Features or filters? On the relationship between syntax and information structure

András Bárány (Bielefeld University) & Jutta-Maria Hartmann (Bielefeld University) The interaction of information structure (IS) and syntax is discussed widely. A major question is whether IS is part of narrow syntax (*i.a.* Rizzi 1997, Belletti 2004, Aboh 2010, Hartmann 2016, Miyagawa 2017, van der Wal 2022) or a post-syntactic interface (*i.a.* Reinhart 2006, Neeleman & van de Koot 2008, Titov 2020). In the latter approach, syntax generates several structures and interface constraints filter out those not matching a particular IS.

In this talk, we add to this debate by considering data from **agreement alternations based on IS-features** not yet discussed in this context which raise questions about how to integrate IS and syntax as well as redundancy and efficiency in the architecture of grammar. **Data** Information structure can affect agreement patterns (see e.g. Mkude 1974, Bokamba 1979, Marten & Gibson 2016, Bobaljik & Wurmbrand 2002, Nazareth 2007, 2011, van Urk 2015, van der Wal 2022). In both (1), (2), arguments referring to contextually salient referents control object agreement in ditransitives, be they **recipient** or **theme** arguments.

(1) Tigrinya (Nazareth 2011: 109–110)

a. What did Jonas give to the poor? - [T gänzäb] hib-u-wom. money.SG PFV.give-SM.3SG.M-OM1.3PL.M 'He gave them money.'
b. To whom did Jonas give the money? - [R n-dika-tat] hib-u-wo.

to-poor-PL PFV.give-SM.3SG.M-OM1.3SG.M

'He gave **the money** to the poor.'

(2) Itelmen (Bobaljik & Wurmbrand 2002: 17)

- a. *My brother came.* -i *kma* [$_{R}$ *onna-nk*] [$_{T}$ $\beta a \dot{t} \dot{c}$] *t-zəl-nen.* and I him-DAT knife 1SG.SBJ-give-3SG.OBL 'And I gave the knife to him.'
- b. Where is **the knife**? qełnu [_R zlatumx-enk] t-zəl-čen? really brother-DAT 1SG.SBJ-give-1SG.SBJ>**3SG.OBJ** 'Didn't I give **it** to my brother?'

In contrast to movement ('Move α '), Agree is not usually thought of as an operation that applies freely and gives rise to multiple Agree relations which can be selected by an interface constraint. Data such as (1), (2) therefore provide a testing ground for probing the interaction of IS and narrow syntax. We discuss two possible analyses in detail.

(A) Narrow syntactic IS features One approach is to assume that IS-features are present in narrow syntax, possibly at all stages of the derivation (Aboh 2010), added later (Hartmann 2016), or serving licensing functions (Miyagawa 2017, van der Wal 2022). Agree can be sensitive to both δ - (discourse) and φ -features, e.g. following the interaction/satisfaction model (INT/SAT; Deal 2015, to appear). If *v* interacts with and is satisfied by φ -features *and* a valued δ -feature, it will agree with a local topical argument, DP_R in (3), but skip the local argument when it is not topical, and probe beyond it, DP_T in (4). If both are topical, *v* will agree with the more local argument and stop probing. Movement is not necessary.

(3) $\left[\underbrace{v[u\varphi;\varphi_{\mathbb{R}},u\delta:\text{TOP}]}_{\uparrow}\left[_{\text{ApplP}} \underbrace{\mathsf{DP}_{\mathbb{R}}[\varphi_{\mathbb{R}},\delta:\text{TOP}]}_{\uparrow}\left[_{\text{Appl}'} \operatorname{Appl}\left[_{VP} \operatorname{V} \mathsf{DP}_{\mathsf{T}}\right]\right]\right]\right]$

⁽¹⁾ Probing for φ + δ , Valuation, Probe halts

- (1) Probing for $\varphi + \delta$, No valuation, Probe continues
- $[\underbrace{v[u\varphi: \varphi_{T}, u\delta: TOP]}_{t} [ApplP DP_{R}[\varphi_{R}] [Appl' Appl [VP V DP_{T}]]]]$ (4)

(2) Probing for φ + δ , Valuation, Probe halts

(B) Post-syntactic agreement filter If IS features are not part of narrow syntax, a postsyntactic IS filter could derive (1), (2) in a way similar to scrambling (Neeleman & van de Koot 2008, Titov 2020). To do this, syntax has to provide either (i) multiple derivations with distinct Agree relations or (ii) a single derivation with multiple Agree relations as the input to the IS interface. Option (i) requires a version of 'Agree α ', not restricted by locality, for which there appears to be no evidence. Option (ii) could be implemented by Multiple Agree (Hiraiwa 2001, Arregi & Nevins 2012, Despić et al. 2019) or the INT/SAT model, both of which allow a probe to enter Agree relations with multiple goals; the IS interface then selects the relation involving the φ -features of the most salient referent in discourse.

Discussion Approach A gives up the inclusiveness condition but has the advantage that IS and other non-local agreement can be analysed in the same way. Such patterns are found, for example, when agreement depends on relative person features (see e.g. Mel'čuk 1988, Béjar & Rezac 2009, Oxford 2019, Coon & Keine 2021), in transitives (direct/inverse systems) or ditransitives as in (5). Agreement controllers are often argued to be resolved in narrow syntax using Cyclic Agree or interaction/satisfaction, without movement.

(5) Alutor (Mel'čuk 1988: 294–295)

a.	<i>əlləy-a</i> father-ERG	Ø- ina -jəl-i 3SG.SBJ-1SG.OBJ-give-3SG.SBJ	[_R	yəmək-əŋ 1SG-DAT][т <i>yəttə</i>] 2sg.abs
	'Father gave	e you as a wife to me .'				
b.	<i>əlləy-a</i> father-ERG	Ø- ina -jəl-i 3SG.SBJ-1SG.OBJ-give-3SG.SBJ	[_R	<i>yənək-əŋ</i>] 2SG-DAT	[_T	yəmmə] 1SG.ABS

'Father gave **me** as a wife to you.'

Approach **B** requires multiple Agree relations in syntax. While feasible in principle, this approach introduces redundancy in several ways. First, if φ -based alternations are derived and computed in narrow syntax, a second, post-syntactic mechanism for IS-based agreement doubles narrow syntactic Agree computations. Second, in case all potential goals are equally salient, the agreement controller is always the most local argument — to account for this default, syntactic locality needs to be doubled in a post-syntactic component as well.

Conclusion Both approaches face conceptual issues but A highlights the parallel to agreement alternations based on person which can also be derived in narrow syntax, without movement (Bárány 2021). B introduces redundancy and other analytical challenges: if IS selects among several derivations, there must be non-local Agree; if IS selects among several options in one derivation, it is still more syntactic than Titov's (2020) interface. We thus propose that, for agreement, narrow syntactic IS-features (approach A) are preferable.

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