

“Reflexive” N is not a detransitivizer: Evidence from Turkish and Old Turkic

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Abstract. The so-called “reflexive” suffix *-n-* is sometimes characterized as a detransitivizer that derives anticausatives. This paper argues against this view, on the basis that some of the functions of the so-called “passive” suffix have been erroneously attributed to the “reflexive,” since the two suffixes are homophonous in certain environments across Turkic languages. Data from Turkish and Old Turkic (Old Uygur) are evaluated while controlling for phonological environment. The results show that the “reflexive” does not derive anticausatives. Instead, all affixal anticausatives are derived with the “passive” morpheme, which, unlike the “reflexive” is a true detransitivizer.

Keywords. reflexive; passive; anticausative; detransitivization; Turkish; Old Turkic

1. Introduction. The Turkish “reflexive” suffix *-n-* and its cognates elsewhere in Turkic have been claimed to be detransitivizers (e.g., van Schaaik 2001; Erdem 2015; Gündoğdu 2017; Zaslansky 2023). Herein I argue against this view. Overlapping allomorphy of the “reflexive” and “passive” suffixes has led to confusion over the function of this suffix. Most studies that make this assumption acknowledge that the passive, canonically marked with *-l-*, occurs as *-n-* in certain environments, yet they do not subsequently control for these environments. There are non-trivial differences between the claims made in these works, and I cannot do them justice in this short paper, so I will focus on one recent example that is of particular relevance.

Zaslansky (2023) claims that *-n-* is a detransitivizer in Old Turkic and in modern Turkic languages. Based on Turkic data and findings from work on diachronic typology, he posits that *-n-* originated in Turkic pre-history as a detransitivizer and reflexivizer, and that it later developed an anticausative function prior to the Old Turkic period.¹ His evidence consists of examples from Old Turkic and modern Turkic languages where an intransitive verb suffixed with *-n-* contrasts with an unsuffixed transitive verb. However, nearly all of his examples involve environments that are known to condition the *-n-* allomorph of the “passive” in Turkic (see 2.1.).

This work is an attempt to untangle the valency properties of these two morphemes in modern Turkish and Old Uygur (9th–13th c.) by controlling for phonological environment. The results indicate that detransitivization, and specifically anticausative formation, are properties of the passive suffix (whose default form is *-l-*) but not of the reflexive. Cases where a suffix of the form *-n-* exhibits these properties involve verb stems containing // or ending in a vowel, environments where the passive exponent tends to be *-n-* rather than *-l-* in Turkic. The apparent anticausative function of *-n-* is really a case of mistaken identity, and represents the “passive” morpheme rather than the “reflexive.” When the data are restricted to consonant-final stems that do not contain //, convincing cases of anticausatives marked with *-n-* vanish. The effect is especially stark for Old Turkic: In the controlled Old Uygur dataset, the majority of *-n-*-marked verbs are transitive. Furthermore, *-n-* has a higher rate of transitivizing an intransitive verb than of detransitivizing a transitive one, although more often it has no effect at all on transitivity.

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¹ Zaslansky is also concerned with non-oppositional suffixed verbs for which no contrasting basic form exists (the so-called *deponents*), and with the diachronic development of “reciprocal” *-š-*. These are outside the scope of the present study.

The paper is organized as follows: Section 2 addresses some confounds in assessing the reflexive suffix. Section 3 presents a study on modern Turkish verbs derived with *-l-* and *-n-* wherein the phonological properties of the verb stem are controlled for. Section 4 presents a similar study on Old Uygur. Section 5 concludes.

2. Confounds. 2.1. ALLOMORPHY AND HOMOPHONY. The so-called “passive” and “reflexive” suffixes have overlapping allomorphy in the Turkic languages. The passive, typically realized as *-l-*, occurs as *-n-* in certain environments, where it is identical to the reflexive suffix. Stems that condition the *-n-* allomorph of the passive include those ending in a vowel, and those containing // . Johanson (2021) states, “In most old and more recent languages, the marker {-n} derives undifferentiated passive-reflexive-medial verbs when attached to vowel-final stems” (2021:585); he cites examples from Turkish, Tatar, Crimean Tatar, Chuvash, Dukhan, and Yakut. In other languages, the allomorphy is strictly based on dissimilation, as in for example Kazakh, where the passive is generally *-l-* after a vowel, but *-n-* with a stem containing // : *ˈoqı-l-* ‘to be read’ (Johanson 2021:586), *bayqa-l-* ‘to be noticed’, but *bayla-n-* ‘to be tied’ (Şahan Güney 2006:130). The same is true in Uzbek: *oqi-l-* ‘be read’ but *aldā-n-* ‘be deceived’ (< *aldā-* ‘deceive’; Boeschoten 2022:395). Note that the // need not necessarily be at the end of the stem or even in the final syllable to trigger dissimilation. The details vary from language to language, but importantly the default passive and reflexive allomorphs remain distinct in most if not all Turkic languages. For convenience, I adopt the following notation:

- (1) N = the set of morphemes whose default exponent is *-n-*
 L = the set of morphemes whose default exponent is *-l-*

Applying this convention to Turkish, we can describe the distribution of exponents as follows:

- (2) N ↔ *-n-* everywhere
 L ↔ *-n-* stems ending in // or a vowel
 L ↔ *-l-* elsewhere

Despite homophony in some environments (where both sets of morphemes have *-n-*), the respective functions can be teased out by focusing on stems where the default allomorphs occur (the approach adopted in Key 2021). In this way, we find that L derives passives and impersonals but N does not. Where a form with *-n-* exists, it is never passive/impersonal.

- (3) Passive
yaz-ul- ‘to be written’ **yaz-un-*
giy-il- ‘to be worn’ *giy-in-* ‘to get dressed’
- (4) Impersonal
koş-ul- ‘(for one to) run’ **koş-un-*
kaç-ul- ‘(for one to) flee’ *kaç-in-* ‘to avoid’

We can thus be confident that, following // or a vowel, passives and impersonals appearing with *-n-* are instances of L, not N.

- (5) *bil-in-* ‘be known’ *oku-n-* ‘be read’
öl-ün- ‘(for one to) die’ *yürü-n-* ‘(for one to) walk’

Some commonly cited cases of detransitivizing *-n-* are post-vocalic, which is a non-contrastive environment for L and N in Turkish.

- (6) Reflexive Anticausative
yika-n- ‘wash (oneself)’ *kapa-n-* ‘close (int.)’

As Key (2021, 2025) shows, “passive” L derives both reflexives and anticausatives, so we cannot be confident that the suffixes in (6) are the reflexive N and not the passive L.

When we factor out the environments that condition the *-n-* allomorph of L, convincing cases of anticausatives with *-n-* disappear (Key 2021). In this connection, it is noteworthy that Zaslansky’s (2023) cross-Turkic examples of anticausatives with *-n-* are based on stems that end in a vowel and/or contain /ll/, e.g., Yakut *xolbo-n-* ‘join/mix, get joined to something’, Karachay-Balkar *džalya-n-* ‘join/get linked’, Azerbaijani *baɣla-n-* ‘become closed’ (168), and Old Turkic *alk-ın-* ‘disappear, perish’ (< *alk-* ‘destroy’; 179).

2.2. TRANSITIVITY AND DETRANSITIVIZATION. Another factor that contributes to confusion, albeit to a lesser degree, is a lack of clarity about what is meant by *transitivity* and *detransitivization*. In the generative literature, transitivity and valency-changing operations are usually understood in absolute terms—see, for example, Reinhart & Siloni’s (2005) lexical valency reduction operation or Alexiadou et al.’s (2015) nonactive Voice projection; though differing from each other in important respects, these approaches share the properties of reducing the number of syntactic arguments by one, and of eliminating accusative case assignment. In contrast, other work views transitivity as gradient, existing on a continuum from more to less transitive (Hopper & Thompson 1980, Kemmer 1993). As the following sections show, in Turkish and Old Turkic, L is a detransitivizer in the strict sense, while the the impact of N on argument structure is often less absolute.

For the purposes of this study, transitivity is defined in the strict sense as the ability to assign accusative case. Although verbs that assign lexical dative or ablative case might be considered transitive in some regard, I limit the term to the stricter definition primarily because this usage is in line with work such as Reinhart & Siloni (2005) and Alexiadou et al. (2015), whose models of transitivity alternations specifically address the elimination of accusative and no other case. Furthermore, in Turkish there are qualitative differences that distinguish accusative-assigning verbs from those that assign an oblique case alone: only accusative-assigning verbs participate in transitivity alternations, only accusative case participates in differential object marking (DOM), and—in the standard dialect—only the complements of accusative-assigning verbs can occur as a nominative subject in the passive construction (Legate et al. 2020; see Akkuş 2021 on dialectal variation).

When L applies to a transitive verb thus defined, it returns an intransitive verb, whether this be anticausative or reflexive (not to mention passive).

- (7) *aç-* ‘open (tr.)’ *aç-ıl-* ‘open (intr.)’
kır- ‘break (tr.)’ *kır-ıl-* ‘break (intr.)’
tart- ‘weigh (tr.)’ *tart-ıl-* ‘weigh oneself (intr.)’
at- ‘throw (tr.)’ *at-ıl-* ‘throw oneself forward (intr.)’

With N, the results are not always so categorical. Transitive *giy-* ‘put on, wear’ is apparently detransitized by N: unlike the basic verb, *giy-in-* ‘get dressed’ is acceptable without an object.

- (8) a. #(üst-üm-ü) *giy-dim*
clothes-1SG.POSS-ACC wear-PST-1SG
‘I put on #(my clothes).’ (infelicitous out of the blue)

- b. giy-in-di-m
wear-N-PST-1SG
'I got dressed.' (fine out of the blue)

Given the right context, however, *giy-in-* can appear with both an accusative complement and a dative (which is usually omitted even in the basic form). The example below is part of a news headline beginning, "An Out-of-the-ordinary Protest in Ankara!" The situation does not conform to normative expectations of getting dressed, so the full argument structure is warranted.

- (9) Fatura-lar-ı üzer-in-e giy-in-di!
bill-PL-ACC on-3SG.POSS-DAT wear-N-PST
'He wore the bills on himself'
<https://www.yurtgazetesi.com.tr/guncel/ankarada-sira-disi-eylem-faturalari-uzerine-giyindi-h214763.html> (accessed 5/21/2025)

Under the definition adopted herein, *giy-in-* is not the detransitivized version of *giy-*, since it retains the ability to assign accusative case. L verbs, including verbal reflexives, are strictly intransitive, whereas the accusative argument of an N verb is not always eliminated in an absolute sense.

In addition, note that the inclusion of "ability" in the definition is also intended to capture the variation seen in differential object marking, whereby an object is or is not case-marked, depending on its referential and discourse status. Transitive verbs as defined herein have the potential to assign accusative case, though they need not always do so.

3. Detransitivization in Turkish. This section is an attempt to untangle some of the derivational properties of L and N in modern Turkish. To assess the morphemes' compatibility with a detransitivizing function, all verbs from Nakipoğlu & Üntak (2008) with suffixes *-l-* and *-n-* were collected, and stems ending in a vowel or /l/ were excluded to ensure default allomorphs. Verbs with no corresponding basic stem (*deponents* in the sense of Kemmer 1993 and Zaslansky 2023) were further excluded, leaving 56 and 51, respectively. These were compared to the corresponding simple verbs in terms of valency (3.1) and anticausative formation (3.2). Note that Nakipoğlu & Üntak exclude passives and impersonals from their data, so these verbal types are also not reflected in the current study. (Full data are not included because of space limitations).

3.1. VALENCY ALTERNATIONS. As already mentioned, transitivity is defined herein as the ability to assign accusative case. Nakipoğlu & Üntak do not include information on argument structure, so I referred to the *Türk Dil Kurumu (TDK) Güncel Türkçe Sözlük (Turkish Language Institute Modern Turkish Dictionary)*, which identifies accusative case with the notation *-i*. It was, however, also necessary to make some independent assessments in consultation with native speakers, as some entries in the TDK are problematic. For example, *ölçün-* 'to deliberate' is identified as transitive with *-i*, but native speakers I have consulted reject this. Conversely, the TDK identifies *örtün-* 'cover oneself' as *nesnesiz* ('objectless'), but gives an example with an accusative object.

Detransitivization is also defined in absolute terms: A marked form is detransitivized iff the accusative case of the basic form is categorically unavailable. Alternating pairs were evaluated with regard to the transitivity of the unmarked and marked members. The pattern consistent with detransitivization is +acc/-acc. While this is the dominant pattern for both morphemes, the rate is

lower for N than for L. L exhibited the detransivization pattern for 51 out of 52 transitive basic verbs (98%),² but N did so with only 34 out of 41 (83%) (which is admittedly still rather high).

Pattern type	Basic	Suffixed	-l-	-n-
a. Detransitivizing	+acc	-acc	51	34
b. Retained transitivity	+acc	+acc	1	7
c. Retained intransitivity	-acc	-acc	4	9
d. Transitivity	-acc	+acc	0	1
Total			56	51

Table 1. Valency alternation patterns for *-l-* and *-n-* in Modern Turkish

The seven cases where N did not eliminate the accusative case of the base verb were variable in their impact. For three of these (*sar-in-* ‘to wrap around oneself,’ *giy-in-* ‘to get dressed,’ *ört-ün-* ‘to cover oneself’), a direct object is easily omissible, while for the other four (*ed-in-* ‘to acquire,’ *sav-un-* ‘to defend,’ *sez-in-* ‘to sense,’ *tak-in-* ‘to put on’) the object remains obligatory. Naturally, a direct object may also be un-casemarked, in accordance with differential object marking (DOM).

Erdem (2015) proposes that, in the case of transitive reflexives, it is dative case rather than accusative that is reduced. However, this is falsified by the following example from his paper, where the transitive reflexive *sar-in-* takes both dative and accusative arguments.

- (10) *Duş-tan* *çık-ıp* *üstün-e* *havlu-yu* *sar-in-di*.
 shower-ABL leave-GER on-DAT towel-ACC wrap-REF-PAST
 ‘S/he wrapped him/herself with a towel after leaving the shower.’ (Erdem 2015:83)

In the case of intransitive verbs that take oblique arguments, N does not reduce this argument.

- (11) *değ-* (+DAT) ‘touch’ *değ-in-* (+DAT) ‘mention, touch upon’
sığ- (+DAT) ‘fit into’ *sığ-in-* (+DAT) ‘take refuge in’
tap- (+DAT) ‘worship’ *tap-in-* (+DAT) ‘worship’
kaç- (+ABL) ‘flee from’ *kaç-in-* (+ABL) ‘avoid’
yet- (+DAT) ‘suffice’ *yet-in-* (+INST) ‘make do with’

3.2. ANTICAUSATIVE FORMATION. An anticausative is a morphologically marked intransitive that shares a core event with an unmarked transitive whose subject is a causer (Haspelmath 1993). Reflexives of the detransitivizing type may derive anticausatives (Déchaine & Wiltschko 2017).

Of 56 L-verbs, 21 anticausatives were identified. In contrast, only 3 of 51 N-verbs had semantics suggestive of anticausativization, and these are arguably not true anticausatives. This

² The single case of a transitive *-l-* form comes from the TDK’s sense 5 of *bayıl-* ‘(slang) to pay [money] in recompense’; the more usual senses of the verb, including ‘faint, swoon,’ are intransitive. The single transitivity use of *-n-* is *düş-ün-* ‘to think (about),’ whose base *düş-* ‘to fall’ is generally intransitive. The TDK does not list the transitive use of *düş-*, nor of other intransitive verbs such as *git-* ‘to go,’ *çık-* ‘to come out,’ and *kaç-* ‘to flee,’ which are discussed in Tat & Key (2009). Since these are not given in the data source, they are not included here. Such marginal uses (including the transitive sense of *bayıl-*) arguably do not belong in this assessment, though it is unclear to me how to exclude specific transitive uses in a principled, unbiased way. See discussion of the relatively rare transitive sense of Old Uyghur *örtä-n-* ‘to burn, destroy’ in 4.2.

corroborates Key's (2021) finding that L but not N derives anticausatives. In most cases of an anticausative in L, there is simply no N form.

(12)	Basic transitive		L anticausative		N verb
	<i>boğ-</i> 'to drown'		<i>boğ-ul-</i>	'to drown'	–
	<i>boz-</i> 'to spoil'		<i>boz-ul-</i>	'to spoil'	–
	<i>burk-</i> 'to sprain'		<i>burk-ul-</i>	'to get sprained'	–
	<i>büz-</i> 'to pucker'		<i>büz-ül-</i>	'to pucker'	–
	<i>devir-</i> 'to knock over'		<i>devr-il-</i>	'to get knocked over'	–
	<i>kavur-</i> 'to scorch'		<i>kavr-ul-</i>	'to get scorched'	–
	<i>saç-</i> 'to scatter'		<i>saç-il-</i>	'to scatter'	–
	<i>sıyr-</i> 'to scrape'		<i>sıyr-il-</i>	'to get scraped'	–
	<i>sök-</i> 'to pull off'		<i>sök-ül-</i>	'to come off'	–
	<i>yar-</i> 'to split'		<i>yar-il-</i>	'to split'	–
	<i>yay-</i> 'to spread'		<i>yay-il-</i>	'to spread'	–
	<i>yığ-</i> 'to heap'		<i>yığ-il-</i>	'to heap'	–
	<i>yık-</i> 'to demolish'		<i>yık-il-</i>	'to collapse'	–

In most cases where an N form exists, it exhibits semantic drift and so does not share a core event with the base. Note that the L-verbs below are simply intransitive variants of the basic verb.

(13)	Basic transitive		L anticausative		N verb
	<i>aç-</i> 'to open'		<i>aç-il-</i>	'to open'	<i>aç-in-</i> 'to germinate (seed)'
	<i>bük-</i> 'to twist'		<i>bük-ül-</i>	'to be twisted'	<i>bük-ün-</i> 'to writhe in pain'
	<i>dök-</i> 'to pour, spill'		<i>dök-ül-</i>	'to pour, spill'	<i>dök-ün-</i> 'to wash'
	<i>ger-</i> 'to tense up'		<i>ger-il-</i>	'to tense up'	<i>ger-in-</i> 'to stretch arms, back'
	<i>kır-</i> 'to break'		<i>kır-il-</i>	'to break'	<i>kır-in-</i> 'to strut, dance'
	<i>soy-</i> 'to peel'		<i>soy-ul-</i>	'to peel'	<i>soy-un-</i> 'to undress'
	<i>yırt-</i> 'to rip, tear'		<i>yırt-il-</i>	'to rip, tear'	<i>yırt-in-</i> 'to shout, shriek'

Even in the three cases where an N-verb is anticausative-like, there exists an L-verb that is a better semantic fit. The N-verbs all add some component of meaning that is absent in the basic form.

(14)	Basic transitive		L anticausative		N verb (all intransitive)
	<i>çöz-</i> 'to undo'		<i>çöz-ül-</i>	'to come undone'	<i>çöz-ün-</i> 'to biodegrade'
	<i>kas-</i> 'to contract (muscle)'		<i>kas-il-</i>	'to contract (muscle)'	<i>kas-in-</i> 'to cramp (muscle)'
	<i>kar-</i> 'to mix'		[<i>kar-il-</i>] ³	'to mix'	<i>kar-in-</i> 'to mix by shaking'

I argue that even these verbs are not true anticausatives, and that they should be classified along with the N verbs in (13) as derived verbs exhibiting greater or lesser semantic drift vis-à-vis a root verb. Adopting the complete absence of semantic drift as a criterion for defining anticausatives may at first glance seem too strict a standard; nevertheless, the L derivations in (12–14) do in fact meet this standard, suggesting that it is correct. Thus, if we exclude stems that end in a vowel or contain //, limiting the data to stems that trigger default allomorphs, we are left with no convincing examples of anticausatives with N.

³ The verb *kar-il-* does not appear in Nakipoğlu & Üntak (2008) and is not represented in the numbers in Table 1. It is included in (14) for paradigmatic completeness.

4. Passive allomorphy in Old Turkic. In order to address the functions of L and N from a diachronic perspective, this section presents a study on the distribution of the suffixes *-l-* and *-n-* in Old Uygur, a variety of Old Turkic. Old Turkic comprises three corpora: runiform (7th–10th c.), Old Uygur (9th–13th c.), and Karakhanid (11th c.) (Erdal 2004). Before presenting the Old Uygur study, I briefly address the matter in the other two corpora.

4.1. RUNIFORM. At present I have little information on the distribution of *-l-* and *-n-* in runiform Turkic. However, it appears that at least the Orkhon inscriptions exhibit dissimilation of the passive suffix from *-l-* to *-n-*. Erdal (1991:595), discussing the apparently passive *boguzla-n-* ‘for one’s throat to be cut,’ suggests that in Orkhon Turkic the passive *-(X)l-* cannot be added to a stem with *//* in the final syllable. This is consistent with the verbal forms found in Aydın’s (2014) extensive glossary to the Orkhon inscriptions, e.g., *kıl-in-* ‘be created’ (178). I have located no passives of vowel-final stems in this glossary (apart from *boguzla-n-*), and I do not currently have any information about the distribution of allomorphs in runiform texts outside of Orkhon. Obviously more work is needed in this area.

4.2. KARAKHANID. Passive allomorphy appears to be in flux in Karakhanid Turkic. Güner (2021) reports that the passive/inchoative suffix *-l-* can be added directly to vowel-final stems (193), but also states that the suffix *-n-* may realize the functions of passive on a stem ending in a vowel or *//* (218), which is tantamount to saying that the passive may occur as *-n-* in these environments. Hence we find both *oқи-l-* (205) and *oқи-n-* (232) for ‘to be read,’ as well as *bul-ul-* (196) and *bul-un-* (224) for ‘to be found.’ In several passages of the famed 11th-c. Turkic–Arabic dictionary and encyclopedia *Divânü Lugâti’t-Türk (Compendium of the Turkic Dialects, late 11th c.)*, Mahmûd al-Kâşgari comments on the sporadic replacement of *-l-* with *-n-*. He gives the example *bitig bitildi/bitindi* ‘the writing was written,’ and states that both *biti-l-* and *biti-n-* (passive forms of *biti-* ‘to write’) are acceptable (Erdi & Yurteser 2005:71). In another case, under the entry for *bandı (ba-n-dı)* ‘was tied,’ Kâşgari states that the suffix has changed from *-l-* to *-n-* (169). He does not ascribe this phenomenon to any particular dialect. This suggests that it was a matter of free variation, since he otherwise pays special attention to dialectal differences.

4.3. OLD UYGUR. The *-l-* allomorph of the passive is possible in all environments (Erdal 1991). For instance, the Old Uygur cognate of Azerbaijani *bağla-n-* ‘become closed,’ which Zaslansky (2023) cites as an anticausative, has *-l-* rather than *-n-*: *bagla-l-* ‘to be bound and fastened’ (Erdal 1991:655). Yet one also encounters *-n-* on some stems containing *//* or ending in a vowel. Thus we find both *böl-ül-* (656) and *böl-ün-* (595–596) ‘be divided,’ as well as *bäklä-l-* (655) and *bäklä-n-* (593) ‘be kept, guarded.’ This variation is not discussed in Ağca (2021) among the linguistic features used in the dating of Old Uygur texts, and my own preliminary investigations based on his dating are not promising in this regard. For example, *böl-ül-* is attested quite late, in a text catalogued as BT I B, which Ağca assigns to Group VII (late 13th–early 14th c.), whereas *böl-ün-* appears somewhat earlier, in BT I D, which he assigns to Group V (late 11th–12th c.). It therefore seems likely that the differences in passive allomorphy cannot be associated with any specific periodization within Old Uygur, and that this is rather a matter of dialectal, idiosyncratic, or free variation, as in Karakhanid Turkic.

With this in mind, I have evaluated a set of *-l-* and *-n-*-marked verbs at large, and I have also controlled for phonological environment, thus obtaining two sets of numbers. The verbs are drawn from volumes I. 1–3 of the new *Uigurisches Wörterbuch* (Röhrborn & Özertural 2010–2023), an extensive revision and update of the series of fascicles originally published by Röhrborn (1977–1998). The new work includes detailed information on the argument structures

attested with each verb, and is therefore ideally suited to our purposes here. Volumes 1–3 contain all vowel-initial verbs (from *ab-* to *üzüş-*). I collected all verbs suffixed with *-l-* and *-n-* in these volumes, in the belief that this constitutes a representative sample (since the initial vowel is not a conditioning environment, and is not associated with any particular morphology). I excluded all verbs with no attested basic form. I then compared each suffixed verb to the corresponding basic verb in terms of whether or not it can take an accusative-marked complement; at this stage I further excluded pairs where attestation of either the basic or suffixed member is inadequate to establish (in)transitivity. This left 48 alternating pairs with *-l-* and 54 pairs with *-n-*. The results are shown in Table 2. (See Appendix for full data.)

Pattern type	Basic	Suffixed	<i>-l-</i>		<i>-n-</i>	
			overall	controlled	overall	controlled
a. Detransitivizing	+acc	-acc	42	30	20	4
b. Retained transitivity	+acc	+acc			16	7
c. Retained intransitivity	-acc	-acc	6	5	14	3
d. Transitivity	-acc	+acc			4	3
Total			48	35	54	17

Table 2. Valency alternation patterns for L and N in Old Uygur.

The transitivity properties of the two suffixes are strikingly different. When the simple verb is transitive, the *-l-*-marked verb is intransitive in 100% of cases (42 out of 42), whereas the *-n-*-marked verb is intransitive in only 55% of cases (20 out of 36). Furthermore, in 4 out of 18 cases where the basic verb is intransitive (22%), the *-n-*-marked verb is actually transitive.

I also controlled for phonological environment, narrowing the dataset to consonant-final stems that do not contain //l/. As in the general dataset, 100% of *-l-*-alternating pairs with a transitive basic verb exhibited the detransitivization pattern (30 out of 30). However, the results for *-n-*-alternating pairs were starkly different: When the simple verb is transitive, the *-n-*-marked verb is intransitive in only 4 out of 11 cases (36%). In 3 out of 6 cases where the basic verb is intransitive (50%), the *-n-*-marked verb is transitive. Though the numbers are small, after controlling for environment *-n-* actually has a higher rate of transitivity than of detransitivization. More often still, *-n-* has no effect on transitivity.

In the controlled dataset, there are several anticausatives derived with *-l-* but none with *-n-*. The following minimal pairs exemplify this.

(15)	Basic transitive	L anticausative	N verb
	<i>ač-</i> ‘to open’	<i>ač-il-</i> ‘to open’	<i>ač-in-</i> (transitive) ‘to open (clothing, sins)’
	<i>adır-</i> ‘to separate’	<i>adır-il-</i> ‘to separate’	–
	<i>as-</i> (I) ‘to increase’	<i>as-il-</i> ‘to increase’	–
	<i>es-</i> ‘to decrease’	<i>es-il-</i> ‘to decrease’	–
	<i>üdür-</i> ‘to separate’	<i>üdr-ül-</i> ‘to separate’	–
	<i>ük-</i> ‘to heap, collect’	<i>ük-ül-</i> ‘to heap, collect’	<i>ük-ün-</i> (intransitive) ‘to gather, collect’
	<i>üz-</i> ‘to shred, tear’	<i>üz-ül-</i> ‘to shred, tear’	–

As in modern Turkish, the anticausative is consistently formed with L. Often, no corresponding N verb exists. Of the two cases where there is an N verb, *aç-in-* is transitive and hence decidedly not anticausative. The following examples (from Röhrborn & Özertural) demonstrate the argument structures of transitive *aç-* ‘open’ (15a) and the minimal pair based on this: *aç-ıl-* ‘open (intransitive)’ (15b) and *aç-in-* ‘open (transitive)’ (15c,d).

- (16) a. t(ä)ñri yer-i-ñä bar-gu yol-ug aç
 god place-3SG-DAT go-PRTC way-ACC open
 ‘open the way that leads to place of the gods’ Maitr 47 r. 8
- b. t(ä)ñri kapıg-ı aç-ıl-tı
 god door-3SG open-L-PST
 ‘the door to Heaven has opened’ TT I 144
- c. bir-tin sınar-nıñ äñnin-lär-in-tä-ki ton-lar-ı-n aç-in-ıp...
 one-ABL side-GEN shoulder-PL-POSS-LOC garment-PL-3SG-ACC open-N-CONV
 ‘they opened their garments at one shoulder’ TT IV 147 o.
- d. yazok-lar-ıg keñür-ü aç-in-ıp...
 sin-PL-ACC widen-CONV open-N-CONV
 ‘[we want] to confess our sins openly’ ETS 134:19

As for *ük-ün-* ‘to gather, collect,’ this looks at first glance like a candidate for an anticausative, being an intransitive corresponding to transitive *ük-* ‘to heap, collect.’ Yet Erdal (1991) defines *ük-ün-* as ‘(of troops) to collect (intr.), (of an army commander) to collect (his troops) around him’ (625). Clauson’s (1972) definition concurs with this: ‘To bring together, concentrate (troops)’ (111). This verb is apparently used only in a military context with a human subject, and is apparently reflexive, while the L form *ük-ül-* represents the true anticausative. This may be reflected in Röhrborn & Özertural’s choice of the same German root verb for the glossing of both *ük-* and *ük-ül-* (‘aufhäufen’ and ‘aufgehäuft werden,’ respectively) but an entirely different verb for *ük-ün-* (‘sich sammeln’).

A general difference that emerges between the suffixes is that *-l*-marked verbs are intransitive across all meanings and uses, whereas *-n*-marked verbs show more variety, with a number of intransitive uses alongside the transitive ones. This is consistent with the observation made earlier in regard to modern Turkish that N often makes it complements omissible without eliminating them in an absolute sense. Arguably, however, the methodology employed herein is overly coarse-grained, as there might be intransitive uses that do in fact constitute detransitivization, independent of the existence of transitive uses. I have identified only one possible case of this: *örtä-/örtä-n-* ‘burn, blaze, destroy,’ which is assigned to the retained transitivity alternation type (+acc/+acc), since both verbs have at least one use with an accusative complement. Yet in four out of five senses *örtä-n-* is strictly intransitive, and looks like a good anticausative for transitive *örtä-* in senses such as ‘burn’ and ‘blaze.’ Only a single sense (no. 3) is transitive, with the meaning ‘burn, destroy,’ and only a single example of this use is given. The methodology employed here does not permit me to include intransitive *örtä-n-* as an anticausative, and this is without doubt a shortcoming. However, after controlling for environment, the alternation is excluded (*örtä-* is vowel-final), and so becomes a non-issue. The natural conclusion is that the anticausative uses of *örtä-n-* actually bear an allomorph of L, while transitive *örtä-n-* bears N.

5. Conclusion. The results of the modern Turkish and Old Uygur studies presented here indicate that L is a true detransitivizer while N is not. L derives passives, anticausatives, and detransitivizing reflexives (see also Key 2021). In contrast, N has a less predictable effect on valency, deriving both transitive and intransitive reflexives, as well as idiosyncratic types.

When ascertaining the derivational properties of reflexive N in Turkic, it is absolutely critical to control for phonological environment, because most (if not all) Turkic languages realize passive L as *-n-* following *//* and/or postvocally, and so the functions of L may be erroneously ascribed to N. When we exclude these environments, the evidence for N as a detransitivizer in modern Turkish is considerably weakened, and in Old Uygur it all but vanishes. Importantly, N does not derive anticausatives in either language.

Failing to control for environment has consequences for linguistic analysis. Zaslansky (2023) presents a range of detransitive and anticausative *-n-*-marked verbs in modern Turkic languages and in Old Turkic, nearly all of which end in a vowel or contain *//*. He proposes that Turkic *-n-* had its diachronic origin as a valency-decreasing morpheme, with “a primarily detransitivizing and reflexive function that later developed anticausative and other senses” (181). The results of the present work suggest quite the opposite. In Old Uygur, N had a high prevalence of transitivity; many transitive verbs retained the ability to assign accusative case in combination with it, and some intransitive verbs even acquired an accusative complement. If N had similar properties in the ancestor of modern Turkish contemporaneous with Old Uygur, then the number of intransitive N-formations has actually increased in this language over time. Citing Xaritonov (1963) and Xasenova (1959), Geniušienė (1987) remarks that Yakut retains a large number of the transitive verbal reflexives of Old Turkic, while Kazakh has lost nearly all of them. Turkish, it would appear, is somewhere inbetween.

N cannot plausibly have originated as a detransitivizer. If it is shown to be such in any of the modern Turkic languages, this can only be an innovation.

Appendix. Old Uygur data (collected from Röhrborn & Özertural, 2010–2023), arranged according to stem phonology.

I. Alternations with *-l-*

+acc/-acc

Consonant Stems Without /l/			
+acc		-acc	
aç-	‘to open’	aç-ıl-	‘to open’
adır-	‘to separate’	adr-ıl-	‘to separate’
anut-	‘to prepare’	anut-ul-	‘to be prepared’
ar-	‘to clean, wash’	ar-ıl-	‘be cleaned...’
as- (I)	‘to increase’	as-ıl- (I)	‘to increase’
as- (II)	‘to hang’	as-ıl- (II)	‘to be hung’
äñ-	‘to bend’	äñ-ıl-	‘to bend, bow’
ätiz-	‘to play (music, an instrument)’	ätiz-ıl-	‘to be played’
ävir-	‘to turn’	ävr-ıl-	‘to turn (intr.); be turned’
entür-	‘to have engraved’	entür-ül-	‘to be engraved (?)’
es-	‘to reduce, decrease’	es-ıl-	‘to reduce, decrease...’
ešid-	‘to hear’	ešid-ıl-	‘to be heard, told, reported’
et-	‘to create’	et-ıl-	‘to be created, exist’
ıd-	‘to send; ignite (a fire)’	ıd-ıl-	‘to be sent; be ignited’
igid-	‘to raise, feed, support’	ig(i)d-ıl-	‘to be cared for, be fed’
it-	‘to push’	it-ıl-	‘to be pushed out (of the mind)’
or-	‘to cut, mow’	or-ul-	‘to be mowed’
ötüntür-	‘to have (sth.) summoned’	ötüntür-ül-	‘to have recited respectfully’
uduz-	‘to take (in a direction), guide’	uduz-ul-	‘to be brought closer’
uk-	‘to understand’	uk-ul-	‘to be understood’
ur-	‘to hit; to put, place’	ur-ul-	‘to be put, placed’
unit-	‘to forget’	unit-ıl-	‘to be forgotten’
ur-	‘to put’	ur-ul-	‘to be put’
uš-	‘to cut (a body) into pieces’	uš-ul-	‘to be cut into pieces’
üdür-	‘to separate’	üdr-ül-	‘to be separated; to separate’
ük-	‘to heap, collect, strengthen’	ük-ül-	‘to heap, collect; be covered’
üntür-	‘to bring into the open’	üntür-ül-	‘to be clear, in the open’
ür-	‘to blow’	ür-ül-	‘to swell, inflate’
ürt-	‘to cover’	ürt-ül-	‘to be covered’
üz-	‘to shred, tear’	üz-ül-	‘to be shredded; tear’
Consonant Stems With /l/			
+acc		-acc	
al-	‘to take’	al-ıl-	‘to be taken’
agırlat-	‘to have venerated’	agırlat-ıl-	‘to be venerated’
ölit-	‘to wet’	ölit-ıl-	‘to be wetted’
örlät-	‘to disturb’	örlät-ıl-	‘to be disturbed’

Vowel Stems	
+acc	-acc
ata- ‘to name; to appoint’	ata-l- ‘to be named’
aya- ‘to venerate’	aya-l- ‘to be honored, worshiped’
ävdi- ‘to gather, collect’	ävdi-l- ‘to collect oneself; to come to (?)’
erpä- ‘to cut with a saw’	erpä-l- ‘to be cut with a saw’
ugra- ‘to plan, intend’	ugra-l- ‘to be foreseen’
ula- ‘to continue’	ula-l- ‘to be continued’
üstä- ‘to increase’	üstä-l- ‘to increase’
üvä- ‘to suppress’	üvä-l- ‘to be stressed, tired, exhausted’

-acc/-acc

Consonant Stems Without /l/	
-acc	-acc
agtar- (II) ‘to be whirled around’	agtar-il- (II) ‘to be whirled around’
ak- ‘to flow’	ak-il- ‘to flow out, gush upwards’
erit- ‘to be cursed’	erit-il- ‘to be criticized’
öç- ‘to go out (fire), come to and end’	öç-ül- ‘to be wiped out, exhausted’
ögit- ‘to be praised’	ögit-il- ‘to be praised’
Vowel Stems	
-acc	-acc
adro- ‘to advance; to distinguish oneself’	adro-l- ‘to distinguish oneself’

II. Alternations with *-n-*.

+acc/-acc

Consonant Stems Without /l/	
+acc	-acc
arit- ‘to wash, clean’	arit-in- ‘to wash oneself, clean oneself’
er- ‘to criticize, denigrate’	er-in- ‘to be sad, moan; get angry’
ög- ‘to praise’	ög-ün- ‘to boast, praise oneself’
ük- ‘to heap, collect’	ük-ün- ‘to gather, collect’
Consonant Stems With /l/	
+acc	-acc
alk- ‘to destroy; make disappear’	alk-in- ‘to decrease; disappear, end’
il- ‘to cite; write; pull toward oneself’	il-in- ‘to be attached to; hang (from)’
Vowel Stems	
+acc	-acc
adirtla- ‘to distinguish; investigate’	adirtla-n- ‘to be examined (by a doctor)’
agirla- ‘to treat with respect’	agirla-n- ‘to be treated with respect’
agrukla- ‘to regard as a burden’	agrukla-n- ‘to regard as a difficulty’
alka- ‘to praise’	alka-n- ‘to praise’ (obl.)
apı- ‘to protect, defend’	apı-n- ‘to stay away from, avoid’

ata-	‘to name; appoint’	ata-n-	‘to be named; be appointed’
aya-	‘to treat with respect’	aya-n-	‘to be treated with respect’
äsirkä-	‘to grieve; to be stingy with’	esirkä-n-	‘to grieve; keep for oneself’
odgurakla-	‘to determine, decide’	odgurakla-n-	‘to be determined, decided’
olı-	‘to press, squeeze’	olı-n-	‘to be pressed, squeezed’
uçuzla-	‘to mock, despise’	uçuzl(a)-n-	‘to be mocked, be worthless’
ula-	‘to bind, tie’	ula-n-	‘to be bound (to something)’
u-	‘be able to do (sth.)’	u-n-	‘to be successful; expend effort’
ütlä-	‘to admonish; encourage, console’	ütlä-n-	‘to get excited (the heart)’

+acc/+acc

Consonant Stems Without /l/			
+acc		+acc	
aç-	‘to open’	aç-in-	‘to open (clothing)’
as-	‘to hang’	as-in-	‘to put on, wear (clothing)’
et-	‘to furnish; decorate’	et-in- (II)	‘to decorate (the body); prepare’
ögrät-	‘to teach, train’	ögrät-in-	‘to practice, get skilled in’
uk-	‘to understand, accept’	uk-un-	‘to know about; accept, confess’
ur-	‘to hit, beat; attach’	ur-un-	‘to hit, massage; put on, wear’
ürt-	‘to cover; hide (sin)’	ürt-ün-	‘to cover, hide (sin)’
Consonant Stems With /l/			
+acc		+acc	
al-	‘to take, receive’	al-in-	‘to accept; absorb’
elt-	‘to accompany; take’	elt-in-	‘to own, carry with oneself’
Vowel Stems			
+acc		+acc	
adka-	‘to catch with the talons’	adka-n-	‘to perceive’
amra-	‘to love’	amra-n-	‘to love’
aşa-	‘to eat’	aşa-n-	‘to eat’
igdülä-	‘to feed’	igdülä-n-	‘to feed (oneself)’
ogşa-	‘to stroke, pet’	ogşa-n-	‘to stroke, pet’
örtä-	‘to burn; destroy’	örtä-n-	‘to blaze, burn (out, down)’
özirkä-	‘to respectfully accept’	özirkä-n-	‘to consider as one’s property’

-acc/-acc

Consonant Stems Without /l/			
-acc		-acc	
ev-	‘to hurry’	ev-in-	‘to hurry’
it- (II)	‘to disappear, vanish’	it-in-	‘to sink, disappear’
utur-	‘to meet each other; to resist’	utr-un-	‘to resist’

Vowel Stems			
-acc		-acc	
açı-	‘to hurt; to pity, have mercy on’	açı-n-	‘to take care of, maintain’
adala-	‘to get into distress’	adala-n-	‘to get into distress’
arı-	‘to be/become clean/pure’	arı-n-	‘to be cleansed (of one’s sins)’
atla-	‘to ride a horse’	atla-n-	‘to mount a horse’
ikirçgülä-	‘to doubt, be suspicious’	ikirçgülä-n-	‘to be doubted’
isi-	‘to get warm (from the sun, etc.)’	isi-n-	‘to warm up (metaphorical)’
orna-	‘to settle in a place’	orna-n-	‘to reside, find a place’
ögrünçlä-	‘to enjoy oneself, have a good time’	ögrünçlä-n-	‘to rejoice, be glad’
örlä-	‘to rise (cloud, sun, moon)’	örlä-n-	‘to rise (cloud)’
övkälä-	‘to get angry’	övkälä-n-	‘to get angry’
uza-	‘to extend, last a long time’	uza-n-	‘to become an expert’

-acc/+acc

Consonant Stems Without /l/			
-acc		+acc	
öt-	‘to reply respectfully’	öt-ün-	‘to discuss respectfully’
ud-	‘to follow’	ud-un-	‘to respect’
üş-	‘to gather, unite’	üş-ün-	‘to gather (one’s thoughts)’
Vowel Stems			
-acc		+acc	
agrı-	‘to hurt, ache’	agrı-n-	‘to worry (about someone)’

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