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The syntax of negative polarity items in Central Kurdish

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ABSTRACT

This paper investigates the morpho-syntactic properties and structure of *hych kasek* 'anyone' and *hych shitek* 'anything', two negative polarity items (NPIs) in Central Kurdish (CK). The study explores their variants in negative and non-negative contexts and evaluates their alignment with the proposals of Collins and Postal (CP2014). CK data reveal support for the distinction between unary and binary NEG structures, while highlighting variations in the deletion of the NEG element. *Hych kasek* consistently exhibits variants, while *hych shitek* demonstrates context-specific patterns. A split-DP structure is proposed, with the determiner splitting into D_{NEG} (lexicalized by *hych*) and D_{SOME} (lexicalized by *-ek*). The semantic distinction between unary and binary NEG structures is observed. Additionally, a third pattern of NEG raising is suggested, allowing NEG to raise optionally with or without a resumptive copy. This study enhances our understanding of NPIs in CK, providing insights into their morpho-syntactic structure and their compatibility with the proposals put forth by CP2014.

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1. Introduction

Negative Polarity Items (NPIs), such as English *any* and *ever*, are a class of words or phrases that are licensed in negative, downward entailing, and nonveridical environments, such as *yes/no* questions and *if*-conditionals (Vallduví, 1994; Giannakidou, 2006, 2011). Studies of NPIs have been interrelated with studies on negation (see e.g. Laka, 1994; Sells & Kim, 2006; Taleghani, 2006; White-Sustaita, 2010; Kwak, 2010; Shimoyama, 2011; Collins et al., 2017; Hiraiwa & Akanlig-Pare, 2022; Al Khalaf, 2022; Bumford & Sharvit, 2022).

In Kurdish, examples of NPIs include *hych kasek* 'anyone', *hych shitek* 'anything', *hargyz* 'never', *qat* 'ever, never' and *yek fils* 'a penny'. Central Kurdish (CK), (or Sorani), is the Kurdish dialect spoken by Kurds in the northern part of Iraq and western part of Iran. Other Kurdish dialects include Northern Kurdish, Southern Kurdish, Zazaki and Hawrami (see McCarus, 2009; Haig & Öpengin, 2014). Sorani's speakers constitute 25-30% of the estimated 30 million Kurdish native speakers in the world (McCarus, 2009, p. 587).

Kurdish is an understudied language, and no research has been conducted on the syntax of negative polarity items. Studies conducted on NPIs in several languages, including Persian and Turkish, have emphasized the importance of negative syntactic constructions and negative polarity licensing. Kwak (2010), for example, identifies two types of negative sensitive items in Persian: negative polarity items and negative concord items, and analyzes them using negative structures. According to Görgülü (2017), NPIs in Turkish appear in a variety of contexts, including negative sentences, *yes/no* questions, conditional sentences, and with the adjectival suffix *-süz* 'without'. In Kurdish, NPIs have similar characteristics, which necessitate specific negative contexts. Identifying NPIs within Kurdish is essential for understanding their syntax and grammatical functions. In studying NPIs in Kurdish, scholars can discover how these items interact with negation and contribute to the language's overall syntax.

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This paper will specifically be looking at the syntax and licensing of the nominals *hych kasek* ‘anyone’, *hych shitek* ‘anything’, and their variants. These two NPIs commonly occur in negative contexts marked by a negative element prefixed to the verbal complex. They can also occur in non-negative contexts such as yes/no questions and *if*-conditional sentences, yet never in affirmative sentences.

While the full forms *hych kasek* ‘anyone’ and *hych shitek* ‘anything’ have the same distribution in both negative and non-negative environments, their equivalent short forms (i.e. variants) have inconsistent distribution. For example, *hych kasek* ‘anyone’ maintains the same variants in negative and non-negative contexts, whereas *hych shitek* ‘anything’ does not suggest a unified set of variants in both types of contexts. More specifically, while *hych kasek* ‘anyone’ allows only the three variants *hych kas* ‘no one’, *kas* ‘one’, and *kasek* ‘someone’ in both negative and non-negative contexts, *hych shitek* ‘anything’ allows only *hych* ‘nothing’ in negative contexts but the forms *hych* ‘nothing’ and *shitek* ‘something’ in non-negative contexts.

This non-consistent behavior of *hych shitek* in negative and non-negative contexts in comparison to *hych kasek* creates a challenge to the analysis proposed in this paper. We argue that the determination of these forms follows from several factors mainly related to the complex DP structure of these NPIs and the inherent nature of the NP *kas* ‘one’ and *shit* ‘thing’. In this paper, we adopt the recent proposals by Collins & Postal 2014, (henceforth CP2014), and show that CK NPIs present a challenge to CP2014 mapping framework and their proposed DP structure of NPIs, in addition to other related issues regarding NEG raising, NEG deletion, and the distinction between unary-NEG NPIs (NPIs with one overt NEG element) and binary-NEG NPIs (NPIs with two covert NEG elements).

This paper is organized as follows. A literature review is first presented, focusing on Collins and Postal’s (2014) proposal regarding negative polarity items (NPIs). Secondly, the research method used to examine morpho-syntactic properties and structure of CK NPIs is presented. Following this, the CK NPIs, namely *hych kasek* and *hych shitek*, are described and discussed in detail, including an overview of their possible variants. Afterward, the syntactic analysis of the behavior of these NPIs in negative and non-negative contexts is presented. The conclusion summarizes the main findings and implications of the study.

2. Literature review: Collins and Postal

The study of Negative Polarity Items (NPIs) has attracted interest from scholars in multiple linguistic fields such as syntax (e.g. Hoeksema, 2000; Kilma, 1964; Kumar, 2013; Sohn, 1995), semantics and pragmatics (e.g. Chierchia, 2013; Fauconnier, 1975; Ladusaw, 1992; Linebarger, 1987), and semantico-syntax (e.g. Horn & Kato, 2000; Kubota & Levine, 2021; Progovac, 1992). This paper focuses on the Kurdish language, adopting Collins and Postal’s (2014) theoretical framework to examine NPIs in both negative and non-negative contexts. By exclusively utilizing this model, the analysis maintains a specific scope, deliberately excluding alternative theoretical proposals from other sources.

In their monograph, Collins and Postal (2014) provide a radical analysis of negation and NPIs. Their view is based on the assumption that NPIs are ‘expressions underlyingly associated with a NEG, which has raised away from the NPI’ (CP2014:17). Consider, for instance, the NPI *ever* in (1) which is allowed only in contexts where the licenser *not* is in a c-commanding position:

- (1) a. *Chloe ever tasted beer.
b. Chloe did not ever taste beer.

CP2014 argue that the licenser *not* originates as part of the adverbial *ever*, as shown in (2):

- (2) Chloe never tasted beer.

The difference between *ever* and *never* is caused by the morphological realization of NEG which modifies the existential quantifier SOME in the adverbial; in *never*, the NEG is realized as *n-* and SOME is unpronounced, whereas in *ever*, the NEG is raised to a post-Aux position and realized as *not*, as demonstrated in (3a-b), respectively:

- (3) a. Chloe [[NEG SOME] ever] tasted beer
 b. Chloe did NEG1 [[<NEG1> SOME] ever] taste beer (CP2014:17-18)

Similarly, the following pair has the same underlying structure in (5):

- (4) a. I saw no widow.
 (5) b. I didn't see any widow. I saw [[NEG SOME] widow] (CP2014:19)

In (4a), NEG is spelled out as *no*, and SOME is unpronounced. In (4b), NEG is raised to a post-Aux position and spelled out as *n't*, and SOME is realized as *any*; that is, it is a suppletive form of SOME which is determined by the following rule:

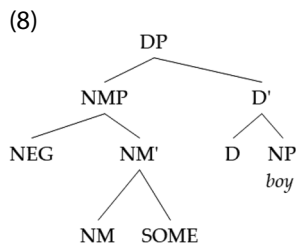
- (6) *The SOME→any mapping*
 a. SOME → *any*, in the context [<NEG> ___] (NEG unpronounced)
 b. SOME → null, in the context [NEG ___] (NEG pronounced)
 c. SOME → *some*, otherwise (CP2014:19).

This mapping shows that SOME has three spell-outs: *any*, null, and *some* depending on the pronunciation and movement of NEG. However, there is a class of NPIs that requires the NEG to be raised and SOME to be null. This class (abbreviated as JACK class minimizers) includes the slang forms *dick*, *diddly*, *diddly squat*, *jack*, *jackshit*, *shit*, and *squat*. These forms behave differently than other forms discussed above, as shown in (7a-c):

- (7) a. Karen doesn't know jackshit_A about relativity.
 b. *Karen knows **no** jackshit_A about relativity.
 c. *Karen doesn't know **any** jackshit_A. (CP2014:19).

(7a) shows that the NPI *jackshit* is licensed by the NEG *n't* which raises out from the associated D in the underlying structure [_{DP}[_D NEG SOME] JACK], and it also shows that SOME is null. (7b) is ungrammatical because NEG stays in situ in *no jackshit*, and (7c) is also ungrammatical because SOME is spelled out as *any*, in violation of the following rule: SOME → null, in the context [___ [_{NP} JACK]].

However, assuming that nominal NPIs are negative quantificational DPs involving the underlying structure [[NEG SOME] NP], CP2014 argue that NEG and SOME are not determiners, rather they occupy the Spec-DP position, and the actual determiner is null. NEG and SOME are the specifier and the complement of NMP (for NEG Merge Phrase), respectively, as shown in the following representation for *no boy* (CP2014:27). Nonetheless, Collins and Postal in their monograph and subsequent papers (see Collins & Postal, 2017a, 2017b; Collins et al., 2017) refer to [NEG SOME] as a determiner, we adopt this perspective to simplify the explanation and analysis of CK NPIs, aligning with prior research on negative determiners (e.g., Al-Bataineh, 2021) and DP (e.g., Al-Bataineh, 2020; 2023):



The given views discussed so far are associated with the main argument that there are two fundamental types of NPIs defined by Universal Grammar; Unary-NEG structures which involve a single NEG (e.g. *no window* and *not... any window* discussed above) and the binary-NEG/reversal structures which have two covert NEG. These two types are represented as follows (CP2014:31):

- (9) a. [α NEG X] (unary-NEG NPI)
 b. [α NEG [NEG X]] (binary-NEG NPI/reversal)

Examples of the binary-NEG/reversal NPIs are in (10a-c). Notice that there is no overt NEG associated with/c-commanding *any* NP.

- (10) a. At most half of the class knows *any physics*.
 b. Everybody who steals *any candy* will get caught.
 c. If you steal *any candy*, you will be caught.

(CP2014:29).

The given NPIs are considered as binary-NEG/reversal because 'a second NEG scoping over the first nullifies the semantic consequences of the first one' (CP2014:30). Notice that the given NPIs in (10a-c) can be replaced by the indefinite *some*, as in (11a-c):

- (11) a. At most half of the class knows *some physics*.
 b. Everybody who steals *some candy* will get caught.
 c. If you steal *some candy*, you will be caught.

(CP2014:30).

CP2014 argue that the two NEGs are unpronounced because of the existence of NEG Deleters which are *at most half of the class*, *every*, and *if* in the given examples above. That is, the two NEGs are not pronounced because of NEG Deletion which 'involves a relation between individual NEGs and other phrases, their NEG Deleters' (CP2014:31). Moreover, the distinction between unary-NEG NPIs and binary-NEG NPIs is based on several tests which include alternation with Non-NPI Indefinites, discourse anaphora, negative inversion, VP ellipsis, and intensives (CP2014:33-38).

3. Research method

The research method employed in this study involved the elicitation and evaluation of data from twelve native speakers of Central Kurdish, including the second author. To gather the necessary data, various techniques such as elicitation tasks, interviews, and language samples were utilized. The data elicitation process involved presenting the participants with prompts and scenarios designed to elicit natural language responses containing the targeted negative polarity items (NPIs). Specifically, the elicitation tasks were selected to gather targeted linguistic data relevant to the research questions on NPI usage in different linguistic contexts, such as affirmative, negative, interrogative and conditional sentences.

The interviews have been used to gain insight into speakers' perceptions of NPIs and natural language use. The participants were carefully selected to ensure representation from different age groups, genders, and educational backgrounds, ensuring a diverse range of language proficiency and usage. The data were collected by the second author who is a native speaker of Kurdish and verified by 12 native speakers (6 from Erbil city, 5 from Sulaimaniyah city and 1 from Halabja city). The observations and arguments made in this paper were verified with different sets of examples.

All of the native speakers were bilinguals, speaking both Kurdish and English. The participants were asked to translate into Kurdish certain English sentences that contain NPIs. The participants were also asked to generate their own sentences and complete sentences, such as 'I do not know ___' and 'Do you know ___?' with proper NPIs. The responses were audio-recorded and transcribed for further analysis. Participants were asked questions that explored their understanding and usage of NPIs, including their interpretation of NPIs in conversation.

Grammaticality judgments of the examples were given based on the linguistic intuition of the native speakers when given the equivalent examples in English. Subsequently, the second author, as a native speaker and language expert, assessed the collected data, ensuring its accuracy and reliability. In addition, one of the participants is a professor of Kurdish language. To ensure reliability and validity, all the data and examples have been checked by this professor. This rigorous data collection process provided

a solid foundation for analyzing the morpho-syntactic properties and structure of the NPIs in Central Kurdish.

4. Description and discussion of CK NPIs: an overview

The discussion in this section aims primarily to show the properties, distribution and the environments that license the NPIs *hych kasek* 'anyone', *hych shitek* 'anything' and their variants which occur in both negative and non-negative contexts. As will be shown below, these NPIs show several peculiarities with regard to their forms and morphosyntactic structures; that is, the formation of these NPIs is not the same in a particular context due to several factors that affect their internal structure. Within the DP domain, the semantics of the NP interacts with the other components of NPIs, i.e. NEG and D, in a way that makes possible for deletion of NEG, D, or both to take place in one NPI but not the other in the same construction. These peculiarities are explained below in more detail.

4.1. Negative contexts

The NPIs *hych kasek* 'anyone' and *hych shitek* 'anything' commonly occur in negative contexts. They are licensed by the negative markers prefixed to the verb complex as shown in (12a-b); they are ungrammatical in affirmative contexts as shown in (13a-b):¹

(12) a.

<i>hych</i>	<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-nās-im</i>
no	one-INDEF	with-this	name	NEG-know.PRS-1SG

'I do not know anyone with this name.'

b.

<i>hych</i>	<i>shit-ek</i>	<i>sabārat</i>	<i>be-m</i>	<i>bābata</i>	<i>nā-zān-im</i>
no	thing-INDEF	concerning	with-this	subject	NEG-know.PRS-1SG

'I do not know anything about this subject.'

(13) a.

* <i>hych</i>	<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>da-nās-im</i>
no	one-INDEF	with-this	name	IND-know.PRS-1SG

'*I know anyone with this name.'

b.

* <i>hych</i>	<i>shit-ek</i>	<i>sabārat</i>	<i>be-m</i>	<i>bābata</i>	<i>da-zān-im</i>
no	thing-INDEF	concerning	with-this	subject	IND-know.PRS-1SG

'*I know anything about this subject.'

As shown in the glosses these NPIs are morphologically composed of the negative element *hych*, an N (*kas* 'one' or *shit* 'thing') and the indefinite article *-ek*. In the examples in (12), there are two NEG elements, the negative element prefixed to the verb and the negative element *hych*. The presence of the negative element in such NPI structures is dealt with as part of the NEG raising and copying process suggested for similar data in Serbian-Croatian and nonstandard English. *hych kasek* 'anyone' can occur as *hych kas* 'no one', *kas* 'one' and *kasek* 'anyone/someone', and hence the negative element *hych* and the indefinite article *-ek* can be unpronounced. The possible forms are given in (14a-b):

(14) a.

(<i>hych</i>)	<i>kas</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-nās-im</i>
no	one	with-this	name	NEG-know.PRS-1SG

'I know no one with this name.'

b.

<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-nās-im</i>
one-INDEF	with-this	name	NEG-know.PRS-1SG

'I do not know anyone with this name.'

The English translation of these forms of *hych kasek* ‘anyone’ reveal the following observations. First, when the morpheme *-ek* is present, the NPI means ‘anyone’ as in *hych kasek* (12a) and *kasek* (14b), but when *-ek* is absent, the NPI means ‘no one’ as in (*hych*) *kas* (18a). Second, when *hych* is unpronounced but *-ek* is present as in *kasek* in (14b), it suggests ‘anyone’ more than ‘someone’ in negative contexts as confirmed by the native speakers consulted. Third, syntactically these forms suggest that NEG raising either leaves a copy as in (12a) or no copy as in (14a-b).

As to *hych shitek* ‘anything’, it can occur as *hych* as in (15), yet not as **hych shit* [no thing], **shit* ‘thing’ or **shitek* ‘something’:

(15)

<i>hych</i> no	<i>la-m</i> of-this	<i>bābata</i> subject	<i>nā-zān-im</i> NEG-know.PRS-1SG
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‘I do not know anything about this subject.’

An interesting fact about *hych shitek* ‘anything’ is that, in contrast with *hych kasek* ‘anyone’, the whole DP *shitek* ‘something’ can be deleted, as in (15). Another difference is that while *kasek* can occur alone without *hych*, *shitek* is not a possible form in negative contexts, as reflected in the ungrammaticality of (16a). Moreover, the form *shit* ‘thing’ is not possible either unless it is preceded by a quantifier such as *zor* ‘many’, (16b). The form *zor shit* is not a strong NPI because it can occur in affirmative sentences as well, (16c); therefore, we disregard this form in the rest of the paper.

(16) a.

* <i>shit-ek</i> thing-INDEF	<i>la-m</i> of-this	<i>bābata</i> subject	<i>nā-zān-im</i> NEG-know.PRS-1SG
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‘I do not know anything about this subject.’

b.

<i>zor</i> many	<i>shit</i> thing	<i>la-m</i> of-this	<i>bābata</i> subject	<i>nā-zān-im</i> NEG-know.PRS-1SG
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‘I do not know many things about this subject.’

c.

<i>zor</i> many	<i>shit</i> thing	<i>da-zān-im</i> IND-know.PRS-1SG
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‘I know many things.’

4.2. Non-negative contexts

According to CP2014, NPIs can occur in non-negative contexts and suggest a binary NEG structure that involves two unpronounced NEGs. Examples of non-negative contexts are the *if* conditional contexts, yes/no questions, sentences that include verbs such as *surprise*, the quantifier *every* and phrases of the form [*only* DP] (see Collins & Postal 2017a, p. 343; Collins et al., 2017, p. 7–8). In CK, the NPIs *hych kasek* ‘anyone’ and *hych shitek* ‘anything’ can occur in non-negative contexts, such as yes/no questions (17a-b), and conditional sentences (18a-b).

(17) a.

<i>hych</i> no	<i>kas-ek</i> one-INDEF	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>da-nās-i?</i> IND-know.PRS-2SG
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‘Do you know anyone with this name?’

b.

<i>hych</i> no	<i>shit-ek</i> thing-INDEF	<i>darbāray</i> about	<i>min</i> I	<i>da-zān-i?</i> IND-know.PRS-2SG
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‘Do you know anything about me?’

(18) a.

<i>agar</i> if	<i>hych</i> no	<i>kas-ek</i> one-INDEF	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>da-nās-i</i> IND-know.PRS-2SG
<i>pe-m</i> to-me	<i>ble</i> say.PRS.3SG				

‘If you know anyone with this name, tell me.’

b.

<i>agar</i> if	<i>hych</i> no	<i>shit-ek</i> thing-INDEF	<i>darbāray</i> about	<i>min</i> me	<i>da-zān-ī</i> IND-know.PRS-2SG
<i>pe-m</i> to-me	<i>ble</i> say.PRS.3SG				

'If you know anything about me, tell me.'

In (17) and (18), *hych kasek* and *hych shitek* again suggest the meanings of 'anyone' and 'anything' respectively as was the case in negative contexts (see examples (12a-b)). However, in non-negative contexts when *hych* is dropped, *kasek* and *shitek* suggest 'someone' and 'something', respectively, as shown in the following examples:

(19) a.

<i>kas-ek</i> one-INDEF	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>da-nās-ī?</i> IND-know.PRS-2SG
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'Do you know someone with this name?'

b.

<i>shit-ek</i> thing-INDEF	<i>darbāray</i> about	<i>min</i> I	<i>da-zān-ī?</i> IND-know.PRS-2SG
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'Do you know something about me?'

(20) a.

<i>agar</i> if	<i>kas-ek</i> one-INDEF	<i>da-nās-ī</i> IND-know.PRS-2SG	<i>pe-m</i> to-me	<i>ble</i> say.PRS.3SG
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'If you know someone, tell me.'

b.

<i>agar</i> if	<i>shit-ek</i> thing-INDEF	<i>da-zān-ī</i> IND-know.PRS-2SG	<i>pe-m</i> by-me	<i>ble</i> say.PRS.3SG
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'If you know something, tell me.'

Other possible variants of *hych kasek* in such contexts are *kas* 'one' and *hych kas* 'no one' as illustrated in the following yes/no question and conditional examples:

(21) a.

<i>hych</i> no	<i>kas</i> one	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>da-nās-ī?</i> IND-know.PRS-2SG
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'Do you know anyone with this name?'

b.

<i>agar</i> if	<i>kas</i> one	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>da-nās-ī</i> IND-know.PRS-2SG	<i>pe-m</i> to-me	<i>ble</i> say.PRS.3SG
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'If you know anyone with this name, tell me.'

Finally, as shown in (22a-b), *hych shitek* 'anything' can also occur as *hych* in non-negative contexts:

(22) a.

<i>hych</i> no	<i>darbāray</i> about	<i>min</i> I	<i>da-zān-ī?</i> IND-know.PRS-2SG
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'Do you know anything about me?'

b.

<i>agar</i> if	<i>hych</i> no	<i>da-zān-ī</i> IND-know.PRS-2SG	<i>pe-m</i> to-me	<i>ble</i> say.PRS.3SG
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'If you know anything, tell me.'

So far, we have outlined the distribution and morphosyntactic properties of the NPIs *hych kasek* and *hych shitek*. The possible variants are summarized in Table 1 according to the context they occur in, whether negative or non-negative.

Table 1. Variants of *hych kasek* and *hych shitek*.

Negative context				
<i>hych kasek</i> 'anyone'	<i>hych kas</i> 'no one'	<i>kas</i> 'one'	<i>kasek</i> 'someone'	* <i>hych</i> 'no one'
<i>hych shitek</i> 'anything'	* <i>hych shit</i> 'nothing'	* <i>shit</i> 'thing'	* <i>shitek</i> 'something'	<i>hych</i> 'nothing'
Non-negative context				
<i>hych kasek</i> 'anyone'	<i>hych kas</i> 'no one'	<i>kas</i> 'one'	<i>kasek</i> 'someone'	* <i>hych</i> 'no one'
<i>hych shitek</i> 'anything'	* <i>hych shit</i> 'nothing'	* <i>shit</i> 'thing'	<i>shitek</i> 'something'	<i>hych</i> 'nothing'

As can be seen *hych kasek* 'anyone' maintains the same variants in negative and non-negative contexts. However, *hych* alone is banned as a form of *hych kasek*. In contrast, *hych shitek* 'anything' does not suggest a unified set of variants in both types of contexts. For example, in negative contexts the only two possible forms are *hych shitek* and *hych* whereas in non-negative contexts *shitek* is also possible. However, later we show that this form does not suggest a negative polarity item along with *kasek* (see the analysis sections for discussion).

5. Syntactic analysis and results

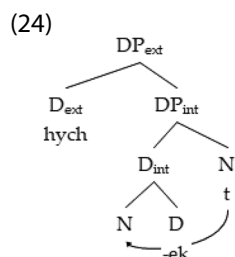
This section provides a detailed analysis of CK NPIs in both negative and non-negative contexts. The analysis of CK NPIs in negative contexts explores the usage of (*hych*) *kasek* 'anyone' and *hych shitek* 'anything', including their variants and syntactic structure. The analysis of CK NPIs in non-negative contexts examines the usage of equivalent NPIs, focusing on the observed variants and their differences from the negative contexts. These results offer valuable insights into the syntactic behavior and variations of CK NPIs across different linguistic environments.

5.1. Analysis of CK NPIs in negative contexts

To account for the perplexing data discussed in the previous section, we assume that the nominal syntax in CK allows for complex nominal expressions which have two determiners simultaneously within a single DP. That is to say, we agree with Tahir (2018) that the DP involves two layers within the nominal constituent. Nonetheless, we modify his analysis and combine it with that of CP2014. We suggest that DP includes two Ds, i.e. the negative element *hych* and the indefinite article *-ek*. That is to say, we adopt the split DP hypothesis proposed in several studies (e.g. Ihsane & Puskás, 2001; Bernstein, 2001; Ihsane, 2003; Aboh, 2004; Svenonius, 2004; Giusti & Iovino, 2016; among others), and represented by as follows:

$$(23) \quad [{}_{\text{DP-ext}} D_{\text{ext}} [{}_{\text{DP-int}} D_{\text{int}} [{}_{\text{NP}} \text{N}]]] \quad (\text{Isac \& Kirk, 2008, p. 140})$$

In assuming that CK is a split-DP language, we suggest that the D splits in two heads; the external D, which is lexicalized by *hych*, realizes negation, and the internal D, which is lexicalized by the indefinite article *-ek*, realizes indefiniteness. The following representation is illustrative:



NPIs *hych kasek* 'anyone' and *hych shitek* 'anything' start the derivation with two DP layers that have the external D *hych* (i.e. D_{NEG}) and the internal D *-ek* (i.e. D_{SOME}), as suggested by CP2014. Since 'the split yields different positions for determiners with different interpretive values' (Giusti & Iovino, 2016, p. 18), the free morpheme *hych* is the only candidate which can move to the highest specifier position. This is reminiscent of the concept of "semantemes that are split and interrupted" (Al-Bataineh, 2022, p.71). The reason is that *-ek*, which is affixal in nature, needs to attach to the moved NP either by D lowering onto

N by the operation of affix hopping or N moves to D by N-to-D movement. We argue that N moves to D as exemplified in the tree above for syntactic reasons related to case assignment, agreement, and word order in Izafe constructions (see Tahir, 2018, for detailed discussions). As correctly stated by Hsu and Syed (2020, p. 116), this split takes place because ‘cooccurrence restrictions between two determiners arise when those determiners compete to fill a unique position’. The unique positions for D_{NEG} *hych* and D_{SOME} *-ek* are represented above.

However, this representation is simplified and does not show the intricate interactions between the two Ds *hych* and *-ek* on one hand and the NPs *kas* ‘one’ and *shit* ‘thing’ on the other. The following subsections discuss these interactions in more detail.

5.1.1. (*Hych*) *kasek* ‘anyone’ and *hych shitek* ‘anything’

As discussed in the overview section, *hych kasek* ‘anyone’ and *hych shitek* ‘anything’ have distinct morpho-syntax, and they show some peculiarities with regard to the presence of *hych*. The NPI *hych kasek* ‘anyone’ has an optional D_{NEG} *hych* as in (25), whereas *hych shitek* ‘anything’ has an obligatory D_{NEG} *hych* as its absence leads to ungrammaticality, as shown in the contrast in (26):

(25)

<i>(hych)</i>	<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-nās-im</i>
no	one-INDEF	with-this	name	NEG-know.PRS-1SG

‘I do not know anyone with this name.’

(26) a.

<i>hych</i>	<i>shit-ek</i>	<i>sabārat</i>	<i>ba-m</i>	<i>bābata</i>	<i>nā-zān-im</i>
no	thing-INDEF	concerning	with-this	subject	NEG-know.PRS-1SG

‘I do not know anything about this subject.’

b.

<i>*shit-ek</i>	<i>sabārat</i>	<i>ba-m</i>	<i>bābata</i>	<i>nā-zān-im</i>
thing-INDEF	concerning	with-this	subject	NEG-know.PRS-1SG

‘I do not know anything about this subject.’

The perplexing behavior of *hych* can be straightforwardly accounted for by proposing a correlation between the D_{NEG} *hych* and the semantic content of the NP, more specifically, the animacy feature carried by the NP. If the NP has the [ANIMACY] feature, as in the case of *kas* ‘one’, the D_{NEG} *hych* may be unpronounced. Otherwise, it is obligatory. This testable hypothesis has some implications and is supported by data to be discussed and elaborated below. Based on this understanding, (*hych*) *kasek* ‘anyone’ and *hych shitek* ‘anything’ have the following representations:

(27)



In both representations, we notice that (*hych*) *kasek* ‘anyone’ and *hych shitek* ‘anything’ are morphologically composed of the D_{NEG} *hych*, an N (*kas* ‘one’ or *shit* ‘thing’), and the indefinite article the D_{SOME} *-ek*. The question here is that how the literal meaning of each NPI changes from ‘no one/nothing’ to ‘anyone/anything’. To answer this question, let us first highlight that the semantics of ‘any’ is realized only in negative contexts. In both (25) and (26), there are two NEG elements, the negative element *nā-* prefixed to the verb and the negative element *hych*. This phenomenon is similar to that in Serbian-Croatian data,

(28a), and nonstandard English data, (28b), (from Collins & Postal, 2017a p. 345, 352; see also Blanchette, 2015; Robinson & Thoms, 2021):

(28) a.

<i>Milan</i>	<i>*(ne)</i>	<i>vidi</i>	<i>ništa</i>
Milan	not	see	nothing

'Milan cannot see anything.'

b. I **ain't** punched **nobody**.

In such structures, two negative elements are present: the first NEG *ne* and *n't* and the second one recognized as part of the NPI *ni-* and *no-*. Such data of NPI structures are referred to as resumptive or copy NEG. The underlying structure of the NPIs in such contexts is as in (29):

(29) $[_{DP} [NEG_1 \text{ SOME}] [_{NP} X]]$ X = body/thing

In CK, Serbian-Croatian, and nonstandard English, NEG₁ raises out of the DP leaving a resumptive/copy NEG. In nonstandard English, the structure suggested for (28b) by Collins and Postal (2017a, p. 347) is as follows²:

(30) $I_{AUX} \text{NEG}_1 \text{punch} [_{DP} [cNEG_1 \text{ SOME}] [_{NP} \text{body}]]$
NEG raising + copying

In CK, (*hych*) *kasek* 'anyone' and *hych shitek* 'anything' have an equivalent structure because in both phrases the negative element *hych* is realized on both the DP and the verb. For example, in (25), simplified in (31), the raising of NEG *hych* to the VP *nānāsīm* 'do not know' leaves a resumptive/copy NEG behind on the DP. Therefore, the underlying structure for the NPI can be represented as in (32a), exemplified in (32b):

(31)

<i>hych</i>	<i>kas-ek</i>	<i>nā-nās-im</i>
no	one-INDEF	NEG-know.PRS-1SG

'I do not know anyone.'

(32) a. $\text{NEG}_1 \text{V} [_{DP} [cNEG_1 \text{ SOME}] [\text{one}]]$
NEG raising + copying

b. $nā_1 \text{V} [_{DP} [chych_1 \text{ SOME}] [kas]]$
NEG raising + copying

Although the word order in Central Kurdish is different from Serbian-Croatian and nonstandard English above, that is, CK has OV, rather than VO word order, the operation of NEG raising is the same. As correctly argued by Kareem (2016), the underlying word order in CK is OV only when the argument is a DP or a PP which must move out of the VP. Evidence in support of this argument is that when the argument is a CP, no movement takes place, as shown in the following example (see Kareem, 2016, for detailed discussion):

(33)

<i>min</i>	<i>de-zān-im</i>	<i>ke</i>	<i>ew</i>	<i>mamosta-(y)e</i>
I	IND-know.PRS-1SG	that	he	teacher-be.PRS.3SG

'I know that he is a teacher.'

(Kareem, 2016, p. 83).

However, as indicated above, the presence of *hych* is optional in *hych kasek* and obligatory in *hych shitek* for reasons related to the semantic feature [ANIMACY] in the N. The optional presence of *hych* in (*hych*) *kasek* 'no one' is the result of applying one of two syntactic strategies; either raising and copying or just raising. When *hych* is present, the first strategy is applied with a surface structure that includes negation in both the NPI and the VP, and when *hych* is absent, only raising is applied without copying. The obligatory presence of *hych* in **(hych) shitek* 'anything' is the result of applying the first strategy, viz.,

raising and copying, as the second strategy is ruled out due to the ungrammaticality of not leaving a copy with inanimate entities.

These assumptions lead us to maintain that in CK raising DNEG *hych* is an obligatory process which may leave a resumptive copy. We argue that the negative prefix *nā-* is actually the suppletive form of the raised DNEG *hych* in both (25) and (26). This argument suggests that there are three patterns with regard to raising NEG. The first pattern includes languages like Ewe (Collins et al., 2017, p. 10), Serbo-Croatian, and non-standard English (Collins & Postal, 2017, p. 353; Blanchette, 2015; Robinson & Thoms, 2021) in which the moved NEG must leave a copy. The second pattern includes a language like Standard English in which the moved NEG cannot leave a copy. The third pattern includes a language like CK in which the moved NEG may leave a resumptive copy. These three cross-linguistic patterns are summarized in (34):

(34) The cross-linguistic patterns regarding copying the moved NEG:

- i. The resumptive copy is obligatory (e.g. Ewe, Serbo-Croatian, and non-standard English)
- ii. The resumptive copy is impossible (e.g. standard English)
- iii. The resumptive copy is optional (e.g. CK)

Collins and Postal (2014) discuss the behavior of NEG-words like *never* in Standard English, but they do not take into their consideration the behavior of the same words in non-standard English. In non-standard English a NEG-word like *never* has two patterns, i.e. *don't ever* and *don't never*. The first pattern is similar to Standard English since the NEG is raised to a post-Aux position and realized as not exactly like JACK class minimizers which require the NEG to be raised and SOME to be null. The second pattern is different because there are two NEG elements, the first is raised to a post-Aux position and realized as *not*, and the second is recognized as part of the NEG-word *never*. These two possible patterns suggest that in non-standard English there are two strategies involved, viz., raising only (in *don't ever*) or raising and coping (in *don't never*), similar to CK in which the resumptive copy is optional.

However, the third pattern exemplified by CK becomes more evident when we consider two facts. First, the absence of the negative prefix *nā-* on the verb leads to ungrammaticality because what determines the well-formedness of the sentence is the obligatory movement of NEG *hych*, rather than, the presence of NEG within the DP domain, bearing in mind that *hych* is optional with animates, as exemplified in (35):

(35)

<i>(hych)</i> no	<i>kas-ek</i> one-INDEF	<i>*(nā)-nās-im</i> NEG-know.PRS-1SG
‘I do not know anyone.’		

Second, in contexts where the NEG *hych* does not exist; that is, in affirmative sentences lacking *nā-*, the NPI cannot mean ‘anyone/anything’, rather it means ‘someone/something’ (more details are left to the section about non-negative contexts). Consider (36):

(36)

<i>shit-ek</i> thing-INDEF	<i>la-m</i> of-this	<i>bābata</i> subject	<i>da-zān-im</i> IND-know.PRS-1SG
‘I know something about this subject.’			

This suggests that what determines the semantics of the NPI is the movement of NEG from the original DP to a higher position. With this in mind, we propose that NPIs can have the semantics of ‘anyone’ or ‘anything’ only in the following context which explains the mapping of D_{SOME} *-ek*. Notice that, unlike a language like English which has different spell-outs of SOME as *any*, *some*, or *no*. SOME in CK is realized by the D_{SOME} *-ek* which has only one form regardless of the environment in which it occurs. The following mapping and the subsequent ones below are intended as semantic, rather than phonological mapping (the quotation marks indicate the change of meaning depending on the context):

(37) The D_{SOME} *-ek* → ‘any’ mapping (first version)

- i. $DSOME -ek \rightarrow$ 'any', in the context [$\langle NEG \rangle$ ___] (NEG is optionally pronounced with animates as it raises with or without a resumptive copy)
- ii. $DSOME -ek \rightarrow$ 'any', in the context [NEG ___] (NEG is obligatorily pronounced with inanimates as raising must leave a resumptive copy)

In both contexts, we notice that although $DNEG$ *hych* has a significant syntactic role as it raises with or without a copy to provide the right configuration under which the NPI means 'anyone/anything', it does not have a semantic content; the double negation in both the DP and VP does not mean that the sentence is interpreted as negated twice, rather it is negated once, as shown in (38) and (39):

(38)

<i>(hych)</i>	<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-nās-im</i>
no	one-INDEF	with-this	name	NEG-know.PRS-1SG

'I do not know anyone with this name.'

'#I do not know no one with this name. = #I know someone.'

(39) I ain't punched **nobody**.

'I didn't punch anyone.'

'#I didn't punch no one. = #I punched someone.'

In brief, the presence of the resumptive copy on the DP does not change the fact that the NPI is interpreted as 'anyone/anything' despite the presence of the copy NEG in the DP. This argument becomes more evident when we consider other variants of these NPIs.

Before we proceed to the next section, we highlight that one of the key findings of Haspelmath's (2001) seminal typological research is that 'it is not possible to establish a one-to-one mapping between any two languages' indefinite pronouns' meaning and distribution' (Denić et al., 2020, p. 168). Therefore, the mappings in this paper are intended to cover the indefinite pronouns system only in CK. Moreover, the English translations do not capture the subtle semantic differences and lead to no distinction in meaning between the variants of CK NPIs. To clear up the confusion caused by the English translation, we state that NPIs roughly translated as 'anyone' and 'anything' represent more emphatic/stronger negation, i.e. more expressive negation with the presence of scalarity; that is to say, they express the endpoint of a pragmatic scale, therefore, they are indefinite pronouns which are interpreted as existential quantifiers over a widened domain of possible referents. In contrast, NPIs translated as 'no one' or 'nothing' represent normal/non-emphatic negation, i.e. they lack the expressive negation due to the absence of pragmatic scalarity (i.e. no scalar endpoint) since they are indefinite pronouns interpreted as negated existential quantifiers over some domain of possible referents. In other words, the distinction between these two categories of NPIs is related to the quantification domain; NPIs meaning 'anyone/anything' are wide scope indefinites whereas those with 'no one/nothing' readings are narrow scope indefinites (cf. Denić et al., 2020; Haspelmath, 2001). The following examples are illustrative:

(40) a.

<i>hych</i>	<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-bin-im</i>
no	one-INDEF	with-this	name	NEG-see.PRS-1SG

'I do not see **anyone at all/whatsoever** with this name.'

(more emphatic negation with pragmatic scalarity).

b.

<i>(hych)</i>	<i>kas</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-bin-im</i>
no	one	with-this	name	NEG-see.PRS-1SG

'I see **no one** with this name.'

(normal negation with no pragmatic scalarity).

The distinction becomes clearer in non-negative contexts such as questions and conditionals. Notice that the given interpretations are not possible with 'no one':

(41) a.

<i>agar</i>	<i>hych</i>	<i>kas-ek</i>	<i>hargez</i>	<i>ba-m</i>	<i>nāwa</i>
if	no	one-INDEF	at all	with-this	name
<i>da-nās-ī</i>	<i>yaksar</i>	<i>pe-m</i>	<i>ble</i>		
IND-know.PRS-2SG	immediately	to-me	say.PRS.3SG		

'If you know anyone at all with this name, tell me immediately.'

b.

<i>to</i>	<i>hych</i>	<i>kas-ek</i>	<i>da-nās-it</i>	<i>la</i>	<i>we</i>
you	no	one-INDEF	IND-know.PRS-2SG	at	there

'Do you know anyone at all down there?'

However, the other variants interpreted as 'someone' and 'something' are different from the previously discussed ones since they are not NPIs; they indicate non-negative indefinite pronouns referring to specific (known or unknown) or unspecific referent (Denić et al., 2020, p. 169):

(42) a.

<i>kas-ek</i>	<i>twān-i</i>	<i>ʔama</i>	<i>tek</i>	<i>bi-dat.</i>
one-INDEF	able.PST-3SG	this	mess	SUB-give.PST.3SG
<i>ema</i>	<i>day-zān-in</i>	<i>ke-ya</i>		
we	ind-know.PRS-1PL	who-be.PRS-3SG		

'Someone managed to mess this up. We will know who.'

b.

<i>bīst-im</i>	<i>kas-ek</i>	<i>sarkawtū</i>	<i>na-bū</i>	<i>balām</i>
hear.PST-1SG	one-INDEF	success	NOT-be.PST.3SG	but
<i>nā-zān-im</i>	<i>ke-ya</i>			
NEG-know.PRS-1SG	who-be.PRS-3SG			

'I heard that someone failed, but I do not know who.'

c.

<i>lawanaya</i>	<i>bāstir</i>	<i>be-t</i>	<i>qisa</i>	<i>lagal</i>	<i>kas-ek-ī</i>
probably	better	be.PRS-3SG	talk	with	one-INDEF-POSS
<i>tir</i>	<i>bi-kayt</i>	<i>darbāi</i>	<i>ʔam-ash</i>		
other	IND-do.PRS.2SG	about	this-too		

'You should probably talk to someone else about this too.'

Therefore, the proposed analysis of the different variants of CK NPIs is based on the different contexts in which the NPIs are used to mean 'any' with emphatic negation, 'no' with normal negation, or 'some' with non-negative indefiniteness.

5.1.2. (*Hych*) *kas* 'no one' and *hych* 'nothing'

The last point discussed above is that DNEG *hych* becomes semantically null when the NPI is interpreted as 'anyone/anything'. This situation becomes different when the NPIs occur as (*hych*) *kas* 'no one' and *hych* 'nothing', because the DNEG *hych* is contentful with the semantics of 'no'. This raises the question of why such a change takes place. To answer this question, let us first highlight that NPIs with the semantics of 'any', D_{SOME} *-ek* is always present in the forms *hych kasek* 'anyone' and *hych shitek* 'anything'. This suggests that D_{SOME} *-ek* can mean 'any' only in the context where it combines with DNEG *hych*. That is to say, the semantics of 'any' arises under binding of NEG and SOME. However, this binding is not possible in the case of (*hych*) *kas* 'no one' and *hych* 'nothing', because the D_{SOME} *-ek* is absent either phonologically (i.e. D_{SOME} *-ek* is syntactically present but it has a null phonological form as in *hych kas* 'no one') or syntactically (i.e. D_{SOME} *-ek* does not merge at all as in *hych* 'nothing'). This argument will be elaborated in detail in this section. For now, let us consider the first peculiarity shown in the contrast in (43) and (44):

(43)

(<i>hych</i>)	<i>kas</i>	<i>ba-m</i>	<i>nāwa</i>	<i>nā-bin-im</i>
no	one	with-this	name	NEG-see.PRS-1SG

'I see no one with this name.'

(44) a.

<i>*shit</i>	<i>sabārat</i>	<i>ba-m</i>	<i>bābata</i>	<i>nā-zān-im</i>
thing	concerning	with-this	subject	NEG-know.PRS-1SG

'I know nothing about this subject.'

b.

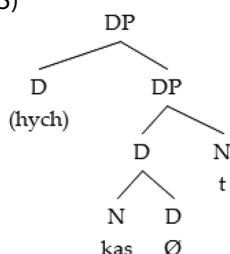
<i>*hych</i>	<i>shit</i>	<i>sabārat</i>	<i>ba-m</i>	<i>bābata</i>	<i>nā-zān-im</i>
no	thing	concerning	with-this	subject	NEG-know.PRS-1SG

'I know nothing about this subject.'

In (43), both forms *hych kas* and *kas* are allowed because, as highlighted above, *hych* is optional when the NP denote an animate entity. Following the same line of logic, we expect that *hych shit* (with an obligatory *hych*) is possible, contrary to fact. As shown in (44a, b), the form **shit* is ruled out because *hych* is obligatory with inanimates, as discussed for **(hych) shitek* 'anything' above, and the peculiarity here is why **hych shit* is also not permitted.

We argue that the presence of D_{SOME} makes possible for 'no one' to be realized as *hych kas* and *kas* whereas its absence makes the forms **hych shit* and **shit* for 'nothing' unacceptable. To make this argument clearer, let us consider the derivation for *hych kas* and *kas* 'no one':

(45)



As discussed in the previous section, the indefinite article *-ek* requires the movement of N to D due to its affixal nature. We follow the same argument here and assume that the presence of D_{SOME} *-ek* makes possible for the forms *hych kas* and *kas* 'no one' to be allowed as evidenced by the position of *kas* after *hych*. The only difference between the given forms and those meaning 'anyone' is that in the former D_{SOME} has null realization whereas in the latter it has the suffixal form *-ek* in *hych kasek* and *kasek*. More precisely, D_{SOME} has two realizations, i.e. *-ek* and \emptyset , to differentiate between the two lexemes 'anyone' and 'no one', respectively (see also Blanchette 2015 and Robinson & Thoms 2021 for similar discussion).

Following the same line of thought, we assume that the two forms **hych shit* and **shit* are not allowed because of the absence of D_{SOME} in both the null and *-ek* forms (i.e. **shit-∅* and **shitek*); that is, it does not merge in D_{int} ; there are not two DP layers as there is only one determiner, viz., D_{NEG} (i.e. no split-DP analysis is needed for this structure). The reason for not projecting the D_{SOME} is related to the absence of N which does not merge in the structure. Therefore, the D_{SOME} cannot be projected. The only D in this structure is the D_{NEG} *hych* which is analogous to a pronoun which does not always require a lexical N complement, but can be merged into the projection of N heads, adding a sense of negation. Without the N, the default reading of *hych* is limited to inanimate entities, thus the meaning of *hych* by itself is 'nothing', whereas merging *hych* into the projection of an N like *kas* restricts the interpretation to animates, and the resulting meaning is 'no one'.

There is a correlation between the 'no' meaning of *hych* and the absence of the D_{SOME} *-ek*. This correlation becomes clear when we notice that the unavailability of *-ek* associates with the unavailability of the N in the sense that the presence of N conditions the presence of *-ek*. This phenomenon seems to go hand in hand with another one related to the type of *hych*, as discussed below, there are two types of *hych*: the default *hych* which associates with N-deletion and projects only with inanimates, while the other marked one associates with N-presence and projects only with animates (see Table 2 below).

Based on this argument, we can explain the second peculiarity here with regard to the question why *hych* by itself means 'nothing' but not 'no one', as shown in (46):

Table 2. Default and marked DNEG.

Default DNEG	Marked DNEG
* <i>hych shit</i>	<i>hych kas</i>
* <i>shit</i>	<i>kas</i>
<i>hych</i>	* <i>hych</i>

(46)

<i>hych</i>	<i>nā-zān-im</i>
no	NEG-know.PRS-1SG
'I know nothing.'	
'#I know no one.'	

Assuming the correctness of the given arguments, we differentiate between two types of DNEG, the default *hych* which associates only with Ns referring to inanimates, and the marked *hych* which selects an internal DP with D_{SOME} as the head, as shown in the following table. The correlation between the presence/absence of N and the two different types of DNEG shows that the absence of N is allowed only when the two strict requirements, viz., recoverability and licensing are fulfilled (Aelbrecht, 2010). Regarding the default *hych*, the meaning can be easily and straightforwardly deduced from the context because the referent is always inanimate. Relatedly, the N cannot be absent with the marked *hych* because both recoverability and licensing cannot be fulfilled. The meaning is not straightforwardly deduced because the presence of D_{SOME} enables two possible meanings, viz., no one and anyone, as discussed above. In addition, licensing is also not allowed simply because the marked DNEG cannot be a licensing head since it selects for a DP, rather than an N. Further discussion is left to the following section below.

In addition to the given morphological and distributional differences between the two types, notice that default DNEG cooccurs only with nominals carrying [-ANIMATE] feature, hence the ungrammaticality of using it as an answer to wh-questions that ask about persons, locations and times, that is to say, the default DNEG *hych* can only mean 'nothing'; other meaning like 'no one', 'nowhere', or '[at] no time' are ruled out:

(47) a.

<i>chy</i>	<i>da-zān-it?</i>	<i>hych</i>
what	IND-know.PRS-2SG	nothing
'What do you know? Nothing.'		

b.

* <i>che</i>	<i>da-nās-it?</i>	* <i>hych</i>
whom	IND-know.PRS-2SG	no one
'Whom do you know? *No one.'		

c.

* <i>chewa</i>	<i>da-ro-n?</i>	* <i>hych</i>
where	IND-go.PRS-3PL	nowhere
'Where do you go? *Nowhere.'		

d.

* <i>key</i>	<i>da-ro-n?</i>	* <i>hych</i>
when	IND-go.PRS-2PL	[at] no time
'When do you go? *[at] no time.'		

However, this argument indicates that the two types of *hych* exist in a complementary distribution which is generated by the parameter setting BOTH. When both the DNEG and D_{SOME} exist, the marked *hych* selects Ns denoting animate entities and projecting as an internal DP which in turn allows for a split DP. When D_{SOME} does not merge, the default *hych* exists as the only syntactic unit within the DP. This parameter setting can be stated differently as follows: the marked DNEG exists only in a split D with a bundling of features, whereas the default DNEG exists when no bundling is possible (see, e.g. Hsu & Syed 2020 for an analysis of similar phenomena). The bundling parameter seems to be crucial not only to capture variation in the forms denoting 'no one' and 'nothing' available in CK, but also for the forms related to 'anyone' and 'anything' discussed in the preceding section. In sum, there are three patterns with regard to the application/nonapplication of the bundling parameter, demonstrated as follows (bearing in mind that *hych* with animates is an optional resumptive copy of the moved NEG, the bundling parameter accounts for all the different variations discussed so far):

(48) The bundling parameter

- i. Both the D_{NEG} and D_{SOME} *-ek*: *hych kasek* 'no one/anyone' and *hych shitek* 'nothing/anything'
- ii. Both the D_{NEG} and D_{SOME} \emptyset : only *hych kas* 'no one'
- iii. nonapplication of the bundling parameter: only *hych* 'nothing'

The last point to mention here is the semantic mapping of D_{NEG} *hych* → 'no', which can be demonstrated as follows:

(49) The D_{NEG} *hych* → 'no' mapping

- i. D_{NEG} *hych* → 'no', in the context [\langle NEG \rangle D_{SOME} \emptyset ___] (NEG is optionally pronounced with animates when D_{SOME} \emptyset is present)
- ii. D_{NEG} *hych* → 'no', in the context [NEG <NP>] (NEG is obligatorily pronounced with inanimates when D_{SOME} \emptyset is absent)

6. Analysis of CK NPIs in non-negative contexts

As discussed in the literature review, CP2014 argue for two fundamental types of NPIs; Unary-NEG structures which involve a single NEG and the binary-NEG/reversal structures which have two covert NEG. These two types are represented as follows (CP2014:31):

- (50) a. [α NEG X] (unary-NEG NPI)
 b. [α NEG [NEG X]] (binary-NEG NPI/reversal)

NPIs in CK challenge the crosslinguistic validity of the representation in (50b) because in non-negative contexts, the binary-NEG NPI does not involve two covert NEG. Other languages also challenge the representation of binary-NEG/reversal structures in Collins and Postal (2014, p. 31). Neg-words in Romance are also acceptable in non-negative contexts, as in the following examples (Becerra Zita, 2021, p. 335–336).

- (51) a.
- | | | | |
|--------------------|--------------|-----------------|-----------|
| <i>Èv</i> | <i>enuto</i> | <i>nessuno?</i> | |
| has | come | (no)one | (Italian) |
| 'Has anyone come?' | | | |
- b.
- | | | | |
|-----------------------------------|--------------|-------------|-----------|
| <i>Li</i> | <i>diràs</i> | <i>res?</i> | |
| him/her | will.tell | (no)thing | (Catalan) |
| 'Will you tell him/her anything?' | | | |
- c.
- | | | | |
|----------------------------|------------|-----------------|---------|
| <i>Y'a</i> | <i>pas</i> | <i>persone?</i> | |
| There-has | not | (no)person | (Gallo) |
| 'Is anyone/someone there?' | | | |

Now consider (52) and (53) and notice that *hych* is present in both *hych kasek* and *hych shitek* despite the presence of the so-called NEG Deleters such as yes/no question marker and *agar* 'if':

- (52) a.
- | | | | | |
|--------------------------------------|---------------|-------------|-------------|------------------|
| <i>hych</i> | <i>kas-ek</i> | <i>ba-m</i> | <i>nāwa</i> | <i>da-nās-i?</i> |
| no | one-INDEF | with-this | name | IND-know.PRS-2SG |
| 'Do you know anyone with this name?' | | | | |
- b.
- | | | | | |
|----------------------------------|----------------|-----------------|------------|------------------|
| <i>hych</i> | <i>shit-ek</i> | <i>darbāray</i> | <i>min</i> | <i>da-zān-i?</i> |
| no | thing-INDEF | about | I | IND-know.PRS-2SG |
| 'Do you know anything about me?' | | | | |

(53) a.

<i>agar</i> if	<i>hych</i> no	<i>kas-ek</i> one-INDEF	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>da-nās-ī</i> IND-know.PRS-2SG
<i>pe-m</i> to-me	<i>bte</i> say.PRS.3SG				

'If you know anyone with this name, tell me.'

b.

<i>agar</i> if	<i>hych</i> no	<i>shit-ek</i> thing-INDEF	<i>darbāray</i> about	<i>min</i> me	<i>da-zān-ī,</i> IND-know.PRS-2SG	<i>pe-m</i> to-me
<i>bte</i> say.PRS.3SG						

'If you know anything about me, tell me.'

In these examples, we notice that the yes/no question marker and *agar* 'if' do not trigger the deletion of *hych* in both *hych kasek* and *hych shitek*. Nonetheless, we agree with CP2014 that the given NPIs are considered as binary-NEG/reversal because 'a second NEG scoping over the first nullifies the semantic consequences of the first one' (CP2014:30). Notice that the interpretation/translation of the given NPIs in (54) and (53) can be replaced by the indefinite *some* in (54a-d), respectively:

(54) a. 'Do you know *someone* with this name?'b. 'Do you know *something* about me?'c. 'If you know *someone* with this name, tell me.'d. 'If you know *something* about me, tell me.'

This fact indicates that although the forms for 'anyone/anything' have the same NEG *hych* in both negative and non-negative contexts, only in binary NEG NPIs, *hych* is interpreted as *some*. In contrast, this semantic equivalence does not exist in unary NEG NPIs. Consider for example (55) and notice that the replacement does not preserve the semantics of the NPI *hych kasek* (for similar phenomena see Szabolcsi 2004; Collins & Postal 2014):

(55)

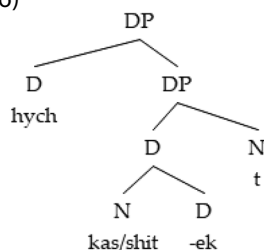
(<i>hych</i>) no	<i>kas-ek</i> one-INDEF	<i>ba-m</i> with-this	<i>nāwa</i> name	<i>nā-nās-im</i> NEG-know.PRS-1SG
-----------------------	----------------------------	--------------------------	---------------------	--------------------------------------

i. 'I do not know anyone with this name=I know no one with this name.'
ii. '?I do not know someone with this name.'

As can be seen in the interpretations of the given sentence, (*hych*)*kasek* cannot be interpreted as 'someone' although it is morphologically identical to the one in (52-53). This indicates that only in binary/reversal NEG, the semantic consequences of NEG in the NPI are nullified, with the result that *anyone* can be interpreted as *someone*. In contrast, in unary NEG, the only interpretation is 'no one' with the semantics of NEG preserved, as shown in the contrast between (55i) and (55ii).

Relatedly, another difference between unary and binary NEG NPIs is that whereas *hych* is always obligatory in *hych shitek* 'anything' in unary NEG structure, it can be optional in both *hych kasek* and *hych shitek* in binary NEG structure. With these two facts in mind, we propose that *hych kasek* and *hych shitek* in non-negative contexts are binary NEG NPIs and can be represented as follows:

(56)



In addition, *hych kasek* can occur in the form of *hych kas* and *kas* and *hych shitek* as *hych* in non-negative contexts as were exemplified in (57) and (58).

(57) a.

<i>hych</i>	<i>kas</i>	<i>ba-m</i>	<i>nāwa</i>	<i>da-nās-ī?</i>
no	one	with-this	name	IND-know.PRS-2SG

'Do you know anyone with this name?'

b.

<i>agar</i>	<i>kas</i>	<i>ba-m</i>	<i>nāwa</i>	<i>da-nās-ī</i>	<i>pe-m</i>	<i>ble</i>
if	one	with-this	name	IND-know.PRS-2SG	to-me	say.PRS.3SG

'If you know anyone with this name, tell me.'

(58) a.

<i>hych</i>	<i>darbāray</i>	<i>min</i>	<i>da-zān-ī?</i>
no	about	I	IND-know.PRS-2SG

'Do you know anything about me?'

b.

<i>agar</i>	<i>hych</i>	<i>da-zān-ī</i>	<i>pe-m</i>	<i>ble</i>
if	no	IND-know.PRS-2SG	to-me	say.PRS.3SG

'If you know anything, tell me.'

As can be seen, the forms *hych kas* and *kas* suggest the same meaning of 'anyone' suggested by the full form *hych kasek* in (52a) and (53a). The speakers consulted confirmed their preference of the full form rather than the shorter forms in such contexts. As such, we suggest that it is a lexical variation and; thus, the derivation in (56) applies to *hych kas* and *kas* as well. *hych* and *-ek* are obligatorily present and projected whether spelled out or not. As to *hych* in (58a-b), it suggests 'anything' similar to *hych shitek* in (52b) and (53b). Moreover, we have argued that default DNEG cooccurs only with nominals carrying [-ANIMATE] feature (see the discussion there).

Assuming the correctness of the given assumptions, we propose the following mapping for SOME → 'any':

(59) The D_{SOME} *-ek* → 'any' mapping (second version)

a. **In unary NEG NPIs**

- i. D_{SOME} *-ek* → 'any', in the context [(\langle NEG \rangle) ____] (NEG is optionally pronounced with animates as it raises with or without a resumptive copy)
- ii. D_{SOME} *-ek* → 'any', in the context [NEG ____] (NEG is obligatorily pronounced with inanimates and raising must leave a resumptive copy)

c. **In binary NEG NPIs**

D_{SOME} *-ek* → 'any', in the context [NEG ____] (NEG is obligatorily projected with both animates and inanimates and no raising of NEG takes place due to the presence of the so-called NEG Deleters).

To revise this mapping and provide its final version, we need to consider the case in which D_{SOME} *-ek* is not involved in NPIs; that is, when it is utilized in non-NPIs denoting 'someone' and 'something'. In such cases, we notice that D_{NEG} *hych* is always absent and there is no interaction between the two Ds. To illustrate, let us consider the following:

(60) a.

<i>kas-ek</i>	<i>ba-m</i>	<i>nāwa</i>	<i>da-nās-im</i>
one-INDEF	with-this	name	IND-know.PRS-1SG

'I know someone with this name.'

b.

<i>shit-ek</i>	<i>la-m</i>	<i>bābata</i>	<i>da-zān-im</i>
thing-INDEF	of-this	subject	IND-know.PRS-1SG

'I know something about this subject.'

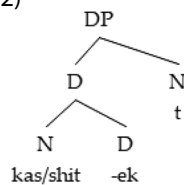
With this in hand, we add the third configuration in (61c) to finalize the $D_{\text{SOME}} -ek \rightarrow \text{'any'}$ mapping, as follows:

(61) The $D_{\text{SOME}} -ek \rightarrow \text{'any'}$ mapping (final version)

- a. In unary NEG NPIs
 - i. $D_{\text{SOME}} -ek \rightarrow \text{'any'}$, in the context [$\langle \text{NEG} \rangle$ ___] (NEG is optionally unpronounced with animates as it raises with or without a resumptive copy)
 - ii. $D_{\text{SOME}} -ek \rightarrow \text{'any'}$, in the context [NEG ___] (NEG is obligatorily pronounced with inanimates and raising must leave a resumptive copy)
- b. **In binary NEG NPIs**
 $D_{\text{SOME}} -ek \rightarrow \text{'any'}$, in the context [NEG ___] (NEG is obligatorily projected with both animates and inanimates and no raising takes place due to the presence of the so-called NEG Deleters).
- c. **In non-NPIs**
 $D_{\text{SOME}} -ek \rightarrow \text{'some'}$, in the context [___] (NEG does not merge and D includes only $D_{\text{some}} -ek$).

That is to say, the only difference between NPIs and non-NPIs is that in the former there is an interaction between D_{SOME} and D_{NEG} , whereas in the latter, no interaction takes place simply because D_{NEG} does not merge in D, as illustrated in the following representation:

(62)



In brief, *hych* is not deleted by the yes/no question marker and *agar* 'if' in both *hych kasek* 'anyone' and *hych shitek* 'anything'; however, it could be unpronounced as demonstrated by the form *kas*. Thus, NEG is obligatory in binary-NEG structures in CK.

Another alternative and plausible approach is that in CK there is a derivational path from plain indefinites to NPIs (or neg-phrases). That is, in CK an NPI can be formed out of a plain indefinite (more specifically a positive polarity item (PPI)), as evidenced in the ungrammaticality of *shitek* under negation.

(63)

<i>*shit-ek</i> thing-INDEF	<i>sabārat</i> concerning	<i>be-m</i> with-this	<i>bābata</i> subject	<i>nā-zān-im</i> NEG-know.PRS-1SG
--------------------------------	------------------------------	--------------------------	--------------------------	--------------------------------------

'I do not know anything about this subject.'

The ungrammaticality of the *shitek* results from being a PPI, but it becomes part of an NPI when it combines with *hych*, as in (64).

(64)

<i>hych</i> no	<i>shit-ek</i> thing-INDEF	<i>sabārat</i> concerning	<i>be-m</i> with-this	<i>bābata</i> subject	<i>nā-zān-im</i> NEG-know.PRS-1SG
-------------------	-------------------------------	------------------------------	--------------------------	--------------------------	--------------------------------------

'I do not know anything about this subject.'

This fact seems cross-linguistically valid, as other languages show similar patterns. In Hungarian 'the addition of the particle *is* "also, even" turns the *vala-* pronouns [*valaki* "someone", *valami* "something"] into negative polarity items [*valaki is* anyone', *valami is* "anything"]' (Szabolcsi, 2002, p. 3). Similarly, Homer (2011) draws a link between the PPI *quelque chose* 'something' and the NPI *quelque chose que ce soit* 'anything' in French. That is, 'French has an overt modifier *que ce soit* whose effect is to turn a PPI into an NPI and this transformation comes with domain widening, which is a hallmark of English any' (Homer, 2011, p. 86). Additionally, this approach is different from C&P since it does not treat *some* and *any* as merely spell-out variants, rather it focuses on their different semantic properties, as in Chierchia's (2013)

framework, for example, *any* activates a certain kind of alternatives, different from the alternatives that *some* activates. That is to say, ‘the key difference between *some* and *any* [is] that the alternatives associated with *some* are active only when relevant, while the alternatives associated with *any* are always active’ (Chierchia, 2013, p. 34). However, the pursuit of this approach has to be left for future research.

7. Conclusion

This paper has looked into the syntax and structure of two commonly used NPIs in CK: *hych kasek* ‘anyone’ and *hych shitek* ‘anything’. It was shown that *hych kasek* suggests the same range of variants in negative and non-negative contexts (these are *kasek*, *kas* and *hych kas*). In contrast, *hych shitek* demonstrates a different set of variants in these contexts. For example, in negative contexts the only possible variant of *hych shitek* is *hych*. In contrast, in non-negative contexts, *shitek* is also allowed; however, it does not function as a negative polarity item because *hych* is obligatory in binary-NEG structures.

The analysis has provided new insight into the structure of negative polarity items and the proposals in CP2014 where NPIs are taken as negative quantificational DPs. More specifically, since CK allows a split-DP structure, we have argued that the D in these NPIs can split into two Ds: (D_{NEG}) lexicalized by the negative element *hych* and D_{SOME} lexicalized by the indefinite article *-ek*. Moreover, the distinction between unary-NEG structure and binary-NEG structure has been well observed in the semantics suggested by *hych kasek* and *hych shitek* in such structures. In the former the NEG element represented as *hych* is optional (in case of *hych kasek*) or obligatory (in case of *hych shitek*), whereas in the latter *hych* is obligatory in both NPIs. Accordingly, through the CK data presented in this study, a third pattern of NEG raising can be proposed where NEG raises with or without leaving a resumptive copy.

This study has focused on examining the properties and structure of *hych kasek* and *hych shitek*. By analyzing these phrases, we gain a better understanding of how they vary and behave in different language situations. However, it is important to note that this study has certain limitations. It specifically concentrates on these two phrases in CK, so we need to apply the findings to other languages or similar negation phrases to test the validity of the analysis. Additionally, the study does not include quantitative analysis, which means we do not have numerical data to make strong statistical conclusions. Furthermore, the study primarily looks at how these phrases are used in negative and non-negative situations, potentially overlooking important variations that may occur in other linguistic contexts. Nevertheless, the findings of this study align with previous proposals made by Collins and Postal (2014), supporting the idea that CK NPIs function as negative quantificational determiner phrases (DPs). Moreover, the study adopts the concept of ‘split-DP structure’ in CK, where the determiner splits into two parts: D_{NEG} and D_{SOME}. This finding expands our knowledge of the morpho-syntactic features of CK NPIs. Additionally, the study suggests a third pattern of NEG raising, which contributes to our understanding of how negation works in CK. In summary, despite the limitations, this study provides valuable insights into CK NPIs, supporting existing theories, and proposing new ideas about their structure.

Notes

1. Abbreviations in the glosses: 1/2/3: first/second/third person, CL: clitic, DEF: definite article, EZ ezafe, IND: indicative, INDEF: indefinite article, NEG: negation element, PERF perfect, PST: past, PL: plural, PRS: present, Q: question particle, SG: singular, SUB: subjunctive. *kas* can be interpreted as ‘one’, ‘person’ or ‘body’ referring to a person. For unification purposes, the word will be glossed as ‘one’ in the whole paper.
2. An alternative structure for (32b) can be found in White-Sustaita (2010) who proposes an analysis along the lines of Concord. For further details, interested readers are referred to White-Sustaita (2010). Other alternative analyses discussed in detail by Shormani and Alhussen (2024) propose the projection of “two NegPs, the first of which [including the raised NEG] is above TP, and the second [including the resumptive/copy] below TP.” While this perspective offers a plausible interpretation, it is not within the scope of this study for further investigation.

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