

KATIYEN as a common ground modifier in Turkish

Ayşe Büşra Yakut Kubaş¹

Abstract. KATIYEN is classified as a negative polarity item that necessarily takes scope under clause-mate negation (Kelepir 2001) and subcategorized as a (super)strong-NPI that is licensed in antimorphic contexts (Görgülü 2017, following Zwarts 1995). I argue that KATIYEN has a dual use as a negative sensitive item and a degree modifier on the common ground. The novel data I present indicate that KATIYEN can be used in structurally (and semantically) nonnegative sentences to express an attitude holder’s ultimate degree of certainty. I aim to capture its dual status by suggesting that KATIYEN is a universal modal adverb that behaves similarly to the Greek emphatic NPIs by taking scope over negation (Giannakidou 2000), in addition has a common ground managing function of marking the interlocutor’s strong stance towards the positive or negative proposition.

Keywords. KATIYEN, negative polarity items, emphatic adverbs, modal adverbs, degree modification, common ground management, discourse

1. Introduction. It has been widely accepted in the related literature that Turkish has the following negative polarity items (hereafter NPIs) (Kelepir 2001:122):

- (1)
 - a. The adverb *hiç* ‘ever’, ‘at all’.
 - b. The words that begin with the morpheme *hiç* such as *hiçkimse* ‘anybody’, *hiçbirşey* ‘anything’, *hiçbir* + N ‘any N’
 - c. The words that do not contain the morpheme *hiç* such as *kimse* ‘anybody’, *asla* ‘ever’ and *katiyen* ‘in any way’, *sakın* ‘ever’
- (2) Sen-i katiyen affet-*(me)-yeceğ-im.
 you-ACC KATIYEN forgive-NEG-FUT-1S
 ‘I will never ever forgive you.’

Based on the observation that Turkish NPIs always require the presence of a negative marker and yet they can provide a fragment answer without the overt presence of sentential negation as in (3), Turkish is argued to be a negative concord language and the NPIs in (1) are analyzed as n-words² which are inherently negative (Zeijlstra 2008, İnce 2012, Jeretič 2017, Kamalı 2017, Görgülü, 2020).

¹ I would like to thank Jack Hoeksema and Hedde Zeijlstra for their invaluable help on the previous drafts of this project. Thanks also to the organizers and participants of the TU+7 conference at the University of Connecticut. Author: Ayşe Büşra Yakut Kubaş, Ankara University (busra.yakut@gmail.com)

² Laka (1990) coins the term ‘n-word’ as a descriptive label due to the morphological negative marking ‘n-’ in words like *n-iente* ‘n-thing’ in Italian.

(i) Gianni *(non) ha visto niente.
 Gianni not has seen n-thing
 ‘Gianni hasn’t seen anything’

Giannakidou (2006:2) offers a working definition for n-words as follows:

(ii) N-word: An expression α is an n-word iff: α can be used in structures that contain sentential negation or another α -expression, yielding a reading equivalent to one logical negation; and α can provide a negative fragment answer (i.e., without the overt presence of negation).

- (3) A: Ali ne zaman gel-ecek?
 Ali when come-FUT.3S
 ‘When will Ali come?’
 B: Hiçbir zaman! / Asla! / Katiyen!
 No one time / Never / KATIYEN
 ‘Never!’

N-words, or more formally negative concord items (henceforth NCIs) are argued to pattern with strong NPIs not negative quantifiers such as *nobody* because of the lack of double negation readings in negative concord structures as given in (4) (Giannakidou & Zeijlstra 2017). Negation is interpreted just once although potentially there may be more than one occurrence of NCI in a single clause.

- (4) Ali katiyen hiçbir zaman hiç kimse-yle buluş-ma-dı.
 Ali KATIYEN no one time no person-INST meet-NEG-PST.3S
 ‘Ali has absolutely never met with anyone again.’

The licensing environments of NPIs vary cross- and intra-linguistically in strength depending on the type of negative context in which the dependent can be licensed (Van der Wouden 1994, Zwarts 1995, among others). Below is given the implicational hierarchy of NPIs adapted from Zwarts (1995) and Lin (2015):

Strength	Antimorphic ³	Antiadditive ⁴	Downward-entailing ⁵	Nonveridical ⁵
Superstrong	Yes	No	No	No
Strong	Yes	Yes	No	No
Weak	Yes	Yes	Yes	No
Superweak	Yes	Yes	Yes	Yes

Table 1: NPI typology of strength

For any item, if it is established that it may appear in some context, then it will also appear in all contexts to its left in the hierarchy. Turkish strict NCIs are canonically licensed by antimorphic negation. They need to co-occur with an overt negative marker (Kornflit 1997, Kural 1997, Zidani-Eroğlu 1997a, 1997b, Aygen-Tosun 1998, Keleşir 2001). The verbal negation marker *-mA*, negative existential *yok* and negative word *değil* are all potential licensors:

- (5) a. Metrobüs-te *kimse* yok.
 metrobus-LOC nobody NEGEX.3S
 ‘There is nobody in the metrobus.’
 e. Sen katiyen yalnız değil-sin.
 you KATIYEN alone NOT.LV-2S
 ‘You are never alone.’

³ For every arbitrary X, Y: if $f(X \cap Y) \leftrightarrow f(X) \cup f(Y)$ and $f(X \cup Y) \leftrightarrow f(X) \cap f(Y)$, then the function f is anti-morphic (adopted from Lin 2015; cf. Zwarts 1995, Van der Wouden, 1997).

⁴ For every arbitrary X, Y: if $f(X \cup Y) \leftrightarrow f(X) \cap f(Y)$, then the function f is anti-additive.

⁵ For every arbitrary X, Y: if $f(X \cup Y) \rightarrow f(X)$ and/or $f(X \cup Y) \rightarrow f(Y)$ then the function f is downward-entailing.

⁵ A propositional operator F is veridical, iff Fp entails p ($Fp \models p$); otherwise F is nonveridical.

A subset of them, namely (1a), (1b) and *kimse* can also be licensed by anti-additive operators i.e. adjectival *-sIz* ‘without’ and adverbial *-sIzIn* (Keleşir 2000; Görgülü 2017:57). The same subset is also allowed in yes-no questions on the condition that the question particle *-mI* attaches to the predicate, thereby delivering the set of polar alternatives (see Kamalı 2022 for further discussion).

- (6) a. *Hiç/hiçbir* aktarma yap-mak-sız-ın Esenler-e ulaş-ıl-ır.
 no transfer make-INF-without-INST Esenler-DAT arrive-PASS-AOR.3S
 ‘One can arrive at Esenler without making any transfer.’
 b. Biz bu ülke-ye *hiçbirşey*-siz gel-di-k.
 we this country-DAT nothing-without come-PST-1PL
 ‘We came to this country without anything.’
- (7) a. Hiç Ankara’ya git-ti-n mi?
 ever Ankara-DAT go-PST-2S Q
 ‘Have you ever gone abroad?’
 b. *Ali ile asla / *katiyen* görüş-meli mi-yim?
 Ali with never / KATIYEN see-NEC Q-1S
 Int. ‘Should I ever meet with Ali?’

Based on the discussed licensing environments, Görgülü (2017) classifies *katiyen*, *asla* and *sakın* in (1c) within the (super)strong NPI group while the rest patterns with strong or weak NPIs depending on whether one accepts questions as downward-entailing (see Mayr 2013, Nicolae 2015).

In this paper I focus on the distribution of KATIYEN and show that it is allowed in formal affirmative contexts meaning ‘definitely, absolutely’ in addition to anti-morphic contexts. I argue that KATIYEN is a universal adverb that takes scope over the whole proposition [p or ¬p]. It has a common ground (henceforth CG) management function in the sense that it strengthens the attitude holder’s position towards the expressed proposition (Romero & Han, 2004).

2. A puzzling distribution. The lexeme [KATIYEN] is originally coming from Arabic root [kt] ‘to cut’, first noted in the Qisas Al-Anbiya ‘The Stories of the Prophets’ which dates back to 1310 in the form of *kat’iyyettin* in the meaning of ‘strictly’ and ‘definitely’. In this study I conducted a small-scale corpus research in Turkish National Corpus and find that KATIYEN can occur in a number of sentences in which a canonical strong NPI item would not.

Turkish informants find the following context where there is no sentential negation marker such as *-mA*, *yok* or *değil* but the lexical meaning of the predicates expresses negation, which I call semantically negative and structurally nonnegative environment, totally compatible with KATIYEN.

- (8) a. Bu karar-a *katiyen* karşı-yım.
 this decision-DAT KATIYEN against.COP-1S
 ‘I am definitely against this decision.’
 b. O-nu *katiyen* reddet-ti-k.
 s/he-ACC KATIYEN refuse-PST-1PL
 ‘We definitely turned him/her down.’
 c. Bura-ya park etmek *katiyen* yasak-tır.

this-DAT parking KATIYEN forbidden-GEN.3S
It is strictly forbidden to park here.’

The fact that morphological negation is absent in these examples challenges the strong NPI status of KATIYEN in Turkish. KATIYEN is also attested in semantically and structurally nonnegative sentences where sentential negation marker is absent and there is no lexically negative predicate, as illustrated below:

- (9) a. Fakat katiyen Kayseri-li ve her bakımdan.
but KATIYEN Kayseri-from and every aspect
‘But he is definitely, and in all respects, from Kayseri.’
b. Katiyen emin-im ki bu hastalık gün-ler-ini geçir-eceğ-iz.
KATIYEN sure-COP.1SG that this sickness day-PL-POSS-ACC pass-FUT-1PL
‘I am definitely certain that we will leave these sick days behind.’
c. Köy işi zor-dur katiyen.
village work hard.GEN.3S KATIYEN.
‘Village work is definitely hard.’
d. Röportaj-lar-da anlat-tık-lar-ım katiyen doğru-dur.
interview-PLU-LOC talk-REL-PL-POSS.1S KATIYEN correct-GEN.3S
‘What I talked about in my interviews are definitely correct.’

The sentences in (9) are usually contained in literary, legal and religious contexts and thus may not sound natural within colloquial speech. I conducted a Google search to see whether there are more examples from recent daily language. Here are two of the sentences that appeared:

- (10) a. Ben aşı ol-ma-mış-tı-m şu anki akl-ım
I vaccine be-NEG-PART-PST-1S this moment-ADJ mind-POSS.1S
ol-sa-ydı katiyen aşı ol-ur-du-m.
be-COND-PST KATIYEN vaccine be-AOR-PST-1SG
‘I haven’t been vaccinated. If I had known then what I know now, I would definitely have been vaccinated.’
b. Katiyen ücretli-ler-in dışarıda tut-ul-acağ-ı bir “ek vergi”
KATIYEN employe-PL-GEN outside keep-PASS-FUT-REL an additional tax
getir-il-me-sin-i öner-iyor-um.
bring-PASS-NOM-POSS.3S-ACC suggest-IMP-1S
‘I suggest there be an additional tax that definitely excludes employees.’

The core of the argument of this paper rests on the contexts in which there is no morphosyntactic negative marker that licenses KATIYEN. In all of the examples above KATIYEN marks the highest degree of certainty expressed by the attitude holder, behaving as a universal modal adverb such as *definitely* in English.

In the following sections, I will first try to disambiguate KATIYEN from the strong NPI/NCI *asla* ‘never’ since one might consider that there is a temporal KATIYEN which carries the same meaning with *asla* in Turkish. I will show that the meaning of KATIYEN is different from *asla* in negative sentences.

Furthermore, I will provide empirical evidence that KATIYEN is incompatible with possibility modal markers (i.e. existential modal force) even in negative sentences, which signals for a semantic core in two uses of KATIYEN.

2.1. KATIYEN IS MODAL. In most of the negative sentences, switching KATIYEN with *asla* does not seem to make a notable difference in meaning.

- (11) Ali parti-ye asla/katiyen Ayşe ile gel-e-mez.
 Ali party-DAT never/ KATIYEN Ayşe with come-ABIL-NEG.3S
 ‘Ali can-never /definitely-cannot come with Ayşe.’

Both can be used in denial contexts where an interlocutor rejects a previous utterance but KATIYEN is not an acceptable fragment answer to a temporal question.

- (12) A: Ev-e ne zaman gel-ecek-sin?
 house-DAT when come-FUT-2S
 ‘When are you coming back home?’
 B: # Katiyen!
 ‘Definitely not’
 B¹: Asla!
 ‘Never’

To elaborate, the answer in (12-B) is acceptable as a denial of the presupposition expressed by the question in (12-A) that you will come home. While KATIYEN rejects that the speaker will come home, *asla* encapsulates the answer to the temporal wh-question *ne zaman* and (12- B¹) asserts that the speaker will not come home at any time.

They pattern distinctively in the presence of a possibility modal as well. *Asla* is compatible with a possibility modal marker while KATIYEN is not.

- (13) a. Bu program asla çalış-ma-yabil-ir.
 this program never work-NEG-POSS-AOR.3S
 ‘This program may never work.’
 b. Defne belki sen-i asla affet-me-yecek.
 Defne maybe you-ACC never forgive-NEG-FUT.3S
 ‘It is possible that Defne will never forgive you.’
- (14) a. *Ali ile belki katiyen tartış-ma-yacağ-ım.
 Ali with maybe KATIYEN argue-NEG-1PL
 Int: ‘Maybe I will definitely not argue with Ali (again).’
 b. *Ali katiyen hüküm giy-me-yebil-ir.
 Ali KATIYEN sentence wear-NEG-POSS-AOR.3S
 Int: ‘There is a possibility that Ali will not definitely be sentenced.’

It is a significant observation that sentences containing possibility modal marker and KATIYEN are highly degraded irrespective of the existence of a negative marker.

- (15) a. *Belki Ali katiyen suçlu-dur.
 maybe Ali KATIYEN guilty-COP.3S-GEN
 Int: ‘Maybe Ali is definitely guilty.’
 b. *Ali katiyen hüküm giy-ebil-ir.
 Ali KATIYEN sentence wear-POSS.AOR.3S
 Int: ‘It is possible that Ali will definitely be sentenced.’

KATIYEN is compatible with modal markers that express necessity in positive and negative sentences as respectively exemplified.

- (16) a. Bu bina-yı *katiyen* terk et-meli-siniz.
 this building-ACC KATIYEN leave-MOD-2PL
 ‘You should definitely leave this building.’
- b. Bu saat-e kadar ödev-i-ni *katiyen* bitir-miş-tir.
 this hour-DAT until homework-POSS.3S-ACC KATIYEN finish-EVID-GEN.3S
 ‘She must definitely have finished her homework until this time.’
- (17) a. Suçlu-yu ziyaret-e *katiyen* gid-e-mez-siniz.
 criminal-ACC visit-DAT KATIYEN go-POSS-NEG-2PLU
 ‘You absolutely cannot visit the criminal.’
- b. Bence olay-dan sonra *katiyen* konuş-ma-mış ol-malı-lar.
 for me incident-ABL after KATIYEN speak-NEG-PST.PART be-NEC-PL
 ‘I think they must definitely not have spoken after that incident.’

Both intuitively and empirically KATIYEN patterns similarly in morphosyntactically positive and negative environments. Following Romero & Han (2004) and Repp (2013) among others, I argue that it functions as a modifier of the CG managing operator and flags the maximum degree of strength of credence anchored to the attitude holder.

3. The Analysis.

3.1. THE CG MANAGEMENT. The original notion of the CG goes back to Stalnaker (1978), Karttunen (1977) and Lewis (1979) and expresses the set of propositions which the participants in the conversation mutually agree to treat as true for the purposes of the exchange of conversation. The notion of CG-management, on the other hand, is introduced by Krifka (2008) and utilized in distinguishing different kinds of contributions different kinds of speech acts make to the CG. As an example, questions do not denote propositions that the interlocutors mutually agree to treat as true. Instead, they signal to the interlocutor(s) by asking how to proceed in meeting their conversational goals.

Following Portner’s (2007) notion of *common propositional space* which encompasses of the set of propositions of which the participants in the conversation are mutually aware, Repp (2013) suggests that the CG-status of a proposition can also be a part of the CG even though the interlocutors are not genuinely committed to it, which further implies that the CG does not encompass the immediately preceding utterance in the sense that the utterance is suggested to be added to the CG by the speaker who takes it to be true while the hearer’s position towards its status is undetermined, which is the reason why the immediately preceding utterance is added to CG only after the hearer signals his/her agreement or does not express his/her disagreement.

Based on this extended version of CG, Repp (2013) argues that the modal particles, illocutionary negation as expressed by the operator FALSUM, and the operator VERUM are all CG managing operators which indicate the status of a proposition in relation to the CG.

3.2. THE VERUM OPERATOR. VERUM focus is originally regarded as a type of focal accent in German that emphasizes the truth of a proposition (Hohle 1992).

- (18) Er HAT geweint.
 he Has cried
 ‘He DID cry.’

Romero & Han (2004) define VERUM as a conversational epistemic operator that marks the speaker’s certainty that the proposition in its scope should be added to the CG; in technical terms, in all the worlds w' that are compatible with x ’s knowledge in w it holds that in all the

worlds w'' that conform to the conversational goals of x in w' , the proposition in question is in the CG. This function is taken as a correct denotation for epistemic expressions like *be sure*, *be certain* and epistemic *must*.

In regard to negative sentences, it is the position of negation with respect to VERUM that obtains two types of readings, one involving denial (i.e. metalinguistic negation in Horn's terms (1985)) and the other neutral reading (i.e. inner negation)⁶. When negation takes wide scope with respect to VERUM operator, the result is the outer negation reading while in the configuration where VERUM takes wide scope with respect to negation, the inner negation reading is obtained⁷.

Following Romero & Han (2014) I argue that KATIYEN affects the degree of certainty expressed by the attitude holder similar to the VERUM operator in both morphosyntactically negative and nonnegative sentences. It flags the attitude holder's belief that every continuation of the conversational exchange should involve p or $\neg p$. The polarity sensitivity of KATIYEN is inflicted by the logical equation in negative sentences: $\forall x [P(x) \Rightarrow \neg Q(x)] = \neg \exists x [P(x) \wedge Q(x)]$. KATIYEN as a universal adverb scopes over a negated proposition ($[KATIYEN > \neg p]$), as the result also produces the semantic effect of $[\neg > \exists]$. I will further support this view by showing that there is a diametric opposition between KATIYEN and *kesinlikle* 'definitely' in fragment answers such that KATIYEN exhibits a sensitivity for negation whereas *kesinlikle* is pragmatically affiliated with affirmation, though both in principle attach to a proposition, p or $\neg p$.

3.3. CG MANAGING MODIFIER KATIYEN. Below given two denial contexts in which KATIYEN is used as an intensifier of a response within a structurally nonnegative or negative sentence, respectively.

- (19) A: O sen-i reddet-me-di.
 he you-ACC reject-NEG-PST.3S
 'He didn't reject you.'
 B: KATIYEN et-ti.
 KATIYEN do-PST.3SG.
 'He CERTAINLY did.'
- (20) A: O sen-i reddet-ti.
 he you-ACC reject-PST.3S
 'He rejected you.'

⁶ Ladd (1981) dubs two negations, *outer negation* and *inner negation* based on the observation that in negative polar questions the former double-checks p , the latter $\neg p$ (Repp 2013:7):

- (i) a. Schläft Peter nicht auch? *outer negation*
 sleeps Peter not also
 'Isn't Peter sleeping too?'
 b. Schläft Peter auch nicht? *inner negation*
 sleeps Peter also not
 'Isn't Peter sleeping either?'

⁷ Repp (2013:8) argues for a separate conversational epistemic operator, FALSUM for denials. It attaches between an illocutionary operator and a proposition and expresses that in all the worlds w' that conform to x 's knowledge in w it holds that in all the worlds w'' that conform to the conversational goals of x in w' (according to the Maxims of Quantity and Quality), the proposition in question is not in the CG.

B: KATIYEN et-me-di.
KATIYEN do-NEG-PST.3S
'He ABSOLUTELY didn't.'

In addition to denial contexts, KATIYEN can express strong reaffirmation by modifying the previously asserted negative proposition (22). (21) is degraded for a number of Turkish speakers. They report to use *kesinlikle* 'definitely' instead of KATIYEN in a nonnegative sentence.

- (21) A: O sen-i çok üz-dü.
he you-ACC much upset-PST.3S
'He upset you very much.'
B: ? KATIYEN çok üz-dü.
'He DEFINITELY did upset me very much.'
- (22) A: O sen-i hiç üz-me-di.
he you-ACC never upset-PST.3S
'He has never upset you.'
B: KATIYEN hiç üz-me-di.
'He has ABSOLUTELY never upset me.'

KATIYEN expresses the highest degree of certainty towards the asserted proposition and one can question the degree such that the sincerity of the attitude holder can be taken issue regardless of the truth of the proposition. Compare (23) and (24).

- (23) A: Ali yalancı değil.
Ali liar NOT.3S
'Ali is not a liar.'
B: Emin misin?
'Are you sure?'
- (24) A: Ali *katiyen* yalancı değil.
'Ali is absolutely not a liar.'
B: #Emin misin?
'Are you sure?'
B¹: Nasıl bu kadar eminsin?
'How are you so sure?'

In addition, KATIYEN can be used in yes-no questions to double-check the strength of commitment. The speaker questions for one last time whether the attitude holder is really committed to maintain their stance towards the proposition expressed as if there is a silent '*Are you sure?*' following the body.

- (25) a. Context: The cancellation of the death penalty was at-issue:
? Ölüm cezası katiyen iptal edil-miş mi?
death penalty KATIYEN cancel-EVID.3S Q
'Is the penalty definitely cancelled?'
- b. Context: Hanging a criminal was at-issue. The court had long discussions whether to perform it or not. The final decision is not to hang him/her. The speaker is asking whether the decision is really definite:
Suçlu katiyen asıl-ma-yacak mı?
criminal KATIYEN be.hang-NEG-FUT.3S Q

‘Is the criminal definitely not going to be hanged?’

Note that the perspective holder is not the speaker but the listener or interlocutor in yes-no questions with KATIYEN, interrogating whether the interlocutor has the highest degree of certainty, the strongest stance with the proposition *Ölüm cezası iptal edildi* ‘The death penalty is cancelled’ in (25a) and *Suçlu asılmayacak* ‘The criminal is not going to be hanged’ in (25b) being in the CG (see Mayer (2020) for a similar account of *at all* in questions.).

3.4. FRAGMENT ANSWERS. There is one remaining issue that needs to be addressed before presenting a semantic formulation for CG- KATIYEN. In fragment answers, KATIYEN reveals the default negative reading which has led researchers analyze it as a negative-concord item. The picture seems to be more complicated when one takes into account adverbs which function as a response particle and intuitively share the same meaning such as *kesinlikle* ‘definitely’.

- (26) A: Çocuğunuz sınava çalışıyor mu?
‘Is your kid studying for the exam?’
B_{negative}: Katiyen (hayır) / #Kesinlikle / Kesinlikle *(hayır)
KATIYEN (no) / Definitely / Definitely *(no)
B_{positive}: ?Katiyen *(evet) / Kesinlikle.
KATIYEN *(yes) / Definitely.
- (27) A: Çocuğunuz sınava çalışmıyor mu?
‘Is your kid not studying for the exam?’
B: *Katiyen* (he is not studying).
Absolutely not.
B¹: ?Kesinlikle (he is not studying).
Definitely.

KATIYEN and *kesinlikle* pattern in a diametrically opposite ways with respect to their interaction with negation in fragment answers. KATIYEN obtains a negative response token by itself in contrast to *kesinlikle* which obtains a positive answer to a positive polar question in (26). But in negative polar questions, both obtain a negative answer as in (27) while *kesinlikle* is degraded when not followed by the negated predicate *çalışmıyor* ‘he is not studying’.

As for assertions and responses to them, KATIYEN is used in denying the previous affirmative statement whereas *kesinlikle* reaffirms the previous positive assertion as in (28B¹). Note that for a number of speakers KATIYEN in (28B¹) can be used as a reaffirmation as well. In (29), both KATIYEN and *kesinlikle* strongly reaffirm the previous negative statement conveying the speaker B’s agreement with the asserted proposition.

- (28) A: Hasan bir hırsız!
Hasan a thief.COP.3S
‘Hasan is a thief!’
B: *Katiyen*!
Absolutely not!
B¹: *Kesinlikle*! / ?*Katiyen*!
Definitely!
- (29) A: Hasan hırsız değil!
Hasan thief NOT.3S
‘Hasan is not the thief!’

B: *Katiyen!*
 Absolutely not! (I agree)
 B¹: *Kesinlikle!*
 Definitely! (I agree)

	KATIYEN	<i>Kesinlikle</i>
Maximal credence interpretation	+	+
Negative reaction to a positive assertion	+	-
Negative reaction to a negative assertion	+	+
Positive reaction to a negative assertion	-	-
Positive reaction to a positive assertion	?	+
Negative reaction to a positive polar question	+	-
Negative reaction to a negative polar question	+	+
Positive reaction to a positive polar question	?	+
Positive reaction to a negative polar question	-	-

Table 2: KATIYEN vs. *kesinlikle* as response particles

Based on their use as a response token we can conclude that response particle *kesinlikle* is anaphoric to the asserted or questioned proposition in the previous turn in the discourse while response particle KATIYEN seems to be only anaphoric to negative propositions in assertion context and question contexts as in (27) and (29). What is peculiar to KATIYEN and what has led researchers to argue for an NCI-analysis is that it seems to induce its own negative force as a response particle to positive assertions or questions (26) and (28).

Giannakidou (2000) shows that only emphatic NPIs provide successful negative fragment answers in Greek. She brings additional evidence that differentiates emphatic NPIs from their nonemphatic counterparts (i.e. absence of long-distance licensing, island sensitivity, semantic invariance under different operators, providing fragment answers...etc.) and argues that Greek emphatic NPIs are universal quantifiers sensitive to negation. Reconciling the earlier observations that KATIYEN behaves like a strong-NPI in negative contexts considering with its incompatibility with possibility modals I suggest that it functions as a universal NPI in negative sentences similar to Greek emphatic NPIs in the sense of Giannakidou (2000).

The reason why KATIYEN (but not *kesinlikle* (or *kati suretle* ‘definitely, strictly’)) has become sensitive to negation seems to be coincidental. I argue that the common core of these lexical items is being a universal modal adverb. The sensitivity for negation is a special use inflicted upon a single one of them. “Compare e.g. *one bit*, an NPI with *a bit*, which is not an NPI (cf. I am (not) a bit worried), but may be used to strengthen negation, and *a little bit*, which is also not an NPI, but differs from *a bit* in negative clauses...Arguably, these items have the same basic interpretation, but developed special uses which have to be learned separately. If this is so, then *a bit*, *one bit* and *a little bit* are all possible candidates for NPI-status, but only one bit has been grammaticalized as such.” (Hoeksema 1994:1).

3.5. TOWARDS A SEMANTIC FORMULATION. The previous work on CG management and VERUM deals with the dual function of particles such as *really* (Romero & Han 2004), *totally* (Beltrama 2018) and *mica* ‘at all’ (Frana & Rawlins 2019) and propose a quantification-overworlds approach to account for their pragmatic functions (with references to degrees)

while Mayer (2020:516) argues for a degree-based account of *at-all* which has a dual use as a degree modifier and operator on the CG. Her account captures *at-all*'s status as a minimizer NPI and provides a semantic kernel between degree modifiers and CG operators. Greenberg & Wolf (2019), on the other hand, discusses the intensified response particle use of *legamrey* 'absolutely' in Hebrew which also functions as an intensifying degree modifier of gradable adjectives within the propositional level similar to English *completely* and propose a unified analysis for both uses based on a degree-based account of speech act operator ASSERT.

KATIYEN does not attach to a gradable predicate as a degree modifier unlike *tamamen* 'completely' in Turkish. The contribution of KATIYEN in (30a) is to add a stronger degree of commitment to the asserted proposition *ölü değil* 'She is not dead' and thus to signal the hearer to modify their willingness to accept it and add it to the CG (Wolf 2015). In that sense, it functions as a degree modifier on the CG marking the highest degree of certainty towards the asserted proposition.

- (30) a. *Katiyen ölü/dolu değil.*
 KATIYEN dead/full NOT.3S
 'It is definitely not dead/full.'
 b. *Tamamen *ölü/dolu değil.*
 completely dead / full NOT.3S
 'It is not completely *dead/full.'

Adopting the degree-based formulation of ASSERT operator (Wolf 2015) and the denotation of *absolutely* from Greenberg & Wolf (2019) I suggest KATIYEN functions as a degree modifier over assertions KATIYEN by combining with a gradable speech act operator *G* which is typically ASSERT. As given in (31), ASSERT combines with a proposition *p*, a credence degree *d*, a context *c* and yields the context *c'* where the CG is updated with the information that the speaker's degree of credence of *p* in *w* at time *c_t* is *d*.

- (31) $[[\text{ASSERT}]]_{\langle\langle s,t \rangle, \langle d \langle c,c \rangle \rangle} = \lambda p. \lambda d. \lambda c. \lambda c': c' = \langle c_{sp}(eaker), Ch(earer), C_{time}, C_w \cap \{w: \text{ASSERT}(p)(d)(c) \} \rangle$

ASSERT holds if and only if the speaker believes that *p* in *w* to a credence degree *d*. KATIYEN combines with ASSERT and modifies the assertion by maximizing the credence of the speaker in the asserted proposition.

- (32) a. $[[\text{KATIYEN}(\text{ASSERT})]](\text{Hasan is a thief})(c)$
 $\lambda c': c' = \langle c_{sp}, c_h, c_t, c_w \cap \{w: \exists d d = \max(S_G) \wedge \text{ASSERT}(\text{Hasan is a thief})(d)(c) \} \rangle$
 b. $[[\text{KATIYEN}]] = \lambda G. \lambda p. \lambda d. \lambda c. \lambda c': c' = \langle c_{sp}, c_h, c_t, C_w \cap \{w: \exists d d = \max(S_G) \wedge G(p)(d)(c) \} \rangle$

As formulated in (32b), KATIYEN combines with a gradable speech act operator *G* (typically ASSERT), a proposition *p*, a degree *d* (typically a credence degree) and a context *c* and yields the unique context *c'* where the speaker believes in *w* that Hasan is a thief to a maximum credence degree where *S_G* denotes the scale associated with a gradable speech act operator ASSERT. Note that *p* can be replaced by $\neg p$ in principle, which accounts for the occurrence of KATIYEN in negative sentences.

4. Conclusion. Turkish NCI-item KATIYEN is attested in a number of contexts that do not contain syntactic and/or semantic negation. In order to capture the similarities in the meaning and usage of KATIYEN in negative and affirmative utterances, I proposed a compositional semantic account based on Greenberg & Wolf (2019) such that KATIYEN is a degree modifier

of a gradable speech act operator which operates over the propositional level. It maximizes the degree of credence the attitude holder has towards the proposition in question. A promising starting point is to describe the connection between the two uses of KATIYEN, one as an NCI in fragment answers providing a default negative answer and the other as an CG modifier lies in the domain of discourse. Based on the observation that KATIYEN is incompatible with possibility modal markers I argued that it is a universal modal and following the assumption that scales are monotone and lexical maximizers can be considered as de facto universal quantifiers (Heim 2000; Beltrama 2018:37) I suggested that the NCI property of KATIYEN might be accounted for in line with Greek emphatic NPIs according to the analysis of Giannakidou (2000). Studying the distribution of KATIYEN allows to make one step forward in understanding different contributions modal adverbs make to the CG and in finding an empirically valid explanation to relate negative polarity with discourse effects, which hopefully lays the ground for a more fine-grained investigation of the illocutionary level.

References

- Aygen-Tosun, Gülşat. 1998. *The split Infl hypothesis in Turkish*. M.A. thesis. Boğaziçi University, Istanbul.
- Beltrama, Andrea. 2018. Totally between subjectivity and discourse: Exploring the pragmatic side of intensification. *Journal of Semantics* 35(2). 219–261.
doi:<https://doi.org/10.1093/semant/ffx021>.
- Frana, Ilaria & Kyle Rawlins. 2019. Attitudes in discourse: Italian polar questions and the particle mica. *Semantics and Pragmatics* 12(16). 1–48.
doi:<http://dx.doi.org/10.3765/sp.12.16>.
- Giannakidou, Anastasia. 2000. Negative...concord? *Natural Language and Linguistic Theory* 18:457-523
- Giannakidou, Anastasia & Hedde, Zeijlstra. 2017. The Landscape of Negative Dependencies: Negative Concord, N-Words, Split Scope. In M. Everaert & H. van Riemsdijk (eds.), *The Blackwell Companion to Syntax*, 2nd Edition. London: Blackwell.
- Görgülü, Emrah. 2017. Negative polarity in Turkish: from negation to nonveridicality. *Macrolinguistics* 5(7), 51-69. The Learned Press.
- Görgülü, Emrah. 2020. Negative sensitive items in Turkish: Negative polarity or negative concord? *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi* 21, 724-749.
- Greenberg, Yael, and Lavi Wolf. 2019. Intensified Response Particles to Assertions and Polar Questions: The Case of Hebrew *legamrey*. In *Proceedings of NELS49*.
- Heim, Irene. 2000. Degree operators and scope. In Brendan Jackson and Tanya Matthew (eds.), *Proceedings of Semantics and Linguistic Theory (SALT) 10*, 40–64. eLanguage.
- Hoeksema, Jack. 1994. On the grammaticalization of negative polarity items. In the *Proceedings of the Twentieth Annual Meeting of the Berkeley Linguistics Society: General Session Dedicated to the Contributions of Charles J. Fillmore*.
- Hohle, Tilman N. 1992. Uber verum-fokus im deutschen. In Joachim Jacobs (ed.), *Informations struktur und grammatik*, Westdeutscher Verlag. 112–41.
- Horn, Laurence R. 1985. Metalinguistic Negation and Pragmatic Ambiguity. *Language* 61(1): 121-74. <https://doi.org/10.2307/413423>
- İnce, Atakan. 2012. Fragment Answers and Islands. *Syntax* 15(2), 184-214.
- Jeretič, Paloma. 2017. Hybrid and Optional Negative Concord in Turkish: A Unified Analysis. In Yılmaz Köylü and Jaklin Kornfilt (eds.), *IULC Working Papers* 18(2).

- Kamali, Beste. 2017. Negative concord in Turkish polar questions. Paper presented in *Com(parative) Syn(tax) Meetings*. Leiden University Center for Linguistics. March 23, 2017.
- Kamali, Beste. 2022. Motivating a duality of primary polar question meanings. Ms. ZAS.
- Karttunen, Lauri. 1977. Syntax and semantics of questions. *Linguistics and Philosophy* 1:344.
- Kelepir, Meltem. 2000. Scope of Negation: Evidence from Turkish NPIs and Quantifiers. In *Proceedings of GLOW Asia II*, September 1999 at Nanzan University, Nagoya, Japan.
- Kelepir, Meltem. 2001. *Topics in Turkish Syntax: Clausal Structure and Scope*. Ph.D. dissertation. MIT.
- Kornfilt, Jaklin. 1997. *Turkish*. London: Routledge.
- Krifka, Manfred. 2008. Basic notions of information structure. *Acta Linguistica Hungarica* 55, 243-276.
- Kural, Murat. 1997. Postverbal constituents and Linear Correspondence Axiom in Turkish. *Linguistic Inquiry* 28, 498-519.
- Ladd, Robert. 1981. A first look at the semantics and pragmatics of negative questions and tag questions. *Papers from the Seventeenth Regional Meeting of the Chicago Linguistic Society*, 164-171.
- Laka, Itziar Murgaza. 1990. *Negation in Syntax: On the Nature of Functional Categories and Projections*, Ph.D. dissertation. MIT.
- Lewis, David. 1979. Scorekeeping in a language game. *Journal of Philosophical Logic* 8, 339-359.
- Lin, Jing. 2015. *Acquiring Negative Polarity Items*. Ph.D. dissertation. University of Amsterdam. Utrecht: LOT.
- Mayer, Erika. 2020. Degree modifiers and common ground operators: The case of at all. *Poster presentation at SALT 30*. Virtual conference held by Cornell University.
- Mayr, Clemens. 2013. Downward monotonicity in questions. E. Chemla, V. Homer & Grégoire Winterstein (eds.), *Proceedings of Sinn und Bedeutung* 17, 345-362. Paris: ENS
- Nicolae, Andreea. 2015. Questions with NPIs. *Natural Language Semantics* 23, 21-76. <https://doi.org/10.1007/s11050-014-9110-8>
- Portner, Paul. 2007. *Beyond the CG: The semantics and pragmatics of epistemic modals*. Talk. International Conference on Linguistics in Korea.
- Repp, Sophie. 2013. Common ground management: modal particles, illocutionary negation and VERUM. In *Beyond expressives – explorations in use-conditional meaning*, vol. 28. Current Research in the Semantics / Pragmatics Interface, 231-275. Leiden: Brill. doi:https://doi.org/10.1163/9789004183988_008.
- Romero, Maribel & Chung-Hye Han. 2004. On negative yes/no questions. *Linguistics and Philosophy* 27. 609-658. doi:<https://doi.org/10.1023/B:LING.0000033850.15705.94>.
- Stalnaker, Robert. 1978. Assertion. In Peter Cole (ed.), *Pragmatics*, vol. 9, 315-333. New York: New York Academic Press. doi:http://dx.doi.org/10.1163/9789004368873_013.
- Van der Wouden, Ton. 1994. *Negative Contexts*. Ph.D. dissertation. Rijksuniversiteit Groningen.
- Wolf, Lavi. 2015. *Degrees of Assertion*. Ph.D. dissertaion. Ben-Gurion University of the Negev.
- Zeijlstra, Hedde. 2004. *Sentential negation and negative concord*. Utrecht: LOT.
- Zeijlstra, Hedde. 2008. On the Syntactic Flexibility of Formal Features. In Theresa Biberauer (ed.), *The Limits of Syntactic Variation* 143-173. Amsterdam: John Benjamins.
- Zidani-Eroğlu, Leyla. 1997a. Indefinite noun phrases in Turkish. Ph.D. dissertation. University of Wisconsin-Madison, Madison, WI.

- Zidani-Eroğlu, Leyla. 1997b. Exceptionally case-marked NPs as matrix objects. *Linguistic Inquiry* 28(2), 219–230.
- Zwarts, Frans. 1995. Nonveridical contexts. *Linguistic Analysis* 25, 286–312.