

# Turkish pluractional inchoatives

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## 1 Introduction

- This study investigates Turkish inchoatives formed with the so-called “reciprocal” suffix  $-(I)\textit{s}$
- Unlike more widely studied anticausative markers, it does not derive reflexives or passives, but it does mark reciprocal, intensive and pluractional motion verbs (Key and Ótött-Kovács, 2024)

<b>Reflexive</b>	<i>giy-in-</i> ‘dress’ put.on-REFL	* <i>giy-iş-</i> put.on-PLRC	<i>yıka-n-</i> ‘wash’ wash-REFL	* <i>yıka-ş-</i> wash-PLRC
<b>Passive</b>	<i>yap-ul-</i> ‘be built’ make-PASS	* <i>yap-ış-</i> make-PLRC	<i>duy-ul-</i> ‘be heard’ hear-PASS	* <i>duy-uş-</i> hear-PLRC

Table 1: Where  $-\textit{s}$  can’t be used

<b>Inchoative</b>	<i>bur-uş-</i> ‘crumple’ twist-PLRC	<i>gel-iş-</i> ‘develop’ come-PLRC	<i>hafif-le-ş-</i> ‘lighten’ light-V-PLRC
<b>Reciprocal</b>	<i>bak-ış-</i> ‘look at each other’ look-PLRC	<i>yaz-ış-</i> ‘write to each other’ write-PLRC	<i>toka-la-ş-</i> ‘shake hands’ handshake-V-PLRC
<b>Intensive</b>	<i>titre-ş-</i> ‘vibrate’ tremble-PLRC	<i>kip-iş-</i> ‘blink rapidly (eyes)’ blink-PLRC	
<b>Motion verbs</b>	<i>uç-uş-</i> ‘fly helter-skelter’ fly-PLRC	<i>kaç-ış-</i> ‘flee in all directions’ flee-PLRC	

Table 2: Uses of  $-(I)\textit{s}$

- We propose that the array of verb types in Table 1 is naturally accounted for if  $-(I)\textit{s}$  spells out a pluractional head, an approach already suggested in Atlamaz and Öztürk 2023 and Key and Ótött-Kovács 2022, 2024
- We name this distribution **p-syncretism**, to contrast it with the more familiar u-syncretism (Embick 1998, 2004) in which the inchoative (anticausative) has the same morphological marking as the passive and reflexive
- Focusing on  $-(I)\textit{s}$  inchoatives, we argue that these are not derived from a transitive verb, but are independent derivations from a root or non-verbal category
- Inchoatives with  $-(I)\textit{s}$  are iterative pluractionals that build degree achievements (Dowty, 1979), whose denotation involves progress along a property scale comprising an iteration of change-of-state (COS) subevents

## Roadmap:

- §2 presents the distribution of  $-(I)\mathfrak{s}$  in inchoative/causative alternating pairs and the lexical aspect of (ostensibly) deverbal and deadjectival  $-(I)\mathfrak{s}$  verbs, and argues that they are degree achievements derived from a root or non-verbal category
- §3 lays out a formal derivation of degree achievements through the interaction of DegP and an iterative Plrc head
- §4 outlines an account of p-syncretism, positioning pluractional inchoatives in the family of pluractional types
- §5 concludes

## 2 Inchoatives suffixed with $-(I)\mathfrak{s}$

### Main claim

- The suffix  $-(I)\mathfrak{s}$  derives inchoatives from simple verbal roots and—in conjunction with the verbalizing suffix  $-lA$ —from adjectives and nouns
  - We argue that **none of these are derived through detransitivization**, and that  **$-(I)\mathfrak{s}$  inchoatives are independently derived degree achievements**
- We have benefited from the data in these extremely useful sources:
    1. Nakipoğlu and Üntak 2008 (henceforth N&Ü)
    2. A lexicon of verbs called from the *Türk Dil Kurumu Türkçe Sözlük* [Turkish Language Association Dictionary] (1998)
    3. Gandon 2013, who has collected all  $-(I)\mathfrak{s}$  verbs from the *Grand dictionnaire turc-français* [Large Turkish-French Dictionary] (2008)

### 2.1 (Ostensibly) de-verbal inchoatives

#### 2.1.1 Not anticausatives

- In a few verb pairs,  $-(I)\mathfrak{s}$  appears to have an **anticausative function**: a simple transitive has a corresponding complex intransitive marked with  $-(I)\mathfrak{s}$ , e.g., *bur-* ‘twist (tr.)’/*bur-uş-* ‘crumple (int.)’ (Gandon, 2013)

Simple transitive	(Ostensible) $-(I)\mathfrak{s}$ anticausative
<i>ayır-</i> ‘separate’	<i>ayır-uş-</i> ‘decompose’
<i>bur-</i> ‘twist’	<i>bur-uş-</i> ‘crumple’
<i>kar-</i> ‘mix’	<i>kar-uş-</i> ‘mix’
<i>kir-</i> ‘break’	<i>kir-uş-</i> ‘wrinkle’
<i>yığ-</i> ‘heap’	<i>yığ-uş-</i> ‘heap up on top of one another’

Table 3: (Ostensible)  $-(I)\mathfrak{s}$  anticausative (décausitif) (Gandon, 2013)

- We claim that these are **not anticausatives** in the sense of Haspelmath 1993
- On closer inspection, such pairs exhibit semantic drift and so do not represent a transitivity alternation sharing a core event

- The simple transitives have a true anticausative with the non-active Voice suffix  $-(I)l$  (Key, 2025) while  $-(I)ş$  inchoatives have a transitive counterpart that stacks the causative  $-DIr^1$  onto  $-(I)ş$
- A core meaning is shared within the simple/ $-(I)l$ -marked pairs, and within the  $-(I)ş$  /  $-(I)ş-tIr$  pairs, but not between the simple transitive and the  $-(I)ş$ -marked verb
- Unlike a detransitivizing suffix,  $-(I)ş$  contributes a meaning component that is present on both sides of the alternation
- Our claim is that this meaning is related to **event plurality**

Anticausative alternation				Causative alternation			
Simple transitive		$-l, -n$ anticausative		$-(I)ş$ inchoative		$-(I)ş-tIr$ causative	
<i>bur-</i>	‘twist’	<i>bur-ul-</i>	‘twist’	<i>bur-uş-</i>	‘crumple’	<i>bur-uş-tur-</i>	‘crumple’
<i>kir-</i>	‘break’	<i>kir-ul-</i>	‘break’	<i>kir-iş-</i>	‘wrinkle’	<i>kir-iş-tur-</i>	‘wrinkle’
<i>ayır-</i>	‘separate’	<i>ayır-ul-</i>	‘separate’	<i>ayır-iş-</i>	‘decompose’	<i>ayır-iş-tur-</i>	‘decompose’
<i>kar-</i>	‘mix’	<i>kar-ul-</i>	‘mix’	<i>kar-iş-</i>	‘mix’	<i>kar-iş-tur-</i>	‘mix’
<i>yığ-</i>	‘heap’	<i>yığ-ul-</i>	‘heap up’	<i>yığ-iş-</i>	‘heap up on top of one another’	<i>yığ-iş-tur-</i>	‘heap on top of one another’

Table 4: Anticausative and causative alternations

### 2.1.2 $-(I)ş$ verbs with corresponding intransitive base

- There are also  $-(I)ş$  inchoatives whose **corresponding simple verb is intransitive**, Table 5. Obviously, there can **no detransitivization** here
- The transitive variant is again formed by stacking  $-DIr$  on top of  $-(I)ş$ , and again the inchoative and causative forms share a meaning component that is absent from the simple verb

Simple intransitive		Causative alternation			
		$-(I)ş$ inchoative		$-(I)ş-tIr$ causative	
<i>ol-</i>	‘become’	<i>ol-uş-</i>	‘form’	<i>ol-uş-tur-</i>	‘form’
<i>gel-</i>	‘come’	<i>gel-iş-</i>	‘develop’	<i>gel-iş-tur-</i>	‘develop’
<i>dön-</i>	‘turn’	<i>dön-üş-</i>	‘metamorphose’	<i>dön-üş-tür-</i>	‘metamorphose’
<i>kok-</i>	‘smell’	<i>kok-uş-</i>	‘smell rotten’	<i>kok-uş-tur-</i>	‘cause to smell rotten’
<i>uyu-</i>	‘sleep’	<i>uyu-ş-</i>	‘go numb’	<i>uyu-ş-tur-</i>	‘make numb’
<i>değ-</i>	‘touch (+dat.)’	<i>değ-iş-</i>	‘change’	<i>değ-iş-tir-</i>	‘change’
<i>kız-</i>	‘get angry’	<i>kız-iş-</i>	‘get heated/inflamed’	<i>kız-iş-tur-</i>	‘heat/inflame’
<i>yat-</i>	‘lie down’	<i>yat-iş-</i>	‘calm down’	<i>yat-iş-tur-</i>	‘calm down’
<i>yet-</i>	‘suffice’	<i>yet-iş-</i>	‘grow (crops, livestock)’	<i>yet-iş-tir-</i>	‘grow, raise’

Table 5:  $-(I)ş$  inchoative/transitive pairs corresponding to intransitive basic verbs

#### Summary

- $-(I)ş$  does not derive anticausatives via a detransitivization process

<sup>1</sup>Capital letters in suffix notation indicate variable segments. Capital D may be /d/ or /t/, depending on the voicing of the previous segment. Capital I may be any of the four high vowels /i, ı, ü, u/ according to vowel harmony.

### 2.1.3 Aspectual properties

- The nonactive Voice exponent  $-(I)l-$  derives the full range of dynamic lexical aspect types (Vendler 1957) for inchoatives, which they inherit from the core event

	Basic transitive	Anticausative
<b>Achievement</b>	<i>kır-</i>	<i>kır-ıl-</i> ‘break’
<b>Accomplishment</b>	<i>sök-</i>	<i>sök-ül-</i> ‘unravel’
<b>Activity</b>	<i>sars-</i>	<i>sars-ıl-</i> ‘shake’

Table 6: Event types of basic/anticausative pairs

- Inchoatives with  $-(I)\xi$  may be accomplishments or activities, but **never achievements**
- That is to say, they may be telic or atelic, but they always have a process component. This is independent of the event type of any existing basic verb

Basic verb	Event type	$-(I)\xi$ inchoative	Event type
<i>kır-</i> ‘break’	Achievement	<i>kır-ış-</i> ‘wrinkle’	Accomplishment or Activity
<i>gel-</i> ‘come’	Achievement	<i>gel-ış-</i> ‘develop’	Accomplishment or Activity
<i>değ-</i> ‘touch’	State or Achievement	<i>değ-ış-</i> ‘change’	Accomplishment or Activity
<i>kok-</i> ‘smell’ (intr.)	State or Achievement	<i>kok-uş-</i> ‘get smelly’	Activity
<i>dön-</i> ‘turn (into)’	Activity/Achievement	<i>dön-üş-</i> ‘metamorphose’	Accomplishment or Activity

Table 7: Event types of basic verbs and corresponding  $-(I)\xi$  inchoatives

- An anticausative with  $-(I)l-$  may be punctual, but an inchoative with  $-(I)\xi$  has duration:
- *kır-ıl-* ‘break (int.)’ is a simple achievement: It is odd in the imperfective (1), except on a special reading (e.g. slow-motion)
- In contrast, *kır-ış-* ‘wrinkle’ is scalar, readily permitting an in-progress reading in the imperfective (2) (Vivanco 2021)

(1) # Vazo kır-ıl-ıyor.  
vase break-NACT-IMPERF.3  
‘The vase is breaking.’

(2) Cild-im kır-ış-ıyor.  
skin-1SG.POSS break-PLRC-IMPERF.3  
‘My skin is wrinkling.’

- Both *dön-* and *dön-üş-* can have a change-of-state reading with a dative complement, but only the latter is appropriate to describe the durative process of metamorphosis (4)

(3) Erkek-ler tekaüt ol-unca çocuğ-a dön-üyor-lar.  
man-PL retirement V.NACT-CNVRB child-DAT turn-IMPRF-PL  
‘When men retire, they turn into children.’ (<https://sozluk.gov.tr/>, accessed 5/31/2026)

- (4) Tırtıl kelebeğ-e \***dön**-üyor / **dön-üş**-üyor.  
 caterpillar butterfly \***turn-IMPRF** / **turn-PLRC-IMPRF**  
 ‘The caterpillar is turning into a butterfly.’

- The verbs *kok-* ‘smell; stink’ and *kok-uş-* ‘go stinking rotten’ have a telic reading in the perfect and seem almost interchangeable, with the subtle difference that *kok-uş-* indicates a greater degree of putrefaction

- (5) a. Çöp kok-muş.  
 trash smell-PRF.EVID.3  
 ‘The trash has gotten smelly.’  
 b. Çöp kok-uş-muş.  
 trash smell-PLRC-PRF.EVID.3  
 ‘The trash has gone rotten.’

- We suggest that the difference in intensity is due to the fact that *kok-* is an achievement while *kok-uş-* is an accomplishment whose durativity comprises a series of rotting subevents
- The difference is more salient in the imperfective: *kok-* ‘smell’ is stative, while *kok-uş-* is obligatorily eventive

- (6) a. Çöp kok-uyor.  
 trash smell-IMPERF.3  
 ‘The trash smells.’ (state)  
 b. Çöp kok-uş-uyor.  
 trash smell-PLRC-IMPERF.3  
 ‘The trash is going rotten.’ (process)

#### 2.1.4 *-(I)ş* inchoatives are degree achievements

- **The properties of *-(I)ş* inchoatives are suggestive of degree achievements** (Dowty, 1979), a subset of alternating COS verbs that always have duration but may be telic (accomplishment) or atelic (process)
- They are therefore compatible with both ‘in’ and ‘for’ temporal modification

- (7) Cild-im beş sene **boyunca** / **içinde** kır-ı~~ş~~-tı.  
 skin-1SG.POSS five year **for** / **in** break-**PLRC-IMPERF.3**  
 ‘My skin wrinkled for five years/in five years.’

- Since degree achievements are based on scalar properties, they tend to be deadjectival (see §2.2 following).
- Rappaport Hovav (2014) notes that in English, some simple verbs also pattern as scalar COS, e.g., *crumple*
- We equate the *-(I)ş* verbs discussed in this section with this set of English simple verbs; cf. *bur-uş-* ‘crumple’

### Summary

- Anticausatives derived with nonactive Voice suffix  $-(I)l$  correspond to a transitive basic verb. The anticausative inherits its lexical semantics, including lexical aspect, from the basic predicate
- **Inchoatives derived with  $-(I)\xi$  do not always correspond to a transitive basic verb.** The inchoative does not inherit its lexical semantics or aspect from any basic verb. Inchoatives with  $-\xi$  are **always durative**, but may be telic or atelic
- **We conclude that  $-(I)\xi$  inchoatives are not derived from an independently occurring basic verb, and suggest that they are degree achievements**

## 2.2 Deadjectival and denominal inchoatives

- The majority of  $-(I)\xi$  inchoatives are derived from adjectives
  - Gandon (2013) identifies 12 deverbal, 12 denominal, and 100 deadjectival  $-(I)\xi$  inchoatives in her dataset
- **Inchoatives derived from non-verbal categories** feature the suffix sequence  **$-lA-\xi$**

Non-verbal stem			$-lA-\xi$ inchoative	
<i>sakin</i>	‘calm’	* <i>sakin-iş-</i>	<i>sakin-le-ş-</i>	‘calm down’
<i>iyi</i>	‘good’	* <i>iyi-ş-</i>	<i>iyi-le-ş-</i>	‘improve, heal’

Table 8:  $-(I)\xi$  inchoatives with non-verbal stems

- The first element,  $-lA$ , is a highly productive verbalizer, deriving a range of verb types
- Nakipoğlu and Üntak (2008) report 953 verbs formed with (unaugmented)  $-lA$  in their lexicon, of which we provide a sample below
- Since  $-(I)\xi$  cannot attach directly to a non-verbal base, as shown in Table 8,  $-lA$  is always interposed

Non-verbal stem		$-lA$ verb	
<i>etiket</i>	‘label’	<i>etiket-le-</i>	‘label’
<i>etki</i>	‘influence’	<i>etki-le-</i>	‘impress’
<i>ezber</i>	‘rote’	<i>ezber-le-</i>	‘memorize’
<i>kıyas</i>	‘comparison’	<i>kıyas-la-</i>	‘compare’
<i>laf</i>	‘words’	<i>laf-la-</i>	‘chat’
<i>saçma</i>	‘silly’	<i>saçma-la-</i>	‘babble’
<i>ihtiyar</i>	‘old’	<i>ihtiyar-la-</i>	‘grow old’
<i>pepe</i>	‘stutterer’	<i>pepe-le-</i>	‘stutter’
<i>temiz</i>	‘clean’	<i>temiz-le-</i>	‘clean’

Table 9: Illustrative examples of the  $-lA$  verbalizer

- Here we argue that, like the deverbal formations discussed before, deadjectival/denominal inchoatives with the sequence  **$-lA-\xi$**  are **not derived from a corresponding transitive verb**

### 2.2.1 No corresponding *-lA* verb

- First, in the overwhelming number of cases, there is **no corresponding basic verb**
- Gandon (2013) reports that verbs in *-lA* exist for only 11 out of 112 *-lA-ş* inchoatives (9.8%)
- By our count, in N&Ü a *-lA* verb exists for 83 of 558 *-lA-ş* inchoatives (15%), see the Tables below and more data in Appendix-A

	Nakipoğlu and Üntak 2008		Gandon 2013	
	<i>-lA-ş</i> inchoative	<i>-lA</i> w/ same base	<i>-lA-ş</i> inchoative	<i>-lA</i> w/ same base
<b>Deadjectival</b>	344	42	100	11
<b>Denominal</b>	212	41	12	0
<b>Deadverbial</b>	2	0	0	N/A
<b>Total</b>	<b>558</b>	<b>83</b>	<b>112</b>	<b>11</b>

Table 10: The number of *-lA-ş* inchoatives and corresponding *-lA* verbs

Non-verbal stem	* <i>-lA</i>	<i>-lA-ş</i> intransitive	<i>-lA-ş-tIr</i> transitive
<i>buhar</i> 'vapor'	* <i>buhar-la-</i>	<i>buhar-la-ş-</i> 'vaporize'	<i>buhar-la-ş-tir-</i> 'vaporize'
<i>çirkin</i> 'ugly'	* <i>çirkin-le-</i>	<i>çirkin-le-ş-</i> 'become ugly'	<i>çirkin-le-ş-tir-</i> 'make ugly'
<i>çöl</i> 'desert'	* <i>çöl-le-</i>	<i>çöl-le-ş-</i> 'desertify'	<i>çöl-le-ş-tir-</i> 'desertify'
<i>dar</i> 'narrow'	* <i>dar-la-</i>	<i>dar-la-ş-</i> 'narrow'	<i>dar-la-ş-tir-</i> 'narrow'

Table 11: Verbalizing inchoatives with *-lA-ş*

### 2.2.2 Intransitive *-lA* verbs

- Even when a corresponding *-lA* verb exists, it is usually not a plausible base of anticausativization
- Sometimes, the corresponding *-lA* verb is itself intransitive, see Table 12
- This mirrors the previously discussed de-verbal inchoatives where the basic verb is also intransitive

Non-verbal stem	<i>-lA</i> intransitive	<i>-lA-ş</i> intransitive	<i>-lA-ş-tIr</i> transitive
<i>afal</i> 'astonished'	<i>afal-la-</i> 'be astonished'	<i>afal-la-ş-</i> 'be astonished'	<i>afal-la-ş-tır-</i> 'astonish'
<i>hafif</i> 'light'	<i>hafif-le-</i> 'lighten'	<i>hafif-le-ş-</i> 'get light/silly'	<i>hafif-le-ş-tır-</i> 'lighten'
<i>sakin</i> 'calm'	<i>sakin-le-</i> 'calm down'	<i>sakin-le-ş-</i> 'become calm'	<i>sakin-le-ş-tır-</i> 'make calm'
<i>sersem</i> 'dazed'	<i>sersem-le-</i> 'become dazed'	<i>sersem-le-ş-</i> 'become dazed'	<i>sersem-le-ş-tır-</i> 'daze'
<i>sıcak</i> 'hot'	<i>sıcak-la-</i> 'feel hot'	<i>sıcak-la-ş-</i> 'become warm'	<i>sıcak-la-ş-tır-</i> 'make warm'

Table 12: *-lA-ş* inchoatives where the corresponding *-lA* verb is intransitive

### 2.2.3 *-lA* verbs with significant semantic drift

- When the *-lA* verb is transitive, there is **often significant semantic drift** between it and the *-lA-ş* verb
- There is always a corresponding transitive that stacks the causative *-DIr* and preserves the core meaning of the *-lA-ş* verb
- This is the same pattern observed in for simple verbs
- See Table below and more data in Appendix-B

Non-verbal stem	<i>-lA</i> transitive	<i>-lA-ş</i> intransitive	<i>-lA-ş-tIr</i> transitive
<i>ağır</i> 'heavy'	<i>ağır-la-</i> 'provide with accommodations'	<i>ağır-la-ş-</i> 'become heavy'	<i>ağır-la-ş-tır-</i> 'make heavy'
<i>kök</i> 'root'	<i>kök-le-</i> 'uproot'	<i>kök-le-ş-</i> 'take root'	<i>kök-le-ş-tır-</i> 'cause to take root'
<i>kötü</i> 'bad'	<i>kötü-le-</i> 'denigrate'	<i>kötü-le-ş-</i> 'worsen'	<i>kötü-le-ş-tır-</i> 'worsen'
<i>köz</i> 'live charcoal'	<i>köz-le-</i> 'grill over charcoal'	<i>köz-le-ş-</i> 'become charcoal'	<i>köz-le-ş-tır-</i> 'turn to charcoal'

Table 13: *-lA-ş* inchoatives where the corresponding *-lA* verb is transitive

### 2.2.4 Some plausible *-lA* stems

- By our count, there are 61 *-lA-ş* verbs in N&Ü for which a corresponding transitive *-lA* verb exists
- Of these, 14 are semantically close, such that the *-lA* transitive appears to be a plausible base for the *-lA-ş* inchoative
- Yet even in these cases, **there exists a stacking transitive in *-lA-ş-tIr***
- We suggest that the *-lA* and *-lA-ş-(tIr)* verbs in Table 14 are separate derivations from a common root whose meanings happen to converge

Non-verbal stem	- <i>lA</i> transitive	- <i>lA-ş</i> intransitive	- <i>lA-ş-tIr</i> transitive
<i>denk</i> 'equivalent'	<i>denk-le-</i> 'even up'	<i>denk-le-ş-</i> 'come into equilibrium'	<i>denk-le-ş-tir-</i> 'bring into equilibrium'
<i>düz</i> 'smooth'	<i>düz-le-</i> 'smooth'	<i>düz-le-ş-</i> 'become flat'	<i>düz-le-ş-tir-</i> 'flatten'
<i>güncel</i> 'up-to-date'	<i>güncel-le-</i> 'update'	<i>güncel-le-ş-</i> 'update'	<i>güncel-le-ş-tir-</i> 'update'
<i>taze</i> 'fresh'	<i>taze-le-</i> 'freshen'	<i>taze-le-ş-</i> 'become fresh'	<i>taze-le-ş-tir-</i> 'freshen'
<i>ozon</i> 'ozone'	<i>ozon-la-</i> 'ozone'	<i>ozon-la-ş-</i> 'become ozone'	<i>ozon-la-ş-tir-</i> 'ozone'
<i>üç</i> 'three'	<i>üç-le-</i> 'make three'	<i>üç-le-ş-</i> 'become three'	<i>üç-le-ş-tir-</i> 'make three'

Table 14: -*lA-ş* inchoatives and the corresponding transitive -*lA* verbs with similar meaning

### 2.2.5 Monomorphemic -*lAş*?

- For the overwhelming majority of -*lA-ş* inchoatives, there is no viable basic transitive in -*lA*
- Noting this, **some authors therefore conclude that -*lAş* is monomorphemic**, not analyzable into component parts
- However, there are compelling reasons **not to take this approach**:
  - Both -*lA* and -(*I*)*ş* are abundantly attested in Turkish: N&Ü catalog 953 verbs derived with -*lA* alone and 147 with -(*I*)*ş* alone.
  - In -*lA-ş* inchoatives the two suffixes have functions that they exhibit independently: -*lA* attaches to a noun or adjective to derive a verb, and -(*I*)*ş* forms a scalar change-of-state verb that may be telic or atelic (see below)
  - The sequence -*lA-ş* is therefore readily segmentable by speakers

### 2.2.6 Aspectual properties

- Like the deverbal derivations, denominal inchoatives with -(*I*)*ş* test as accomplishments and as activities
  - Like the deverbal cases in §2.1., deadjectival verbs with -*lA-ş* **always have a process component denoting scalar change**
  - They are felicitous in the imperfective, (8a); and with both ‘in’ and ‘for’ temporal phrases, (8b)

- (8) a. Şehir gittikçe güzel-le-ş-iyor.  
city gradually beautiful-v-PLRC-IMPERF.3  
‘The city is gradually beautifying.’
- b. Şehir beş sene boyunca / içinde güzel-le-ş-ti.  
city five year for / in beautiful-v-PLRC-PST.3  
‘The city beautified for / in five years.’ (process / accomplishment)

- They are therefore a perfect fit for degree achievements: **they denote a gradual change in the degree or extent of a property along an abstract scale** (Beavers 2011; Dowty 1979; Kennedy and Levin 2008, i.a.)

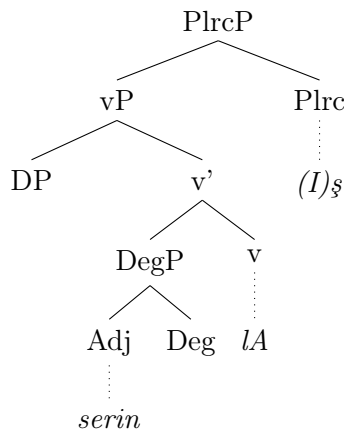
### 3 Proposal

- We have presented evidence that  $-(I)\xi$  inchoatives, whether deverbal or deadjectival, are degree achievements
- We now propose that  $-(I)\xi$  spells out a pluractional (PLRC) head whose role is to denote progress along a multi-point property scale through an iteration of subevents

#### 3.1 Deadjectival/Denominal verbs

- We propose the following structure in (9) for non-verbal  $-LA-\xi$  derivatives, e.g., *serin-le-ξ* ‘to cool’

(9)



- Kearns (2007) argues that COS predicates with duration, such as *x* cooled, are interpreted as movement along a property scale, where the theme has different degrees (*d*, *d'*) of, e.g., coolness at different times (*t*, *t'*) such that an increase in time correlates to an increase in degree

(10) *x* bears the property of coolness to degree *d* at time *t*  
*x* bears the property of coolness to degree *d'* at *t'*  
*t* < *t'* & *d* < *d'*

(Kearns 2007:28)

- The transitions to comparative result states are non-unique and hence repeatable. Kearns argues that these transitions are an iteration of achievements. The iterative pluractional is therefore a natural fit for deriving the process component. We take Lasersohn’s (1995) iterative pluractional semantics as our starting point

(11)  $V\text{-PLRC}(X) \Leftrightarrow \forall e, e' \in X[V(e) \wedge \neg \tau(e) \circ \tau(e')] \wedge \text{CARD}(X) \geq n$

(based on Lasersohn 1995: 251)

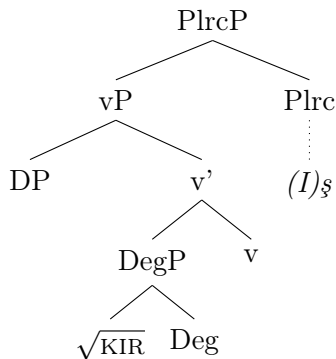
- According to Kearns, a deadjectival verb involves a series of iterated achievements, each of which means ‘become *A*-er,’ where ‘*A*’ is the property named by the adjective. If the base predicate has the appropriate denotation, then the iteration contributed by the pluractional will ensure progress along a scale

- Following Vivanco (2021), we formalize the scalar structure by postulating a DegP
- Deg introduces an ordered set of points (degrees):  $d, d', d'', \dots$ ; it is a function that takes a property as its argument and returns a property scale.
- In the case of denominal verbs, the base noun is also interpreted as a gradable property, e.g., *çöl* ‘desert,’ the base of *çöl-le-ş-* ‘desertify,’ is related to a property scale along the dimension of desert-ness
- Little-*v* introduces a punctual event with a result state. When it is applied to a property scale, the result state is an increased degree of the property:  $d_n \rightarrow d_{n+1}$
- Thus, the denotation of the vP node is ‘become A-er.’ The pluractional then takes the denotation of vP as the base predicate V, which it iterates, finally deriving scalar change

### 3.2 (Ostensibly) deverbal inchoatives

- As for ostensibly deverbal inchoatives, we equate these with the simple scalar verbs found in English
- Rappaport Hovav (2014) observes that the same scalar COS types found in deadjectival verbs are also found with simple verbs, e.g. ‘stretch’ and ‘shrivel’ (cf. *bur-uş-* ‘crumple’)
- She further notes that some verbs denote progress along a scale without specifying the property, e.g. ‘evolve’ and ‘develop’ (cf. *gel-iş-* ‘develop’)
- In other words, the base of these verbs is still a property scale even though it is not categorically an adjective. These roots are interpreted as properties in the context of Deg. The output is a property scale, which is the argument of little-*v*

(12)



### 3.3 Degree achievement without Plrc

- N&Ü list 71 deadjectival verbs featuring the verbalizer *-lA* without the pluractional *-(I)ş*
- Of these, 46 are transitive (taking a differentially marked accusative complement)
- Of the 25 intransitive Adj. + *-lA* verbs, we count 20 inchoatives
- Gedik (2019) also notes the low number of inchoatives with *-lA*
- She concludes that *-lA* bundles *v* with (active) Voice and so does not derive unaccusatives. She dismisses the small number of exceptions as lexicalizations.

- We disagree with this conclusion
- Instead, we attribute the low number of ADJ + *-lA* inchoatives to competition with the pluractional derivation outlined above
- We further note:
  - All *-lA* degree achievements are deadjectival
  - 20 out of 344 deadjectival verbs and 0 out of 212 denominal verbs with *-lA* (not *-lA-ş*) are inchoative
  - We suggest that, in these cases, the property scale is contained within the AdjP projection

	Adjective		Verb	
<b>Transitive</b>	<i>temiz</i>	‘clean’	<i>temiz-le-</i>	‘clean’
<b>Dative complement</b>	<i>pis</i>	‘filthy’	<i>pis-le-</i>	‘befoul’
<b>Unergative</b>	<i>topal</i>	‘lame’	<i>topal-la-</i>	‘walk with a limp’
<b>Unaccusative COS</b>	<i>geniş</i>	‘wide’	<i>geniş-le-</i>	‘widen’

Table 15: ADJ + *-lA* inchoatives

## 4 Other pluractional types in Turkish: p-syncretism

- We have identified (at least) three other pluractional types in Turkish with the exponent  $/(I)ş/$ 
  1. **Intensive verbs**
    - The  $-(I)ş$ -marked verb expresses the intensive performance of the event denoted by the base
    - The pluractional requires the iteration of the embedded event

Base verb		$-(I)ş$ verb	
<i>titre-</i>	‘shiver, pulsate’	<i>titre-ş-</i>	‘vibrate’
<i>krp-</i>	‘wink, blink’	<i>krp-ış-</i>	‘blink rapidly (eyes)’

Table 16: Intensive  $-(I)ş$  verbs

### 2. Pluractional motion verbs

- The verbs in Table 17 denote chaotic motion
- We model this by analyzing the PLRC as denoting contemporaneous events whose temporal traces overlap (Key and Ótött-Kovács, 2024)

Base verb		$-(I)ş$ verb	
<i>kaç-</i>	‘escape, flee’	<i>kaç-ış-</i>	‘flee helter-skelter’
<i>koş-</i>	‘run’	<i>koş-uş-</i>	‘run helter-skelter’
<i>uç-</i>	‘fly’	<i>uç-uş-</i>	‘fly helter-skelter’

Table 17: Pluractional motion verbs

- (13) Kuş-lar uç-uş-tu.  
bird-PL fly-PLRC-PST.3SG  
'The birds flew helter-skelter.'

(Kornfilt 1997: 178 ex. (651))

### 3. Reciprocal verbs

- The  $-(I)\text{ş}$ -marked verb expresses reciprocity
- The PLRC expresses event plurality and it is responsible for introducing the INS argument into the structure (more more details on argument-introducing pluractionals, see Ótrott-Kovács 2024)
- The PLRC composes with an independently not attested stem, which may contain (at least) one implicit argument, 'one other'

Base verb		$-(I)\text{ş}$ verb	
<i>bak-</i>	'look'	<i>bak-ış-</i>	'look at e.o.'
<i>*dert-le-</i>		<i>dert-le-ş-</i>	'have a heart-to-heart talk with e.o.'
<i>öp-</i>	'kiss on the cheeks or lips'	<i>öp-üş-</i>	'kiss e.o. on the lips'
<i>tanı-</i>	'recognize, be acquainted with'	<i>tanı-ş-</i>	'get/be acquainted with e.o.'
<i>*toka-la-</i>		<i>toka-la-ş-</i>	'shake hands'
<i>yaz-</i>	'write'	<i>yaz-ış-</i>	'write to e. o.'

Table 18: Representative examples of reciprocal verbs

- (14) Figen Çiğdem'-le yaz-ış-tı.  
Figen Çiğdem-INS write-PLRC-PST.3  
'Figen and Çiğdem exchanged correspondences with each other.'

- We propose that  $/(I)\text{ş}/$  is an underspecified Vocabulary Item, which spells out the [-singular] feature in the context of verbs, 15

- (15) [-singular]  $\leftrightarrow / (I)\text{ş} / \mid [+V] \_$

## 5 Conclusion

- $-(I)\text{ş}$  derives inchoative verbs, but it does not derive reflexives or passives
- We argued that  $-(I)\text{ş}$  inchoatives are not derived through detransitivization of a transitive stem
  - The (ostensive) verbal base is in anticausative alternation with  $-(I)l / (I)n$  verbs;  $-(I)\text{ş}$  verbs are in causative alternation with  $-DIr$  verbs
  - The corresponding verb can be intransitive
  - $-lA-\text{ş}$  verbs overwhelmingly lack a  $-lA$  stem
  - Even if the corresponding  $-lA$  stem exists, it can be intransitive, or exhibit significant semantic drift

- In the case of the handful of *-lA-ŷ* verbs where there is a plausible *-lA* stem, we observe that the *-lA-ŷ* verbs are in causative alternation with the causative-marked verb in *-lA-ŷ-tIr*
- *-(I)ŷ* verbs always involve a process component; this contrasts with *-(I)l* anticausatives, which can derive the full range of lexical aspect types
- *-(I)ŷ* verbs are independently derived degree achievements
  - DegP adds a property scale over property denoted by the stem (root, adjective or noun)
  - Little-v introduces a punctual event with a result state
  - When applied to the property scale, the result state is an increased degree of the property
  - The pluractional, spelled out by *-(I)ŷ*, derives the iteration of achievements

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## A Non-verbal stems

base	*- <i>lA</i>	- <i>lA-ş</i> intransitive	- <i>lA-ş-Dİr</i> transitive
acı 'bitter'	*acı-la-	acı-la-ş- 'become bitter'	acı-la-ş-tır- 'make bitter'
alçak 'low; base'	*alçak-la-	alçak-la-ş- 'become low'	alçak-la-ş-tır- 'make low'
başka 'other'	*başka-la-	başka-la-ş- 'become other'	başka-la-ş-tır- 'otherize'
batılı 'western'	*batılı-la-	batılı-la-ş- 'westernize'	batılı-la-ş-tır- 'westernize'
buhar 'vapor'	*buhar-la-	buhar-la-ş- 'vaporize'	buhar-la-ş-tır- 'vaporize'
çirkin 'ugly'	*çirkin-le-	çirkin-le-ş- 'become ugly'	çirkin-le-ş-tır- 'make ugly'
çöl 'desert'	*çöl-le-	çöl-le-ş- 'desertify'	çöl-le-ş-tır- 'desertify'
dar 'narrow'	*dar-la-	dar-la-ş- 'narrow'	dar-la-ş-tır- 'narrow'
etkin 'active'	*etkin-le-	etkin-le-ş- 'activate'	etkin-le-ş-tır- 'activate'
ılık 'warm'	*ılık-la-	ılık-la-ş- 'warm up'	ılık-la-ş-tır- 'warm up'
iyi 'good'	*iyi-le-	iyi-le-ş- 'improve'	iyi-le-ş-tır- 'improve'
kalmın 'thick'	*kalmın-la-	kalmın-la-ş- 'thicken'	kalmın-la-ş-tır- 'thicken'
radikal 'radical'	*radikal-le-	radikal-le-ş- 'radicalize'	radikal-le-ş-tır- 'radicalize'
tabu 'taboo'	*tabu-la-	tabu-la-ş- 'become taboo'	tabu-la-ş-tır- 'make taboo'
uzak 'far'	*uzak-la-	uzak-la-ş- 'go away from'	uzak-la-ş-tır- 'send away'
yoğun 'dense'	*yoğun-la-	yoğun-la-ş- 'become dense'	yoğun-la-ş-tır- 'make dense'

## B Corresponding *-lA* verb exists but with different meaning

base	<i>-lA</i> transitive	<i>-lA-ş</i> intransitive	<i>-lA-ş-Dİr</i> transitive
ağır 'heavy'	ağır-la- 'provide with accommodations'	ağır-la-ş- 'become heavy'	ağır-la-ş-tır- 'make heavy'
ak 'white'	ak-la- 'acquit'	ak-la-ş- 'turn white'	ak-la-ş-tır- 'make white'
bütün 'whole'	bütün-le- 'complete, complement'	bütün-le-ş- 'become whole'	bütün-le-ş-tır- 'make whole'
eter 'ether'	eter-le- 'anesthetize with ether'	eter-le-ş- 'become ether'	eter-le-ş-tır- 'etherify'
genel 'general'	genel-le- '(over)generalize'	genel-le-ş- 'become widespread'	genel-le-ş-tır- 'make widespread'
kök 'root'	kök-le- 'uproot'	kök-le-ş- 'take root'	kök-le-ş-tır- 'cause to take root'
kötü 'bad'	kötü-le- 'denigrate'	kötü-le-ş- 'worsen'	kötü-le-ş-tır- 'worsen'
köz 'live charcoal'	köz-le- 'grill over charcoal'	köz-le-ş- 'become charcoal'	köz-le-ş-tır- 'turn to charcoal'
lif 'fiber; loofah'	lif-le- 'scrub with a loofah'	lif-le-ş- 'become fibrous'	lif-le-ş-tır- 'make fibrous'
zor 'force; difficult'	zor-la- 'force'	zor-la-ş- 'get difficult'	zor-la-ş-tır- 'make difficult'