Two Turkish Clause Linkages: -DIK- and -mE--A pilot analysis based on the METU Turkish Corpus-

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Introduction

As far as clause linkage structures¹ are concerned, Modern Turkish of the Republic Turkey furnishes a variety of constructions which is worthy of typological analysis. When we accept the idea of typological scale, starting from syntactic independence, passing by way of strong embedding, and reaching finally to lexicalization, it is surprising for linguists to be able to retrace the several stages of this continuum in Turkish.²

syntactic independence

· 1	
▲ (1) Hasan git-ti, o-nu bil-iyor-um.	
Hasan go-PF3SG it-ACC know-PR-1SG 'Hasan has gone. I k	now it.'
(2) Hasan gel-di, git-ti.	
H come-PF3SG go-PF3SG 'Hasan has come an	nd gone.'
(3) Hasan ben gel-dim san-1yor.	
H I come-PF1SG believe-PR3SG 'Hasan believes that	at I have come.'
(4) Bil-iyor-um ki Hasan gel-di.	
know-PR1SG CM H come-PF3SG 'I know (that) Has	san has come.'
(5) Hasan-'ın gel-diğ-i-ni bil-iyor-um.	
H GEN come-VN-his-ACC know-PR-1SG 'I know (that) Hat	san has come.'
(6) Hasan gel-mek ist-iyor.	
H come-INF want-PR3SG 'Hasan wants to c	come.'
(7) Hasan-'ın gel-me-si-ni ist-iyor-um.	
H GEN come -VN-his-ACC want-PR-1SG 'I want Hasan to c	come.'
(8) Hasan öl-ü-ver-di.	
▼ H die-GR-give-PF3SG 'Hasan died sudde	enly.'
lexicalization	-

Two independent clauses in (1) are in the relation of parataxis. It should be safe to claim with LEHMANN that clause linkage is here maximally elaborated. In the sentence (2), two predicates are coordinated. We can also say *Hasan gel-ip gitti* with a gerund *-ip*. As in (3), a certain kind of verb, especially verb of belief like *sanmak* "to

¹ I use the term "clause linkage" in order to comprise different types of subordination or hypotaxis attested in Turkish. I consider with

LEHMANN that "subordination is conceived as a form of clause linkage". On the polysemy of "subordination", see LEHMANN 1988:219. ² LEHMANN presupposes this continuum in his typology of clause linkage, cf. LEHMANN 1988:217. We can find the same view about "the complex cognitive-semantic continuum underlying the scale of complementation" in GIVÓN 2001:59.

believe^{3,}, can appear immediately after an independent sentence *ben geldim* "I have come" without any surface complementizer. On the contrary, in the example (4), two clauses are clearly linked by *ki* complementizer. The same sentence would be paraphrased into (5) by the suffix *-diğ-* without semantic difference. The subject *Hasan* takes then genitive suffix *-un*. The literal English translation would be "I know Hasan's coming".

In the sentence (6), when the verb *istemek* "to want" shares a co-referential subject *Hasan* with the subordinate verb, it can take the infinitive *gelmek* 'to come'. But if the same verbs don't have a co-referential subject, we must have recourse to the suffix -mE- and the subject is put in genitive, see (7).

Two verbs appear successively in the examples (2) and (8). In the latter, however, the verb *vermek* 'to give' assigns to the first verb *ölmek* 'to die' an inchoative acceptation, and this verbal serialization functions as a compound verb *ölüvermek* 'to die suddenly'. Clause linkage is here minimally elaborated and maximally compressed. In (8), two verbs are lexicalized into a single unit.

Syntactically speaking, it is important to ask whether these constructions can occur with the same frequency in the ordinary usage of Turkish, and what kind of syntactic constraints they have.

At first, as I have already remarked, the example (3) is syntactically constrained, for it is acceptable for the verb of belief *sanmak* "to believe". Next, we know that the same sentence can be paraphrased as follows:

(9) Hasan ben-i gel -di san -iyor 'Hasan believes that I have come'.
 H I-ACC come-PF3SG believe-PR3SG

In this example, the embedded subject *ben* is governed by the main verb *sammak* through an accusative *-i*. Finally, the *ki* complementizer in (4) was totally an alien element to Old Turkish. It was borrowed from Persian. It is well-known that the use of *ki* suffers some syntactic constraints.⁴ The construction is foreign for Turkish, language which doesn't know any explicit subordination. Here, we will be satisfied with the following conclusion of JOHANSON: "it would seem, instead, that the word *ki* fulfills the general connective tasks common to «conjunctions» and «relatives» and that a further differentiation in traditional terms [i.e. hypotaxis and subordination] is impossible."⁵

A detailed analysis of these different constructions is not within the scope of the present contribution. Our attention will be focused on the clause linkage by -DIK- and -mE-, i.e. the examples (5) and (7). These constructions are said to be the most typical clause linkage in Modern Turkish.

1. Opposition of -DIK and -mE-

In traditional Turkish grammar, the main concern in syntax was the classification of different verbal constructions rather than the explanation of their differences in usage and meaning. For instance, we can't find any more than an inventory of verbal constructions in traditional grammar published in Turkey.⁶

³ Grammatical abbreviations: PF = present perfect, PR = present, AO = aorist, IP = Inferential past, ACC = accusative, GEN = genitive, DAT = dative, ABL = ablative, SG = singular, PL = plural, CM = complementizer, VN = verbal nominal, INF = infinitive, GR = gerund, INT = interrogative. I follow a traditional way of describing Turkish vowel harmony and infinitive, the infinitive ending having therefore two variants *-mek* or *-mak*.

⁴ See among others, JOHANSON 1975: 105-106, ERGUVANLI 1981:126-133 and ÖZSOY 1999:321-322.

⁵ JOHANSON 1975:118.

⁶ cf. BANGUOĞLU 1974, GENCAN 1979, EDISKUN 1984.

1.1. Previous studies

Among European Turkologists, lights have been cast on syntactic differentiations since the very beginning of Turkish Linguistics, the *Grammaire de la langue turque* of Jean DENY published in 1921, for example.

Besides ki construction, DENY distinguished three different usages.

- 1. When one wants to express a future action or a past action, he uses respectively the nominal forms -(y)EcEK- and -DIK-.
- 2. When one wants to express an action subordinate to the speaker's *volition*, an order for instance, he uses the action nominal *-mE* or -MEkIIK.
- 3. In all other cases, one uses action nominal in the following preferential order: -DIK, -mE, -MEklIK, -(y)Iş.⁷

Geoffrey LEWIS claimed that "-me is used in indirect commands, -diği and -eceği in indirect statements and questions". He added some examples. "çocuklara aşağıya inip kendisini sokakta beklemelerini söyledi 'she told the children to go downstairs and wait for her in the street'. With the substitution of beklediklerini for beklemelerini, the sentence would mean 'she told the children that they went down and waited..."⁸

Robert GODEL explained more clearly the distinction between -mE- and -DIK-.

"the action of -mE- designates a conceived fact, an idea that a fact may happen or can happen. (...) This is why the verbal noun -mE- is used to express an order, a wish, and in general, every idea presented as an object of desire, wish or anxiety:..."⁹

Louis BAZIN repeated the same opinion but in a different way. "Such constructions with the action nominal *-me* are, especially, imposed by the rule when the action is dependent on a principal verb expressing intention, desire, wish, fear, etc., in other words when the action is virtual:..."¹⁰ In summary, we can find a syntactic difference on the one hand,, i.e. the fact that -mE- is used in general with the emotional verb expressing desire, wish and anxiety, and a cognitive difference on the other hand, i.e. the fact that -DIK- can be suffixed to a verbal clause representing a really conceived state of affairs, while -mE- suffixed to a clause depicting a virtual state of affairs presupposed in speaker's mind.

In recent studies, -mE- and -DIK- are analyzed usually in connection with -mEK- and -EcEK-.¹¹ Nevertheless, in the following lines, in order to make our discussion concentrated on our proper problem and to avoid unnecessary complications, I will draw my attention solely to the opposition of -mE- and -DIK-.

As for the linguistic analysis of two suffixes -mE- and -DIK-, the year 1999 was particularly important, for we saw two excellent studies published in Turkey and Germany. The syntactic and semantic description of -mE- and -DIK- in ÖZSOY 1999 is comprehensive and convincing. A more concise but penetrating recapitulation of CSATÓ 1999 may be regarded as a milestone for the present problem.

⁷ DENY 1921:865.

⁸ LEWIS 2000:250.

⁹ GODEL 1945:149.

¹⁰ BAZIN 1978:116.

¹¹ Capitals represent archiphonemes. Thus -mE- will be realized as -me- or -ma-, -DIK- as -dik-, -duk-, -duk-, -duğ-, -duğ-, -duğ-, or -duğ-.

1.2. ÖZSOY 1999 and CSATÓ 1999

Owing to ÖZSOY's book, we can obtain an overview of -DIK- and -mE-, see Table 1.

1. with -DIK-	2. with -mE-	3. with both -DIK- and -mE-					
in ACC:	in ACC:	in ACC:					
okumak,	affetmek, beğenmek, beklemek,	anlamak, bilmek, bildirmek, duymak,					
sanmak,	dinlemek, emretmek, istemek,	düşünmek, farketmek, görmek,					
zannetmek	merak etmek, onaylamak, önermek,	hatırlamak, ilan etmek, kabul etmek,					
	özlemek, planlamak, rica etmek,	öğrenmek, söylemek, tahmin etmek,					
	sevmek, seyretmek, tavsiye etmek,	unutmak, yazmak					
	talep etmek, tercih etmek						
	in DAT:	in DAT:					
	alışmak, canı sıkılmak, çalışmak,	dikkat etmek, inanmak, içerlemek,					
	karar vermek, ramak kalmak,	kızmak, memnun olmak, sevinmek,					
	sinirlenmek	şaş(ır)mak, şükretmek, teşekkür etmek,					
		üzülmek					
	in ABL:	in ABL:					
	bıkmak, bunalmak, cesaretlenmek,	hoşlanmak, korkmak					
	çekinmek, faydalanmak, hoşlanmak,						
	sıkılmak, şikayet etmek, utanmak,						
	vazgeçmek, yararlanmak						

Table 1 : Compatibility of -DIK- and -mE- cf. ÖZSOY 1999¹²

He distinguished three genres of verbs. Verbs such as *okumak, sanmak, zannetmek* in the left column can co-occur solely with -DIK-. Verbs in the center column are compatible with -mE-, but not with -DIK-. He added that "majority of the main verbs can occur in both types of structures." cf. ÖZSOY 1999:70. For verbs in the right column, the choice of -mE- or -DIK- is based on a different cognition about the state of affairs depicted by the embedded verb.

"The structures in which the embedded verbs are assigned the -DIK / -(y)AcAK suffixes express factivity; those in which they are assigned the -mA / -mAK suffixes generally express non-factivity such as wish, manner, appreciation, etc." ÖZSOY 1999:69-70.

The next examples illustrate such a cognitive differentiation.

- (10) a. Doktor *gel-diğ-i-ni bil-iyor mu-sun*? doctor come-DIK-3SG-ACC know-PR INT-2SG 'Do you know that the doctor has come / came?'
 - b. Doktor *gel-me-si-ni bil-iyor mu-sun*? doctor come-mE-3SG-ACC know-PR INT-2SG 'Do you know that the doctor will come / the doctor's coming?'

¹² Table 1 is drawn on the basis of ÖZSOY's description.

As ÖZSOY noted, "the suffix -DIK- is used to express an action (i) that has occurred in the past with respect to the moment of utterance or (ii) that is simultaneous with or has preceded the main action." cf. ÖZSOY 1999:55-56. It is important to realize that in (10a), speaker regards the doctor's arrival as factive, i.e. really conceived, granted that the action happened in the near past or not, while in (10b), the doctor's coming is not factive, but simply postulated in the speaker's mind.¹³ However, in (11), it is difficult to discern such a cognitive distinction, because the main verb expresses an emotive nuance, so that the factivity of the embedded verb is not be fully guaranteed.

- (11) a. Ben sen-in bura-ya *gel-diğ-in-e* çok *sevin-dim*. I you-GEN here-DAT come-DIK-2SG-DAT very be pleased-PF1SG 'I am happy that you have come here.'
 - b. Ben sen-in bura-ya *gel-me-n-e* çok *sevin-dim*. I you-GEN here-DAT come-mE-2SG-DAT very be pleased-PF1SG 'I am happy that you have come here.'

Or should we interpret (11b) as 'I am happy that you will come here'? Anyway, my happiness can be perfectly realizable both before and after your coming here. The emotional movement or feeling is not strictly bound to time and space. On the contrary, it is free from such restrictions!¹⁴ Without any doubt, the clue for correct interpretation lies not in the suffixes -mE- and -DIK-, but in the semantics of the main verb as well as in the cognitive process of a given action or state of affairs. Strangely enough, ÖZSOY and CSATÓ wrote seemingly contradictory statements about the verb *korkmak* 'to be afraid'. ÖZSOY classified *korkmak* among the verbs that don't demonstrate any semantic differences in both -mE- and -DIK-, cf. (12), whilst CSATÓ quoted the same verb in order to explain a semantic difference for the suffixes, cf. (13).

- (12) a. Ben onun para-sı-nı *çaldır-ma-sı-ndan kork-uyor-um.* I his money-3SG-ACC have stolen-MA-3SG-ABL afraid-AO-1SG 'I'm afraid of him having his money stolen.'
 - b. Ben onun para-sı-nı çaldır-acağ-ı-ndan kork-uyor-um.
 I his money-3SG-ACC have stolen-EcEK-3SG-ABL afraid-AO-1SG
 'I'm afraid of him having his money stolen.' (ÖZSOY 1999:152)

ÖZSOY's examples are closely related to the suffixes in use, i.e. -mE- vs -EcEK-. Generally speaking, it is difficult to distinguish -mE- from -EcEK- in the context where we express an apprehension about a state of affairs that has not yet happened or that is imagined in the speaker's mind.¹⁵ On the contrary, in the following examples, the choice between -mE- and -DIK- is accompanied with the difference in meaning.

¹³ Based on the semantic and cognitive differences of these suffixes, some Turkologists propose to use different terms: *factive nominal* or *nominalization* for -DIK-, *action nominal* or verbal noun for -mE-, cf. KORNFILT 1997:50 and 541. I am fully convinced of the validity of this terminology, but here, in order to avoid a complication, I call them *suffixes*, or -DIK- and -mE- complement.

¹⁴ On an interesting contrast of synonymous structures to those with different meanings, see ÖZSOY 1999:152-153.

¹⁵ There is a comment of a Turkish native that a higher probability of stealing is expressed in (12b).

(13) a. Beni	gör-düğ-ü-nden	kork-ar-ım.	'I'm afraid that he/she has seen me.'
I-ACC	see-DIK-3SG-ALB	be afraid-A	D-1SG
b. Beni	gör-me-si-nden	kork-ar-ım.	'I'm afraid that he/she will see me.'
I-ACC	see-mE-3SG-ALB	be afraid-A	0-1SG

In the examples of (11)-(13), the main verbs do not govern accusative case, but dative in (11) and ablative in (12) and (13). ÖZSOY adopted the case government as a criterion for the classification in Table 1. In our corpus-based analysis, we will examine only the verbs governing accusative case, so that more complete results will be published separately in a future paper including verbs of dative and ablative government. Therefore, in this article, we will treat the following construction: embedded verb (VERB1)+-mE-/-DIK- +ACC+ main verb (VERB2).

The analysis of CSATÓ 1999 does not take the case marking as a criterion, but it seems to have been more or less successful by virtue of a careful consideration to the semantics of the main verb. It is interesting to notice that the verbs *okumak* 'to read', *sammak* 'to believe', *zannetmek* 'to think' are not registered in CSATÓ's table, see Appendix. We know that *sammak* and *zannetmek* take a regular inflected sentence besides the construction with -DIK-, see the example (3) already quoted.

(3) Hasan ben gel-dim san-iyor 'Hasan believes that I have come'.

But such a latitude in syntactic structure has nothing to do with the compatibility with -DIK- or -mE-, because *bilmek* 'to know', *demek* 'to say' and *istemek* 'to want' share this same syntactic latitude. Thus it had better to keep this problem outside of the present discussion.

- (14) Yirmi beş desem *var mıdır bilmem*. (Sait FAIK, *Bütün Eserleri* 14, 1987: 38) 'If I say 25, is it OK? I don't know.'
- (15) İşte; onları bir daha gözden geçirelim dedik. (ibid.: 91)'Well, let's examine them again, we said.'
- (16) Ben de gazetelerden hayatımı *kazanayım istedim*, olmadı. (*ibid*.: 110)'I also wished if I could earn my living from newspapers, but it didn't work.'

2. A Corpus-Based Analysis

As it is remarked rightly in the abstract of the homepage of METU Turkish Corpus, it is of vital need and importance for Turkologists to be able to make access to linguistically and meta-linguistically preprocessed corpora of written and spoken Turkish texts. In the present article, with a generous permission of the Informatics Institute at Middle East Technical University (METU), I could make the most of the METU Turkish Corpus (METU Corpus).¹⁶

¹⁶ This pilot corpus-based study is deeply indebted to METU Corpus. I want to express my sincere gratitude to the Informatics Institute at

2.1. METU Turkish Corpus

The METU Corpus contains tagged and parsed written Turkish texts of post-1990: novels 24%, short stories 21%, articles 16%, essays 14%, research monograph 12%, travel 4%, interview 2% and others 7%.

As to the size of the corpus, after some initial experimentation, we decided that 2.000.000 words would be a reasonable aim, again given our resources. Some interactions with publishers set our sample size to 2000 words (or whenever the last sentence finishes); including up to three samples from one source if its publisher allows it. Currently, our corpus size is 1.200.000 words consisting of 520 samples from 291 different sources. cf. SAY and al. 2002

The next tagged sentence of METU Corpus corresponds to the following sentence: *Turgut Bey'in erken yattığını biliyordu* 'He knew that Mr. Turgut had gone to bed early'.

Turgut¥1¥Turgut+Noun+Prop+A3sg+Pnon+Nom¥ Bey'in¥2¥Bey+Noun+Prop+A3sg+Pnon+Gen¥Bey+Noun+Prop+A3sg+P2sg+Nom¥ erken¥4¥erken+Adj¥erken+Adv¥erke+Noun+A3sg+P2sg+Nom¥er+Noun+A3sg+Pnon+Nom^DB+Verb +Zero^DB+Adv+While¥ yattığım¥2¥yat+Verb+Pos^DB+Noun+PastPart+A3sg+P2sg+Acc¥yat+Verb+Pos^DB+Noun+PastPart +A3sg+P3sg+Acc¥ biliyordu¥2¥bil+Verb+Pos+Prog1+Past+A3sg¥bile+Verb+Pos+Prog1+Past+A3sg¥ !¥1¥.+Punc¥ (METU Turkish Corpus: 00195177)¹⁷

The total number of words of METU Corpus, which I can make in my disposition, is estimated about 862,700 words according to my own calculation.¹⁸ From these tagged sentences, I selected all the examples of -DIK- and -mE- in accusative case, and I made the list of extracted sentences.

VERB1	Occ.	VERB2	Occ.	Text ID.	Extracted Construction
almak	1	anlamına gelmek	1	00204267	gayrimemkullerini geri almaları anlamına
					geliyordu.
almak	2	beklemek	1	00267177	hiç kımıldamadan odanın içindeki nesnelerin yavaş yavaş o her zamanki bildik biçimlerini <i>almalarını bekledim</i> .
almak	3	gerekmek	1	00107211	hatta günde birkaç kez karar <i>almanızı gerektiren</i> bir süreçtir.
almak	4	gerekmek	2	00287280	biletleri ayrı ayrı yerlerden <i>almaları</i> gerektiğini önermekteydi.

 Table 2
 List of -mE- construction in METU Corpus (extract)

From now on, VERB1 and VERB2 will be in italics .

METU. But the responsibility of any linguistic analysis in this article is, of course, mine.

¹⁷ In the following citations, I only note the ID number of text, here 00195177 for instance.

¹⁸ In October 2003, the size of the METU corpus reached to two million words, see in detail http://www.ii.metu.edu.tr/~corpus/index.html. And cf. ATALAY and al. 2003.

Table 2 represents the first four samples of *almak* with -mE- complement. In Table 2, I classified embedded verbs (VERB1) in relation to main verbs (VERB2). The frequency count of VERB1 is given in the second column. If I can find several examples with the same VERB2, I put their occurrences in the fourth column. The fifth column shows the ID number of the text from which the sentence in question was extracted.

It turned out that among VERB1 with the suffix of -mE- or -DIK-, there are many examples, 693 for -DIKand 68 for -mE-, which are not governed by the verb, but by other linguistic units such as adjective, noun or postposition, see (17) and (18).

- (17) Bu kartal-lar-ın Amerika'-nın simge-si *ol-ma-lar-ı* **doğal**. (00077111) this eagle-PL-GEN A-GEN symbol-3SG be-mE-PL-3SG natural 'These eagles are naturally the symbol of America.'
- zaman Tümay sol el-i-ni, (18) Yazma-yı öğren-dik-leri writing-ACC learn-DIK-3PL Т left hand-3SG-ACC time kullan-ıyor-du. İlkay ise sağ el-i-ni (00137171)İ as for right hand-3SG-ACC use-PR-PF 'When they learned how to write, Tümay was using his left hand, İlkay his right hand.'

Omitting these examples, our analysis will finally be based on 3218 samples for -DIK- and 754 samples for -mE-, see Table 3.

-DIK-				-mE-			
Total	VERB2	Occ.	%	Total	VERB2	Occ.	%
3911	Verb	3218	82.3	822	Verb	754	91.7
occ.	Not verb	693	17.7	occ.	Not verb	68	8.3

Table 3 Results of research: VERB1+-DIK-/-mE-+ACC+VERB2

In the previous studies of -DIK- and -mE-, it is the main verb (VERB2) and not the embedded verb (VERB1) that has been under consideration. It seems intuitively justified. But is it impossible to suppose that there are some syntactic or semantic constraints of VERB1 upon the choice of -DIK- and -mE-? In other words, are these suffixes always dependent on the main verb (VERB2)? Our quantitative investigation gives us a possible solution.

In Table 4, generally speaking, the most frequent VERB1 with suffix -mE- in the center column are all compatible with -DIK- in the right column. It would be then safe to claim that VERB1 is free from any constraints of two suffixes -mE- and -DIK-. On the contrary, it is VERB2 that can bring under control the choice of -DIK- and -mE-.

VERB 1	+-mE- occ.	+-DIK- occ.	VERB 1	+-mE- occ.	+-DIK- occ.
olmak	77	1285	çıkmak	14	30
gelmek	43	106	gitmek	14	58
yapmak	30	132	söylemek	12	52

Table 4 Absence of constraints of VERB1 upon suffixes -DIK-/-mE-

Pre-final manuscript for *Corpus-Based Approaches to Sentence Structures*, John Benjamins, T. Takagaki et al., 2005, pp.151-177.

etmek	27	81	geçmek	10	38
almak	25	68	getirmek	10	26
vermek	16	55	içmek	10	13

There is further empirical evidence for the dependency of VERB2 on the suffixes in question. If we want to preserve the same case marking of (19a), i.e. the accusative case, we cannot use the verb *bakmak* 'to look', because it requires dative, not accusative, see (19b). To resolve this problem, we are obliged to choose another VERB2 taking accusative such as *fark etmek*, see (19c).¹⁹

(19) a. Ali *bak-tı* ki hava karar-mış. 'Ali realized that it has darkened.' A look-PF3SG CM air darken-IP3SG

- b.*Ali hava-nın karar-dığ-1-*nı bak-tı.* A air-GEN darken-DIK-3SG-ACC look-PF3SG
- c. Ali hava-nın karar-dığ-1*-nı fark et-ti.* A air-GEN darken-DIK-3SG-ACC difference make-PF3SG 'Ali noticed that it had gotten dark.'

It is evident that the choice of VERB2 depends on that of -DIK-/-mE- and its case marking.

2.2. Towards a semantic classification of VERB2

Roughly speaking, the classification of CSATÓ are for the most part in accordance with ÖZSOY, see Appendix. However, CSATÓ distinguished the following ten semantic categories of verb.

Category of VERB2 (CSATÓ's explanation in German)	-DIK-+	-mE-+
1. truth (Prädikate, die die Einstellung zum Wahrheitsgehalt	comptatible	compatible
des Satzes ausdrücken)		
2. utterance (Aussageprädikate)	comptatible	compatible
3. cognition (Prädikate des Wissens und des Erwerbs von	comptatible	compatible
Wissen)		
4. anxiety (Prädikate des Fürchtens)	comptatible	compatible
5. comment (kommentierende Prädikate)	comptatible	compatible
6. desire (Prädikate des Begehrens)	incompatible	compatible
7. manipulation (manipulative Prädikate)	incompatible	compatible
8. modality (modale Prädikate)	incompatible	compatible
9. execution (Leistungsprädikate)	incompatible	compatible
10. aspect (Phasenprädikate)	incompatible	compatible

Though such semantic classification of verbs is of primary significance for syntactic analysis, it must remain tentative and incomplete. In fact, it is not always easy to assign a single semantic slot to any verb which may be

¹⁹ Examples cited from ERGUVANLI 1981:131

polysemic or polyvalent by nature.

From the classification of CSATÓ, we can discern at first sight two major verbal categories which will be pertinent for our syntactic analysis. Our classification is essentially based on the compatibility with two suffixes. The categories from 1 to 5 are all compatible with both -DIK- and -mE-, whereas those from 6 to 10 can co-occur only with -mE-. There are some empirical foundations of our classification.

Firstly, Category 1 contains only a small number of verbs such as *emin ol-* 'to be sure', *inan-* 'to believe', *kabul et-* 'to accept' showing speaker's attitude towards the truth value of the sentence. As speaker's judgment on the truth value is particularly significant in the category 3, verb of cognition like *dinlemek* 'to listen', Category 1 can not win by itself an independent status, cf. (20) and (21).

(20) Ben size inanırım. 'I believe you.' cf. TÜRKÇE SÖZLÜK 1979

(21) Beni dinlersen, bu işten vazgeç. 'If you listen to me, give up this job.'

In these examples, it can be said that two verbs *inanmak* and *dinlemek* carry out the same cognitive function, i.e. to place confidence in one's words as truth. It is interesting to observe that CSATÓ registered *kabul etmek* in both categories: as the meaning of 'anerkennen, akzeptieren' in Category 1 and that of 'annehmen, akzeptieren' in Category 3, see CSATÓ 1999:26 and 28.

Secondly, Category 4, verbs of anxiety, is composed of only two verbs, *çekinmek* 'to hesitate' and *korkmak* 'to be afraid' and they all govern ablative case, not accusative, so that we put them out of consideration in this article. In addition, verbs belonging to this category are not numerous. Besides these two verbs, we can find *dehşetlenmek* 'to be horrified' and *yılmak* 'to dread', but also verbs designating not fear itself, but its resulting action such as *titremek* 'to tremble', *ürkmek* 'jump up with fright', *ürpermek* 'to shiver'. In summary, verbs of anxiety will not be able to constitute an independent category, and it is convenient to postulate that they should be classified as a subgroup.²⁰ A few verbs of execution in Category 9, *başarmak* 'to accomplish' and *çalışmak* 'to try', do not form its own category, but can be considered as a variant of aspectual verbs of Category 10.

Finally, if we take into consideration some cross-linguistic evidence and adopt the categories of complement-taking verbs advocated by Talmy GIVÓN,²¹ the verbal categories of CSATÓ will be simplified into the following three categories: 1. Manipulation verbs, 2. Modality verbs and 3. Perception-Utterance-Cognition verbs. Table 5 shows the general tendency in the compatibility of VERB2 attested in more than five occurrences in METU Corpus.

Tuste of Schertal tenating in the comparising of (2102 in 121 c. compas								
	Manipulation verb	Modality verb	Perception-Utterance-					
			Cognition verb					
-DIK-	Incompatible	Incompatible	Compatible					
-mE-	Compatible	Compatible	Compatible					

 Table 5
 General tendency in the compatibility of VERB2 in METU Corpus²²

²⁰ Özlemek 'to miss' appears twice in Category 5 and 7. The latter seems probably an error, cf. CSATÓ 1999:27 and 28.

²¹ GIVÓN 2001:40-41.

²² In case the derivatives had more than five occurrences, I included them in a single heading. I registered therefore anlayabilmek and anlayamamak in the frequency of anlamak. The total attains 3303 occurrences, i.e. about 83% of the total occurrences of VERB2.

As we shall see later, it is solely in Modality verb that the use of -mE- is imposed to the embedded complement. In some verbs of Manipulation, we can observe a fluctuation in the choice of -DIK- and -mE-. In Perception -Utterance-Cognition verb, the use of -DIK- is predominant.

What kind of cognitive and semantic differences are there in the world behind these general tendencies? To give evidence of the semantic and cognitive differences, it would be relevant for us to analyze two fold examples of VERB2, that is, the pairs of examples where VERB2 can govern both -DIK- and -mE-.

3. Semantics of -DIK- and -mE-

The two fold examples of VERB2 attested in METU Corpus are not small in number. We will examine more closely each verbal category separately.

3.1. Manipulation verb

There are many examples of -mE- for *söylemek* 'to tell'. It is well-known that *söylemek*, when it controls -mE- complement, has an deontic meaning, while it doesn't with -DIK- complement. The distinction in clause linkage is here accompanied with the semantic difference of the main verb, cf. (22) and (23).²³

- (22) Sana *haber etmemi söylediler*: (00082133) *'They told me to inform* you (= that I should inform you):'
- (23) Benimle de bir röportaj yapmak *istediğini söyledi*. (00065211) *'He said that he wanted* to make a reportage with me too.'

Except for söylemek, manipulation verb generally takes -mE- complement, see Table 6.24

VERB2	Meaning	-DIK-	-mE-
emretmek	to order	0	5
engellemek	to prevent	0	22
ileri sürmek	to propose	18	0
öğütlemek	to recommend	1	4
önermek	to propose	1	10
öne sürmek	to propose	9	0

Table 6 Manipulation verb

sağlamak	to obtain	1	64
salık vermek	to recommend	0	4
söylemek	to tell	425	26
tembih etmek	to warn	0	1
tembihlemek	to warn	0	3
teklif etmek	to propose	0	2

Imperative verb is typical of Manipulation verb, cf. *emretmek* in Table 6. The synonymous verb *buyurmak* 'to order' always governs -mE- complement, see (24) and (25).

- (24) Yardımcılarına lonca defterini hemen *getirmelerini buyurdu*. (00098231)
 - 'He ordered helpers to bring quickly membership lists.'

²³ cf. CSATÓ 1999:29.

In (22) söylemek will be interpreted as a manipulative predicate, for it is accompanied with -mE- complement; therefore haber etmesi in the complement clause can be translated by 'should inform'.

²⁴ Tables 6 to 11 show both VERB2 attested in more than five occurrences and two fold examples found in METU Corpus.

(25) Sadece bir daha görüşemeyeceklerini uygun bir şekilde *söylemesini buyurmuştu*.(00094233)'He had *ordered to say* in a convenient way that they would never see each other.'

The deontic meaning is equally strong in the act of warning. We can say that the warning is a negative variant of order, because speaker warns hearer against doing something, i.e. he tells hearer not to do it. This is the reason why *tembih etmek* 'to warn' and *tembihlemek* 'to warn' always take -mE- complement. The act of recommendation will also be considered as an attenuated variant of order. It is important to point out that -mE-suffix is predominant for the verbs *ögütlemek* 'to recommend' and *salık vermek* 'to recommend'.

On the other hand, this deontic nuance becomes much weaker in the act of proposition. In fact, there are probably two cognitive processes to be distinguished. When speaker expects more or less strongly the accomplishment of a given action or state of affairs, the proposition will be contiguous to an order. But this speaker's expectation can be enough weak. Such a cognitive differentiation will be reflected in the choice of -mE- and -DIK-.

In the verb of proposition, we use -DIK- for *ileri sürmek* and *öne sürmek*, while *önermek* and *teklif etmek* govern -mE- complement. The definition of *önermek* in TÜRKÇE SÖZLÜK 1979 is very suggestive.

önermek (-*i*) *Kabul edilsin* diye bir şey öne sürmek, teklif etmek. **'önermek** (-*i*) to propose in saying '*let one accept*', cf. teklif etmek'.

From this explanation, it is evident that *önermek* and *teklif etmek* have an additional deontic meaning that is absent in *öne sürmek*.

3.2. Modality verb

It would be convenient to set apart three categories of verb: verb of desire, verb of need and verb of aspect.

The verb of desire takes generally the suffix -mE-. For *istemek* 'to want', against 146 cases with -mE-, only two are attested with -DIK-.

VERB2	Meaning	-DIK-	-mE-	istemek	to want	2	146
arzu etmek	to want	0	1	sevmek	to like	0	4
arzulamak	to want	0	1	tercih etmek	to prefer	1	2
beklemek	to expect	0	92	ummak	to hope	1	1

Table 7	Verh	of desire

However, these two examples turn out to be exceptional. In the example (26a), VERB1 and VERB2 are the same verb *istemek*, and in (26b), VERB2 *istemis* governs -mE- complement which appears immediately before, i.e. *itimad edilmesini*, and doesn't control directly the other coordinated clause with *olduğunu*.

(26) a. Zaten Şirket sizin; sistemin mantığı içinde *istediğinizi istediğiniz* pozisyona getirmek hakkınız olsa gerek. (00161271)

b. Ergani mebusu Kazım Vehbi Bey, gürültüler arasında, müzakerenin kâfi *olduğunu* ve hükümete beyan-ı *itimad edilmesini istemiş*, (...) (00022231)

The situation is different for *ummak* 'to hope'. A hope can be conceived without any temporal delimitations. As the following examples give us a proof, the state of affairs that speaker hopes to be can be situated at any temporal point.

- (27) Sessizliğin içinde, görünmeyen birilerinin, belki de Tanrının onu *duymasını umardı*.
 (00040121)
 'He *hoped that* in silence, somebody invisible, perhaps God *hears* him.'
- (28) Artık anlamaya *başladığınızı ummak* istiyorum. (00198170) 'I want to *hope that you have begun* to understand it then.'
- (29) İkisi de uzun uzun incelediler, bizse hemen Aferin, çok güzel olmuş! *diyeceklerini umuyorduk*.
 (00164276)
 'Both of them examined for a long time, we *hoped that they would say* soon: 'Bravo, very beautiful!'

Atemporality is particularly evident in (27) where *ummak* has an aorist suffix *-ar-*. Speaker's hope can be both retrospective and prospective. Your understanding has already begun at the moment of utterance in (28), but not yet their saying in (29).

The verb *sevmek* 'to like' governs -mE- complement in all occurrences, whereas its synonymous variant *tercih etmek* 'to prefer' control -mE- and -DIK- complements, see (30) and (31).

- (30) İlkay'ın yerine benim *ölmemi tercih eder* miydin? (00137271)'Did you *prefer my death* in place of İlkay?'
- (31) Gençliğinde *yazdıklarını tercih ederim*. (00196177) 'I *prefer what he wrote* in his youth.'

For the following verbs designating the need, we can't find any example with -DIK-.

		-		
VERB2	Meaning	-DIK-	-mE-	
gerekmek	to be needed	0	35	
gerektirmek	to require	0	7	
rica etmek	to request	0	11	

Table 8 Verb of need

talep etmek	to request	0	3
yetmek	to suffice	0	2
zorlamak	to oblige	0	1
zorunlu kılmak	to necessitate	0	2

The verb of aspect generally takes -mE- complement.

VERB2	Meaning	-DIK-	-mE-
başarmak	to accomplish	0	2
becermek	to carry out	0	4

izlemek	to follow	2	9
sürdürmek	to let continue	1	7

In some cases, especially when the verb represents continuous stages of an action or state, it can take -DIK- as well as -mE-. Compare the following examples.

(32) ... su sineklerini nasıl avladıklarını izleyerek yürümek çok hoşuma gitmişti doğrusu.

(00164176)

'To tell the truth, it was very pleasant for me to walk tracing how they hunted black beetles (hydrophilus).'

(33) Biberlerin ve patlıcanların *büyümesini izlemek* fazla heyecanlı değil,... (00175266) *'Tracing the growing up* of green peppers and egg plants is not so exciting,...'

3.3. Perception -Utterance-Cognition verb

The category of Perception-Utterance-Cognition verb is, as its terminology reveals, complex. I will treat these three verbal categories separately.

3.3.1. Perception verb

In the act of perception, at least three distinct cases should be taken into consideration. Speaker perceives an event or state of affairs or sound as three different phenomena: 1. An identified and directly perceptible phenomenon, 2. A real but not directly perceptible one, 3. A not really perceived, but imagined one.

VERB2	Meaning	-DIK-	-mE-
andırmak	to remind	0	2
anımsamak	to remember	34	1
anımsatmak	to let remember	9	0
dinlemek	to listen to	11	1
düşlemek	to dream	4	2
duymak	to hear	75	2
duyumsamak	to perceive	5	0

Table 10	Perception verb
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görmek	to see	236	4
göstermek	to show	73	3
hissetmek	to feel	52	1
hissettirmek	to let perceive	6	0
işitmek	to hear	7	1
şaşırmak	to be confused	4	1
seyretmek	to watch	0	2
sezmek	to perceive	14	0

A directly perceptive discourse must be linked to VERB2 by -DIK-. In this regard, CSATÓ claims with justice that -DIK- complement has an indicative meaning and that the non-finite predicates hold an assertive meaning in the indicative.²⁵ In (34), the direct discourse is accompanied with a quotative particle **diye**. Speaker asserts the action of asking and also identifies two interlocutors, Mother and Ayşe. The event of asking is here a clearly identified and directly perceptible phenomenon.

(34) ... annemin mutfakta Ayşe'ye, Onlarla iyi anlaşabiliyor musun? diye sorduğunu duydum. (00137271)
 ... I heard that my mother asked Ayşe in the kitchen: Can you and them understand each other well?'

The following examples seem more eloquent. Speaker was really listening to Kerem's explanation in (35). On the contrary, in the example (36), what Cenan and Sitem heard must have been a salutation, but what they perceived was the disappearance of bad feelings indirectly perceptible in the act of greeting. The use of -DIK- for a really perceived phenomenon seems avoided in (36).

- (35) Merakla Kerem'in *anlattiklarını dinliyorduk*. (00002213) 'With curiosity, we *were listening to what* Kerem *was explaining*.'
- (36) Cenan'la Sitem, Çorba kaşıkları havada, Eşber'in Duman'la selâmlaşıp hasret gidermesini dinlediler.
 (00073111)

'Cenan and Sitem, holding their soup spoons, *sensed in Eşber's voice* when she said hello to Duman *that Eşber's bad feelings were gone.*'

How about a not directly perceived but imagined phenomenon? For instance, the verb *düşlemek* 'to dream' govern both -DIK- and -mE- complement.

- (37) ... on sekiz yaşlarında nasıl *olduğunu*, dünyaya nasıl *baktığını* ve nasıl *olgunlaştığını düşlemeye* çalışıyorum. (00005221)
 '... I try *to imagine how she was* at eighteen..., *how she thought* about the world and *how she grew up*.'
- (38) Mete Caddesi'ndeki apartmanlardan birinden bir sevgilinin çıkıp gelmesini düşlüyordum. 'I was dreaming that a beloved would appear and come suddenly from one of the flats at Mete Street.' (00070223)

I suppose that this difference in clause linkage derives from two distinct presuppositions of these two sentences. Speaker presupposes in (37) that she was alive at eighteen and is alive now too. However, in (38), the appearance of a beloved was no more than a possibility for the speaker.

The following examples (39) and (40) depict not really happened but imagined situations, so that these situations are not presupposed at the moment of watching.²⁶

- (39) İnsanların açlıktan *ölmesini seyretmek* hoşunuza mı gidiyor? (00140211)'Do you like to *watch* people *dying* from hunger?'
- (40) İnsanların bir lokma ekmek için *kavga etmelerini seyretmek* mutlu mu ediyor sizi?'Is it pleasant for you *to watch* people *quarreling* for a piece of bread?' (00140211)

Finally it is difficult to separate an action verb from a noun when it represents a sound or cry.

²⁶ The concept of presupposition seems to have somethning to do with the notion of implicativity, see GIVÓN 2001:44, 56-57.

- (41) Karı Şefik, kuzu *melemesini andıran* o inanılmaz sesi ile konuşmaya başlamıştı.
 'Wife Şefik started talking with an unbelievable voice which *reminds a baa of sheep*.' (00190277)
- (42) Epsilon'un *viyaklamalarını duyunca* uğraşını bırakıp karşı daireye geçti. (00149211)'As soon as she *heard* Epsilon's *squawking*, she gave up her work and went to the other room.'
- (43) Uzaklardan yankılanarak gelen köpek *ulumalarını işitiyorduk*. (00147111)'We *heard* dogs' *howling* coming from far away with echoes.'

3.3.2. Utterance verb

Except for *söylemek* already mentioned, it seems rare to make use of -mE- complement for the verb of utterance. Here, a special attention should be paid to two fold examples of following verbs, *anlatmak*, *belirtmek* and *ifade etmek*.

		-	
VERB2	Meaning	-DIK-	-mE-
açıklamak	to announce	26	0
anlatmak	to explain	115	2
belirtmek	to state	63	1
belli etmek	to show	9	0
bildirmek	to inform	15	0

iddia etmek	to claim	10	0
ifade etmek	to explain	9	3
itiraf etmek	to confess	13	0
sormak	to ask	69	0
söylemek	to tell	425	26
vurgulamak	to stress	15	0

It was M.A.K. HALLIDAY who called *projection* a characteristic clause linkage of the verb of utterance. For him, the hypotactic construction of the verb of utterance represents the projection where the embedded clause is projected through the main clause, which instates it as (a) a locution or (b) an idea. The logical-semantic relationship whereby a clause comes to function, he added, not as a direct representation of (non-linguistic) experience but as a representation of a (linguistic) representation.²⁸

Here the essential function of VERB2 is to project what is said about as a linguistic representation. The suffix -DIK- shows what has really been expressed in words. This is the reason why -DIK- is unanimously exploited. On the other hand, we can discern the opposition of *factum* and *modus*, which corresponds respectively to -DIK- and -mE-. We can interpret the verb with -mE- as a manner of action rather than the action itself, cf. (44)-(46).²⁹

(44) M. ile karşılaşmamı anlatan bu satırları o gün eve döner dönmez, daha aldıklarımı yerleştirmeden oturup yazmıştım. (0061213)

'That day, as soon as I came home, without putting into place what I had bought, I sat and wrote down these lines which *explained how I would meet* M.'

²⁷ The verb *demek* is attested twice with -mE-, but in these cases, *demek* does not mean 'to say', but 'to mean'. Geri dönmeye çabaladıkları dönemin mitik *olması*, bu akımların politik ve toplumsal bakımdan etkisiz *olmaları demek* değildir. (00201177) Diğer taraftan bu durum, sanayicilerin üretim nitelik ve koşullarını devlet teşebbüslerinin içerdiği belirsizliklere göre ayarlamaya mecbur *olmaları demekti*; (00205266)
²⁸ HALLIDAY 1994:219 and 250.

²⁹ The same remark is found in Csató 1999:26.

(45) Profesör Kissling, Osmanlılarda Tarikatlerin Sosyolojik ve Pedagojik Rolü isimli meşhur makalesinde, bunların tüm fakir fukaraya kapılarını *açmalarını* ve eşitlikçi davranışlarını özellikle *belirtmektedir*. (00023113)

'In the famous article entitled, "Sociological and pedagogical roles of religious group among the Ottomans", Professor Kissling *states* especially *how* these guys (= religious groups) *open* the doors and how they behave equally to all of the poor people.'

(46) Fabrika ve kent sadece işbölümünün *derinleşmesini*, üretimin *toplumsallaşmasını* ve verimliliğin *artmasını ifade etmezler*. (00043123)
'Factory and town *don't explain how to deepen* solely the division of labor, *how to socialize* the production and *how to increase* the productivity.'

The deictic integration is also characteristic of -DIK- complement, -DIK- demonstrating in general an observable or recognizable act occurred in a specific time and space, see (47) and (48)

- (47) ... bir camaraderie'nin doğmasına *yol açtığını* da, **burada** *belirtmeden* geçemeyeceğiz.
 '...we can't advance *without stating* **here** also *that it* (*=mülemmâ problem*) *has been a cause* of the rise of friendship.' (00085222)
- (48) **Bir süre sonra**, yeni bir müşteri *bulduğunu söyledi*. (00096233) '**After some time**, *he said that he found* a new client.'

3.3.3. Cognition verb

It would not be exaggerated if I called this category a waste basket of verbs. In fact, the difficulty in the semantic classification of verbs obliged me to stuff into this category all the verbs left to be classified.

		Table I	u Cog
VERB2	Meaning	-DIK-	-mE-
affetmek	to forgive	1	1
aktarmak	to turn over	11	0
anlamak	to understand	196	4
anlaşılmak	to be understood	6	1
belirlemek	to decide	3	1
bilmek	to know	341	20
bulmak	to find	12	3
ciddiye almak	to take seriously	15	0
çıkarmak	to take out	18	0
düşünmek	to think	223	9
eklemek	to add	5	0
fark etmek	to distinguish	77	1
getirmek	to bring	2	3

Table 11	Cognition verb
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öğrenmek	to learn	71	8
öğretmek	to teach	6	2
okumak	to read	11	2
onaylamak	to approve	1	1
ortaya koymak	to expose	7	0
paylaşmak	to divide	5	0
reddetmek	to reject	3	2
saklamak	to conceal	6	0
sanmak	to believe	112	1
saptamak	to fix	8	0
savunmak	to defend	19	0
seçmek	to select	3	2
tahmin etmek	to estimate	6	0
tanımlamak	to define	1	2

Pre-final manuscript for *Corpus-Based Approaches to Sentence Structures*, John Benjamins, T. Takagaki et al., 2005, pp.151-177.

haber almak	to learn	7	0
hatırlamak	to remember	35	1
hatırlatmak	to remind	14	0
kabul etmek	to accept	9	1
kanıtlamak	to prove	12	0
kavramak	to comprehend	11	0

tutmak	to hold	3	1
unutmak	to forget	41	0
vermek	to give	2	2
yapmak	to make	14	5
yazmak	to write	23	2
zannetmek	to suppose	6	0

Generally speaking, the frequency of -mE- is not very high, except for some verbs like *anlamak*, *bilmek*, *bulmak*, *düşünmek*, *öğrenmek*, *reddetmek*, *seçmek* and *vermek*.

The distinction between *factum* and *modus* is here relevant too. The verb with -mE- suffix can be regarded as a manner rather than an action, see the next pairs of examples (49)-(54).

- (49) Ona, kendisini sevdiğini söyle. Bunu söylemesini bilemiyorsan, (00283276)'Tell her that you like her. If you don't know how to say this,...'
- (50) Sonra da niye *söylediğimi bilmeden* anlamsız bir soru sordum: (00047224) 'Then I asked a meaningless question *without knowing why I said it.*'
- (51) Bir an *geri dönüp kaçmayı düşündü.* (00148111) *'He thought how to return and escape* at the moment.'
- (52) Kim *olduğunu düşündü*. Burada ne arryordu? (00130176) *'I thought who he was*. What was he looking for here?'
- (53) Yürümesini öğrenemedin yıllardır; (00003121)'You have not been able to learn how to walk for years.'
- (54) ... ne düşündüğünü hiçbir zaman öğrenemeyeceğim. (00137271)
 '... I will never be able to *learn what he thought*.'

Finally, the presupposition can differentiate the use of -mE- from that of -DIK-.

- (55) ... bir tutam unun ziyan olmasını affedemedi. (00082233) 'I could not permit that a handful of flour would be wasted.'
- (56) Bu babamın *yaptığını* hiç *affetmeyeceğim*. (00172276) 'I will never *forgive* my father for *what he did*.'

The waste of flour was not presupposed at the moment of permission in (55), because the flour in question had not yet been wasted at the moment of my forgiving. On the contrary, in (56), my permission presupposes the fact that my father has really done this. Similarly, at the moment of acceptance, they have not yet come in (57). Speaker's implication in (58) is a belief that love isn't pure.

- (57) Ama sonunda *gelmelerini kabul ettim*. (00172176) 'But finally *I accepted them to come*.'
- (58) Demek sonunda aşkın kirli bir şey *olduğunu kabul ediyorum*. (00087222) 'In short, finally I *accept that* love *is* a dirty thing.'

Conclusion

First of all, the present contribution must be complemented, on the one hand by the analysis of the VERB1 having other case markings than accusative, and on the one hand by the integration of examples with the suffixes of -EcEK- and -mEK-.

In our pilot analysis based on METU Corpus, the linguistic choice of -DIK- and -mE- is related to many factors. But I can't find any syntactic or semantic constraints of the embedded verb (VERB1) upon the choice of -DIK- and -mE-. On the contrary, some determining factors of two clause linkages are composed of the differences in semantic and cognitive features of the main verb (VERB2). Consequently, it is important to make a close investigation upon the semantics of VERB2. In this article, the adoption of a cross-linguistically valid categorization of verbs has brought us some positive fruits.

The tripartition of verbs, i.e. 1. Manipulation verb, 2. Modality verb and 3. Perception- Utterance-Cognition verb, explains to some extent a general tendency in the choice of two clause linkages.

Table 12 General tendency in the choice of clause inkage						
VERB2 Manipulation verb		Modality verb	Perception-Utterance-			
			Cognition verb			
	Generally -mE-	Mostly	Generally -DIK-			
with some fluctuations		-mE-	with many two fold cases			

Table 12 General tendency in the choice of clause linkage

Some fluctuations in Manipulation verb will be interpreted as lexico-semantic phenomena. For instance, we can discern two completely distinct classes in the verb of proposition. *İleri sürmek* and *öne sürmek* govern -DIK-complement, whilst *önermek* and *teklif etmek* control -mE- complement. This holds true also in the verb of recommendation. There is a case where *öğütlemek* governs -DIK-, but never in *salık vermek*. It can be said that the -mE- suffix is mostly imposed by the semantic content of Modality verb. Some rare examples are not excluded, but the semantic or cognitive meaning of VERB2 will explain the presence of -DIK- suffix in those examples, cf. 3.2.

The choice of -DIK- and -mE- in Perception-Utterance-Cognition verb is complicate and diversely motivated. In Perception verb for example, the factivity or identifiability of the event perceived seems relevant, cf. 3.3.1. For Utterance verb, the difference between *factum* and *modus* on the one hand, the deictic integration on the other hand is closely related to the choice of -DIK- and -mE-, cf. 3.3.2. In Cognition verb, besides the distinction of *factum* and *modus*, the role of speaker's presupposition is not negligible, cf. 3.3.3.

Finally, we have left behind a relatively important question. Can we expect the same results from spoken Turkish? The answer will be negative. As ERKMAN-AKERSON properly noted, it is parataxis, not hypotaxis that is a non-marked syntactic device in spoken language, see ERKMAN-AKERSON 2000:172.

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Semantic category of VERB2	TRUTH	UTTERANCE	COGNITION	ANXIETY	COMMENT
-DIK-	Compatible	Compatible	Compatible	Compatible	Compatible
-mE-	Compatible	Compatible	Compatible	Compatible	Compatible
+ACC	kabul etmek	anlatmak demek dile getirmek ifade etmek söylemek sormak	anlamak bilmek duymak fark etmek görmek göstermek haber almak hatırlamak ortaya çıkmak unutmak		affetmek beğenmek özlemek
+DAT	emin olmak inanmak		dikkat etmek		içerlemek memnun olmak sinirlenmek şaşırmak üzülmek
+ABL				çekinmek korkmak	bıkmak bunalmak cesaretlenmek faydalanmak hoşlanmak yararlanmak

Semantic category of VERB2	DESIRE	MANIPULATION	MODALITY	EXECUTION	ASPECT
-DIK-	Incompatible	Incompatible	Incompatible	Incompatible	Incompatible
-mE-	Compatible	Compatible	Compatible	Compatible	Compatible
+ACC	dilemek	dava etmek	gerekmek	başarmak	
		emretmek			

³⁰ This table is based on the CSATÓ's description of pp.25-28. In the Category COMMENT, I omit the verbs, deli etmek, eleştirilmek, etc. which cannot take object complement. Adjectival predicates such as doğru 'right', lazım 'necessary' and faydasız 'useless' are also out of consideration.

Pre-final manuscript for *Corpus-Based Approaches to Sentence Structures*, John Benjamins, T. Takagaki et al., 2005, pp.151-177.

J /	U	e un, 2000, pp.101			
	ummak	engellemek			
		izin vermek			
		kabul etmek			
		öğütlemek			
		özlemek			
		rica etmek			
		sağlamak			
		söylemek			
		talep etmek			
+DAT			lüzum olmak	çalışmak	başlamak
				ramak kalmak	

accusative 対格 atemporality 非時間性 clause linkage 節結合 cognitive process 認知過程 factivity 事実性 factum 行為 METU Turkish Corpus 中近東工科大学トルコ語コーパス modus 様態 presupposition 前提 semantic categories 意味範疇 syntactic latitude 統語的自由度 verb 動詞 manipulation ~ 操作動詞, modality ~ モダリティー動詞, perception ~ 知覚動詞, utterance ~ 言述動詞, cognition ~ 認知動詞 ATALAY, N.B アタライ BAZIN L. バザン CSATÓ É.Á チャトー DENYJ. ドゥニ GIVÓN T. ギヴォン HALLIDAY M.A.K. ハリディ JOHANSON L. ヨハンソン LEWIS G. ルイス ÖZSOY S. ウズソイ