# Variation and gradience in non-standard Turkish affix ordering



## Background

#### Affix order variation

- Semantically vacuous affix order variation is cross-linguistically rare
- How is knowledge about licit orderings encoded? Optional displacement rules, variable templates, bigrams...? (Bickel et al., 2007; Dąbkowski, 2022; Mansfield, 2015; Ryan, 2010)

#### The case study: Turkish

▶ In verbs with more than one TAM morpheme, an agreement morpheme can variably follow any or all of them without any semantic differences

#### The pattern

'we would come':

gel-di-yse-k come-PAST-COND-1PL root-TAM-TAM-**Agr** 

Final agreement

b. gel-di-**k**-se come-past-1pl-cond root-TAM-**Agr**-TAM

Medial agreement

c. gel-di-k-se-k come-past-1pl-cond-1pl root-TAM-Agr-TAM-Agr

- Double agreement
- ► The agreement morpheme surfaces in three different paradigms depending on the preceding TAM morpheme (Güneş 2020, 2021):

# k-paradigm (Agr<sub>k</sub>) z-paradigm (Agr<sub>z</sub>) reduced z-paradigm (Agr<sub>rz</sub>)

1sg	- <i>m</i>	-(y)Im	- <i>m</i>
2sg	- <i>n</i>	-sIn	-n
3sc	Ø	Ø	$\varnothing$
1 <sub>PL</sub>	- <i>k</i>	-(y)lz -sInIz	-Z
2 <sub>PL</sub>	-nlz	-sInIz	-nlz
3 <sub>PL</sub>	-lEr	-lEr	-lEr
	I .		

#### Previous work

- ► Final agreement is the standard, expect for 3PL -*lEr* which is normally realized with medial agreement
- ▶ Agr<sub>z</sub> reported to be limited to final position: \*TAM-Agr<sub>z</sub>-TAM(-Agr)  $\rightarrow$ Has been taken as evidence for different syntactic status of  $Agr_z$  (Bobaljik, 2000; Good and Yu, 1999, 2005; Güneş, 2020, 2021; see also Kornfilt, 1996)
- No other restrictions on the availability of the different orderings have been documented

#### Research question

What factors determine which of the three orderings are licensed for a **given item?** Does it depend on the agreement paradigm / the verbal root / the TAM morphemes / the  $\phi$ -features / the speaker...?

#### Methods

#### Procedure

- ▶ Medial and double agreement is prescriptively substandard → Might be routinely rejected in a standard acceptability judgment experiment
- ▶ Medial and double agreement is largely confined to spoken language → Hard to investigate using corpus data
- Solution: in-depth one-hour fieldwork interviews with the help of a Turkish-speaking research assistant

#### Materials

- All verbs are used in the context of a full sentence
- ► Each sentence is presented three times, with final, medial and double agreement
- We used largely but not exclusively short and frequent verbal roots
- Buraya kadar **gel-di-yse-k** bir çayınızı içeriz. so-far **come-past-cond-1pl** a tea drink 'Now that we have come here, let us have a cup of your tea.'
  - Buraya kadar **gel-di-k-se** bir çayınızı içeriz. so-far **come-past-1pl-cond** a drink
  - Buraya kadar **gel-di-k-se-k** bir çayınızı içeriz. so-far **come-past-1pl-cond-1pl** a tea

## **Participants**

- ▶ 21 informants, 2 of which were excluded due to unreliable judgments
- ▶ All were native speakers and grew up in Turkey; all but 4 of them still lived in Turkey by the time of the interview
- Our goal: interview a demographically and linguistically diverse pool of speakers

## Youngest | 18 years Housewife (2x)

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Oldest	62 years
Average	37 years

Age

## Gender Female 58%

Male 62%

## Native languages other than English

Albanian and Macedonian Arabic and Zazaki Georgian Laz None (15x)

## Occupation

Tiousewite (2x)		
Babysitter		
Driver		
Social media manager Freelance content creato		
		Nurse
Building constructor		
Financial specialist Publisher		
Student/activist		
Student/journalist		

Graduate student (3x)

Professor (2x)

## Findings

## Final and 3PL medial agreement: categorically grammatical

▶ 3PL final agreement is slightly dispreferred compared to medial but not rejected

## Non-3PL medial and double agreement: free variation and gradience

- Different speakers accept different forms, report inter-speaker variation
- Many intermediate judgments, strong prescriptive intuitions
- No consistent effect of  $\phi$ -features (other than 3PL), other morphemes (TAM/root) or agreement paradigm – no pattern emerges

#### The z-paradigm is not restricted to word-final position

▶ Some participants accepted the majority of forms with medial Agr<sub>z</sub> agreement they were presented, and many at least some

## Takeaways and open questions

#### ... for Turkish agreement morphology

- $\triangleright$  No evidence that the *z*-paradigm differs syntactically from the k- and rz-paradigms (Neu, under review)
- ▶ Why is 3PL different?

#### ... for theories of affix order variation

- Contrast between categorical acceptability of final and 3PL medial agreement vs. variable judgments for non-3PL medial and double agreement
- → Due to transparent vs. opaque mapping from the underlying syntax?
- ► How is knowledge about non-3PL medial and double agreement encoded?

#### ... methodologically

► (How) can we test speakers' intuitions quantitatively?

#### The bottom line

While final agreement and 3PL medial agreement are categorically grammatical, non-3PL medial and double agreement is subject to rampant variation without any discernible patterns. The apparent absence of any productive generalizations raises the question how this knowledge is encoded.

# References and acknowledgments

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