Postsyntactic operations and Turkic 3PL Agreement Patterns

Eszter Ótott-Kovács
eo264@cornell.edu

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1.
Introduction

Three 3PL agreement marking patterns

The plural feature can be:

1. **Unmarked**: Kazakh

Bala-lar	ɯstɯkkœl-ge	bar-dɯ-∅.
child-PL	Issyk-Kul-DAT	go-3PST-**PL**

Three 3PL agreement marking patterns

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2. **Marked by /lAr/**: Turkish

   Çocuk-lar Issık Göl-e git-ti-**ler**.

   child-PL Issyk-Kul-DAT go-3PST-**PL**

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3. **Marked by /(I)ʃ/**: Kyrgyz

   Baldar Ɯsɯk-Kœl-gœ bar-**ɯʃ**-tɯ.

   child.PL Issyk-Kul-DAT go-**PL**-3PST

   'The children went to the Issyk-Kul.'

Three 3PL agreement marking patterns

The plural feature can be:

1. **Unmarked**: Kazakh

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2. **Marked by /lAr/**: Turkish

   Çocuk-lar Issık Göl-e git-ti-**ler**. **Plural exponent is /lAr/**

   child-PL Issyk-Kul-DAT go-3PST-**PL**

3. **Marked by /(I)ʃ/**: Kyrgyz

   Baldar Ɯsɯk-Kœl-gœ bar-**ɯʃ**-tɯ.

   child.PL Issyk-Kul-DAT go-**PL**-3PST

   'The children went to the Issyk-Kul.'

/(l)ʃ/ syncretism

Focus of the talk: Kyrgyz /(I)ʃ/

Marked by /(I)ʃ/: Kyrgyz

(1) Baldar Ɯsɯk-Kœl-gœ bar-**ɯʃ**-tɯ.
child.PL Issyk-Kul-DAT go-**PL**-3PST
'The children went to the Issyk-Kul.'

Focus of the talk: Kyrgyz /(I)ʃ/

Marked by /(I)ʃ/: Kyrgyz

(1) Baldar Ɯsɯk-Kœl-gœ bar-**ɯʃ**-tɯ.
child.PL Issyk-Kul-DAT go-**PL**-3PST
'The children went to the Issyk-Kul.'

(2)* Baldar Ɯsɯk-Kœl-gœ bar-dɯ-**lar**. (The Turkish pattern)
child.PL Issyk-Kul-DAT go-3PST-**PL**

(3)? Baldar Ɯsɯk-Kœl-gœ bar-dɯ-∅. (The Kazakh pattern)
child.PL Issyk-Kul-DAT go-3PST-**PL**

The semi-optionality of the plural /(I)ʃ/ marker is due to optional impoverishment in the context of [-participant, -speaker]. Also see Bamyacı et al. 2014 for the lack of overt plural exponent with non-agentive 3PL subjects; the same descriptive generalizations observed in Bamyacı et al. 2014 carry over to Kyrgyz as well.

Roadmap

2.
/(I)ʃ/ is an agreement marker

/(I)ʃ/ has no corresponding semantic mapping

- /(I)ʃ/ is not a not a marker of “phrasal cumulativity” (Kratzer 2008)

(1a) Baldar Ɯsɯk-Kœl-gœ bar-**ɯʃ**-tɯ.
child.PL Issyk-Kul-DAT go-**PL**-3PST
‘The children **separately** went to the Issyk-Kul.’ (**MULTIPLE** *going* events)

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child.PL Issyk-Kul-DAT go-**PL**-3PST
‘The children **separately** went to the Issyk-Kul.’ (**MULTIPLE** *going* events)

(1b) Baldar Ɯsɯk-Kœl-gœ bar-**ɯʃ**-tɯ.
child.PL Issyk-Kul-DAT go-**PL**-3PST
‘The children **together** went to the Issyk-Kul.’ (**ONE** *going* event)

The same observation holds for other verbs, e.g., *lift up the piano*

/(I)ʃ/ patterns with agreement features

- Certain clausal constructions do not have agreement features:
  - /(I)p/ manner adverbial clauses
  - Relative clauses

/(I)ʃ/ patterns with agreement features

- Certain clausal constructions do not have agreement features:
  - /(I)p/ manner adverbial clauses
  - **Relative clauses**

(4a) [biz d͡ʒaʃa-gan] koet͡ʃœ-loer
[we live-RC] street-PL
'the streets [where we live]'

(4b) * [biz d͡ʒaʃa-gan-**ɯbɯz**] koet͡ʃœ-loer
[we live-RC-**1PL**] street-PL

/(I)ʃ/ patterns with agreement features

- Prediction: If /(I)ʃ/ is an agreement marker, it is ungrammatical in these configurations → **Borne out**

(5a) [baldar d͡ʒaʃa-gan] kœt͡ʃœ-lœr
[child.PL live-RC] street-PL
'the streets [where the children live]'

(5b) * [baldar d͡ʒaʃa-**ʃ**-kan] kœt͡ʃœ-lœr
[child.PL live-**PL**-RC] street-PL

/(I)ʃ/ is an agreement marker

... But what feature does it spell out?

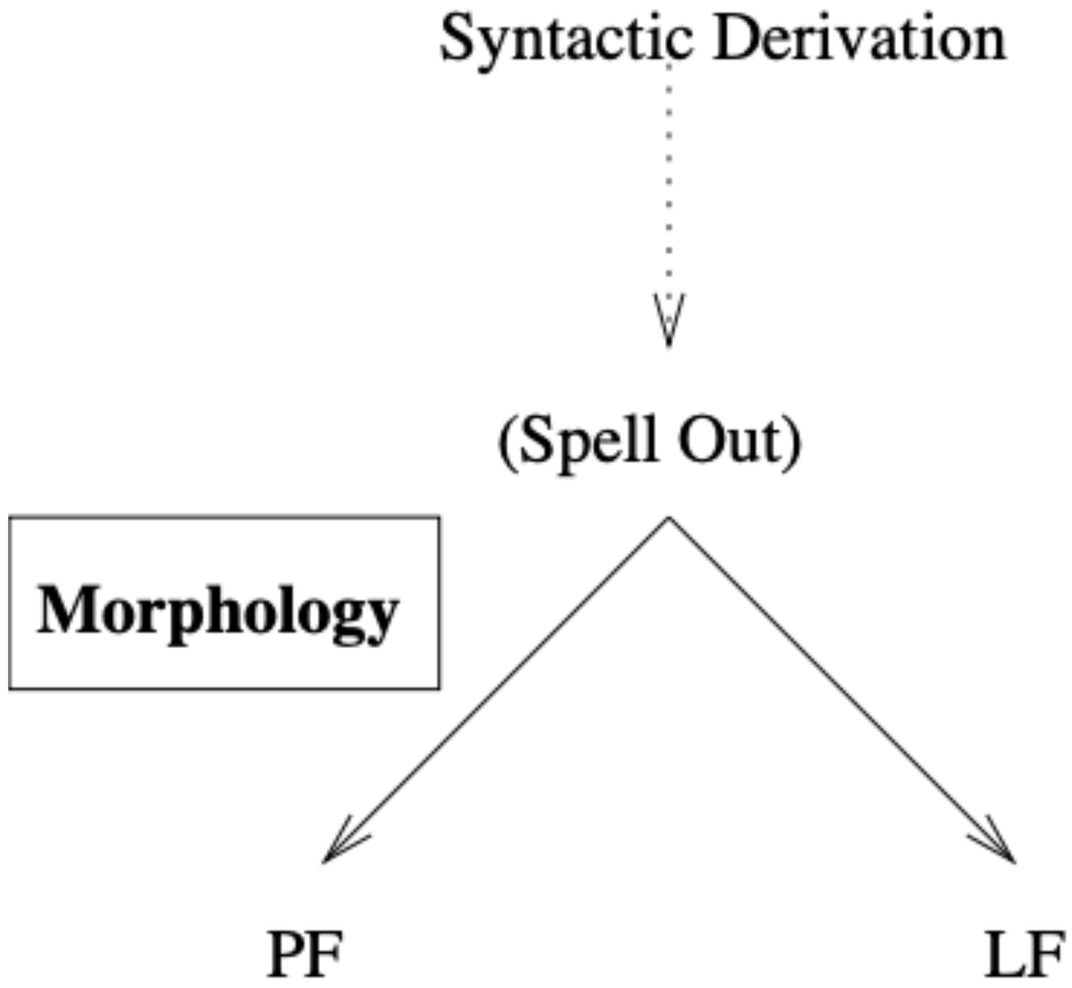
3.
/(ɪ)ʃ/ spells out [-singular]

Background assumptions

- Person and number features are binary (Noyer 1992, Bobaljik 2008, Nevins 2007, Despić & Murray 2018)
- Number features: [+singular], [-singular] (Harbour 2003)
- Person features: [+author], [-author], [+participant], [-participant] (Harbour 2016)
- Honorific feature: [honorific]

Background assumptions

- Model of grammar: Morphology interprets the output of the Syntactic Derivation (Halle & Marantz 1993, i.a.)
- Output of Syntax: Abstract features appearing in bundles
- Morphology: Manipulate features
- Vocabulary Insertion adhering to the Subset Principle
  - Vocabulary Items bear features
  - The most specified gets inserted into the terminal
  - VI and terminal feature mismatches are disallowed



Let's look at agreement paradigms

Compare 1SG & 1PL

	k-paradigm	z-paradigm	sI-paradigm
1SG	TAM-*m*	TAM-*mIn*	NMLZ-*(I)m*
2SG	TAM-*ŋ*	TAM-*sIŋ*	NMLZ-*(I)ŋ*
2SG.POLITE	TAM-*ŋIz*	TAM-*sIz*	NMLZ-*(I)ŋIz*
3SG	TAM-*Ø*	TAM-*Ø*	NMLZ-*(s)I(n)*

1PL	TAM-*k*	TAM-*BIz*	NMLZ-*(I)bIz*
2PL	TAM-*ŋAr* < *-ŋ-LAr*	TAM-*sIŋAr* < *-sIŋ-LAr*	NMLZ-*(I)ŋAr* < *-(I)ŋ-LAr*
2PL.POLITE	TAM-*ŋIzdAr* < *-ŋIz-LAr*	TAM-*sIzdAr* < *-sIz-LAr*	NMLZ-*(I)ŋIzdAr* < *-(I)ŋIz-LAr*
3PL	*-(I)ʃ-*TAM-*Ø*	*-(I)ʃ-*TAM-*Ø*	*-(I)ʃ-*NMLZ-*(s)I(n)* ~ NMLZ-*LAr-(s)I(n)*

I submit that the exponents in the sI-paradigm are not specified for [possessive]. The distribution of the sI-paradigm is determined by the category of the preceding marker, a property also displayed by the k- and z-paradigms.

Let's look at agreement paradigms

Compare 2SG & 2PL

	k-paradigm	z-paradigm	sI-paradigm
1SG	TAM-*m*	TAM-*mIn*	NMLZ-*(I)m*
2SG	TAM-*ŋ*	TAM-*sIŋ*	NMLZ-*(I)ŋ*
2SG.POLITE	TAM-*ŋIz*	TAM-*sIz*	NMLZ-*(I)ŋIz*
3SG	TAM-*Ø*	TAM-*Ø*	NMLZ-*(s)I(n)*

1PL	TAM-*k*	TAM-*BIz*	NMLZ-*(I)bIz*
2PL	TAM-*ŋAr* < *-ŋ-LAr*	TAM-*sIŋAr* < *-sIŋ-LAr*	NMLZ-*(I)ŋAr* < *-(I)ŋ-LAr*
2PL.POLITE	TAM-*ŋIzdAr* < *-ŋIz-LAr*	TAM-*sIzdAr* < *-sIz-LAr*	NMLZ-*(I)ŋIzdAr* < *-(I)ŋIz-LAr*
3PL	*-(I)ʃ-*TAM-*Ø*	*-(I)ʃ-*TAM-*Ø*	*-(I)ʃ-*NMLZ-*(s)I(n)* ~ NMLZ-*LAr-(s)I(n)*

The deletion of /l/ following /ŋ/ is the result of the Syllable Contact Law, a phonological requirement in the language that the onset cannot be more sonorous than the preceding coda (Baertsch and Davis 2001, Gouskova 2004, Washington 2010, Seo 2011).

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Compare 2SG.POLITE & 2PL.POLITE

	k-paradigm	z-paradigm	sI-paradigm
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2PL.POLITE	TAM-*ŋIzdAr* < *-ŋIz-LAr*	TAM-*sIzdAr* < *-sIz-LAr*	NMLZ-*(I)ŋIzdAr* < *-(I)ŋIz-LAr*
3PL	*-(I)ʃ*-TAM-*Ø*	*-(I)ʃ*-TAM-*Ø*	*-(I)ʃ*-NMLZ-*(s)I(n)* ~ NMLZ-*LAr*-*(s)I(n)*

Desonorization of /l/ following obstruents is also the result of the Syllable Contact Law (Baertsch and Davis 2001, Gouskova 2004, Washington 2010, Seo 2011).

Let's look at agreement paradigms

Compare 3SG & 3PL

	k-paradigm	z-paradigm	sI-paradigm
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/(I)ʃ/ spells out [-singular]

But only with 3PL subjects

- /(I)ʃ/ is *not* used in 1PL, 2PL and 2PL.POLITE agreement markers

(6) Biz Ɯsɯk-Kœl-gœ bar-(*ɯʃ)-tɯ-k. **1PL**
1PL Issyk-Kul-DAT go-(*PL)-PST-1PL
Intended: 'We went to the Issyk-Kul.'

(7a) Siz Ɯsɯk-Kœl-gœ bar-(*ɯʃ)-tɯ-ŋar. (< ŋ-LAr) **2PL**
2PL Issyk-Kul-DAT go-(*PL)-PST-2PL
Intended: 'You(pl) went to the Issyk-Kul.'

(7b) * Siz Ɯsɯk-Kœl-gœ bar-ɯʃ-tɯ-ŋ. **2PL**
2PL Issyk-Kul-DAT go-PL-PST-2
Intended: 'You(pl) went to the Issyk-Kul.'

4.
Plural Fission

2PL, 2PL.POLITE & 3PL exponents are NOT mono-morphemic

	k-paradigm	z-paradigm	sI-paradigm
1SG	TAM-*m*	TAM-*mIn*	NMLZ-*(I)m*
2SG	TAM-*ŋ*	TAM-*sIŋ*	NMLZ-*(I)ŋ*
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2PL.POLITE	TAM-*ŋIzdAr* < -*ŋIz-LAr*	TAM-*sIzdAr* < -*sIz-LAr*	NMLZ-*(I)ŋIzdAr* < -*(I)ŋIz-LAr*
3PL	-*(I)ʃ*-TAM-*Ø*	-*(I)ʃ*-TAM-*Ø*	-*(I)ʃ*-NMLZ-*(s)I(n)* ~ NMLZ-*LAr*-*(s)I(n)*

Postsyntactic operations

- Agreement on the T (or D, in the case of nominalized predicates) node gets evaluated in the course of the syntactic derivation
- At this point agreement features consist of just one feature bundle
- **Question**: How come that two exponents correspond to one feature bundle?

[-author, +participant, -singular] ↔ /ŋ-LAr/

[-author, +participant, +honorific -singular] ↔ /ŋIz-LAr/

Postsyntactic operations

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  [-author, +participant, -singular] ↔ /ŋ-LAr/

  [-author, +participant, +honorific -singular] ↔ /ŋIz-LAr/

- **Answer**:
  - The output of the syntactic derivation is sent to Spell Out
  - This representation is subject to the postsyntactic operation **fission**

  [-author, +participant] ↔ /ŋ/

  [+honorific] ↔ /Iz/

  [-singular] ↔ /LAr/

Fission

- Fission accounts for “one-to-many mapping” phenomena (Noyer 1992, Halle & Maranz 1993, Halle 1997)
- Ex

Two views on fission

- Main point of departure: **When** fission takes place

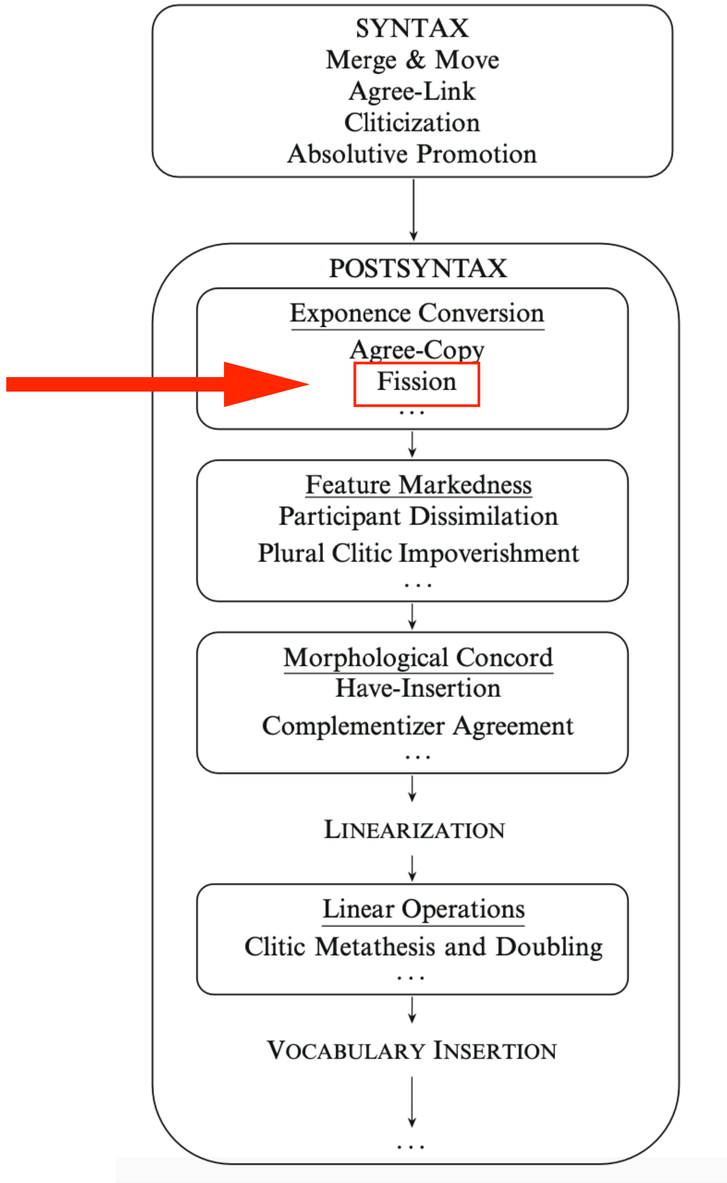
1. Fission **takes place at the same time as Vocabulary Insertion** (Noyer 1992, Halle 1997, and with slightly different theoretical apparatus Harbour 2008)

   In the course of Vocabulary Insertion a subsidiary terminal is created when the inserted exponent's own features do not fully match the features of the terminal

2. Fission **precedes Linearization and Vocabulary Insertion** (Arregi & Nevins 2012)

Two views on fission

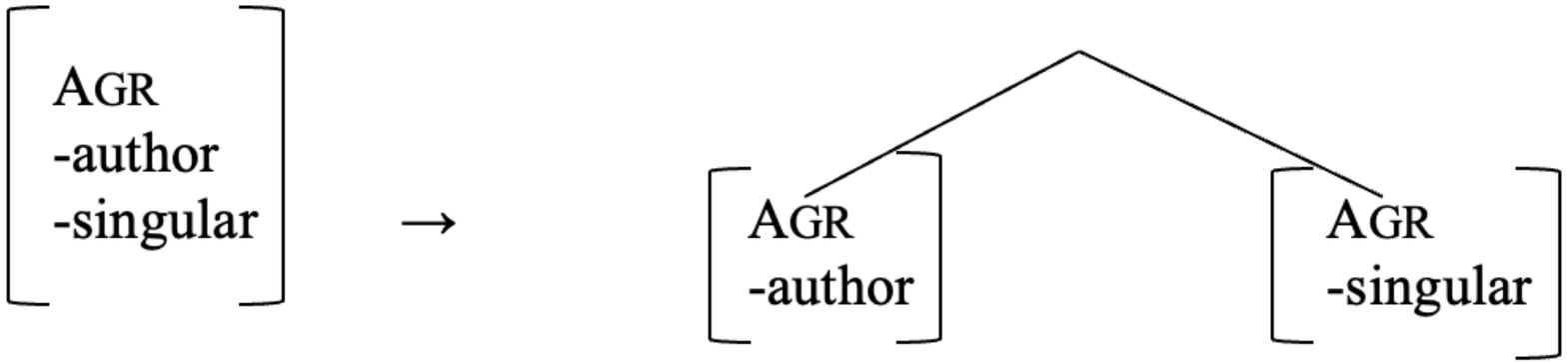
Fission **precedes Linearization and Vocabulary Insertion** (Arregi & Nevins 2012)



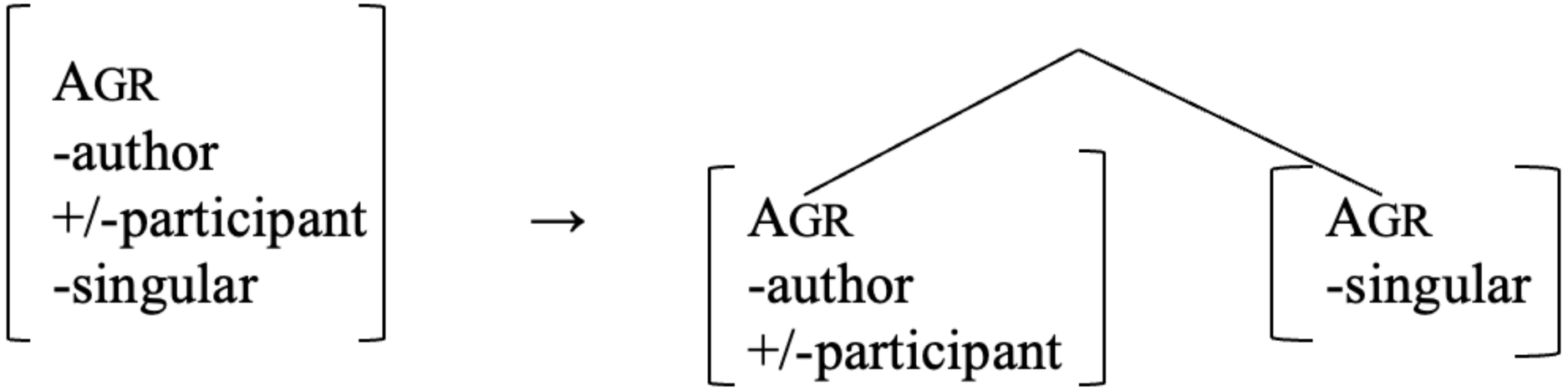
Arregi & Nevins 2012: 4, Fig. 1.1.

Arregi & Nevins' (2012) Fission

- Fission targets feature bundles of a given category containing two specific features

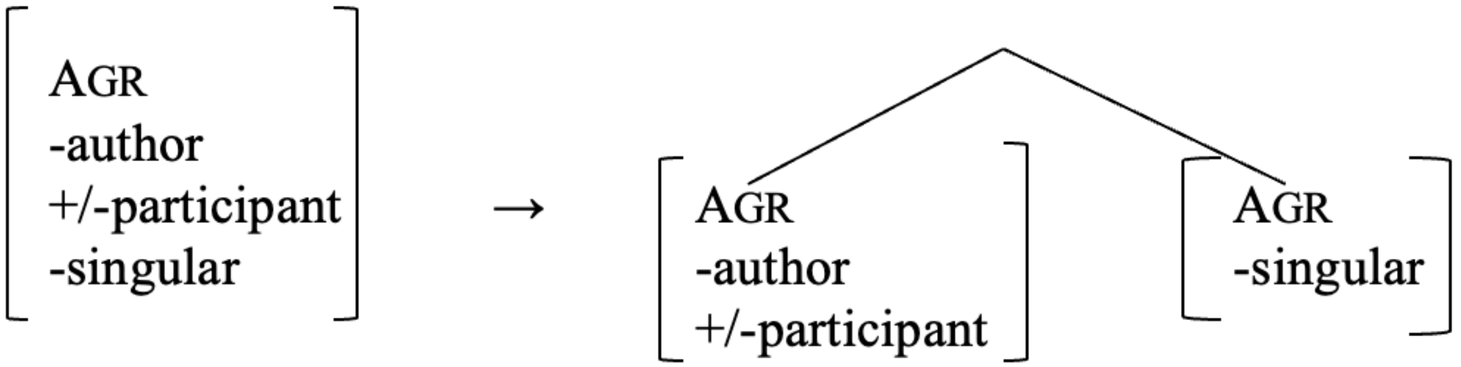


Proposal: Plural Fission



- This explains why 1SG-1PL are mono-morphemic, but 2PL-3PL are not

Proposal: Plural Fission



[-author, +participant, -singular] → [ŋ] - [LAr]

Order of the output feature bundles

- **2PL and 2PL.POLITE: [person]-[number]**
- Agr[-author, +**participant**, -singular] → Agr[-author, +participant] Agr[-singular]
  - 2PL: /(I)ŋAr/ (< (I)ŋ-LAr), 2PL.POLITE: /(I)ŋIzdAr / (< (I)ŋIz-LAr)

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- **2PL and 2PL.POLITE: [person]-[number]**
- Agr[-author, +**participant**, -singular] → Agr[-author, +participant] Agr[-singular]
  - 2PL: /(I)ŋAr/ (< (I)ŋ-LAr), 2PL.POLITE: /(I)ŋIzdAr / (< (I)ŋIz-LAr)

- **3PL: [number]-[person]**
- Agr[-author, **-participant**, -singular] → Agr[-singular] Agr[-author, -participant]
  - /NMLZ-LAr-(s)I(n)/ (optional 3PL in the sI-paradigm)

Order of the output feature bundles

	k-paradigm	z-paradigm	sI-paradigm
2PL	TAM-*ŋAr* < -*ŋ*-*LAr*	TAM-*sIŋAr* < -*sIŋ*-*LAr*	NMLZ-*(I)ŋAr* < -*(I)ŋ*-*LAr*
2PL.POLITE	TAM-*ŋIzdAr* < -*ŋIz*-*LAr*	TAM-*sIzdAr* < -*sIz*-*LAr*	NMLZ-*(I)ŋIzdAr* < -*(I)ŋIz*-*LAr*
3PL	-*(I)ʃ*-TAM-*Ø*	-*(I)ʃ*-TAM-*Ø*	-*(I)ʃ*-NMLZ-*(s)I(n)* ~ NMLZ-*LAr*-*(s)I(n)*

- The reason 2PL & 2PL.POLITE do not participate in Lowering is that **the number features are not adjacent to TAM**
- In 3PL **[-singular] is adjacent to TAM**, a highly unusual configuration (Trommer 2003), which motivates Lowering

5.
Lowering

Postsyntactic movement operations

- Embick & Noyer 2002:
  - **Lowering**
    - Before Vocabulary Insertion
    - Operates on hierarchical structures → It can reference a specific functional head
    - Feeds allomorphy
  - **Local Dislocation**
    - After Vocabulary Insertion/linearization
    - Operates on non-hierarchical, linearized structures
    - Does not feed allomorphy
- There are other views, e.g., Arregi & Nevins' (2012, 2018) metathesis in the Generalized Reduplication framework (Harris & Halle 2005)

The [-singular] movement is not local

Let's look at the Kyrgyz predicate template

VERB STEM	SLOT 1 ASPECT	SLOT 2 TENSE	AGREEMENT	
oku-	mak-	æle-	siŋ	'You were supposed to read'
oku-	mak-	æken-	siŋ	'(I heard that) You are going to read'

For this view of Slot-1 and Slot-2 suffixes see Jendraschek 2011, Key & Schreiner 2014

The [-singular] movement is not local

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VERB STEM	SLOT 1 ASPECT	SLOT 2 TENSE	AGREEMENT	
oku- 'read'	**mak-** PRSP	**æle-** PST	**siŋ** 2SG	'You were supposed to read'
oku- 'read'	**mak-** PRSP	**æken-** EVID	**siŋ** 2SG	'(I heard that) You are going to read'

For this view of Slot-1 and Slot-2 suffixes see Jendraschek 2011, Key & Schreiner 2014

The [-singular] movement is not local

- If the movement of /(I)ʃ/ is a case of Local Dislocation, the following is predicted to be grammatical:
- [-singular] is predicted to show up between Slot-1 and Slot-2 → **Not borne out**

VERB STEM	SLOT 1 ASPECT		SLOT 2 TENSE	AGREEMENT
oku- 'read'	**mag-** PRSP	**ɯʃ-** PL	**æle-** PST	**Ø** 3
oku- 'read'	**mag-** PRSP	**ɯʃ-** PL	**æken-** EVID	**Ø** 3

- These forms are gibberish

The [-singular] movement is not local

- The correct forms are the following:

VERB STEM		SLOT 1 ASPECT	SLOT 2 TENSE	AGREEMENT
oku- 'read'	**ʃ-** PL	**mak-** PRSP	**æle-** PST	**Ø** 3
oku- 'read'	**ʃ-** PL	**mak-** PRSP	**æken-** EVID	**Ø** 3

- → [-singular] is **Lowered** (in the sense of Embick & Noyer 2002)

[-singular] is Lowered to Aspect (Slot 1)

- Domain between VoiceP and Slot-1 (AspP) contains:
  - Low Aspect projections
  - Modality

[-singular] is Lowered to Aspect (Slot 1)

- Domain between VoiceP and Slot-1 (AspP) contains:
  - **Low Aspect projections: /(I)p d͡ʒyr/ 'habitual'**, …
  - Modality

(8a) Baldar bul kitep-ti oku-**p d͡ʒyr-yʃ**-œt.

child.PL this book-ACC read-**HABIT**-**PL**-3CONT

'The children read this book habitually.'

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- Domain between VoiceP and Slot-1 (AspP) contains:
  - **Low Aspect projections:** /**(I)p d͡ʒyr**/ **'habitual'**, …
  - Modality

(8a) Baldar bul kitep-ti oku-**p d͡ʒyr-yʃ**-œt.

child.PL this book-ACC read-**HABIT-PL**-3CONT

'The children read this book habitually.'

(8b) * Baldar bul kitep-ti oku-**ʃ-up d͡ʒyr**-(**yʃ**)-œt.

child.PL this book-ACC read-**PL-HABIT**-(**PL**)-3CONT

[-singular] is Lowered to Aspect (Slot 1)

- Domain between VoiceP and Slot-1 (AspP) contains:
  - Low Aspect projections
  - **Modality: /A/j al/ 'ability'**

(9a) Baldar oku-j al-ɯʃ-at.

child.PL read-**ABIL**-**PL**-3CONT

'The children can read.'

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- Domain between VoiceP and Slot-1 (AspP) contains:
  - Low Aspect projections
  - **Modality: /A/j al/ 'ability'**

(9a) Baldar oku-j al-ɯʃ-at.

child.PL read-**ABIL**-**PL**-3CONT

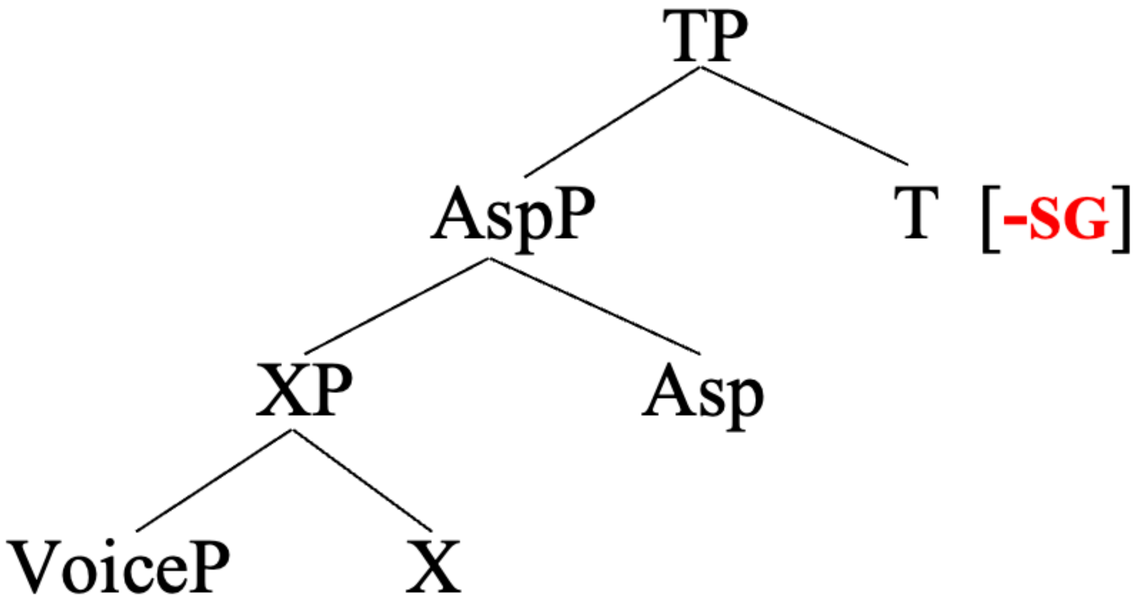
'The children can read.'

(9b) * Baldar oku-ʃ-a al-(ɯʃ)-at.

child.PL read-**PL**-**ABIL**-(**PL**)-3CONT

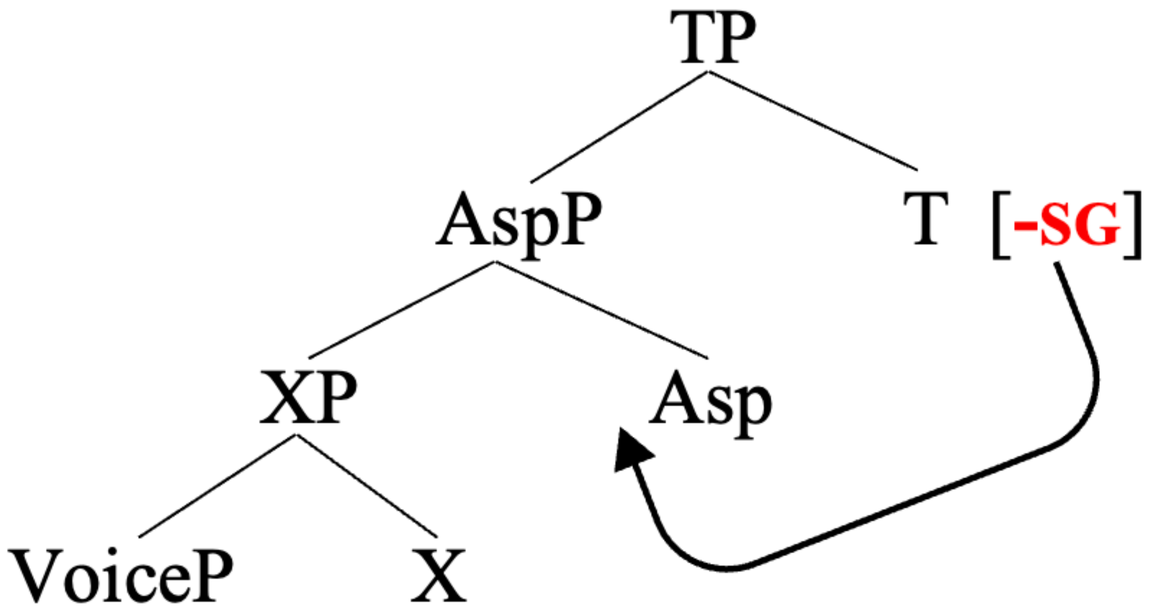
[-singular] is Lowered to Aspect (Slot 1)

Input structure



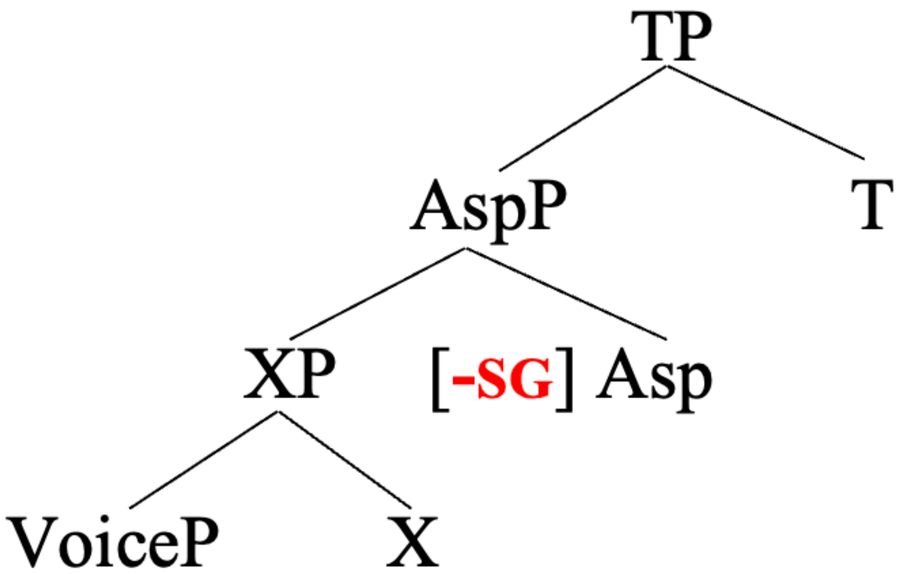
[-singular] is Lowered to Aspect (Slot 1)

Lowering



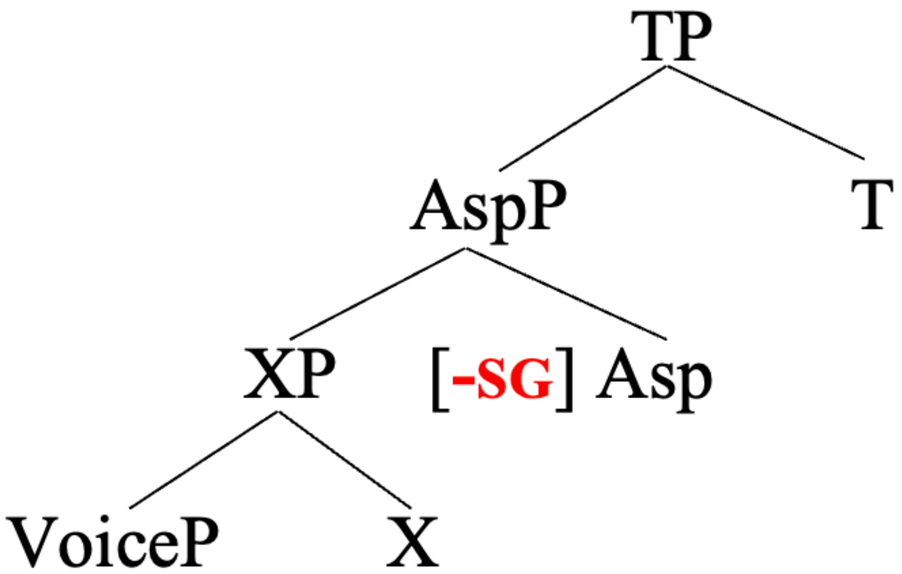
[-singular] is Lowered to Aspect (Slot 1)

Output structure



6.
Vocabulary Insertion

Linearization



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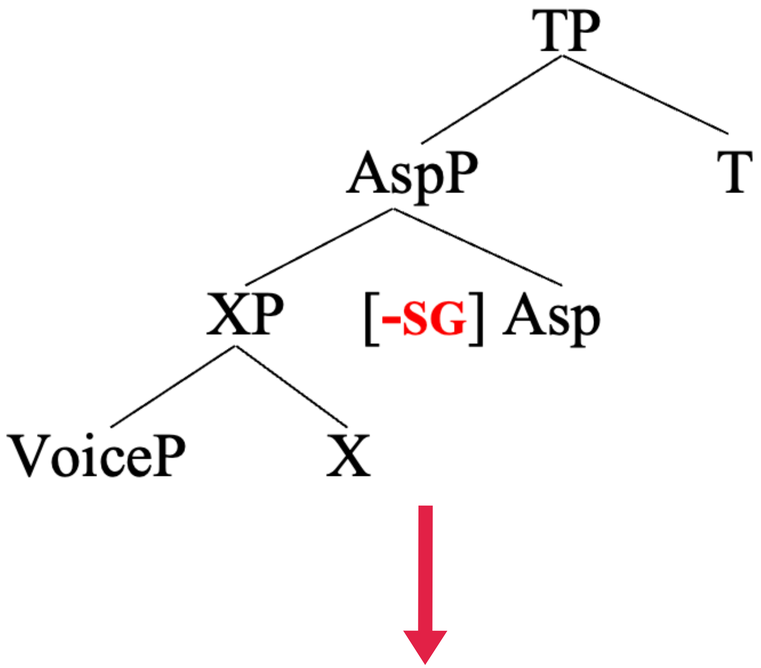

[[[[VoiceP + X] + -SG] + Asp] + T]

/LAr/ or /(I)ʃ/

- Output of Linearization:

  [[[[VoiceP + X] + -SG] + Asp] + T]

- /LAr/ is specified for [-singular]
- How is it blocked in this context?

(10) * Baldar Ɯsɯk-Kœl-gœ bar-**lar**-dɯ.
child.PL Issyk-Kul-DAT go-**PL**-3PST
Intended: 'The children went to the Issyk-Kul'

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Intended: ‘The children went to the Issyk-Kul’

- /(I)ʃ/ is contextually specified for [+V] (Baker 2003)

/LAr/ or /(I)ʃ/

- /(I)ʃ/ is contextually specified for [+V] (Baker 2003)

[-singular] ↔ /(I)ʃ/ | [+V]__

[-singular] ↔ /LAr/

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7.
Conclusions

- **Desideratum**:
  - /(I)ʃ/ is the spell-out of [-singular] but only with 3PL subjects
  - /(I)ʃ/ is unusually positioned (precedes TAM/NMLZ)

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  - **Plural Fission: targets [-author, -singular]**
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    - Explains why movement feeds allomorphy: Movement must occur before Vocabulary Insertion
  - **Vocabulary Insertion**
    - [-singular] can be spelt out by /LAr/ or /(I)ʃ/ depending on the preceding category
    - /(I)ʃ/ is contextually specified for [+V]

Implications

- Turkic 3PL agreement markers can all be captured by parametrized operations:
  - **Kazakh**: impoverishment of [-singular] (in the context of [-author, -participant]
  - **Turkish**: No Lowering, or Lowering to T (cf. Güneş 2021)
  - **Kyrgyz**: Lowering to Asp

- What we learned about post syntactic operations:
  - Fission precedes Vocabulary Insertion (pro Arregi & Nevins 2012)

- Taking the exponent /(I)ʃ/ to bear [-singular], also accounts for other uses of /(I)ʃ/ where it is inserted in terminals that define event plurality (Ótott-Kovács, in prep)


Rahmat!

References

Appendix

Order of the output feature bundles

Proposal

- **2PL and 2PL.POLITE: [person]-[number]**
- Agr[-author, +**participant**, -singular] → Agr[-author, +participant] Agr[-singular]
  - 2PL: /(I)ŋAr/ (< (I)ŋ-LAr), 2PL.POLITE: /(I)ŋIzdAr / (< (I)ŋIz-LAr)

- **3PL: [number]-[person]**
- Agr[-author, **-participant**, -singular] → Agr[-singular] Agr[-author, -participant]
  - /NMLZ-LAr-(s)I(n)/ (optional 3PL in the sI-paradigm)

Order of the output feature bundles

Let's consider an alternative

- **2PL, 2PL.POLITE, 3PL: [person]-[number]**
  - Agr[-author, +**participant**, -singular] → Agr[-author, +participant] Agr[-singular]

- Two facts to explain:
  1. Why [-singular] is not Lowered in 2PL, 2PL.POLITE?
  2. How can we derive the optional order attested in 3PL in the sI-paradigm?

Order of the output feature bundles

Let's consider an alternative

- Two facts to explain:
  1. **Why [-singular] is not Lowered in 2PL, 2PL.POLITE?**

- Lowering of [-singular] is conditioned by [-participant]
- 2PL, 2PL.POLITE have [+participant] → [-singular] is not Lowered
- 3PL has [-participant] → [-singular] is Lowered

Order of the output feature bundles

Let's consider an alternative

- Two facts to explain:

  2. How can we derive the optional order attested in 3PL in the sI-paradigm?

  -(I)ʃ-NMLZ-(s)I(n) ~

  NMLZ-LAr-(s)I(n)

- NMLZ is: AspP + DP
- [-singular] is either Lowered
  - to Asp, or
  - to [π], if the preceding head is [D]

Order of the output feature bundles

Some advantages of the proposed analysis

- The answer to Q2 is immediately obvious:
  - The feature ordering in NMLZ-LAr-(s)I(n) is the result of the output of Fission
- Lowering can be motivated (however stimulative this motivation may be)
  - TAM-[-singular] (a very unusual (~ dispreferred) ordering) drives Lowering

Order of the output feature bundles

Some advantages of the proposed analysis

- In possessive structures the plural suffix /LAr/ precedes the possessive agreement suffix

(i) kɯz-**dar**-ɯ (Kyrgyz)

girl-**PL**-3(POSS)

'his/her/their daughter**s**'

- Hypothesis: Diachronic change whereby the plural gets reanalyzed as a [-singular] agreement marker
  - In fact, we know that this happened in Turkish

(ii) kız-lar-ı (Turkish)

girl-**PL**-3(POSS)

1. 'His/her daughter**s**'; 2. 'Their daughter**s**'; **3. 'Their daughter(SG!)'**

  - In the 3rd meaning, the feature ordering is [AGR [-singular][-author, -participant]]
  - This ordering gets generalized to all 3PL agreement markers

Metathesis analysis á la Arregi & Nevins 2012

- Accounting for the 3PL in the k and z-paradigms:

  Asp T π # →
  [Asp T π > < #] →
  Asp T π # Asp T π # →
  # Asp T π

- This could be parametrized to the [-participant] feature in [π]

Metathesis analysis á la Arregi & Nevins 2012

- Accounting for the variable feature ordering in 3PL in the sI-paradigm:

NMLZ-LAr-(s)I(n)

Asp D π # →
[π > < #] →
π # π # →
Asp-D # π

-(I)ʃ-NMLZ-(s)I(n)

Asp D π # →
[Asp D π > < #] →
Asp D π # Asp D π # →
Asp D π

- This could be parametrized to the D head