of the high degree of affiliation of the 1st Per. Pl. marker with DN in evidential past tense need to be further contemplated. When we take a closer look at the DNCs with the 1st Per. Pl. marker, we observe that 16 sentences out of 31 (51.6%) incorporate the AGR marker as the impersonal

we, i.e., the semantic subject is the author with his/her presupposed party. This special use of *we* is categorized as the 'rhetorical' *we* by Quirk et al. (1985). The example (27) extracted from the corpus illustrates the case.

(27) Nedense beni çok etkiledi. Ayrıca gideceği yere vardığında yanına gelen şeklin kaybettiği babası olmasıyla Lem'in Solaris'ine sağlam selam çakıldığını görmemiş de değiliz.

'It has impressed me a lot for some reason. Besides, it is not that *we* have not noticed that they pointed at Lem's Solaris since the figure that came aside on his/her arrival was his/her lost father.'

As can be seen from the example, the author prefers to use the 1st Per. Pl. although there exists no referential plural agent as indicated by the AGR marker. The pragmatic motivation behind the AGR interchange can be interpreted as strengthening the grounds of the statement as if approved by other individuals. Yet, (27) is an excerpt that belongs to a movie review in which a subjective statement made by a reviewer is open to generalization as there exist potential reviewers who would approve it. In the excerpt (28) is shown another example of the 'rhetorical *we* by which the author designates his/her faction as instigator of the action while defending his/her arguments.

(28) Bugün fundamentalizmin böylesine güçlenmesinin başlıca sebeplerinden birinin de rasyonel akla dayandırılan pragmatizmin vahşeti olduğunu biliyor ve bunun insan evrimiyle çeliştiğini evrimci araştırmalar sayesinde söyleyebiliyoruz. Keza Horkheimer ve Heidegger ya da Feyerabend ve Popper okumamış değiliz.

'Today, *we* know that one of the main reasons why fundamentalism has gained power to such an extent is the ferocity of the pragmatism attributed to the rational mind and state that this contradicts with human evolution by means of evolutionary research. Yet, it is not that *we* have not read either Horkheimer and Heidegger or Feyerabend and Popper.'

On the other side, there are 15 instances where the 1st Per. Pl. marker designates a referential (non-impersonal) plural agent clearly denoted in the context. The excerpt (29) illustrates such a case in the context of which the author complains about an event that he/she participated with friends. Here, the 1st Per. Pl. marker denotes a group of individuals to whom the author makes an explicit reference.

(29) Bunun haricinde organizasyonun bütün boşluklarını kullanmamış da değiliz.
'Except that, it is not that *we* have not manipulated any weaknesses of the organization either.'

We complete our analysis of AGR markers in DNCs in evidential past tense by drawing the conclusion that the high degree of affinity of the 1st Per. Pl. marker with DN is concomitant with the use of the impersonal *we*, as is the case of the 3rd Per. Sg. in progressive tense with the impersonal *insan*. It may introduce particular pragmatic effects such as reinforcing the statement in strong denial contexts as in the example (28).

Lastly, we analyze AGR markers in DNCs in future tense. In Table 20 and 21, collocational frequencies of AGR markers and the corresponding log-likelihood ratios are given respectively.

Table 20. Collocational Frequencies of AGR Markers and DN in Future Tense

1st Sg.	Y	~Y	1st Pl.	Y	~Y
X	84	178516	X	104	39058
~X	324	757785	~X	304	897243
2nd Sg.	Y	~Y	2nd Pl.	Y	~Y
X	6	59894	X	13	23896
~X	402	876407	~X	395	912405
3rd Sg.	Y	~Y	3rd Pl.	Y	~Y
X	179	611428	X	22	23509
~X	229	324873	~X	386	912792

Table 21. Log-Likelihood Ratios of AGR Markers with DN in Future Tense

	1st Sg.	2nd Sg.	3rd Sg.	1st Pl.	2nd Pl.	3rd Pl.
Log-Likelihood Ratio	0.60	-23.59	-77.85	223.29	0.61	10.46

When we look at the ratios in Table 21, we observe quite a different pattern than that of progressive and past tense. The log-likelihood ratio of the 1st Per. Sg. marker, for the first time, happens to be insignificant as it stays within the confidence interval <-3.84, 3.84>. Also, the 3rd Per. Sg. marker has a significantly low degree of association with DN. The 1st Per. Pl., which has been found

significant in the evidential past tense as well, turns out to be the most affiliated AGR marker with DN with the log-likelihood ratio of 223.29. Remarkably, the ratio of the 3rd Per. Pl. marker is also significant with the value of 10.46. This is another aspect by which the future tense differs from the evidential past tense, apart from having an insignificant ratio for the 1st Per. Sg. marker.

There are 104 instances of DNCs in future tense with the 1st Per. Pl. marker. When we examine these constructions one by one, as we did for the evidential past tense, we see that the use of the impersonal *we* is even more prevailing: 95 instances out of 104 (91.3%) incorporate the impersonal *we*. In the following excerpt (30), the author, who is a fan of a football team, shows his/her support for a player named Müller.

(30) Ama Müller yardırmıyor, defansın arkasından akmıyor diye hakkını vermeyecek değiliz.
'However, it is not that *we* will not give him his credit just because Müller does not strive and break away from the defense.'

Similar to what we have observed with the evidential past tense, the author, by using the 'rhetorical' *we*, implicitly refers to other fans of the same team who are potential candidates to support his/her reaction. Moreover, there are also instances in which the author does not necessarily refer to an implicit secondary agent. This is mostly observed when the author exhibits a strong denial of a presupposition as seen in the example (31).

(31) Zamanında ÖSS'de matematiği fule yakın yapmış insanım, bir çıkarma işlemini yapamayacak değiliz yani.

'I am a person who almost got perfect score in mathematics in ÖSS (acronym of an examination), so it is not that *we* will not be able to do the subtraction, you know.'

In (31), the author is the only semantic agent of the statement. Thus, such a use of the impersonal *we* is likely to be related with the author's motivation of displaying a more assertive stance. Erk-Emeksiz (2010) also points out the denial strengthening property of the sentential negation operator *değil* by comparing it with the verbal negation *–mA*. Although she makes comparisons between *–mA* and *değil* in both evidential past and future tense in SNCs such as *yapmayacağım (I will not do it)* and *yapacak değilim (it is not that I will do it)*, a similar pragmatic effect is also observable in DNCs. In this respect, we do not claim that the impersonal *we* is restricted to DNCs. The following example (32) illustrates that a SNC with *değil* may incorporate a 'rhetorical' *we* with similar pragmatic functions.

(32) Fikrine katılmayacak değiliz. Şiirlerine küsecek değiliz ya da zihnimizden silecek değil ya.

'It is not that *we* will not agree with his/her opinion. It is not that *we* will be offended by his/her poems or not that he/she will wipe them off from our minds.'

DNCs and SNCs[16] may incorporate impersonalization in a very similar manner, as seen in the example (32) which contains the both in the same context. Therefore, it is more reasonable to state that the affinity of the impersonal *we* with DNCs in evidential past and future tense is related to the presence of *değil*, not to the multiple negation phenomenon per se.

In a small set of instances (9 out of 104) are employed non-impersonal *we* as subject as well. In the examples (33) and (34) are provided such DNCs.

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[16] Here, SNCs exclusively refer to single negative constructions with *değil* as in *yapacak değilim (it is not that I will do it)*, and not those with *–mA* as in *yapmayacağım (I will not do it)*, which have been previously mentioned in the chapter.

(33) Sizin kölelik motivasyonunuz düşecek diye biz "özgürler" bu tip tartışmaları

yapmayacak değiliz.

'It is not that *we* 'the free people' will not make this kind of discussions just because
your incentive for slavery will decrease.'

(34) Bu durumda zihniniz "Bitti artık. Arkadaş da olabiliriz. Ayrıldık diye

görüşmeyecek değiliz ya" gibi saçma yalanlar uydurur.

'In that case, your mind makes up senseless lies such as "It is over. We can be
friends. It is not that *we* will not see each other because *we* broke up."'

In (33), the author explicitly defines the plural semantic agent and overtly

incorporates the pronoun *we* without pro-drop. As for (34), the author quotes an

imaginary person who refers to oneself and his/her couple as the plural agent.

On the other side, we have also examined DNCs with the 3rd Per. Pl. marker

and observed that 13 out of 22 instances (59.1%) incorporate the impersonal *they*,

and most of them are of the type 'corporate', that is, the plural agent is designated as

a specific presupposed group (Hofherr, 2003; Siewierska and Papastathi, 2011).

Two examples with the 'corporate' *they* are given in (35) and (36).

 (35) Yoksa hukuki işlemin ardından suçlu bulunursa yaptırım olurdu herhalde.

Dokunulmazlığı var diye yaptırım uygulamayacaklar değil ya.

'Otherwise, there would be law enforcement if he/she found guilty after the legal
regulations. It is not that *they* will not impose any sanction because he/she is
inviolable.'

(36) Bir dahakine 2 yıllık başvurmayı düşünüyorum. Sonuçta bir daha vermeyecek

değiller ya.

'I consider applying for 2 years next time. After all, it is not that *they* will not grant
it no more.'

In (35), the author refers to legal authorities by using the impersonal *they* without specifically mentioning them. Likewise, in (36), the author, by using *they*, implicitly refers to a committee in an embassy who would evaluate his/her visa application. Non-impersonal use of *they* is also observed in DNCs (9 instances out of 22) as given in the example (37) in which the author makes an explicit reference to the agent, namely, *the authorities*.

(37) Yetkililer de her gün bu kokuya maruz kalıyor olmalılar ama reseptörler ölüyor diye de aynı kokuyu ömür boyu almayacak değiller ya.

'The authorities must be exposed to this smell every day, but it is not that *they* will not perceive the same smell for a lifetime just because their olfactory receptors are vanishing.'

3.3 Concluding remarks

In this chapter, we have investigated how tense and AGR markers, i.e., the structural properties of DNCs, are collocated with DN and provided a detailed account based on various forms of impersonalization mechanisms as to why particular AGR markers have been found to be significantly affiliated with DN in each tense. In this respect, we have first shown that the progressive and past tense are much more affiliated with DNCs than the evidential past and future tense based on the log-likelihood ratios given in Table 8. This dichotomy is also endorsed by the log-likelihood ratios found in the analysis of AGR markers in each tense (see Table 15, 17, 19 and 21) for the following reasons:

- In both progressive and past tense, the most affiliated AGR markers with DN are the 1st Per. Sg. and 3rd Per. Sg. AGR markers, although the degree of affinity is reversed due to the use of the impersonal *insan*, which is much

more prevalent in the progressive tense. Moreover, the rest of AGR markers all have significantly low degree of affiliation with DN in both tenses.

- In both evidential past and future tense, the 1st Per. Pl. marker has a high degree of affiliation with DN. This is due to the common use of the impersonal *we*, which is even more prevalent in the future tense (91.3%) than in the evidential past tense (51.6%). There seems to be a mismatch with respect to the affiliation of the 1st Per. Sg. marker between the two in that the 1st Per. Sg. has an insignificant degree of affiliation in the future tense with the log-likelihood ratio of 0.60 (see Table 21), whereas a significant one is observed in the evidential past tense with the value of 105.06 (see Table 19). However, the ubiquitous impersonal *we* in the future tense refers to the first person, i.e., the author, in a considerable number of instances such as the sentence given in (31), and consequently, the log-likelihood of the 1st Per. Sg. marker in the future tense, in fact, is greater than 0.60 in semantic terms.

When we look at the log-likelihood ratios obtained by the overall distribution of AGR markers in all tenses (see Table 13), the 1st Per. Sg. stands out as the most affiliated AGR marker with DN. This is essentially true for each tense as well considering that the impersonal *insan* and *we*, in fact, refer to the author (the 1st Per. Sg.) with or without his/her presupposed party. As we will discuss in the next chapter, the DN affiliation of the 1st Per. Sg. marker on behalf of the author complements the lexical affiliations of DN in terms of the pragmatic properties of DNCs.

CHAPTER 4

PRAGMATIC PROPERTIES OF DNCs

In this chapter, we investigate the pragmatic properties of DNCs and give an attempt to explain the functionalities of this complex phenomenon by elaborately analyzing the collocations of the local contextual features, namely, verbs and post-*değil* elements, the latter of which may include adverbs, pragmatic markers, and pronouns. The first case, where a DNC may be incorporated, is when the author denies a presupposition (Givon, 1978), which must also be negated in order for it to give rise to a double negative statement. We will refer to this case as *denials*. All tenses that we consider in this study, i.e., the progressive, past, evidential and future tense, may incorporate a DNC as a denial of a negative presupposition. In (38), (39), (40) and (41) are provided excerpts from the corpus illustrating this use for each tense respectively:

(38) Ayrıca niye hafızasını sildi ve bu gerçekten hafıza silme miydi? Çünkü Hiro hatırlamıyor değil. Kendini on yaşında sanıyor.

'Besides, why did he erase his memory, and was it really a memory deletion? In fact, it is not that Hiro does not remember it. He thinks that he is ten years old.'

(39) Anlamadın. Bana bak. Ben anlamadım değil. Sen anlatamamışsındır. Delirtme beni pis ukala! Sen adam gibi anlat, biz anlarız.

'You do not get it. Look at me. It is not that I did not understand it. You could have not expressed it. Do not drive me crazy, you filthy big head! Explain it decently, then we will understand it.'

(40) Stadın oradaki mağazada basketbol takımının formaları yok. Kalmamış değil

yani. Satmıyorlamış. Akatlar'ın orada varmış satış.

'There are not any jerseys of the basketball team at the store by the stadium. It is not that there is not any left. In fact, they don't sell them anymore. They say there is a sale near Akatlar.'

(41) Arapçadan Türkçeye geçen sözcüklerin geçiş esnasında dilin fonetik

özelliklerine göre yamulduğunu bilenlerin pek de iplemediği durum. Nitekim,

Arapçada p harfi yok diye biz kullanmayacak değiliz.

'This a point ignored by those who know that Turkish words borrowed from Arabic have been warped during transition according to the phonetic characteristics of the language. As a matter of fact, it is not that we will not use it just because there is no letter p in Arabic.'

In (38), the author denies the presupposition that the protagonist Hiro does

not remember things and puts forward an alternative view as to why he seems to be

not remembering. Here, what is being denied may explicitly be present in the

context, e.g., there are indeed some individuals who are in accord with the

presupposition, or the author simply presumes such a belief and denies it. In (39),

there is a serious quarrel between authors, and one of them denies the opponent's

presupposition that he/she does not understand the point being made. Apparently,

what the author denies in the example has already been expressed by his/her

opponent in the context and must thereby be accessible to the addressee as well. In

(40), the author unexpectedly fails to buy an item and denies what would typically

be seen as a cause, that is, being out of stock, reinforcing his/her complain. Lastly,

in (41), the author specifies the presupposition in the most explicit manner and

denies it in the same clause. Self-evidently, the author denies the presupposition that

he/she would not use the letter p, for it does not exist in Arabic. In fact, the majority

of DNCs in future tense incorporate a denial of a negative presupposition that is

explicitly presented. We will attempt to account for this idiosyncratic behavior of the future tense in the upcoming parts of the chapter.

Considerably, such strong denials we have just introduced occur in only a small portion of DNCs in the corpus. Leaving them aside, in DNCs, it is either that a pragmatic process occurs in which the epistemic stance of the author is reflected, or that the author weakly rejects a negative presupposition expressing a middle truth value. Both cases require that the action or state denoted by the author have a certain degree of vagueness or fuzziness, that is, they must have a variable degree of certainty, i.e., gradability. However, they also differ from each other in that the former does not necessitate any presupposition and implies a particular epistemic stance. This dichotomy, in a more general sense, is also established by Prince et al. (1982), who distinguish hedges that change the truth value of a statement from those that do not. We first provide an example of the latter case in which the author denies a negative presupposition, i.e., the author does not like a specific individual, while not refraining from pointing out the downsides of that individual and displays a defensive stance.

(42) Bu adamı sevmiyor değilim de, bazen tekrara düşüyor. Fazlaca 'copy paste' yapıyor. Kaynağın doğruluğunu araştırmadan bilgi veriyor ve fazlaca çalıntı yapıyor.

'It is not that I do not like this guy, however sometimes he repeats himself. He does copy-pasting a lot. He provides information without inquiring validity of the source and commits plagiarism too much.'

On the other side, we consider the former case to be an *understatement* in the most general sense and claim that the author mitigates his/her assertion by using

a DNC without explicitly denying a presupposition. Hübler well expresses the motivation behind the use of understatement:

> Understatements reduce the degree of liability which a speaker incurs with every sentence. To be more precise, it lessens the liability for acceptability by reducing the number of acceptability conditions. … In other words, the content of a sentence which is to serve as an understatement has been manipulated in such a way that it becomes more acceptable for the hearer than the unmanipulated content would be. (Hübler, 1983, p.19)

An excerpt in which the author expresses his/her fear in a DNC is provided in (43). It is worth noting that the truth condition of the statement is not weakened as in (42). In fact, the author clearly indicates the cause of his/her fear and does not introduce any contrastive statement to it unlike (42).

(43) Banliyö dizileri süspansiyonlarının hantal ve yolların bozuk olmasından dolayı vagonları aşırı derecede sallanan hat, bir gün raydan çıkacak diye korkmuyor değilim.

'It is not that I do not fear that the train will derail one day because its wagons swing extremely due to rough rails, and the suspensions of the suburban trains are ponderous.'

To be more precise, consider the example (44) in which a DNC with the same verb *fear* is used, but weakly denied as in (42):

(44) Drogba transferine de büyük bir bütçe harcayarak sınırları zorlamıştır. Umarım gerekli mali yapılanmamız vardır. Korkmuyor değilim de, Ünal Aysal şimdiye kadar

yöneticilik hünerlerini en iyi şekilde gösterdi. Bunun da bir çözümünü bulmuştur. Bulacaktır.

'He has also pushed the limits by allocating large amount of funds for Drogba's transfer. I hope that we have an appropriate financial infrastructure. It is not that I am not scared, however, Ünal Aysal has exquisitely demonstrated his managerial skills. I believe he has found a solution. Or, he will.'

In (44), although the author worries whether the football club has enough financial power for the transfer, he/she also strongly believes that the authorities will manage it well. In other words, the author 'is scared' only to some extent. The DNC in (43), however, differs from that of (44) in that the author conveys his/her strong fear with a mitigated commitment. The mitigation may be attributed to the author's unwillingness to appear as overly nervous, or to his/her underlying contrastive presumption which weakens the truth conditions, thus leading to a similar effect attained in (44) as demonstrated in the example (45), which is a deliberately modified version of (43):

(45) … bir gün raydan çıkacak diye korkmuyor değilim de, bu çok düşük bir olasılık.

'… It is not that I do not fear that the train will derail one day, however, it is very unlikely.'

In (45), although the degree of author's fear is alleviated by the following contrastive statement, it still remains difficult as to whether a negative presupposition has emanated or not. We ascribe such distinction between (44) and (45) to different contextual characteristics of the two. In (45), it is unlikely that a negative presupposition is being denied, for the peculiar cause of the author's fear cannot be priorly assumed by the addressee. However, in (44), the addressee may in

fact presuppose that the author would not be scared as the cause of the author's fear involves a common ground with the addressee. The distinction becomes more salient if we replace DNCs *(it is not that I do not fear)* with their corresponding affirmative semantic transformation *(I fear).* Then, the statements (44) and (45) respectively become as follows:

(46) … Umarım gerekli mali yapılanmamız vardır. Korkuyorum da, Ünal Aysal şimdiye kadar yöneticilik hünerlerini en iyi şekilde gösterdi. …

'… I hope that we have an appropriate financial infrastructure. I am scared, however, Ünal Aysal has exquisitely demonstrated his managerial skills. …'

(47) … bir gün raydan çıkacak diye korkuyorum da, bu çok düşük bir olasılık.

'… I fear that the train will derail one day, however, it is very unlikely.'

As can be seen in (47), replacement of the DNC in (45) does not as much affect the semantics of the statement as much as in (44) and (46). Evidently, in (46), the author expresses his/her fear more assertively than in (44). On the other hand, the affirmative construction in (47) does not change the degree of assertion, but only takes away the pragmatic effects conveyed by the DNC in (45).

Understatement may be realized by means of various hedging devices such as adverbs and quantifiers that introduce certain degrees of fuzziness (Lakoff, 1972), epistemic markers, e.g., modal *(may, might, etc.)* and lexical expressions *(I think, I believe, etc.)*, transfer of negation (Bublitz, 1992) as well as multiple negation (Quirk et al., 1985; Fetzer, 2007). From a functional perspective, understatement may arise as a means of politeness and indirectness (Brown & Levinson, 1978), reduction of commitment (Prince et al., 1982; Prokofieva & Hirschberg, 2014), equivocation (Fraser, 2010), etc. In this respect, our main

objective in this chapter is to infer which verbs and post-*değil* elements are more likely to be incorporated in DNCs by analyzing collocations in order to distinguish the constraints of the understatement phenomenon in DNCs. We also aim to readdress the inferences made in Chapter 3 with regards to tense and agreement in terms of pragmatic functions of DNCs in order to provide a more comprehensive account on the characteristics of these constructions.

4.1 Distribution of verbs

In this section, we will explore the verbal lexical items incorporated in DNCs by the log-likelihood ratios attained by collocational frequencies of verbs with DN. As we did in Chapter 3, these frequencies are obtained on the basis of SNCs. Taking variable *X* as a verb selected, and *Y* as *değil*, which yields a DNC when concatenated to a SNC, *f(XY)* denotes the frequency of use of the verb in DNCs, *f(~XY)* the frequency of all DNCs except those incorporating the verb, *f(X~Y)* the frequency of all SNCs incorporating the verb, and *f(~X~Y)* the frequency of all SNCs except those incorporating the verb. In this respect, we calculate log-likelihood ratios of all the distinct verbs retrieved from DNCs. We also group these verbs by tenses as we did in the analysis of AGR markers. This will give us an idea whether pragmatics of DN is associated with tense or not. In Table 22, we provide the 32 most affiliated verbs with DN in progressive tense.[17]

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[17] To maintain the continuity of the chapter, we provide the rest of the list (495 verbs in total) in both progressive and past tense in Appendix A and B respectively. We do not, however, list all the verbs with significant log-likelihood ratios due to the abundance of data in both tenses. The number of significant verbs in evidential past and future tense were small enough to fit in the chapter.

Table 22. The 32 Most Affiliated Verbs with DN in Progressive Tense

	VERB	LOGL		VERB	LOGL
1	merak etmek *(to wonder)*	16157.32	17	yaratmak *(to create)*	595.12
2	düşünmek *(to think of)*	4352.27	18	aklına getirmek *(to bring one's mind)*	594.83
3	hak vermek *(to give right)*	3105.06	19	aklından geç(ir)mek *(to cross one's mind)*	584.00
4	korkmak *(to fear)*	2578.25	20	hatırlatmak *(to remind)*	541.49
5	düşündür(t)mek *(to make one think of)*	2297.08	21	özenmek *(to aspire)*	473.04
6	tırsmak *(to wimp out)*	1971.58	22	sezmek *(to sense)*	455.57
7	şüphelenmek *(to doubt)*	1708.05	23	sezilmek *(to be sensed)*	415.24
8	kıllanmak *(to smell a rat)*	1606.19	24	içinden geç(ir)mek *(to consider)*	410.49
9	andırmak *(to resemble)*	1171.04	25	canını sıkmak *(to bother)*	359.30
10	kıllandırmak *(to make one smell a rat)*	1006.07	26	imrenmek *(to envy)*	344.82
11	uyandırmak *(to arouse)*	998.16	27	aramak *(to seek)*	332.01
12	korkutmak *(to make one fear)*	927.25	28	takdir etmek *(to appreciate)*	319.76
13	özlemek *(to miss)*	774.62	29	işkillenmek *(to smell a rat)*	318.52
14	üzülmek *(to be sorry)*	742.94	30	üzmek *(to upset)*	288.78
15	hoşuna gitmek *(to please)*	711.05	31	sorusu gelmek *(to come to mind 'the question of')*	284.42
16	aklına gelmek *(to come to mind)*	672.98	32	dedirtmek *(to make one say)*	280.68

Conspicuously, the most affiliated verbs with DN in progressive tense turn out to be verbs of cognition *(e.g, to think, to wonder, to consider, to come to one's mind, etc.)*, emotion *(e.g. to fear, to be annoyed, to worry, to envy, etc.)*, sensation *(e.g. to sense, to smell a rat, to doubt, etc.)*, perception *(e.g. to resemble)* which all can be ascribed to some kind of a mental or psychological activity and point to an experiencer agent. It is also notable that particularly causative *(e.g. kıllandırmak, düşündürmek, etc.)* and, to some extent, passive *(e.g. sezilmek, özlenmek, etc.)* variants of verbs are observed as well. This is mainly due to the use of causative and passive constructions as an impersonalization mechanism mentioned in Chapter 3.

When we look at the most affiliated verbs with DN in past tense given in Table 23, we observe that these verbs largely overlap with those obtained in progressive tense. Although DNCs in both progressive and past tense favor psychological verbs, there are some discrepancies as well. The most notable one is due to the verbs *sanmak (to suppose)* and *zannetmek (to suppose)*. These verbs have significantly high degree of affiliation with DN in past tense with the log-likelihood ratio of 455.64 and 110.93 respectively, whereas in progressive tense, the verbs show exactly the opposite behavior having significantly low degree of affiliations with the log-likelihood ratio of -628.68 and -146.33. The verb *sanmak* is, in fact, quite similar to the verb *düşünmek (to think)* in semantic terms. One important difference between the two is that *sanmak* also imports self-doubt to the act of thinking, and consequently, is weaker in terms of assertion. To put it more explicitly, a DNC with the verb *düşünmek* in progressive tense as in *düşünmüyor değilim (not that I do not think)* would be more likely to be interchangeable with *sanıyorum (I suppose)* than its affirmative counterpart *düşünüyorum (I think)*, for

the act of supposing does not need to be further mitigated as it inherently brings a

lack of confidence.

Table 23. The 32 Most Affiliated Verbs with DN in Past Tense

	VERB	LOGL		VERB	LOGL
1	düşünmek *(to think of)*	10581.49	17	yaratmak *(to create)*	477.28
2	merak etmek *(to wonder)*	2846.20	18	sanmak *(to suppose)*	455.64
3	tırsmak *(to wimp out)*	1949.36	19	aklına gelmek *(to come to mind)*	446.62
4	korkmak *(to fear)*	1329.17	20	havası sezmek *(to sense a flavor of)*	425.35
5	kıllanmak *(to smell a rat)*	1294.77	21	kıllandırmak *(to make one smell a rat)*	412.83
6	düşündür(t)mek *(to make one think of)*	1091.02	22	üzülmek *(to be sorry)*	411.38
7	hoşuna gitmek *(to please)*	1056.44	23	oluşmak *(to materialize)*	402.65
8	aklından geç(ir)mek *(to cross one's mind)*	983.48	24	aramak *(to seek)*	382.57
9	beklemek *(to expect)*	963.77	25	gözünden kaçmak *(to escape one's notice)*	339.90
10	sezmek *(to sense)*	935.87	26	hissetmek *(to feel)*	336.34
11	hak vermek *(to give right)*	789.00	27	takdir etmek *(to appreciate)*	334.67
12	içinden geç(ir)mek *(to consider)*	783.96	28	havası almak *(to get a flavor of)*	330.09
13	dikkatini çekmek *(to take one's attention)*	703.75	29	işkillenmek *(to smell a rat)*	323.36
14	şüphelenmek *(to doubt)*	654.61	30	canını sıkmak *(to bother)*	323.24
15	tadı almak *(to get the taste of)*	640.60	31	kapılmak *(to be carried away)*	303.66
16	hatırlatmak *(to remind)*	547.55	32	uyandırmak *(to arouse)*	291.99

This explains why DNCs incorporating *sanmak* in progressive tense are so rare, even though their SN counterparts are abundant. An interesting excerpt containing a DNC with *sanmak* in progressive tense is provided in (48) as an exceptional example.

(48) Olumsuzluk eki içeren bir fiilimsi ile bir fiili aynı cümlede kullanmak sureti ile çaktırmadan yaratılan olumlu anlamın bir alışkanlık halini alması durumu olduğunu sanmıyor değilim.

'It is not that I do not suppose that the affirmative meaning sneakily created by using a gerund and verb that contain a negative morpheme in the same sentence is a case of falling into a habit.'

In the past tense, however, the verb *sanmak* has a significantly high degree of affiliation with DN, and consequently, there are many DNCs detected in our corpus with *sanmak.* An example is given in (49):

(49) Şarkıyı ilk duyduğumda Avrupa kökenli bir club şarkısı sanmadım değil. Şaşırttın beni Chris.

'It is not that I did not suppose that it was a European club song when I first heard it. You surprised me Chris.'

In (49), the verb *sanmak* is practically interchangeable with *düşünmek*, as in *'Avrupa kökenli bir club şarkısı olduğunu düşünmedim değil' (It is not that I did not think that it was a European club song).* This is because the author's act of supposing has occurred sometime in the past, and it is conveyed that his/her supposition turned out to be false. Because the verb *sanmak* in past tense does not have any tentativeness unlike in progressive tense, DN may be employed to *sanmak* as a mitigation device in past tense.

Furthermore, the case of *sanmak* forms only one aspect of the verbal lexical differences between DNCs in progressive and past tense. It is also observed that the grammatical aspect also plays a role in how lexical items are distributed in two tenses particularly for verbs of emotion and sensation. Verbs that bear the characteristics of the perfect aspect, that is, if they do not denote an event that is repeated or has longstanding effects, but rather refer to a momentary action with a temporal referentiality, such as *hayran kalmak (to be fascinated), gözleri dolmak (to be filled with tears), rahatlamak (to be relieved), tadı almak (to get the taste of), hayal kırıklığı yaşamak (to have a disappointment)*, etc., are more affiliated with past tense.[18] For example, in (50), the phrasal verb *gözleri dolmak (to be filled with tears)* denotes a repeated act conditioned on another recurring event, whereas, in (51), the act of being filled with tears denotes a specific complete event.

(50) Yanlış yüzyılda ve yanlış yerde doğmaktan ötürü yabancılaşma ve tek başınalığın doruğa çıkması kaçınılmaz oluyor. Böyle şahsi duygular beslediğinde insanın gözleri dolmuyor değil.

'The culmination of alienation and solitariness becomes inevitable because of being born in a wrong century and place. It is not that one's eyes are not filled with tears when such personal feelings are experienced.'

(51) 6. sezonun şu ana kadar yayınlanan en iyi bölümü olabilir. Canımız Winterfellimizden asılan Stark bayrağını görünce gözlerim dolmadı değil.

'It may be the best episode of the 6. season until now. It is not that my eyes were not filled with tears when I saw the Starks' flag on our beloved Winterfell.'

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[18] At this point, it should be noted that we do not here claim that the grammatical aspect has an influence on the pragmatics of DN, but rather provide an account of the difference between two tenses in terms of the distribution of the most affiliated verbs. It may well be the case that a similar effect exists in affirmative constructions as well.

In Table 24 is provided the 30 most affiliated verbs with DN in evidential past tense[19]. As seen from the table, although psychological verbs again predominate the given verb list, there are several unusual ones such as *çözmek (to solve), yakışmak (to suit), görmek (to see), gönderilmek (to be sent),* etc. Among them, *çözmek* and *gönderilmek* are not detected in any of DNCs in progressive and past tense, and *yakışmak* and *görmek* both have significantly low degree of affiliation in DNCs of progressive and past tense.

Apart from that, understatement may occur in DNCs in evidential past tense as given in the example (52). It is notable that we would have had a similar result in terms of pragmatic effects if the evidental past tense *(düşünmemiş değilim)* has been replaced by the simple past tense *(düşünmedim değil)*.

(52) Bugün içtiğim çayın içinden örümcek çıkmasıyla hayatımda bir ilk yaşamamı sağlamış nargileci. Araknofobi sahibi biri olarak canıma kastettiklerini düşünmemiş değilim.

'It is the hookah place that made me cut my eye teeth on it having seen a spider in my tea cup today. Being a person with arachnophobia, it is not that I have not thought that they made an attempt on my life.'

Also, there is a considerable amount of DNCs where *değil* takes the past copula (–DI) which may lead to the incorporation of the evidential past tense, since in 18.3% of DNCs, the past copula is present. This ratio substantially drops to 2.5% in progressive tense and to 0.3% in past tense. An example of a DNC in evidential past tense with the past copula is given in (53).

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[19] Due to the limited amount of data in the evidential past and future tense when compared with the progressive and past tense, the tables provided from this point on contain all the significant verbs whose log-likelihood ratios are higher than the confidence bound of 3.84.

Table 24. The 30 Most Affiliated Verbs with DN in Evidential Past Tense

	VERB	LOGL		VERB	LOGL
1	düşünmek *(to think)*	67.56	16	şaşırmak *(to be surprised)*	9.43
2	havası vermek *(to give a flavor of)*	54.68	17	kafa karıştırmak *(to confuse)*	8.97
3	kıllanmak *(to smell a rat)*	51.58	18	çözmek *(to solve)*	8.15
4	hava katmak *(to add a flavor)*	28.24	19	özlemek *(to miss)*	6.87
5	kandırmak *(to deceive)*	27.61	20	etkilenmek *(to be impressed)*	6.43
6	gerekçelendirmek *(to justify)*	26.02	21	görmek *(to see)*	6.39
7	havası yakalamak *(to catch a flavor of)*	26.02	22	istenmek *(to be desired)*	6.19
8	aklından geç(ir)mek *(to cross one's mind)*	14.78	23	üretilmek *(to be produced)*	6.08
9	tırsmak *(to wimp out)*	13.90	24	aklına gelmek *(to come to mind)*	6.01
10	eğlenceli olmak *(to be fun)*	13.52	25	yakışmak *(to suit)*	5.66
11	göze çarpmak *(to catch one's eyes)*	13.35	26	dışına çıkmak *(to go out of)*	5.62
12	hayal etmek *(to imagine)*	11.81	27	hak etmek *(to deserve)*	5.37
13	yol açmak *(to cause)*	10.75	28	ortaya çıkmak *(to arise)*	4.46
14	hoş olmak *(to be pleasant)*	9.98	29	yaşanmak *(to be experienced)*	4.16
15	olmak *(to be)*	9.76	30	gönderilmek *(to be sent)*	4.14

(53) İnternete bağlanmamışken buna benzer bir scripting dili geliştirmeyi

düşünmemiş değildim. Sonradan html demişler adına.

'It was not that I have not thought about developing a scripting language similar to that when we were not connected to the internet. Later, they called it html.'

Lastly, we investigate the most affiliated verbs with DN in future tense. In Table 25, we provide all 30 verbs with significantly high log-likelihood ratios. Here, we observe that verbs obtained in future tense are quite different from those we have previously examined in other tenses. First, there are many nonpsychological verbs such as *eleştirmek (to criticize), laf söylemek (to speak a word), yapmak (to do), yazmak (to write), kabul etmek (to accept), görüşmek (to meet), etc*. These verbs are either missing, or they have a low degree of affiliation with DN in progressive and past tense. Second, psychological verbs that are affiliated with DN in future tense such as *bilmek (to know)* and *sevmek (to like)* exhibit an exceptional behavior in progressive and past tense, for they have significantly low log-likelihood ratios. The verb *bilmek* has a log-likelihood ratio of -3164.42 in progressive tense being, in fact, the lowest on the whole list and is not even found in past tense. This means that DNCs incorporating *bilmek* may only take part in denials as in the examples (54), (55) and (56).

(54) Sorunun cevabını bilmiyor değilim fakat uzun bir soru olduğu için ve yol

başında bir püf noktası olduğu için kıllanıyorum.

'It is not that I do not know the answer of the question, but I am suspicious because it is long and has a tricky part right at the beginning.'

Table 25. The 30 Most Affiliated Verbs with DN in Future Tense

	VERB	LOGL		VERB	LOGL
1	gol atmak[20] *(to score a goal)*	89.14	16	sevişmek *(to make love)*	7.13
2	eleştirmek *(to criticize)*	61.75	17	kullanmak *(to use)*	6.95
3	bilmek *(to know)*	25.98	18	yer bulabilmek *(to be able to find place)*	6.88
4	söylemek *(to say)*	16.44	19	yazmak *(to write)*	6.66
5	(hakkını) teslim etmek *(to give a credit)*	15.30	20	kabul etmek *(to accept)*	6.59
6	laf söylemek *(to speak a word)*	15.02	21	görmek *(to see)*	6.20
7	yapmak *(to do)*	12.82	22	tanımak *(to recognize)*	6.00
8	acı çekmek *(to suffer)*	12.09	23	görüşmek *(to meet)*	5.80
9	maça gitmek *(to go to the match)*	11.60	24	ses çıkarmak *(to make a sound)*	5.76
10	yatırmak *(to deposit)*	11.52	25	yıkılmak *(to fall down)*	5.76
11	kapılmak *(to be carried away)*	10.69	26	almak *(to receive)*	5.63
12	gülmek *(to laugh)*	9.67	27	başlamak *(to start)*	5.07
13	sevmek *(to like)*	8.10	28	yemek *(to eat)*	4.62
14	ayırt edebilmek *(to be able to distinguish)*	7.45	29	açmak *(to open)*	4.18
15	sevinmek *(to be delighted)*	7.39	30	giymek *(to wear)*	4.07

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[20] The reason why *gol atmak (to score a goal)* has a log-likelihood ratio as high as 89.14 is due to a recurring idiomatic expression: *Kalede kaleci var diye gol atmayacak değiliz (It is not that we will not score a goal just because there is a goalkeeper in the goal post).* Therefore, we consider that this particular verb has an overestimated log-likelihood ratio.

(55) Şu an Steve denen karakterin bir karısının olduğunu, oyuncu öldürünce puan geldiğini ilk kez burada duyuyorum. Yanlış anlaşılmasın, ben bilmiyor değilim. Oyunda böyle bir şey yok.

'Now, I hear that the character named Steve has a wife, and points are gained if a player is killed here for the first time. To avoid any misunderstanding, it is not that I do not know that. There is no such a thing in the game.'

(56) Bilmiyor değilim Windows kurulabildiğini. Ama istemiyorum işte. Ne işi var o gül gibi tasarımda dedemin testisleri gibi duran Windows'un?

'It is not that I do not know that Windows can be installed. But I do not want that. What is Windows, which looks like my grandpa's testicles, doing on such a beautiful design?'

The reason why the verb *bilmek* differs from other mental verbs may be due to its propositional nature. It has a lower degree of tentativeness than the verb *düşünmek (to think)*. It seems that knowing is a more decisive consequence of the act of thinking. The same also accounts for the mental verbs *inanmak (to believe)* and *anlamak (to understand)* which have log-likelihood ratios of -217.76 and -650.36 in progressive tense and -41.36 and -1141.65 in past tense, respectively. In (57) and (58), we provide examples of DNCs with these verbs as well.

(57) Meleklerin varlığına inanmıyor değilim ama oturup insan çocuklarını eğlendirecek kadar boş vakitleri var mıdır ondan şüpheliyim.

'It is not that I do not believe in the existence of angels, but I doubt that they have enough spare time to entertain kids.'

(58) Sonuç olarak aynı düşünmediğimiz için ben futboldan anlamıyor değilim ya da sen futbola tam anlamıyla hakim değilsin.

'As a result, it is not that I do not understand football because we do not agree with each other, or you do not have any command of football.'

As for the emotion verb *sevmek (to like)*, we attain the log-likelihood ratio of -73.36 in progressive tense and -51.26 in past tense. Although a semantically similar verb *hoşuna gitmek (to please)* is strongly affiliated with DN, *sevmek* appears to be overwhelmingly confined in the domain of denials.

Another peculiarity of DN verbs in future tense is that several modal verbs such as *ayırt edebilmek (to be able to distinguish)* and *yer bulabilmek (to be able to find place)* are found positively affiliated with DN. However, modal verbs consistently have a low degree of affiliation in both progressive and past tense. Apperantly, modal verbs are more resistant to hedging. For example, in the following excerpt (59), a DNC with the modal verb *düşünebilmek (to be able to think)* is used in the context of a denial.

(59) Hem haddim değil ama yine de naçizane bir fikir vereyim. İnsanlar artık yeni bir dine inanacak kadar düşünemiyor değil.

'It is not my business, but I will suggest an idea anyway. It is not that people are not able think to believe in a new religion.'

Essentially, all DNCs in future tense are strong denials, and most of them explicitly convey the presupposition being denied as we have seen in the example (41). Relevantly, the impersonal *we,* which is ample in DNCs in future tense, increases the degree of assertion. This is also observed in the evidential past tense as in the example (60).

(60) İddia edilenin aksine, yapmaya çalışıp da beceremediği kara mizahın farkına

varmamış değiliz. Takıldığımız nokta bu süper zeka!

'Contrary to what has been claimed, it is not that we have not noticed the dark
comedy that he/she attempted but failed to perform. This is the point we emphasize,
smart head!'

We consider that the predominance of strong denials in DNCs in future tense

is mainly due to the irrealis mood. In order for an act to be mitigated, it must either

be happening at the present or have already happened in the past.

4.2 Distribution of post-*değil* elements

In this section, we investigate post-*değil* elements following *değil*, namely, adverbs,

conjunctions, interjections, gerunds, discourse markers, and impersonals, in order to

see which elements have high degree of affiliation with DN in each tense. This will

give us an idea how certain elements contribute to the pragmatics of DN. We will

also be able to support our claims made in the previous chapter by elucidating the

role of post-*değil* elements as to whether they mitigate or reinforce statements. This

will be elaborately performed by investigating the elements individually.

Furthermore, we will discuss how the implications of the distribution of verbs

analyzed in the previous chapter are compatible with the distribution of post-*değil*

elements in terms of how tenses accommodate them.

In Table 26, we provide all significantly affiliated post-*değil* elements with

DN in progressive tense.

Table 26. The 32 Most Affiliated Post-Değil Elements with DN in Progressive
Tense

	VERB	LOGL		VERB	LOGL
1	hani *(you know)*	14590.06	17	ha *(intensifier)*	37.27
2	EOC[21] *(end of construction)*	2385.49	18	ayrıca *(besides)*	26.87
3	insan *(imp. 'one')*	684.38	19	içimden *(inwardly)*	24.84
4	de *(yet)*	252.37	20	gerçi *(in fact)*	20.09
5	aslında *(in fact)*	108.01	21	insana *(imp. to 'one')*	19.33
6	tabi *(indeed)*	106.26	22	hafiften *(slightly)*	17.31
7	açıkçası *(frankly)*	97.29	23	insanı *(imp. 'one')*	14.88
8	bazen *(sometimes)*	96.80	24	insanda *(imp. in 'one')*	10.96
9	doğrusu *(actually)*	96.38	25	kendime *(to oneself)*	8.48
10	insanın *(imp. of 'one')*	79.35	26	insanoğlu *(mankind)*	7.60
11	arada *(occasionally)*	65.72	27	öte yandan *(besides)*	7.31
12	inceden *(slightly)*	64.20	28	kimi zaman *(at times)*	7.15
13	zaman zaman *(from time to time)*	62.86	29	kendisinde *(at oneself)*	6.29
14	ara sıra *(sometimes)*	46.91	30	elbette *(surely)*	5.57
15	yani *(I mean)*	46.24	31	bünyede *(in bodily constitution)*	5.39
16	içten içe *(inwardly)*	41.08	32	yer yer *(from place to place)*	5.35

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[21] EOC (end of construction) refers to DNCs with no post-*değil* elements. In this case, the element following *değil* may be any non-lexical item including punctuation marks, numbers, and the end of text stream. A high log-likelihood ratio of EOC roughly indicates that the rate of DNCs with no post-*değil* elements is significantly higher than the rate of SNCs with no post-predicate elements. In other words, *değil* is more likely to be a sentence boundary than a verbal predicate.

As seen from the table, the most affiliated post-*değil* elements are complementary to the verbs we have analyzed in the previous section. Above all, we observe that the impersonal pronoun *insan (one)* is the 2nd most affiliated lexical item in this, and its variants i.e., *insanoğlu (mankind), insanın (of one)*, *insana (to one), insanı (one),* and *insanda (in one)*, are also prevalent. As we have briefly mentioned in Chapter 3, these impersonals, in fact, refer to the author whose semantic role is experiencer. To empirically confirm the hypothesis that the semantic role of experiencer is affiliated with the impersonal *insan,* we apply another collocational analysis. This analysis will be particularly useful when examining each post-*değil* element in terms of how they are associated with verbs, since not only psychological verbs are incorporated in DNCs in progressive tense despite their abundance. If we let *X* represent a verb, and *Y* a post-*değil* element, then the contingency table is constructed as follows: *f(XY)* denotes the frequency of DNCs in a given tense incorporating the verb that precedes the post-*değil* element, *f(~XY)* the frequency of DNCs with the post-*değil* element except those incorporating the verb, *f(X~Y)* the frequency of DNCs incorporating the verb that does not precede the post-*değil* element, and finally, *f(~X~Y)* the frequency of DNCs except those incorporating the verb or the post-*değil* element. After calculating the log-likelihood ratios of all the verbs with respect to the impersonal *insan*, we confirm that *insan* is indeed mostly affiliated with psychological verbs. The verbs having the highest log-likelihood ratios turned out to be *düşünmek (to think), merak etmek (to wonder), görünce şaşırmak (to be surprised when see something), içinden geçirmek (to consider), diye sorgulamak (to question that), diye*

sormak (to ask that), üzülmek (to be sorry), diye şüphelenmek (to doubt that), etc.[22]

An example with a DNC incorporating the impersonal *insan* is given in (61):

(61) Galatasaray'a tam çağ atlatacaktı ki, basiretsiz bir şekilde gönderildi takımdan.

Bari iyi bir takıma gitseydi diye sormuyor değil *insan.*

'He was carelessly dismissed from the team, when he was on the brink of modernizing Galatasaray. It is not that *one* does not ask if he could at least advance to a good team.'

Another post-*değil* element is the interjection *hani (you know)* which is the most affiliated item with DN in progressive as well as past and evidential past tense. One of the main functions of *hani* in DNCs is to make a reference to the negative presupposition as in (62).

(62) Endişelenmiyor da değilim hani. Allah korusun bir gün canlı yayında inme

falan geçirse kimse farkına varmayacak.

'It is not that I do not worry, you know. One day nobody will notice if she has a stroke in the live broadcast. God forbid!'

Note that *hani* may also be placed at the beginning or even at the end of the following statement as in (63) and (64), respectively.

(63) Endişelenmiyor da değilim. Hani, Allah korusun bir gün canlı yayında inme

falan geçirse kimse farkına varmayacak.

'It is not that I do not worry. You know, one day nobody will notice if she has a stroke in the live broadcast. God forbid!'

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[22] In the literature, it is reported that several Uralic languages categorically grammaticalize impersonalization when specific emotion verbs are incorporated (Salo, 2011). Whether the affiliation of Turkish *insan* with the psychological verbs in DNCs has any common ground with such cross-linguistic phenomena is further to be investigated.

(64) Endişelenmiyor da değilim. Allah korusun bir gün canlı yayında inme falan geçirse kimse farkına varmayacak hani.

'It is not that I do not worry. One day nobody will notice if she has a stroke in the live broadcast, you know. God forbid!'

In this respect, *hani* connects the DNC with the following statement that justifies it, together forming a negative presupposition. A more interesting incorporation of *hani* is the case when there exists no overt statement that completes the DNC. Consider the example (65) where the author refers to the state of being an emotional person and expresses his/her interest in becoming one.

(65) Hiç olamadım. Merak etmiyor değilim hani.
'I could never become one. It is not that I do not wonder, you know.'

In (65), the author does not state exactly what he/she is curious about in becoming an emotional person. Here, *hani* makes the addressee reconstruct the object of interest based on the context. However, the affirmative counterpart of the DNC given in (66) sounds incomplete particularly when the author does not have any prior statement to refer to as an object of interest.

(66) Hiç olamadım. Merak ediyorum hani.
'I could never become one. I wonder, you know.'

Consider another example given in (67) in which the affirmative counterpart again sounds contextually strange if replaced the DNC.

(67) Bazı animelerde psikolojimi derinden bozma niyeti olan bir şeyler var. Fullmetal Alchemist'te de vardı misal. O rahatsız edicilik bunda da var. Tabi o kadar etkili değil ama. Garip bir sinir bozuculuk. Hoşuma gitmiyor değil hani *(*Hoşuma gidiyor hani)*[23]. Biz de rahatsız insanlarız sonuçta.

'In some anime series, there are things that deeply derange my psychology. It has occurred in Fullmetal Alchemist too, for example. That disturbing style is present in this too, though not to that extent. Rather, it has a bizarre one. It is not that it does not please me, you know *(*It pleases me, you know)*. After all, we are troubled people anyway.'

In this respect, guardedness is one aspect in the pragmatics of DN. As seen in (65), the author mitigates his/her assertion in a negative context, i.e., his/her alienation from being an emotional person, and hides the argument of interest by means of *hani*.

Continuing with the other post-*değil* elements in Table 26, the particle *de (yet)* is also worth mentioning. It is used as a conjuction that introduces a contrastive statement in DNCs. In this case, weak denial of a negative presupposition occurs as it was in the example (42). It is observed that nontentative psychological verbs[24] such as *bilmek (to know), sevmek (to like/love), inanmak (to believe)* and *istemek (to want)* have a propensity to be incorporated in DNCs with the particle *de*. This supports the idea that these verbs are used in the context of

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[23] Note that the affirmative construction becomes much more acceptable contextually if the particle –dA is used: *Hoşuma da gidiyor hani (It pleases me too, you know).* The reason for that is the particle –dA introduces a meaning similar to that of the adverb *bir yandan (on one hand)* which does not affirm the negative context as a whole, but rather a part of it. Also, we have analyzed the collocations of *hani* and the particle –dA that occurs right before *değil* in DNCs and detected a strong affiliation between the two with the log-likelihood ratio of 645.31 making *hani* by far the most affiliated post-*değil* element with –dA among others. Although two elements may occur only by themselves as in *hoşuma gitmiyor da değil* and *hoşuma gitmiyor değil hani*, there are constructions much more than expected incorporating the both as in *hoşuma gitmiyor da değil hani*. This appears to be an interesting issue and further to be investigated.

[24] The tentative counterparts of the verbs *bilmek, sevmek* and *istemek* can be considered to be *diye düşünmek (to think that), hoşuna gitmek (to please)* and *-AsI gelmek (to have an itch).* The tentative ones are subject to understatement and consequently have a higher affiliation with DN.

denial and not subject to understatement. An example with the verb *istemek* is given in (68).

(68) O zaman ben şunu anlıyorum. Bunlar senin yaşam tercihin değil de, sen her şeyin "anti"si olmaya çalışıyorsun aslında. Bekar değil de "anti-evli"sin mesela. Çocuk sahibi olmak istemiyor değilsin de "anti-baba"sın gibi.

'Then, I understand this. Those are not your way of life, but rather, you try to become the "anti" of everything, essentially. You are not a bachelor, but an "anti-married" for example. It is not that you do not want to have kids, but rather, you are a "anti-father".'

Another post-*değil* element that introduces contrast in DNCs in progressive tense is *aslında (in fact)*. Unlike the conjuction *de,* which introduces a contrastive statement to DNC, this adverb appoints the DNC itself as a contrast to a preexisting context. An example is given in (69).

(69) Blair ve Dan'in arasındaki problem Chuck değil, Dan'in ta kendisi. En azından ben bu bölümde de tam tersini destekleyecek hiçbir şey göremedim. Dan'e de hak vermiyor değilim aslında. Seneler boyunca Blair'in yanında olup da ona güvenebilmek zor şey.

'The problem between Blair and Dan is not due to Chuck, but Dan himself. At least, I could not see anything contrary in this episode either. It is not that I do not give any credit to Dan, in fact. It is hard to be able to trust him after having been with Blair for years.'

In (69), the author first considers an individual as the origin of a problem, and then gives him credit for another reason. Here, DN is used as a device to mitigate the degree of assertiveness to avoid commitment. It may well be a strategy to be more acceptable by the addressee.

Other adverbs used in the context of understatement include *ayrıca (besides), açıkçası (frankly)* and *doğrusu (actually)*. In DNCs, the former is used to introduce a supplementary but mitigated statement. As shown in the example (70), the author notes an additional comment by using a DNC on a book he/she is reviewing.

(70) Bittiğinde "hımm" dedirten ve uzunca düşündüren Hakan Bıçakçı romanı. Kişiyi rüya günlüğü tutmaya özendirmiyor değil ayrıca.

'It is a novel by Hakan Bıçakçı that makes one say "hmm" and contemplate when finished. Besides, it is not that it does not incent one to keep a diary of dreams.'

The function of *açıkçası* and *doğrusu* is different. They are mainly incorporated to denote an unexpected response or attitude. In (71), the author exhibits an unexpected reaction towards his/her psychological disorder. It may be the case that he/she may intend to create an overly dramatic effect or to add a flavor of some irony.

(71) Uzun zamandır beynimi meşgul eden ve yaklaşık yedi ay önce şahsım için uygun görülen tanı. Aslında kendileri bundan sonraki hayatımda her an yanımda olacak. Geçmeyecekmiş yani. Sadece kontrol altında tutulmaya çalışılacakmış. Her an benimle olacağını düşündükçe bir sempati beslemiyor değilim açıkçası.

'It is a diagnosis that was identified on my behalf about seven months ago and has been preoccupying my mind for a long time. In fact, it will accompany me for the rest of my life. I mean, it will never ease off. They will only try to keep it under control. It is not that I do not sympathize with it actually, considering that it will always stay with me.'

These adverbs are also used when the author makes a confession. This is mainly observed in past tense, which we will shortly illustrate along with other post-*değil* elements in the analysis of those obtained in past tense.

In progressive tense, we observe that several temporal adverbs such as *bazen (sometimes), arada (occasionally), zaman zaman (from time to time), ara sıra (sometimes), kimi zaman (at times),* etc. are affiliated with DN. However, we do not consider those to be pragmatic stance makers or mitigation devices, but rather to be related to tense and grammatical aspect. As we will see shortly, the temporal markers obtained in past tense differentiate from those in progressive tense.

When we look at the post-*değil* elements that are affiliated with DN in past tense given in Table 27, we observe that they are virtually similar to those attained in progressive tense as we have seen in the case of verbs. One difference between past and progressive tense in terms of how post-*değil* elements are distributed, however, is that the conjuctions that introduce contrast have more variety in the former such as *ama (but), ancak (however), yalnız (though), fakat (but)* and *lakin (but)*, which are either insignificant or not encountered at all in progressive tense. An example incorporating *ancak* is given in (72).

(72) Öte yandan en son 2006 Mayısı'nda konserlerine gitmiştim. "Aradan 7 sene geçti akustik de olsa gitsem mi?" diye düşünmedim değil ancak konser hakkında bir tane bile olumlu eleştiri okumayınca gitmediğime pişman olmadım açıkçası.

'Besides, I went to their concert last time in May 2006. It is not that I did not think like "It has been 7 years, should I go even if it is acoustic?", however, I did not regret not attending after not having read even a single positive review about the concert.'

Table 27. The 34 Most Affiliated Post-Değil Elements with DN in Past Tense

	VERB	LOGL		VERB	LOGL
1	hani *(you know)*	9679.14	18	ancak *(however)*	15.46
2	EOC *(end of construction)*	3020.50	19	bünyeye *(to bodily constitution)*	13.26
3	de *(yet)*	368.46	20	itiraf etmek gerekirse *(to be honest)*	12.65
4	ama *(but)*	162.68	21	sonlara doğru *(towards the end)*	12.36
5	yani *(I mean)*	119.16	22	vaktiyle *(in one's day)*	10.51
6	doğrusu *(actually)*	102.19	23	ara ara *(occasionally)*	10.45
7	açıkçası *(frankly)*	96.41	24	esasında *(in fact)*	9.88
8	tabi *(indeed)*	81.53	25	zaman içinde *(in time)*	9.83
9	içimden *(inwardly)*	67.79	26	yalnız *(though)*	9.77
10	aslında *(in fact)*	64.50	27	ilerleyen yıllarda *(in the forthcoming years)*	7.19
11	ahah *(lol)*	49.01	28	fakat *(but)*	6.96
12	izlerken *(while watching)*	29.34	29	elbette *(surely)*	6.90
13	ha *(intensifier)*	23.67	30	gerçi *(in fact)*	6.63
14	okurken *(while reading)*	23.28	31	arada *(occasionally)*	6.36
15	seyrederken *(while looking at)*	21.64	32	sonradan *(later on)*	5.80
16	içten içe *(inwardly)*	18.90	33	başlarda *(in earlier)*	5.40
17	lakin *(but)*	18.19	34	ayrıca *(besides)*	4.40

Another newly encountered post-*değil* element is *itiraf etmek gerekirse (to be honest)*[25], which the author uses to convey an unexpected or unmannerly statement, demonstrating a confession, so to speak. In that case, it is not surprising that the author mitigates the statement by means of DN. The adverbs *açıkçası (frankly)* and *doğrusu (actually)* can be used for the same purpose as well. Examples are given in (73) and (74).

(73) Bu formülü bulan kişi kendi adını vermiş. Kıskanmadım değil itiraf etmek gerekirse. Şu ana kadar herhangi bir şey bulabilmiş değilim.

'The person who found this formula gave his/her own name to it. It is not that I did not hold a grudge. It is not that I have found anything until now.'

(74) Bu kadar saçma ve gereksiz bir proje olacağını baştan anlamalıydım. Bir an heyecanlanmadım değil doğrusu açıklanmadan önce. Çok safım.

'I should have understood in the first place that it would be as ridiculous and unnecessary project as it is now. Before it was announced, it is not that I did not get excited for a moment, actually. I am too naïve.'

When the most affiliated post-*değil* elements in evidential past tense given in Table 28 are examined, it can be seen that many of them were also found to be significant in the case of past tense. One difference is the presence of the past copula *idi,* which has a specific function in terms of aspect when incorporated with the evidential past tense. An example is given in (75), in which the author talks about a completed event the effects of which are no longer extant at the present time.

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[25] A more literal translation would be *if it is necessary to confess.*

(75) Özellikle 'Eski Türk Destanları' diye derleme bir kitabım vardı, çok severdim.

Gerçi, tanrının adının Kayra olması kafamı çok karıştırmamış değil idi.

'In particular, I had a compilation book named "Ancient Turkic Epics." I liked it very much. Yet, it was not that the fact that the name of the god was Kayra had not much confused my mind.'

Table 28. The 12 Most Affiliated Post-Değil Elements with DN in Evidential Past Tense

	VERB	LOGL		VERB	LOGL
1	hani *(you know)*	411.31	7	gerçi *(in fact)*	26.07
2	de *(yet)*	157.38	8	yani *(I mean)*	17.29
3	EOC *(end of construction)*	154.08	9	idi *(the past copula)*	9.41
4	ama *(but)*	38.36	10	elbette *(surely)*	8.37
5	tabi *(indeed)*	38.08	11	oysa *(however)*	6.29
6	aslında *(in fact)*	28.82	12	açıkçası *(frankly)*	4.46

As for future tense, the most affiliated post-*değil* elements exhibit quite a different kind of pattern. As can be seen from Table 29, the intensifier *ya* stands out as the most affiliated element replacing *hani,* which occupies the first place for other tenses previously examined. *Ya* intensifies the assertiveness of the strong denial contexts in DNCs that incorporate future tense. An example is given in (76).

(76) Fakat bir sanat eseri ruhta uyandırdığı kişisel etkilerle değerlendirilemez değil mi? Yönetmenler, yazarlar biz ortaçağ temasından haz etmiyoruz diye bu temayı işlemeyecek değil ya.

'But, a piece of art cannot be assessed by personal impressions it arouses in the soul, right? It is not that directors and authors will not make use of it just because we do not like the Middle Ages theme.'

Table 29. The 8 Most Affiliated Post-Değil Elements with DN in Future Tense

	VERB	LOGL		VERB	LOGL
1	ya *(intensifier)*	497.43	5	tabi *(indeed)*	23.93
2	de *(yet)*	148.32	6	elbette *(surely)*	22.97
3	herhalde *(in any case)*	79.89	7	sonuçta *(after all)*	15.71
4	EOC *(end of construction)*	73.25	8	hani *(you know)*	11.69

The adverb *herhalde (in any case)*, which is significantly affiliated with DN in future tense unlike the rest, has a similar function to the intensifier *ya* in terms of how it affects assertiveness. An example is given in (77).

(77) Acil bir durum varsa SMS ile ulaşmak gayet de mümkün. Durumun aciliyetini anladıktan sonra da telefonunu açmayacak değil herhalde karşınızdaki insan.

'It is actually quite possible to get it through by SMS in case of an emergency. It is not that the person across will not pick up the phone in any case after he/she realizes the matter of urgency.'

Likewise, the adverbs *elbette (surely)* and *sonuçta (after all)* also have a similar effect displaying the confidence of the author in denying the presupposition as shown in (78) and (79).

(78) Kampüs içinde aşırı hızdan şikayet eden bir insan evladına rastlamadım. Ben denk gelmedim diye olmayacak değil elbette. Mutlaka olmuştur hız yapan.

'I have never run across any single individual who complains about excessive speed in the campus. Of course, It is not that it will not occur just because I have never encountered it. There must have been someone who overspeeded.'

(79) Bu kadar sene sonrasında biz hedeflediğimiz yere yalnızca tek maç

uzaklıktayız. Önümüzdeki engel büyük ama yıkılmayacak değiller sonuçta.

'We are only one game away from what we have aimed after all these years. The obstacle ahead of us is big, but it is not that they will not collapse after all.'

4.3 Concluding remarks

In this chapter, we have analyzed distribution of lexical items in DNCs in terms of

how they are collocated with DN. In this respect, we have specified which verbs and

post-*değil* elements manifest strong collocational affiliation with DN along with

their pragmatic implications. Revisiting the ideas from Chapter 3 with regards to

impersonalization, we have shown that the impersonal *insan* is mainly incorporated

in the context of understatement. This result is also coherent with the fact that

impersonalization can be used as a hedging device (Luukka & Markkanen, 1997).

Moreover, we have also found correlations between impersonal *we* and strong

denial contexts in evidential past and future tense. We can more specifically

summarize the results of the chapter as follows:

- DNCs mainly incorporate psychological verbs[26] due to the fact that only these

  type of verbs undergo nondenial DN contexts. However, being a

  psychological verb is not a sufficient condition for such understatements to

  occur. Certain verbs such as *bilmek (to know), sevmek (to like/love), inanmak*

  (to believe), istemek (to want) can only be used in denials due to their

  nontentativeness. The following psychological states predominate the

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[26] Tottie and Paradis (1982) also report that certain verbs such as *think* and *believe* have a stronger tendency to be used in negative contexts. However, the instances they provide are limited, and they do not investigate DNCs.

contexts in which understatement occurs: the act of thinking, curiosity, suspicion, fear, worry, feeling, and desire.

- We grouped DNCs into three main categories: strong denials, weak denials and understatements. In strong denials, a negative presupposition, which most obviously manifests itself in future tense, is denied to the fullest extent. In weak denials, a negative presupposition is denied not to the fullest extent, accepting the presupposition partially. As for understatements, either an obscure negative presupposition is denied, or no presupposition to be denied exists. In the latter case, DN is incorporated merely as a hedging device. This can also be interpreted as a 'presumptive negative presupposition' on behalf of the author, that is, the author denies his/her own presupposition that comes with the act of thinking, wondering, or doubting. Or, alternatively, the author incorporates an underlying *hani* which points to any presupposition depending on the context (see Section 4.2). In this respect, the question whether a presupposition truly exists in such understatements is still a valid one.

- Incorporation of strong or weak denials and understatements in DNCs is subject to various constraints such as:

  o The semantics of a verb which determine the tentativeness and the degree of gradability of an act.

  o The grammatical aspect which determines whether an act has ongoing effects or not (see the case of *sanmak (to suppose)* in section 4.1)

- o The grammatical mood which determines whether an act has occurred or not. In the irrealis mood of future tense, only strong denials are attested.
- The analysis of post-*değil* elements provides a deeper understanding of the functionality of DN, particularly the case of understatement. It is noteworthy that the distribution of both verbs and post-*değil* elements yields consistent results regarding how tenses differ from each other in terms of the way they are associated with DN.

CHAPTER 5

CONCLUSION AND FUTURE WORK

In this thesis, we presented a corpus based study of DN in Turkish in terms of the pragmatic implications of DN and several other stance markers. In this respect, we first described semantic and syntactic ambiguity of negation which forms a basis of the dichotomy of strong and weak denials. Then, we have shown how understatement differs from denial, and consequently, DN itself happens to be a hedging device. This is accomplished through a comprehensive statistical analysis of the collocations of structural and lexical items with DN. The analysis of the structural elements in Chapter 3, namely, tense and AGR markers, enabled us to observe how DN is distributed according to tense and how various forms of impersonalization stand out as essential linguistic phenomena with respect to the pragmatics of DN. On the other hand, the analysis of the lexical items in Chapter 4, namely, verbs and post-*değil* elements, enabled us to observe which type of verbs and discourse markers are strongly collocated with DN. The empirical evidence led us in differentiating understatements from denials, provided the means for explaining the pragmatic implications of certain discourse markers. By having examined a rich set of examples, we consider that statistical inferences made with respect to the distribution of tense, agreement and lexical items gave a coherent picture of the functionality of DN.

As a future work, we consider to add the Turkish aorist into the scheme by using a more sophisticated extraction method which will able to disambiguate its surface form. We also consider to look at a wider range of lexical items that are located not only in the position following *değil* but also in those preceding it.

As a final remark, we should emphasize the essential role of corpus analysis in that it enables us to extrapolate robust generalizations that would not be easily discernible through qualitative or introspective analysis. Therefore, it is an efficient method to analyze pragmatics of relatively less frequent structures.

THE MOST AFFILIATED VERBS IN PROGRESSIVE TENSE

Table A1. The Most Affiliated Verbs with DN (33-60)

	VERB	LOGL		VERB	LOGL
33	endişelenmek *(to worry)*	275.18	47	göze çarpmak *(to catch one's eyes)*	190.56
34	hayıflanmak *(to bewail)*	272.72	48	havası vermek *(to give a flavor of)*	181.51
35	kıskanmak *(to be jealous of)*	271.41	49	merak uyandırmak *(to arouse interest)*	181.14
36	kurcalamak *(to rake up)*	258.55	50	kafa kurcalamak *(to preoccupy one's mind)*	177.42
37	sorusunu getirmek *(to bring the question of)*	252.29	51	diyesi gelmek *(to have an itch to say)*	176.49
38	ürpermek *(to shudder)*	244.85	52	şüpheye düşmek *(to have a suspicion)*	172.77
39	iç geçirmek *(to sigh)*	239.14	53	merak ettirmek *(to make one wonder)*	171.94
40	kendine sormak *(to ask oneself)*	230.50	54	kuşkulanmak *(to suspect)*	170.94
41	tedirgin olmak *(to feel uneasy)*	227.48	55	beklemek *(to expect)*	168.92
42	anımsatmak *(to remind)*	227.00	56	tedirgin etmek *(to make one anxious)*	167.68
43	istek uyandırmak *(to arouse one's desire)*	217.09	57	şüphe uyandırmak *(to raise suspicion)*	165.92
44	kapılmak *(to be carried away)*	202.14	58	aklına takılmak *(to stick in one's mind)*	157.78
45	ürkütmek *(to startle)*	201.18	59	kafa karıştırmak *(to confuse)*	160.55
46	sordur(t)mak *(to make one ask)*	196.17	60	havası sezilmek *(to be sensed 'a flavor' of)*	159.76

Table A2. The Most Affiliated Verbs with DN (61-88)

	VERB	LOGL		VERB	LOGL
61	endişe etmek *(to worry)*	158.89	75	sinir olmak *(to be irritated)*	121.50
62	tırstırmak *(to make one wimp out)*	153.67	76	(içine) kurt düşmek *(to smell a rat)*	121.43
63	meraklanmak *(to get curious)*	144.21	77	gülme gelmek *(to feel like laughing)*	120.86
64	sevinmek *(to be delighted)*	141.19	78	kendine kızmak *(to get mad at oneself)*	116.96
65	(şeytan) dürtmek *(to be nudged by the devil)*	140.59	79	şüphelendirmek *(to make one get suspicious)*	116.96
66	'acaba' demek *(to say 'what if')*	140.32	80	hissi uyandırmak *(to arouse the feeling of)*	110.35
67	oluşmak *(to materialize)*	134.82	81	gıpta etmek *(to envy)*	109.77
68	aklını kurcalamak *(to preoccupy one's mind)*	130.97	82	(içi) cız etmek *(to feel a pang of sorrow)*	108.55
69	ürkmek *(to wince)*	128.70	83	endişelendirmek *(to make one worry)*	107.83
70	yaşanmak *(to be experienced)*	128.10	84	işkillendirmek *(to make one smell a rat)*	105.41
71	umutlanmak *(to become hopeful)*	125.81	85	sorası gelmek *(to have an itch to ask)*	104.61
72	çağrıştırmak *(to evoke)*	125.26	86	ürpertmek *(to give one the willies)*	100.47
73	şüphe etmek *(to doubt)*	124.13	87	içi gitmek *(to hanker after)*	99.05
74	heyecanlandırmak *(to excite)*	121.93	88	yaşatmak *(to make one experience)*	96.99

Table A3. The Most Affiliated Verbs with DN (89-118)

	VERB	LOGL		VERB	LOGL
89	kafasına takılmak *(to stick in one's mind)*	95.84	104	havası sezmek *(to sense a flavor of)*	83.79
90	hissi vermek *(to give the feeling of)*	95.61	105	hava katmak *(to add a flavor)*	83.62
91	gözünü korkutmak *(to intimidate)*	94.54	106	barındırmak *(to embody)*	82.51
92	sorgulatmak *(to make one question)*	93.59	107	güldürmek *(to make one laugh)*	82.21
93	mide bulandırmak *(to turn one's stomach)*	91.78	108	dikkat çekmek *(to draw attention)*	81.05
94	işareti bırakmak *(to leave the sign of)*	91.67	109	içi acımak *(to hurt in the heart)*	80.32
95	heyecanlanmak *(to get excited)*	89.70	110	kıl olmak *(to be peeved)*	79.56
96	hissedilmek *(to be felt)*	89.06	111	sebep olmak *(to cause)*	78.60
97	göz kırpmak *(to make eyes at)*	86.56	112	şaşırmak *(to be surprised)*	77.16
98	kanına dokunmak *(to make one's blood boil)*	86.38	113	hüzünlenmek *(to feel sad)*	76.73
99	zoruna gitmek *(to cut to the quick)*	86.38	114	duygulanmak *(to be affected)*	75.43
100	havası almak *(to get a flavor of)*	86.31	115	şüpheye düşürmek *(to make one have a suspicion)*	74.48
101	huylanmak *(to become restive)*	85.93	116	kokusu almak *(to smell a rat)*	74.06
102	hayret etmek *(to be amazed at)*	84.45	117	gark etmek *(to overwhelm)*	73.33
103	'acaba' dedirtmek *(to make one say 'what if')*	83.79	118	gıcık olmak *(to be peeved)*	70.29

Table A4. The Most Affiliated Verbs with DN (119-150)

	VERB	LOGL		VERB	LOGL
119	içi burkulmak *(to feel a pang of sorrow)*	70.27	135	işaretleri bırakmak *(to leave the signs of)*	60.71
120	sezinlemek *(to sense)*	70.17	136	etkileri olmak *(to have the effects of)*	58.73
121	aklını çelmek *(to entice)*	67.40	137	tadı almak *(to get the taste of)*	58.66
122	gaza getirmek *(to egg one on)*	66.87	138	etkisi yaratmak *(to bring the effect of)*	58.51
123	umutlandırmak *(to make one hopeful)*	65.88	139	şüphe çekmek *(to cast doubt on)*	58.04
124	kendini sorgulamak *(to question oneself)*	65.02	140	sorusunu sordurmak *(to make one ask the question of)*	58.04
125	içini kemirmek *(to gnaw at)*	64.20	141	mutlu etmek *(to make one happy)*	57.72
126	burukluk yaratmak *(to create resentment)*	64.20	142	hissine kapılmak *(to get the feeling of)*	57.49
127	gülümsetmek *(to make one smile)*	63.06	143	hissetmek *(to feel)*	57.09
128	işareti yaratmak *(to create the sign of)*	62.99	144	vicdanı sızlamak *(to have on one's conscience)*	56.97
129	şanslı hissetmek *(to feel lucky)*	62.99	145	sürüklemek *(to drag one into)*	56.60
130	bozmak *(to disrupt)*	62.97	146	kabartmak *(to whet)*	56.15
131	gözünden kaçmak *(to escape one's notice)*	62.07	147	cezbetmek *(to tempt)*	55.58
132	atası gelmek *(to have an itch to throw)*	61.61	148	pişman olmak *(to regret)*	55.40
133	hüzünlendirmek *(to make one feel sad)*	61.61	149	işaretleri uyandırmak *(to raise the signs of)*	54.46
134	gözleri aramak *(to seek for)*	60.71	150	gönlü kaymak *(to have a fancy for)*	54.46

Table A5. The Most Affiliated Verbs with DN (151-178)

	VERB	LOGL		VERB	LOGL
151	(içine) kurt düşürmek *(to make one smell a rat)*	54.46	165	içini acıtmak *(to make one hurt in the heart)*	49.60
152	gıcık etmek *(to irritate)*	54.46	166	çileden çıkarmak *(to drive one out his/her mind)*	49.60
153	işaretleri getirmek *(to bring the signs of)*	54.46	167	umutsuzluğa kapılmak *(to get desperate)*	48.41
154	sinirlendirmek *(to make one get angry)*	53.83	168	hissettirmek *(to make one feel)*	47.78
155	sinir bozmak *(to annoy)*	53.22	169	hayal kırıklığı yaratmak *(to cause disappointment)*	47.69
156	açıklama beklemek *(to wait for an explanation)*	53.06	170	sinirine dokunmak *(to get on one's nerves)*	46.78
157	yoklamak *(to check)*	52.51	171	sezinlenmek *(to be sensed)*	46.78
158	üç buçuk atmak *(to be scared out of one's mind)*	52.35	172	acımak *(to pity)*	46.34
159	uyuz olmak *(to be annoyed)*	51.96	173	iç burmak *(to grieve)*	46.31
160	umut etmek *(to hope for)*	51.24	174	izlenimi vermek *(to give the impression of)*	45.84
161	içini yemek *(to gnaw at)*	51.22	175	şaşmak *(to be buffled)*	45.29
162	işareti oluşturmak *(to form the sign of)*	50.90	176	sinir etmek *(to irritate)*	45.15
163	ipucu vermek *(to give hint)*	50.90	177	maneviyatını bilmek *(to be aware of one's spirituality)*	44.76
164	ümitlenmek *(to become hopeful)*	50.73	178	sinyallerini vermek *(to give the signs of)*	44.76

Table A6. The Most Affiliated Verbs with DN (179-208)

	VERB	LOGL		VERB	LOGL
179	ödü kopmak *(to be frightened to death)*	44.76	194	kafası karışmak *(to be confused)*	41.17
180	kendinden korkmak *(to fear oneself)*	44.76	195	aklına yatmak *(to sound reasonable)*	40.95
181	kendinden şüphelenmek *(to doubt oneself)*	44.76	196	özlenmek *(to be missed)*	39.01
182	imrendirmek *(to make one envy)*	44.76	197	sızlamak *(to ache)*	38.42
183	canı çekmek *(to crave for)*	44.60	198	meraklandırmak *(to make one get curious)*	38.26
184	duygulandırmak *(to touch)*	44.49	199	tadı vermek *(to give the taste of)*	37.87
185	rahatsız etmek *(to bother)*	43.97	200	endişe duymak *(to worry)*	37.65
186	çekinmek *(to abstain from)*	42.93	201	havası yaratmak *(to create a flavor of)*	37.43
187	vurası gelmek *(to have an itch to hit)*	42.34	202	gaza gelmek *(to get carried away)*	36.69
188	hissiyatı yaratmak *(to create the feeling of)*	42.16	203	özletmek *(to make one miss)*	36.46
189	tereddüte düşmek *(to hesitate)*	41.81	204	sevk etmek *(to lead towards)*	35.94
190	ihtimalini getirmek *(to bring the possibility of)*	41.81	205	içine oturmak *(to begrudge)*	35.13
191	dövesi gelmek *(to have an itch to beat)*	41.81	206	göze takılmak *(to catch one's eyes)*	35.13
192	tadı yakalanmak *(to be caught by the taste of)*	41.81	207	kıskandırmak *(to make one jealous of)*	35.13
193	ümitlendirmek *(to make one hope for)*	41.81	208	şüphe yaratmak *(to create suspicion)*	35.08

Table A7. The Most Affiliated Verbs with DN (209-240)

	VERB	LOGL		VERB	LOGL
209	sorgulamak *(to question)*	34.63	225	hal almak *(to come to a state of)*	31.38
210	şaşırtmak *(to startle)*	34.62	226	dikkatinden kaçmak *(to escape one's attention)*	31.19
211	neden olmak *(to cause)*	34.53	227	sabırsızlanmak *(to look forward)*	31.19
212	ağız sulandırmak *(to make one's mouth water)*	34.01	228	tat bırakmak *(to leave a taste)*	31.09
213	yol açmak *(to lead to)*	33.95	229	kuşku uyandırmak *(to raise suspicion)*	30.60
214	özendirmek *(to incent)*	33.94	230	isteği doğmak *(to arise a desire of)*	30.60
215	benzetmek *(to liken)*	33.68	231	gıcıklamak *(to irritate)*	30.60
216	duygusu yaratmak *(to create the sensation of)*	32.94	232	anlamı çıkmak *(to come out 'the meaning' of)*	30.59
217	içlenmek *(to deplore)*	32.94	233	çağrışım yapmak *(to evoke)*	30.43
218	merak edilmek *(to be wondered)*	32.89	234	kızmak *(to get angry)*	30.41
219	tadı yakalamak *(to catch the taste of)*	32.51	235	sempati duymak *(to sympathize)*	29.97
220	(içinin) yağları erimek *(to feel bad)*	32.51	236	ayar olmak *(to get pissed off)*	29.72
221	bağırası gelmek *(to have an itch to shout)*	32.51	237	duygusu vermek *(to give the sensation of)*	29.72
222	aklını karıştırmak *(to confuse)*	32.51	238	canlanmak *(to revive)*	29.52
223	dumur olmak *(to be shocked)*	32.03	239	içini burkmak *(to sadden)*	29.09
224	gururunu okşamak *(to flatter)*	31.55	240	baygınlık vermek *(to cause weariness)*	29.09

Table A8. The Most Affiliated Verbs with DN (241-272)

	VERB	LOGL		VERB	LOGL
241	özlem duymak *(to yearn)*	28.50	257	gözü kaymak *(to look unwillingly)*	25.61
242	irkilmek *(to boggle)*	28.15	258	korku sarmak *(to haunt)*	25.61
243	doğurmak *(to give rise to)*	28.12	259	gözlerini yaşartmak *(to make one's eyes water)*	25.61
244	şüphe duymak *(to doubt)*	27.96	260	içi ürpermek *(to shiver)*	25.61
245	germek *(to stress)*	27.86	261	gülme almak *(to laugh unwillingly)*	25.61
246	hayranlık duymak *(to admire)*	27.32	262	akla düşmek *(to fall into one's mind)*	25.61
247	umut vermek *(to give hope)*	26.31	263	esintileri taşımak *(to have a feel of)*	25.61
248	kabir azabı çekmek *(to suffer)*	26.15	264	tedirginlik yaşamak *(to feel apprehension)*	25.61
249	hayal etmek *(to imagine)*	25.85	265	gerilmek *(to be stressed)*	25.58
250	yüreğine su serpmek *(to relieve)*	25.80	266	bozulmak *(to be upset)*	25.28
251	hayranlık uyandırmak *(to evoke admiration)*	25.80	267	sempati beslemek *(to have sympathy)*	25.27
252	sinirlenmek *(to get angry)*	25.68	268	tiksindirmek *(to make one detest)*	24.57
253	sevindirmek *(to make happy)*	25.64	269	tereddüt etmek *(to hesitate)*	24.36
254	yürek burkmak *(to break one's heart)*	25.61	270	garip gelmek *(to sound strange)*	24.31
255	(içinin) yağlarını eritmek *(to make one feel bad)*	25.61	271	nasibini almak *(to have one's share of)*	23.51
256	tuhafına gitmek *(to find strange)*	25.61	272	imajı vermek *(to give the impression of)*	23.51

Table A9. The Most Affiliated Verbs with DN (273-300)

	VERB	LOGL		VERB	LOGL
273	etkisi bırakmak *(to leave an effect of)*	23.39	287	hoş etmek *(to please)*	21.82
274	umutsuzluğa sürüklemek *(to drag one to despair)*	23.39	288	fikir vermek *(to give idea)*	21.55
275	seğirmek *(to twitch)*	23.39	289	sempatik gelmek *(to seem sympathetic to one)*	21.32
276	rahatlatmak *(to relieve)*	23.32	290	sebebiyet vermek *(to cause)*	21.28
277	gücüne gitmek *(to be difficult to digest)*	22.87	291	garibine gitmek *(to seem strange to one)*	21.24
278	içi sızlamak *(to sorrow)*	22.87	292	işine gelmek *(to work for one's interests)*	21.13
279	içi yanmak *(to sorrow)*	22.87	293	suçluluk duymak *(to feel guilty)*	21.00
280	renk katmak *(to add color)*	22.29	294	izlenimi uyandırmak *(to arouse the impression of)*	20.77
281	izlenimi yaratmak *(to create the impression of)*	22.29	295	eli titremek *(to have a hand tremor)*	20.59
282	katkısı olmak *(to have a contribution)*	21.90	296	gözünde tütmek *(to yearn)*	20.59
283	çıldırtmak *(to make on mad)*	21.90	297	gurur vermek *(to make proud)*	20.59
284	hayalini kurmak *(to fantasize)*	21.85	298	özlemini çekmek *(to yearn)*	20.59
285	içi burulmak *(to feel a pang of sorrow)*	21.82	299	endişesini taşımak *(to have concern)*	20.26
286	içi parçalanmak *(to sorrow)*	21.82	300	hoş gelmek *(to seem pleasant)*	19.85

Table A10. The Most Affiliated Verbs with DN (301-332)

	VERB	LOGL		VERB	LOGL
301	mantıklı gelmek *(to sound reasonable)*	19.72	317	moral bozmak *(to demoralize)*	18.42
302	hayrete düşürmek *(to shock)*	19.57	318	güçlük çekmek *(to have difficulty)*	18.14
303	baş göstermek *(to unfold)*	19.57	319	kabarmak *(to surge)*	18.05
304	karizma katmak *(to add charisma)*	19.57	320	hak etmek *(to deserve)*	18.03
305	paranoya yapmak *(to act paranoid)*	19.57	321	sempati uyandırmak *(to arouse sympathy)*	17.97
306	bezdirmek *(to irk)*	19.57	322	gerginlik yaratmak *(to create tension)*	17.97
307	tedirginlik yaratmak *(to create apprehension)*	19.57	323	mesajını vermek *(to give the message of)*	17.97
308	gururlanmak *(to be proud)*	19.50	324	afallamak *(to be bewildered)*	17.97
309	kaplamak *(surge up)*	19.07	325	ortaya çıkmak *(to arise)*	17.83
310	tetiklemek *(to trigger)*	18.76	326	şükretmek *(to be thankful)*	17.47
311	siniri bozulmak *(to lose one's nerve)*	18.72	327	şaşkınlık yaratmak *(to create astonishment)*	17.31
312	gözünde büyümek *(to make heavy weather of)*	18.72	328	iç çekmek *(to sigh)*	17.31
313	potansiyeli taşımak *(to have the potential of)*	18.72	329	gururlandırmak *(to make one proud)*	17.31
314	gözleri yaşarmak *(to be filled with tears)*	18.72	330	tebessüm ettirmek *(to make one smile)*	17.19
315	keyiflendirmek *(to make one joyful)*	18.72	331	sızlatmak *(to make one ache)*	17.14
316	haklı bulmak *(to find one to be right)*	18.57	332	garipsemek *(to find strange)*	16.92

Table A11. The Most Affiliated Verbs with DN (333-360)

	VERB	LOGL		VERB	LOGL
333	tiksinmek *(to detest)*	16.92	347	göğsünü kabartmak *(to make proud)*	16.26
334	dehşete düşürmek *(to terrify)*	16.72	348	midesini kaldırmak *(to turn one's stomach)*	16.26
335	selam çakmak *(to say hi)*	16.72	349	tüyleri ürpermek *(to get the shivers)*	14.43
336	isteği yaratmak *(to create the desire for)*	16.72	350	beklentisi oluşturmak *(to create the expectation of)*	16.26
337	heyecan basmak *(to be filled with excitement)*	16.26	351	içini sızlatmak *(to pull at one's heartstrings)*	16.26
338	gururuna dokunmak *(to feel degraded)*	16.26	352	kulağa çarpmak *(to reach one's ears)*	16.26
339	gözleri dolmak *(to be filled with tears)*	16.26	353	afallatmak *(to make one bewildered)*	16.26
340	işaretlerini doğurmak *(to give rise to the signs of)*	16.26	354	hatalar barındırmak *(to contain errors)*	16.26
341	ikileme düşmek *(to be on the fence)*	16.26	355	dalası gelmek *(to have an itch to brawl)*	16.26
342	kararsızlığa düşmek *(to be in two minds)*	16.26	356	parçalayası gelmek *(to have an itch to tear down)*	16.26
343	ümitsizliğe düşürmek *(to drive one to despair)*	16.26	357	yanaklarını sıkası gelmek *(to have an itch to squeeze one's cheeks)*	16.26
344	kıl etmek *(to irritate)*	16.26	358	gına getirmek *(to grate on one's nerves)*	16.26
345	yapıştırası gelmek *(to have an itch to slap)*	16.26	359	komiğine gitmek *(to sound funny)*	16.26
346	çakası gelmek *(to have an itch to slap)*	16.26	360	kanı kaynamak *(to be full of beans)*	16.26

Table A12. The Most Affiliated Verbs with DN (361-390)

	VERB	LOGL		VERB	LOGL
361	kokusu sezmek *(to sense a smell of)*	16.26	376	kasıt aramak *(to look for intent)*	14.82
362	mutluluk yaşamak *(to go through happiness)*	16.26	377	işareti kalmak *(to stay 'the sign of')*	14.80
363	cıvkını çıkartmak *(to take things too far)*	16.26	378	benzemek *(to resemble)*	14.73
364	boku çıkmak *(to be no more pleasant)*	16.18	379	planlamak *(to plan)*	14.57
365	delirtmek *(to drive mad)*	16.13	380	ikilemde bırakmak *(to make one straddle the fence)*	14.54
366	sorular sormak *(to ask questions)*	16.00	381	dumur etmek *(to shock)*	14.54
367	uyanmak *(to arise)*	15.78	382	değiştiresi gelmek *(to have an itch to change)*	14.54
368	rüyalarına girmek *(to appear in one's dreams)*	15.69	383	düşüncesini getirmek *(to bring the idea of)*	14.54
369	his oluşmak *(to occur 'a feeling')*	15.69	384	cazip gözükmek *(to seem attractive)*	14.54
370	gıdıklamak *(to tickle)*	15.69	385	bıyık altından gülmek *(to smirk)*	14.54
371	isteği gelmek *(to arouse a desire of)*	15.66	386	teşekkürü hak etmek *(to deserve appreciation)*	14.54
372	tebessüm etmek *(to smile)*	15.43	387	ezik hissettirmek *(to make one feel like a looser)*	14.54
373	tuhaf gelmek *(to sound weird)*	15.36	388	düşüncesine kapılmak *(to have an idea of)*	14.54
374	karşılaşılmak *(to be encountered)*	15.00	389	tat katmak *(to add a taste)*	14.54
375	aratmak *(to make one seek)*	14.85	390	şüphesi olmak *(to have a doubt)*	14.54

Table A13. The Most Affiliated Verbs with DN (391-418)

	VERB	LOGL		VERB	LOGL
391	ağzı sulanmak *(to lick one's lips)*	14.54	405	can çekmek *(to crave for)*	14.54
392	içinde taşımak *(to carry it in oneself)*	14.54	406	niyet aramak *(to look for an intention)*	14.35
393	dumura uğratmak *(to make one shock)*	14.54	407	kahrolmak *(to be devastated)*	14.21
394	gülümseme yerleşmek *(to settle 'a smile')*	14.54	408	deli etmek *(to drive mad)*	14.07
395	baltalanmak *(to be undermined)*	14.54	409	potansiyeli görmek *(to see the potential)*	14.07
396	sorunlar çıkmak *(to come out 'problems')*	14.54	410	husursuz etmek *(to trouble)*	14.07
397	şapka çıkarmak *(to take one's hat to)*	14.54	411	karşılaşmak *(to encounter)*	14.03
398	başlayası gelmek *(to have an itch to start)*	14.54	412	gurur duymak *(to be proud)*	13.98
399	öğrenesi gelmek *(to have an itch to learn)*	14.54	413	hayal kırıklığı yaşamak *(to have a disappointment)*	13.73
400	kırası gelmek *(to have an itch to break)*	14.54	414	hayal kırklığına uğramak *(to be disappointed)*	13.73
401	keyfi kaçmak *(to be out of spirits)*	14.54	415	heyecan yapmak *(to get excited)*	13.67
402	tadını kaçırmak *(to cast a damper on)*	14.54	416	aşılamak *(to instill)*	13.63
403	ikilemde kalmak *(to be on the fence)*	14.54	417	hissiyatı vermek *(to give the feeling of)*	13.50
404	kokusu yayılmak *(to emit the smell of)*	14.54	418	yarılmak *(to split one's sides)*	13.50

Table A14. The Most Affiliated Verbs with DN (419-445)

	VERB	LOGL		VERB	LOGL
419	gözler önüne sermek *(to unroll)*	13.41	433	depreşmek *(to relapse)*	13.37
420	isteği doğurmak *(to arouse the desire for*	13.37	434	ağrına gitmek *(to take it to the heart)*	13.37
421	havası estirmek *(to create an atmosphere of)*	13.37	435	huzursuzlanmak *(to be uneasy with one's mind)*	13.37
422	şüphe ettirmek *(to make one have a doubt)*	13.37	436	götü kalkmak *(to put on airs)*	13.37
423	yanlışlarını görmek *(to see the mistakes of)*	13.37	437	gidesi gelmek *(to have an itch to leave)*	13.34
424	garip hissetmek *(to feel strange)*	13.37	438	empati yapmak *(to empathize with)*	13.17
425	göz korkutmak *(to intimidate)*	13.37	439	ümit vermek *(to make one hope for)*	13.13
426	eğilimleri olmak *(to have tendencies of)*	13.37	440	ipucu vermek *(to give a hint)*	12.87
427	çabaları olmak *(to have an endeavor for)*	13.37	441	canı sıkılmak *(to be vexed at)*	12.71
428	hayallerini süslemek *(to fancy up one's dreams)*	13.37	442	kafa bulandırmak *(to confuse)*	12.48
429	umudunu taşımak *(to carry a hope for)*	13.37	442	yoksa demek *(to say 'what if')*	12.48
430	sevinç yaşamak *(to experience joy)*	13.37	443	uykuları kaçmak *(to lose one's sleep)*	12.48
431	duyumlar almak *(to receive rumors)*	13.37	444	ifrit olmak *(to be annoyed)*	12.48
432	kokusu alınmak *(to be sensed 'the smell of a rat')*	13.37	445	düşüncesi uyandırmak *(to raise a thought of)*	12.48

Table A15. The Most Affiliated Verbs with DN (446-476)

	VERB	LOGL		VERB	LOGL
446	işareti uyandırmak *(to raise the sign of)*	12.48	462	kulağına gelmek *(to come to one's ears)*	11.75
447	atmosfer yaratmak *(to create an atmosphere)*	12.48	463	düşüncesi geçmek *(to pass 'a thought of')*	11.75
448	içini ısıtmak *(to warm the cockles of heart)*	12.48	463	gözünü korkutmak *(to intimidate)*	11.75
449	hayranlık beslemek *(to admire)*	12.48	464	stres yaratmak *(to create stress)*	11.75
450	kıs kıs gülmek *(to smirk)*	12.48	465	isyan ettirmek *(to make one rise against)*	11.75
451	huylandırmak *(to make one become restive)*	12.48	466	heveslendirmek *(to make one aspire)*	11.75
452	izler taşımak *(to bear traces)*	12.48	467	aklı kalmak *(to be wrapped up in)*	11.75
453	tanıdık gelmek *(to look familiar)*	12.36	468	isteği uyanmak *(to arise a desire of)*	11.75
454	hoşa gitmek *(to appeal to one)*	12.29	469	ışığı görmek *(to see the light of)*	11.36
455	soğutmak *(to disincline)*	12.28	470	eğlendirmek *(to entertain)*	11.28
456	gaz vermek *(to egg one on)*	12.04	471	parmak basmak *(to make a point)*	11.14
457	etkiler bırakmak *(to leave the effects)*	11.75	472	morali bozulmak *(to be demoralized)*	11.14
458	hayran bırakmak *(to fascinate)*	11.75	473	kopup gitmek *(to lose touch)*	11.14
459	mest etmek *(to entrance)*	11.75	474	göz koymak *(to draw a bead on)*	11.14
460	bağrına basası gelmek *(to have an itch to embrace)*	11.75	475	yüzü kızarmak *(to turn red in the face)*	11.14
461	koyası gelmek *(to have an itch to place)*	11.75	476	saç baş yoldurmak *(to drive one mad)*	11.14

Table A16. The Most Affiliated Verbs with DN (477-495)

	VERB	LOGL		VERB	LOGL
477	kaşınmak *(to itch for trouble)*	11.11	492	hoş olmak *(to be pleasant)*	9.95
478	ortaya çıkarmak *(to reveal)*	11.00	493	isyan etmek *(to rise against)*	9.86
479	yankılanmak *(to echo)*	10.95	494	faydası olmak *(to have a contribution)*	9.81
480	gözlemlemek *(to observe)*	10.75	495	cazip kılmak *(to make it attractive)*	9.75
481	düşüncelere dalmak *(to fall into thoughts)*	10.62			
482	tepkiler almak *(to receive reactions)*	10.62			
483	çelişkiye düşmek *(to contradict)*	10.62			
484	iğrendirmek *(to make one detest)*	10.62			
485	üşüşmek *(to swarm)*	10.62			
486	fısıldamak *(to whisper)*	10.57			
487	titremek *(to tremble)*	10.56			
488	eleştirilere katılmak *(to agree with the critisms)*	10.34			
489	kendini hissettirmek *(to make one's precence felt)*	10.16			
490	işareti oluşmak *(to form 'the sign of')*	10.16			
491	gözlenmek *(to be observed)*	10.13			

THE MOST AFFILIATED VERBS IN PAST TENSE

Table B1. The Most Affiliated Verbs with DN (33-60)

	VERB	LOGL		VERB	LOGL
33	(içine) kurt düşmek *(to smell a rat)*	284.32	47	iç geçirmek *(to sigh)*	181.79
34	düşünmeye başlamak *(to start thinking)*	269.41	48	hayıflanmak *(to bewail)*	179.93
35	korkutmak *(to make one fear)*	268.39	49	hayran kalmak *(to be fascinated)*	170.52
36	gözleri dolmak *(to be filled with tears)*	259.13	50	tedirgin olmak *(to feel uneasy)*	170.29
37	kafası karışmak *(to be confused)*	253.91	51	hayal kırıklığı yaratmak *(to cause disappointment)*	163.31
38	şaşırmak *(to be surprised)*	250.43	52	umutlanmak *(to become hopeful)*	158.75
39	garibine gitmek *(to seem strange to one)*	247.07	53	diyesi gelmek *(to have an itch to say)*	155.39
40	sevinmek *(to be delighted)*	231.31	54	içi burkulmak *(to feel a pang of sorrow)*	153.59
41	kendine sormak *(to ask oneself)*	228.55	55	üzmek *(to upset)*	153.15
42	(içi) cız etmek *(to feel a pang of sorrow)*	226.47	56	ürkmek *(to wince)*	150.85
43	tadı yakalamak *(to catch the taste of)*	204.12	57	kıskanmak *(to be jealous of)*	149.72
44	anımsatmak *(to remind)*	197.02	58	benzetmek *(to liken)*	146.34
45	aklına takılmak *(to stick in one's mind)*	195.02	59	heyecanlanmak *(to be excited)*	143.75
46	gözlerini yaşartmak *(to make one's eyes water)*	187.49	60	hayal kırklığına uğramak *(to be disappointed)*	143.67

Table B2. The Most Affiliated Verbs with DN (61-92)

	VERB	LOGL		VERB	LOGL
61	siniri bozulmak *(to lose one's nerve)*	143.18	77	endişe etmek *(to worry)*	112.68
62	gururunu okşamak *(to flatter)*	142.15	78	zannetmek *(to suppose)*	110.93
63	afallamak *(to be bewildered)*	135.87	79	canı çekmek *(to crave for)*	107.52
64	gülümsetmek *(to make one smile)*	134.94	80	etkisi yaratmak *(to bring the effect of)*	107.14
65	dedirtmek *(to make one say)*	130.60	81	kafasına takılmak *(to stick in one's mind)*	104.72
66	kokusu almak *(to smell a rat)*	122.66	82	aklına getirmek *(to bring one's mind)*	104.27
67	içi burulmak *(to feel a pang of sorrow)*	122.47	83	hissine kapılmak *(to get the feeling of)*	101.41
68	hayal kırıklığı yaşamak *(to have a disappointment)*	119.73	84	heyecanlandırmak *(to excite)*	100.98
69	sebep olmak *(to cause)*	119.39	85	ürpermek *(to shudder)*	100.65
70	heyecan yapmak *(to get excited)*	119.15	86	şüphe etmek *(to doubt)*	99.62
71	hüzünlenmek *(to feel sad)*	119.15	87	yaşamak *(to experience)*	94.39
72	irkilmek *(to boggle)*	116.67	88	içi acımak *(to hurt in the heart)*	93.55
73	andırmak *(to resemble)*	116.44	89	güldürmek *(to make one laugh)*	93.36
74	duygulanmak *(to be affected)*	116.27	90	havası yakalamak *(to catch a flavor of)*	93.05
75	içi gitmek *(to hanker after)*	113.00	91	sorgulamak *(to question)*	91.80
76	şüpheye düşmek *(to have a suspicion)*	112.82	92	endişelenmek *(to worry)*	90.08

Table B3. The Most Affiliated Verbs with DN (93-120)

	VERB	LOGL		VERB	LOGL
93	(içinin) yağları erimek *(to feel bad)*	89.95	107	sevindirmek *(to make happy)*	80.25
94	tedirgin etmek *(to make one anxious)*	89.91	108	şaşırtmak *(to startle)*	78.22
95	gözleri yaşarmak *(to be filled with tears)*	89.51	109	gözler aramak *(to seek 'the eyes')*	76.31
96	gözü korkmak *(to be daunted)*	88.95	110	göze çarpmak *(to catch one's eyes)*	75.07
97	hüzünlendirmek *(to make one feel sad)*	88.00	111	aydınlanma yaşamak *(to have a revelation)*	74.49
98	yaşatmak *(to make one experience)*	87.74	112	tereddüt etmek *(to hesitate)*	73.29
99	içini burkmak *(to sadden)*	87.72	113	gurur duymak *(to be proud)*	70.98
100	ilgisini çekmek *(to draw one's attention)*	87.39	114	gark etmek *(to overwhelm)*	69.81
101	'acaba' demek *(to say 'what if')*	83.79	115	kuşkulanmak *(to suspect)*	69.66
102	kendini sorgulamak *(to question oneself)*	83.28	116	hayal kırıklığına uğratmak *(to disappoint)*	68.01
103	takdirini kazanmak *(to gain one's appreciation)*	83.28	117	özenmek *(to emulate)*	67.74
104	gururu okşanmak *(to be flattered)*	83.04	118	sorgulatmak *(to make one question)*	67.33
105	meraklanmak *(to get curious)*	81.67	119	sorası gelmek *(to have an itch to ask)*	66.94
106	kendine kızmak *(to get mad at oneself)*	80.71	120	bozulmak *(to be upset)*	66.79

Table B4. The Most Affiliated Verbs with DN (121-152)

	VERB	LOGL		VERB	LOGL
121	kaplamak *(surge up)*	66.47	137	huylanmak *(to become restive)*	56.41
122	canı sıkılmak *(to be vexed at)*	65.04	138	ürkütmek *(to startle)*	56.32
123	merak ettirmek *(to make one wonder)*	64.94	139	olası gelmek *(to have an itch to be)*	55.45
124	aklını çelmek *(to entice)*	64.57	140	ümitlenmek *(to become hopeful)*	55.20
125	yol açmak *(to cause)*	64.42	141	gururlanmak *(to be proud)*	54.86
126	işaretleri bırakmak *(to leave the signs of)*	63.80	142	tiksinmek *(to detest)*	54.73
127	tebessüm yaratmak *(to create a smile)*	63.80	143	içine oturmak *(to begrudge)*	54.12
128	kıl olmak *(to be peeved)*	63.49	144	işaretleri oluşmak *(to form 'the signs of')*	54.11
129	tuhafına gitmek *(to find strange)*	62.54	145	işaretleri yaratmak *(to create the signs of)*	54.11
130	şok yaşamak *(to be shocked)*	60.18	146	hissiyatı uyandırmak *(to arouse the feeling of)*	54.11
131	dikkatinden kaçmak *(to escape one's attention)*	59.65	147	kıllanmaya başlamak *(to start being peeved)*	54.11
132	gözünü korkutmak *(to intimidate)*	59.16	148	(içine) kurt düşürmek *(to make one smell a rat)*	54.11
133	içerlemek *(to resent)*	58.20	149	yüreğine su serpmek *(to relieve)*	53.58
134	gerilmek *(to be stressed)*	57.70	150	zoruna gitmek *(to cut to the quick)*	53.04
135	kokusu gelmek *(to come 'the smell of')*	57.64	151	çağrıştırmak *(to evoke)*	52.55
136	gülmek *(to laugh)*	57.20	152	aklında kalmak *(to stay in one's mind)*	51.95

Table B5. The Most Affiliated Verbs with DN (153-186)

	VERB	LOGL		VERB	LOGL
153	garip gelmek (to sound strange)	51.50	170	sordur(t)mak (to make one ask)	46.92
154	heveslenmek (to aspire)	51.42	171	sezinlemek (to sense)	46.56
155	gaza gelmek (to get carried away)	51.19	172	(içinin) yağlarını eritmek (to make one feel bad)	46.44
156	işkillendirmek (to make one smell a rat)	50.87	173	midesi kalkmak (to feel sick to one's stomach)	46.44
157	işareti oluşturmak (to form the sign of)	50.87	174	etkisi olmak (to have an effect on)	46.20
158	özlemek (to miss)	50.35	175	işareti bırakmak (to leave the sign of)	45.91
159	tuhaf gelmek (to sound weird)	50.25	176	(içinde) ukde kalmak (to regret not)	45.91
160	duygulandırmak (to touch)	50.22	177	rahatlamak (to be relieved)	45.22
161	gıcık olmak (to be peeved)	49.65	178	işaretleri oluşturmak (to form the signs of)	44.48
162	dumur olmak (to be shocked)	48.68	179	kendinden tiksinmek (to detest oneself)	44.48
163	hayal etmek (to imagine)	48.63	180	duyumlar almak (to receive rumors)	44.48
164	gülme gelmek (to feel like laughing)	48.43	181	midesi bulanmak (to feel sick)	44.37
165	merak uyandırmak (to arouse interest)	48.04	182	garipsemek (to find strange)	43.80
166	hisse kapılmak (to get the feeling)	48.01	183	morali bozulmak (to be demoralized)	43.29
167	ağzının suyu akmak (to slaver for)	48.01	184	şüphe uyandırmak (to raise suspicion)	43.29
168	yapası gelmek (to have an itch to do)	47.54	185	canlanmak (to revive)	43.15
169	götü kalkmak (to put on airs)	46.92	186	moduna girmek (to get in the mood of)	43.05

Table B6. The Most Affiliated Verbs with DN (187-216)

	VERB	LOGL		VERB	LOGL
187	aklına yatmak *(to sound reasonable)*	42.57	202	yüreğine su serpilmek *(to be relieved)*	37.56
188	sempati duymak *(to sympathize)*	42.28	203	heyecan yaratmak *(to create excitement)*	36.74
189	gözünden yaş gelmek *(to break down in tears)*	42.04	204	tebessüm ettirmek *(to make one smile)*	36.54
190	bağırası gelmek *(to have an itch to shout)*	41.52	205	işaretleri oluşmak *(to form 'the signs of')*	36.07
191	havası yaşatmak *(to make one experience a flavor of)*	41.52	206	uyuz olmak *(to be annoyed)*	36.07
192	yaşanmak *(to be experienced)*	39.43	207	mutlu etmek *(to make one happy)*	35.78
193	şok geçirmek *(to be shocked)*	39.32	208	cezbetmek *(to tempt)*	35.37
194	kendinden utanmak *(to be ashamed of oneself)*	39.32	209	kızmak *(to get angry)*	35.29
195	havası vermek *(to give a flavor of)*	38.81	210	asabı bozulmak *(to get upset)*	34.90
196	şok olmak *(to be shocked)*	38.54	211	heyecan gelmek *(to come 'excitement')*	34.90
197	fark etmek *(to notice)*	38.50	212	titreme gelmek *(to come 'tremble')*	34.90
198	kafa karıştırmak *(to confuse)*	38.36	213	tırsma gelmek *(to come 'fear')*	34.90
199	atası gelmek *(to have an itch to throw)*	37.92	214	kafasından geç(ir)mek *(to cross one's mind)*	34.90
200	hissi yaratmak *(to create the feeling of)*	37.92	215	burukluk yaratmak *(to create resentment)*	34.90
201	ürpertmek *(to give one the willies)*	37.92	216	aklını kurcalamak *(to preoccupy one's mind)*	34.90

Table B7. The Most Affiliated Verbs with DN (217-246)

	VERB	LOGL		VERB	LOGL
217	şüphe oluşturmak *(to create suspicion)*	34.90	232	moral bozmak *(to demoralize)*	32.03
218	burukluk yaşamak *(to resent)*	34.90	233	kurcalamak *(to rake up)*	31.76
219	yüreği ağzına gelmek *(to have one's heart in one's boots)*	34.90	234	tepki vermek *(to react)*	31.74
220	tebessüm etmek *(to smile)*	34.81	235	(başkası) adına üzülmek *(to feel sorry for someone)*	31.74
221	isteği uyandırmak *(to arouse the desire for)*	34.75	236	umutlandırmak *(to make one hopeful)*	31.74
222	rahatsız etmek *(to bother)*	34.37	237	içini acıtmak *(to make one hurt in the heart)*	30.91
223	hayret etmek *(to be amazed at)*	33.67	238	hissi vermek *(to give the feeling of)*	30.50
224	kabartmak *(to whet)*	33.67	239	burukluk hissetmek *(to feel resentment)*	30.37
225	izlenimi uyandırmak *(to arouse the impression of)*	33.66	240	'yusuf yusuf' olmak *(to be scared to death)*	30.37
226	sinir bozmak *(to annoy)*	32.28	241	merak sarmak *(to develop an interest)*	30.37
227	'acaba' dedirtmek *(to make one say 'what if')*	32.28	242	tedirginlik yaşamak *(to feel apprehension)*	30.37
228	ödü kopmak *(to be frightened to death)*	32.28	243	fenalık gelmek *(to feel faint)*	30.37
229	hevesi kaçmak *(to lose interest)*	32.28	244	depreşmek *(to relapse)*	30.37
230	acımak *(to pity)*	32.25	245	vurası gelmek *(to have an itch to hit)*	30.37
231	kabarmak *(to surge)*	32.16	246	meraklandırmak *(to make one get curious)*	30.37

Table B8. The Most Affiliated Verbs with DN (247-276)

	VERB	LOGL		VERB	LOGL
247	dumura uğramak *(to be shocked)*	30.37	262	şükretmek *(to be thankful)*	28.78
248	sevk etmek *(to lead towards)*	30.15	263	ilginç gelmek *(to sound interesting)*	28.57
249	korkusu yaşamak *(o experience the fear of)*	30.14	264	işine gelmek *(to work for one's interests)*	28.57
250	belirmek *(to emanate)*	30.00	265	etkisi yapmak *(to create the effect of)*	28.16
251	neden olmak *(to cause)*	29.56	266	dikkat çekmek *(to draw attention)*	27.61
252	etkili olmak *(to have influence)*	29.11	267	isteği uyanmak *(to arise a desire of)*	27.60
253	gözü kaymak *(to look unwillingly)*	28.86	268	dumura uğratmak *(to make one shock)*	27.60
254	içi yanmak *(to sorrow)*	28.86	269	sorusu gelmek *(to come to mind 'the question' of)*	27.60
255	nostalji yaratmak *(to create nostalgia)*	28.86	270	celbetmek *(to summon)*	27.60
256	gözlerini doldurmak *(to fill one's eyes with tears)*	28.86	271	kahkaha atmak *(to raise a laugh)*	27.08
257	örneklerini görmek *(to see the examples of)*	28.86	272	esmek *aklı(to flash into)*	26.85
258	tiksinti gelmek *(to come 'repulsion')*	28.86	273	mide bulandırmak *(to turn one's stomach)*	26.52
259	tebessüm oluşturmak *(to create a smile)*	28.86	274	ağız sulandırmak *(to make one's mouth water)*	26.52
260	acıtmak *(to make sorrow)*	28.78	275	havası yaratmak *(to create a flavor of)*	26.52
261	hayal kırıklığı yaratmak *(to make one experience disappointment)*	28.78	276	tadı vermek *(to give the taste of)*	26.07

Table B9. The Most Affiliated Verbs with DN (277-306)

	VERB	LOGL		VERB	LOGL
277	şaşkınlık yaşamak *(to have astonishment)*	25.57	292	kendinden şüphelenmek *(to doubt oneself)*	25.44
278	veresi gelmek *(to have an itch to give)*	25.57	293	dalası gelmek *(to have an itch to brawl)*	25.44
279	ters köşe olmak *(to be thrown a curve)*	25.57	294	içini yemek *(to gnaw at)*	25.44
280	gözleri aramak *(to seek for)*	25.44	295	kuşkulandırmak *(to make one get suspicious)*	25.44
281	yüreğini dağlamak *(to break one's heart)*	25.44	296	içinde kalmak *(to regret not)*	25.17
282	şüphe düşürmek *(to raise suspicion)*	25.44	297	saçma gelmek *(to sound ridiculous)*	25.04
283	koltukları kabarmak *(to swell with pride)*	25.44	298	sinir olmak *(to be irritated)*	25.04
284	hüzün kaplamak *(to surge up 'grief')*	25.44	299	mutlu olmak *(to become happy)*	24.84
285	korku kaplamak *(to surge up 'fear')*	25.44	300	tereddüte düşmek *(to hesitate)*	24.73
286	kafasını kurcalamak *(to preoccupy one's mind)*	25.44	301	bozmak *(to disrupt)*	24.58
287	hissiyatı oluşturmak *(to create the feeling of)*	25.44	302	vicdanı sızlamak *(to have on one's conscience)*	23.97
288	sorusunu sordurmak *(to make one ask the question of)*	25.44	303	göze batmak *(to cut a swath)*	23.85
289	ha siktir çekmek *(to say 'no shit')*	25.44	304	sürüklemek *(to drag one into)*	23.51
290	aklı çıkmak *(to run amok)*	25.44	305	gülümsemek *(to smile)*	23.28
291	tüylerini ürpertmek *(to make one's flesh creep)*	25.44	306	içlenmek *(to deplore)*	23.28

Table B10. The Most Affiliated Verbs with DN (307-336)

	VERB	LOGL		VERB	LOGL
307	kuşkuya düşmek *(to have a suspicion)*	23.22	322	gidesi gelmek *(to have an itch to leave)*	22.65
308	beraberinde getirmek *(to bring along)*	23.22	323	katkısı olmak *(to have a contribution)*	22.16
309	yüreği hoplamak *(to jump out of one's skin)*	23.22	324	yaşlar süzülmek *(to run down 'tears')*	22.06
310	kıl kapmak *(to become peeved)*	23.22	325	kafasına yatmak *(to sound reasonable)*	21.76
311	fikrine kapılmak *(to have an idea of)*	23.22	326	gözünden düşmek *(to be disenchanted with)*	21.64
312	isteği doğmak *(to arise a desire of)*	23.22	327	etken olmak *(to be a cause for)*	21.64
313	şüpheye düşürmek *(to make one have a suspicion)*	23.22	328	dumur yaşamak *(to be shocked)*	21.64
314	komiğine gitmek *(to sound funny)*	23.22	329	keyfi kaçmak *(to be put off)*	21.64
315	işaretleri kalmak *(to stay 'the signs of')*	23.22	330	alası gelmek *(to have an itch to receive)*	21.64
316	kursağında kalmak *(to stick in one's gizzard)*	23.22	331	faydası olmak *(to have a contribution)*	21.07
317	vesile olmak *(to conduce toward)*	23.18	332	titretmek *(to cause to tremble)*	21.00
318	sebebiyet vermek *(to cause)*	23.18	333	boğazı düğümlenmek *(to have a lump in one's throat)*	20.54
319	rahatlatmak *(to relieve)*	23.05	334	bağrına basası gelmek *(to have an itch to embrace)*	20.41
320	kalbini kırmak *(to break one's heart)*	22.65	335	tiksindirmek *(to make one detest)*	20.10
321	tat bırakmak *(to leave a taste)*	22.65	336	utanmak *(to be embarrassed)*	20.08

Table B11. The Most Affiliated Verbs with DN (337-368)

	VERB	LOGL		VERB	LOGL
337	gına gelmek *(to be tired of)*	19.96	353	tepkiler almak *(to receive reactions)*	17.14
338	sormak *(to ask)*	19.93	354	akıtmak *(to drain)*	16.87
339	enteresan gelmek *(to sound interesting)*	19.68	355	daralmak *(to feel uncomfortable)*	16.69
340	gözü kalmak *(to begrudge)*	19.68	356	sövmek *(to swear)*	16.58
341	sordur(t)mak *(to make one ask)*	19.68	357	dumur etmek *(to shock)*	16.55
342	gücüne gitmek *(to be difficult to digest)*	19.40	358	irite etmek *(to irritate)*	16.55
343	sınırlarını zorlamak *(to push one's limits)*	19.40	359	yüzü kızarmak *(to turn red in the face)*	16.55
344	yusuflamak *(to be scared)*	19.40	360	baymak *(to bore)*	16.30
345	şüphelendirmek *(to make one get suspicious)*	19.40	361	isteği duymak *(to have a desire for)*	16.16
346	isteği gelmek *(to arouse a desire of)*	18.55	362	paniklemek *(to panic)*	16.16
347	endişelendirmek *(to make one worry)*	18.55	363	tavır takınmak *(to strike an attitude)*	16.16
348	kazanmak *(to gain)*	17.96	364	esintisi almak *(to get a feel of)*	16.14
349	panik olmak *(to panic)*	17.87	365	sinyalini almak *(to get a sign of)*	16.14
350	hayalini kurmak *(to fantasize)*	17.80	366	gülme almak *(to laugh unwillingly)*	16.14
351	havasına girmek *(to get into one's stride)*	17.80	367	suratı asılmak *(to get into a huff)*	16.14
352	girişimleri olmak *(to have had attempts)*	17.80	368	hava basmak *(to give oneself airs)*	16.14

Table B12. The Most Affiliated Verbs with DN (369-398)

	VERB	LOGL		VERB	LOGL
369	heyecan basmak *(to be filled with excitement)*	16.14	384	işareti getirmek *(to bring the sign of)*	16.14
370	ter basmak *(to be filled with sweat)*	16.14	385	fenalık geçirmek *(to feel faint)*	16.14
371	kafa bulandırmak *(to confuse)*	16.14	386	içi gıcıklanmak *(to be titillated)*	16.14
372	gülümseme bırakmak *(to leave a smile)*	16.14	387	göğsünü kabartmak *(to make proud)*	16.14
373	tebessüm bırakmak *(to leave a smile)*	16.14	388	götünü kaldırmak *(to give one a big head)*	16.14
374	yoksa demek *(to say 'what if')*	16.14	389	aklı karışmak *(to get confused)*	16.14
375	yoksa dedirtmek *(to say 'what if')*	16.14	390	aklını karıştırmak *(to confuse)*	16.14
376	ikileme düşmek *(to be on the fence)*	16.14	391	hava katmak *(to add a flavor)*	16.14
377	uyuz etmek *(to irritate)*	16.14	392	neşe katmak *(to bring joy)*	16.14
378	ağlayası gelmek *(to have an itch to cry)*	16.14	393	tat katmak *(to add a taste)*	16.14
379	haykırası gelmek *(to have an itch to shout)*	16.14	394	tadını kaçırmak *(to cast a damper on)*	16.14
380	katılası gelmek *(to have an itch to join)*	16.14	395	zihnini kurcalamak *(to preoccupy one's mind)*	16.14
381	tokatlayası gelmek *(to have an itch to slap)*	16.14	396	bahtiyar olmak *(to become happy)*	16.14
382	yakası gelmek *(to have an itch to burn)*	16.14	397	iç parçalamak *(to pull on the heartstrings)*	16.14
383	çekesi gelmek *(to have an itch to pull)*	16.14	398	korku sarmak *(to haunt)*	16.14

Table B13. The Most Affiliated Verbs with DN (399-426)

	VERB	LOGL		VERB	LOGL
399	kokusu sezmek *(to sense a smell of)*	16.14	413	dedikodu çıkmak *(to spread 'rumor')*	16.14
400	esinti sunmak *(to introduce a feel of)*	16.14	414	dikkatini dağıtmak *(to distract)*	16.14
401	içini sıkmak *(to bother)*	16.14	415	nevri dönmek *(to hit the roof)*	16.14
402	şaşkınlığa uğratmak *(to set on one's heels)*	16.14	416	(şeytan) dürtmek *(to be nudged by the devil)*	16.14
403	kaygısı yaratmak *(to create a concern of)*	16.14	417	çakası gelmek *(to have an itch to slap)*	16.14
404	sempati yaratmak *(to arouse sympathy)*	16.14	418	hissi gelmek *(to come 'the feeling of')*	16.14
405	şüphe yaratmak *(to create suspicion)*	16.14	419	kendine gülmek *(to laugh at oneself)*	16.14
406	tadı yaratmak *(to create a taste of)*	16.14	420	içerlenmek *(to resent)*	16.14
407	beyin amcıklaması yaşamak *(to be mindfucked)*	16.14	421	kendinden iğrenmek *(to detest oneself)*	16.14
408	pişmanlık yaşamak *(to regret)*	16.14	422	iştahı kabarmak *(to whet 'one's appetite')*	16.14
409	dumur yaşatmak *(to make one shocked)*	16.14	423	düşüncesine kapılmak *(to have an idea of)*	16.14
410	gönlünü çalmak *(to steal one's heart)*	16.14	424	umudunu kırmak *(to disencourage)*	16.14
411	kalbini çalmak *(to steal one's heart)*	16.14	425	sempatisini kazanmak *(to gain one's sympathy)*	16.14
412	kulağına çalınmak *(to come to one's ears)*	16.14	426	diline takılmak *(to stick in one's tongue)*	16.14

Table B14. The Most Affiliated Verbs with DN (427-456)

	VERB	LOGL		VERB	LOGL
427	kanısına varmak *(to be of opinion that)*	16.14	442	yad etmek *(to reminisce)*	14.43
428	kulağına gelmek *(to come to one's ears)*	16.01	443	(içini) cız ettirmek *(to make one feel a pang of sorrow)*	14.43
429	pişman olmak *(to regret)*	15.99	444	öpesi gelmek *(to have an itch to kiss)*	14.43
430	izlenimi vermek *(to give the impression of)*	15.92	445	mest olmak *(to be entranced)*	14.43
431	gark olmak *(to be overwhelmed)*	15.52	446	güvenini sarsmak *(to betray one's trust)*	14.43
432	kanı kaynamak *(to take a fancy)*	15.44	447	gülümseme yaratmak *(to create a smile)*	14.43
433	sinirlenmek *(to get angry)*	15.29	448	endişesi yaşamak *(to go through the worry that)*	14.43
434	germek *(to stress)*	15.20	449	oh çekmek *(to give a sigh of relief)*	14.43
435	soğumak *(to fall out of love)*	15.16	450	tüyleri ürpermek *(to get the shivers)*	14.43
436	hastası olmak *(to be mad about)*	15.00	451	kanını dondurmak *(to make one's flesh creep)*	14.43
437	etkilenmek *(to be impressed)*	14.89	452	ütopik gelmek *(to sound utopic)*	14.43
438	sızlatmak *(to make one ache)*	14.58	453	hislenmek *(to be touched)*	14.43
439	sızlamak *(to ache)*	14.46	454	hevesini kırmak *(to lower one's spirits)*	14.43
440	hayran bırakmak *(to fascinate)*	14.43	455	imajı oluşturmak *(to create the impression of)*	14.43
441	*onore etmek (to honor)*	14.43	456	başına gelmek *(to happen to one)*	14.14

Table B15. The Most Affiliated Verbs with DN (457-487)

	VERB	LOGL		VERB	LOGL
457	zevk almak *(to get pleasure)*	14.12	472	küfür savurmak *(to hurl)*	13.26
458	sezdirmek *(to make one sense)*	13.91	473	moda sokmak *(to drive into mood)*	13.26
459	tahrik olmak *(to become aroused)*	13.81	474	süreci geçirmek *(to undergo a process of)*	13.26
460	umut vermek *(to give hope)*	13.76	475	gaza getirmek *(to egg one on)*	13.25
461	mantıklı gelmek *(to sound reasonable)*	13.43	476	heyecan uyandırmak *(to arouse excitement)*	13.25
462	çökmek *(to wash over one)*	13.34	477	tanıdık gelmek *(to look familiar)*	13.16
463	ne oluyor demek *(to say 'what's up')*	13.26	478	ışığı görmek *(to see the light of)*	12.94
463	gözyaşı dökülmek *(to pour 'tears')*	13.26	479	eksikliğini hissetmek *(to feel the absence of)*	12.65
464	başını döndürmek *(to turn one's head)*	13.26	480	eğlenmek *(to have fun)*	12.63
465	mest etmek *(to entrance)*	13.26	481	etkilemek *(to affect)*	12.57
466	gıcıklanmak *(to be irritated)*	13.26	482	yara açmak *(to make a wound)*	12.36
467	endişesine kapılmak *(to have the concern of)*	13.26	483	ter akmak *(to run down 'sweat')*	12.36
468	sanrısına kapılmak *(to have the illusion of)*	13.26	484	düşüncelere dalmak *(to fall into thoughts)*	12.36
469	irite olmak *(to be irritated)*	13.26	485	oha dedirtmek *(to make one say 'whoa')*	12.36
470	sevindirik olmak *(to be delightful)*	13.26	486	ihtimali gelmek *(to come 'the possibility of')*	12.36
471	içi parçalanmak *(to sorrow)*	13.26	487	kriz geçirmek *(to go through a crisis)*	12.36

Table B16. The Most Affiliated Verbs with DN (488-495)

	VERB	LOGL		VERB	LOGL
488	aklına girmek *(to enter one's mind)*	12.36			
489	ağrına gitmek *(to take it to the heart)*	12.36			
490	payı olmak *(to play a part)*	12.36			
491	hayranlık uyandırmak *(to evoke admiration)*	12.36			
492	şoka uğramak *(to be shocked)*	12.36			
493	hüsrana uğratmak *(to disappoint)*	12.36			
494	sinir yapmak *(to get angry)*	12.36			
495	keyiflendirmek *(to make one joyful)*	12.36			

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