Upward Agreement and Syntactic Counterfeeding in Lubukusu

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Overview

Questions

1. Is agreement upward looking, downward, or does it vary?
2. How does agreement interact with case/movement/etc.?

Formal considerations Many long-distance linguistics dependencies are **tier-based strictly local (TSL)** (Graf 2022)

This work Reanalyze the Lubukusu **complementizer agreement** data from Diercks (2013) data as a TSL pattern over **MG dependency trees**

- **Upward agreement** is shown to be unproblematic
- **Hyperraised subjects** are correctly predicted not to agree

Implications Movement **may or may not feed** subsequent operations
→ We need a system that can handle both feeding and counterfeeding

TSL Syntax

TSL in a nutshell

1. Ignore the irrelevant items; the remainder form a **tier projection**
2. Items on the tier are subject to **strictly local constraints**
3. Each logical dependency has a unique tier and constraints

Example: English subject movement and verbal agreement

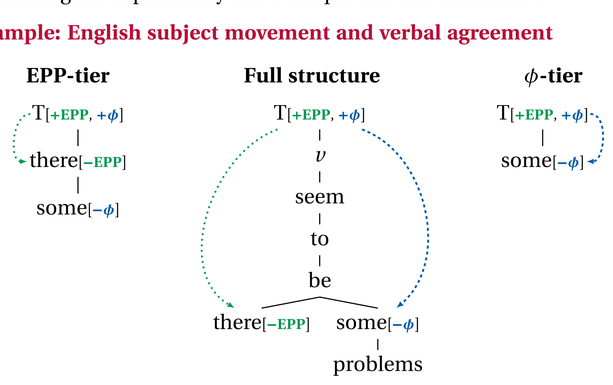


Figure 1: MG dependency tree for *There seem to be some problems*, with tiers for EPP-movement and ϕ-agreement. See below for details.

MG dependency trees

- Static representation of a syntactic derivation: a **derivation tree**
- Every node is a lexical item in base position
- Daughters of a node are its arguments in c-command order
- Features indicate movement, agreement, etc., *in the current derivation*
  +F = landing site / unvalued item −F = mover / valuer

TSL model of agreement (Hanson 2024)

- Project a tier based on the **d[erivational]-command** relation (Graf and Shafiei 2019), which combines dominance and precedence
- The tier for each dependency contains only (i) potential participants and (ii) relativized blockers (cf. Keine 2019)
- On the tier, a probe and its goal (or landing site and mover) must be adjacent; other constraints vary

Notes

- *There* is a potential EPP-mover, but not a potential agreement target
- Intermediate/final positions of movers are not represented
- Successive cyclic movement is assumed not to be feature-driven

Direction of Complementizer Agreement

Descriptive generalization Complementizer agreement may target the embedded subject (downward agreement) or the subject of the containing clause (upward agreement)

TSL analysis Tier includes C heads and subjects (D[–EPP]); order of the probe and goal varies

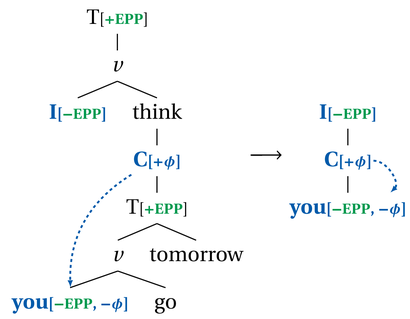
- Downward agreement: probe immediately precedes (commands) goal
- Upward agreement: goal immediately precedes (commands) probe

Examples

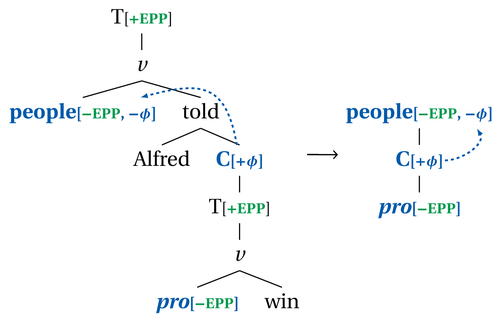
(1) Downward complementizer agreement in West Flemish (Germanic)
Kpeinzen da-j [$_{CP}$ *(gie) morgen goat].*
I.think that-**you** **(you)** tomorrow go
'I think that you'll go tomorrow.'

(2) Upward complementizer agreement in Lubukusu (Bantu)
Ba-ba-ndu ba-bolela Alfredi [$_{CP}$ *ba-li pro a-kha-khile].*
c2-**c2**-people c2-said c1.Alfred **c2**-that *pro* c1-FUT-conquer
'The people told Alfred that he will win.'

West Flemish (ex. 1): C agrees downward



Lubukusu (ex. 2): C agrees upward



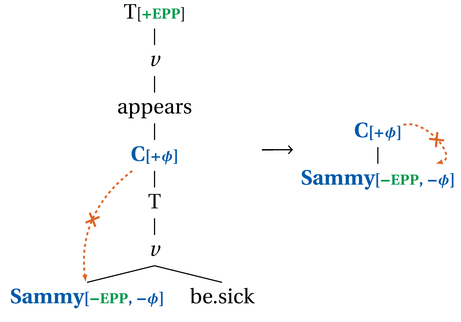
Note: Verbal agreement is ignored for simplicity, assumed to reside on separate tier (not shown)

Syntactic Counterfeeding

Lubukusu hyperraising The subject moves to an agreeing position, yet is invisible for agreement
Explanation Subject appears below C in dependency tree in a language with upward agreement

(3) Agreeing complementizer incompatible with hyperraising
*Sammy a-lolekhana mbo (*a-li) a-likho a-lwala.*
c1.Sammy c1-appears that (***c1**-that) c1.PROG c1-be.sick
'Sammy appears to be sick.' (lit. 'Sammy seems that is sick.')

Lubukusu (ex. 3): Hyperraised subject is below C and cannot agree



Operation Ordering in Syntax

Prediction (with caveats) Minimalism predicts feeding/bleeding; TSL over MG dependency trees predicts counterfeeding/counterfeeding

Reality Both types of patterns are attested

Mvmt. + Case	Object-shift **feeds** accusative marking	e.g. Turkish
Case + Agreement	Ergative marking **bleeds** V-agreement	e.g. Hindi
Mvmt. + Agreement	Hyperraising **counterfeeds** C-agreement	e.g. Lubukusu
Mvmt. + Binding	*Wh*-movement **counterbleeds** Principle B	e.g. English

Table 1: Examples of operation ordering in syntax.

Caveats: (i) copy movement can produce counterbleeding, (ii) TSL syntax can handle some feeding/bleeding in parallel

Why the Lubukusu data is important

- Difficult to disentangle operation ordering from locality/visibility effects
- Movement from below upward agreeing head avoids this confound

Towards a flexible system for operation ordering

- Naïve MG implementation: ordering among licensee features
  - e.g. Feature spec. for Lukusu D head: (+N) –D ($-\phi$) (–EPP)
  - Problem: derivations with ordered licensee features may not be TSL
- TSL-compatible alternative: ordered tree-to-tree maps
  - e.g. Lubukusu: Selection < C-Agreement < Hyperraising
  - TSL tree-to-tree maps are a subject of current research (cf. Graf 2023)

Diercks' *Indirect Agreement* Analysis

- Claim: C agrees with operator in Spec-CP, bound by higher subject
- Problem: Requires extra stipulation to handle hyperraising case
- Comment: Upward dependency formally identical, recast as binding

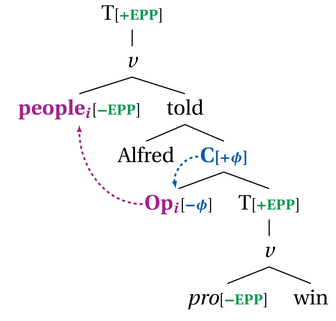


Figure 2: MG dependency tree for Diercks' analysis of (3).

References and Acknowledgments

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