The Anaphor Agreement Effect is not about featural deficiency: Evidence from Avar

Pavel Rudnev
National Research University
Higher School of Economics
pasha.rudnev@gmail.com

Abstract This paper discusses two analyses of the Anaphor Agreement Effect (AAE, Rizzi 1990) in the light of novel data from Avar. By demonstrating that Avar anaphors trigger full, non-trivial agreement on the φ-probe, I argue that the Avar data instantiate a genuine exception to the AAE. I then compare two competing analyses of binding and the AAE: an account whereby anaphoric dependencies arise via the syntactic operation Agree (Murugesan 2019), and a theory deriving the inability of the anaphors' φ-features to trigger full agreement from the presence of additional structural layers inside the anaphors that render the features inaccessible (Preminger 2019). I claim that the absence of the AAE in Avar is in line with the encapsulation analysis whereas the Agree-based analysis is unsuccessful.

Keywords: syntax; morphosyntax; AAE; binding; finiteness; agreement; Avar

1   Introduction

The Anaphor Agreement Effect (AAE) is an empirical observation underpinning a wide range of theories of anaphoric binding (Kratzer 2009; Rooryck & Vanden Wyngaerd 2011). Stated informally, it refers to the inability of reflexive pronouns to trigger φ-agreement on the verb; several more formal definitions are provided in (1) below.

(1)   **Anaphor Agreement Effect**

    a.   Anaphors do not occur in syntactic positions construed with agreement. (Rizzi 1990: 26)

b. Anaphors do not occur in syntactic positions construed with verbal agreement, unless the agreement does not vary for φ-features. (Tucker 2012: 20)

c. Anaphors cannot directly trigger covarying φ-agreement which results in covarying φ-morphology. (Sundaresan 2016: 99)

A major application of the AAE has been to support those theories of anaphoric relations (e.g. Heinat 2006; Rooryck & Vanden Wyngaerd 2011) which seek to derive the referential dependence of reflexive pronouns by postulating an inherent deficiency in φ-features that is eliminated in the course of the derivation via an application of the generalised agreement operation, Agree (Chomsky 2000). On this view, Agree is also the mechanism used to derive the AAE itself (cf. Murugesan 2019).

This paper focuses on cases of legitimate covarying φ-agreement between verbs and reflexives in the Northeast Caucasian language Avar such as (2) below.[1]

(2) ʕali-ca   ži‹w›go   w–ecc- ana
    Ali- ERG ‹M›REFL.ABS M–praise-PST
    'Ali has praised himself.'

I first show that the AAE does not arise in either finite or non-finite clauses in Avar (§2). I argue that, even though Avar is a genuine counterexample to the AAE, it does not warrant dismissing the AAE as a crosslinguistic principle, and the right account of the AAE should explain both the AAE and its exceptions in a systematic way. I compare the predictions of the Agree-based account of Murugesan (2019) (§3) with those of Preminger 2019, a novel analysis of the AAE deriving the defectiveness of agreement from the anaphors' φ-features being encapsulated in additional layers of syntactic structure (§4). I conclude that while the encapsulation view accommodates the Avar facts effortlessly, the φ-deficiency view based on Agree fails to do so.

2   Avar as a true exception to the AAE

For a language to qualify as a true exception to the AAE, three things are required.

---

1. All Avar examples in this paper without a literature reference come from my field notes.

Requirement I the anaphoric element involved in a φ-agreement relation with the verb is an anaphor;

Requirement II the φ-agreement relation between the anaphor and the verb is covarying/non-trivial (Preminger 2019);

Requirement III the φ-morphology is transferred to the φ-probe directly from the anaphor and is not attributable to a mediating element (cf. Sundaresan 2016).

In the remainder of this section I show that all three conditions hold for Avar but first I present three arguments showing that the locus of both agreement and case in Avar is v.

Avar (Northeast Caucasian, ca. 700 000 speakers) is a morphologically ergative language where verbal agreement uniformly tracks the unmarked (absolutive) case; no other cases are able to control verbal agreement. In intransitive clauses such as (3a), the subject *murad* 'Murad' is unmarked for case and controls agreement. In transitive and ditransitive clauses, it is invariably the direct object, unmarked for case, which controls agreement, as illustrated in (3b).

(3) a. murad   w–ač'- ana
         Murad.ABS M–come-PST
         'Murad came.'

     b. hes   jacał-   e   ruq'   b–ana   / *{w/j}– ana
         he.ERG sister.OBL-DAT house.ABS N–build.PST   {M/F}–build.PST
         'He built his sister a house.'

There is no person agreement in Avar, and verbal agreement is restricted to noun class and number, with four noun classes being identified: masculine (realised as *w*), feminine (realised as *j*), neuter (realised as *b*) and plural (realised as *r*). In the ditransitive sentence in (3b) above, only one noun phrase, the neuter *ruq'* 'house' in the absolutive case, can control agreement on the verb, which appears as the neuter agreement prefix *b*; neither the masculine *w* nor the feminine *j* is acceptable.

The case-marking and agreement patterns illustrated above generalise to all clause types in Avar: irrespective of finiteness, S- and O-arguments always appear in the absolutive case and control agreement, whereas the A-argument is marked with ergative (or dative/locative in the case of transitive experiencer verbs) and never controls agreement. I first illustrate the identity of these patterns in transitive clauses:

(4) a.   was-as   mašinal   r– ič- ul- a
          son- ERG cars.ABS PL–√sell-PRS-FIN
          'The son sells cars.'   [finite]

     b. [was-as   mašinal   r– ič- i   ] łik'a– b iš   b–ugo
          son- ERG cars.ABS PL–√sell-NMLZ   good–N thing.ABS N-be.PRS
          'That the son sells cars is a good thing.'   [nominalisation]

     c. insu-   e   b–oł'- ana [was-as   mašinal   r– ič- ize]
          father.OBL-DAT N–want-PST   son- ERG cars.ABS PL–√sell-INF
          'Father wanted his son to sell the car.'   [infinitive]

In all three clause types in (4), the agreeing transitive verb *CM–ič-* 'sell' carries the plural agreement prefix *r–* coreferencing the noun class of the absolutive object *mašinal* 'cars.ABS', and the external argument uniformly carries ergative marking. In intransitive clauses, illustrated in (5), the case and agreement pattern is equally uniform.[2]

(5) a.   was   w–eker- an- a   insuqe
          boy.ABS M–√run-PST-FIN father.APL
          'The boy ran to his father.'   [finite]

     b. [was   insuqe   w–eker- i   ] łik'a– b iš
          boy.ABS father.APL M–√run-NMLZ   good–N thing.ABS
            b–ugo
            N–be.PRS
          'The boy running to his father is a good thing.' [nominalisation]

     c. kinazego   b–oł'ana   [was   insuqe   w–eker- ize]
          everyone.DAT N–want.PST   boy.ABS father.APL M–√run-INF
          'Everyone wanted the boy to run to his father.'   [infinitive]

The identity of patterns of case assignment and agreement across all clause types in Avar provides an argument for dissociating the unmarked (absolutive) case from T and, therefore, against viewing it as nominative. In particular, if T were the source of the unmarked case, that unmarked case

---

2. In addition to the root-plus-thematic vowel nominalisations discussed in this paper, Avar has fully clausal nominalisations. Those are built on the basis of tensed clauses and are compatible with negation. Since they presumably contain overt finite T, I set them aside for the purposes of this paper.

would be predicted not to survive in the absence of T (as is indeed attested in a number of ergative-absolutive languages, cf. Legate 2008, and the overwhelming majority of nominative-accusative languages). As we have just seen, however, this prediction is incorrect for Avar, whose absolutive case persists on S- and O-arguments in the absence of tense marking, suggesting that case assignment and agreement obtain lower in the structure.[3]

The second argument for v being the locus of agreement and case in all Avar clauses is to be found in the interaction of finiteness with negation. As Rudnev (2015) demonstrates, infinitival clauses in Avar are incompatible with clausal negation—a traditional diagnostic of T-less restructuring complements (Wurmbrand 2001).

Clausal negation in Avar is realised as a suffix on the tensed verb: in (6a), the suffix -ro attaches to the present-tense form *ričula* 'sell.PRS' familiar from (4a) above. Attempting to directly negate a low nominalisation, as in (6b), or an infinitive, as in (6c), results in unacceptability.

(6) a. muradi-ca   mašinal   r– ič- ul- a- ro
         Murad- ERG   cars.ABS   PL–sell-PRS-FIN-NEG
         'Murad does not sell cars.'

     b. *[was-as   mašinal r– ič- i-   ro] łik'a– b iš
         son- ERG   cars.ABS PL–√sell-NMLZ-NEG   good–N thing.ABS
            b–ugo
            N-be.PRS
         ('That the son does not sell cars is a good thing.')

     c. *insu-   e   b–oł'- ana [was-as   mašinal r– ič-   ize- ro]
         father.OBL-DAT N–want-PST   son- ERG cars.ABS PL–√sell-INF-NEG
         ('Father wanted his son not to sell the car.')

Given that these nominalisations, which are too 'low' to be able to host negation, still display φ-agreement with the absolutive argument, it follows

---

3. Space limitations preclude me from expanding on the mechanisms underlying case assignment in Avar and choosing between the options currently available. The assignment of ergative and absolutive case in Northeast Caucasian languages has been formalised in terms of [ERG] and [ABS] features on v (Gagliardi et al. 2014; Polinsky 2016; Polinsky, Radkevich & Chumakina 2017), as well as configurationally (Rudnev 2019). As far as I can tell, nothing in the argument hinges on the choice of formalism as long as it is acknowledged that the Avar absolutive is not to be equated with nominative, but I thank an anonymous reviewer for raising the issue.

that φ-agreement in Avar must obtain low. Given the presence of an external argument in Avar infinitival clauses and low nominalisations, signalling the presence of v, I contend that v is the locus of φ-agreement in Avar as has also been proposed for several related languages (see Gagliardi et al. 2014 for Lak and Tsez, and Polinsky 2016; Polinsky, Radkevich & Chumakina 2017 for Archi). Low nominalisations will then be vP-nominalisations formed, on this view, by the nominalising functional head *n* taking the vP as a complement, as sketched in (7).

(7) $[_{nP} [_{vP} \ldots] \, n \,]$

That vP is the locus of φ-agreement and case assignment in Avar can also be seen based on the behaviour of complex predicates. For reasons of space, I only discuss two patterns, but the generalisation regarding case assignment and agreement having applied before a complex predicate has finished forming holds across the board.

The first process is reduplication: verbal roots may be reduplicated to yield compound verbs with meanings similar to the ones obtained by adding particles to verbs in Germanic (cf. *break* with *break up*) or prefixes in Slavic. Only bare roots can be reduplicated, no inflectional or derivational morphology being allowed, with the exception of agreement marking, which is both allowed and required, as illustrated below.

(8) a.   ič'go łabide b–ił'-   ula
            nine three N–divide-PRS
            'Nine divides by three.'   (Gimbatov 2006: 108)

     b.   partija   b–ił'- b–ił'- ana
            party.ABS N–divide-N–divide-PST
            'The party has split.'   (Gimbatov 2006: 107)

Sentence (8a) contains an intransitive verb, *CM–ił'-* 'divide', which agrees with its only absolutive argument, *ič'go* 'nine'. Example (8b) involves the same verbal root, which is reduplicated. The two sentences differ event-structurally in that reduplication evokes a resultative/telic component.

What is notable about (8b) is that the agreement marker must be present before root reduplication can apply, and the bare root carrying an agreement marker does not correspond to any inflected form, verbal or otherwise, as it cannot be used on its own. Nothing, not even the thematic vowel, can be added to the root before reduplication, as witnessed by the unavailabil-

ity of *b–iɬ'-i-b–iɬ'-ana*, which illustrates a failed attempt at reduplicating a bigger constituent (i.e. a nominalisation).

The pre-reduplication agreement pattern follows straightforwardly from a decompositional approach to complex predicates along the lines of Ramchand (2008), whereby event participants are introduced in specifiers of dedicated v-heads as holders of states into which the event under construction decomposes, as sketched in (9).

(9) partija₁ [t₁ b–iɬ'-] b–iɬ'- ana
     party.ABS   N–divide- N–divide-PST
     'The party has split.'

The party in (9) is the holder of the result state of being split up simultaneously with being the undergoer of the event leading up to the result state. The two argument positions are related by movement, and the lexical root is inserted at both v-heads. I conclude from this that, since agreement must be resolved prior to reduplication, and reduplication creates a complex vP, it is necessary that agreement also apply at vP.

The other argument-structure operation of relevance is causativisation: under causativisation in Avar, the external argument of a causativised vP (i.e. the causee) is marked with locative case, the causer is marked with ergative case, whereas the internal argument remains absolutive. Both the lexical verb and the causative marker agree with the absolutive argument, as below:

(10) insuca wasasda **mašinal r**– ič- i- z- a– **r**- una
      father.ERG son.LOC **cars.ABS PL**–sell-NMLZ-INF-CAUS–**PL**-PST
      'Father made the boy sell the cars.'

Causative forms such as *ričizaruna* in (10) consist of the infinitive of the causativised verb (*ričiz-* in (10) above) and the causativising morpheme (diachronically, a truncated form of *do*), which contains an agreement marker in addition to the lexical verb's own agreement marker. The infinitival form *ričiz-*, in turn, contains the low nominalisation *riči*. These containment patterns in Avar are robust and uncontroversial. Given the consensus view of complex predicate formation occurring at the level of event and argument structure traditionally corresponding to vP, and, consequently, of the complement of the causative head being either equal to or smaller than vP (Alsina 1992; Folli & Harley 2007; Guasti 2017; Horvath & Siloni 2011; Kratzer 1996; Li 1990; Pylkkänen 2008; Ramchand 2008; Svenonius 2008;

Table 1: Personal pronouns.

	Singular	Plural
1	*dun*	*niž*
2	*mun*	*nuž*

Table 2: Personal reflexive pronouns.

	Singular	Plural
1	*dungo*	*nižgo*
2	*mungo*	*nužgo*

Ramchand & Svenonius 2014; Ramchand 2018), it follows that both infinitival and nominalised clauses are either equal to or smaller than vP. They can thus be represented as the following simplified hierarchy of functional projections, where both v_{caus} and v_{lex} carry unvalued φ-features:

(11)   (T > Asp >) Causer > v_{caus} > Causee > v_{lex} (…)

With a basic understanding of Avar agreement and case assignment in non-reflexive clauses in hand, we are ready to see that Avar obeys the three requirements formulated at the beginning of this section and is a genuine exception to the AAE. I return to causativisation and its interaction with reflexivisation in §2.3.[4]

2.1 Requirement I: Avar reflexives are anaphors

Rudnev (2017) demonstrates that the Avar reflexive *žiwgo* is a *bona fide* anaphor sharing a host of properties with reflexive pronouns in other languages. This reflexive can only take 3rd person antecedents, both singular and plural. In the other persons, corresponding personal pronouns (cf. Table 1) combine with the intensifying particle *-go* to form personal reflexive pronouns (cf. Table 2). Verbal agreement is, as mentioned earlier, restricted to noun class and number.

First, the reflexive pronoun *žiwgo* in Avar requires a c-commanding antecedent in the same finite clause (12), and cannot c-command it (13):

(12) a.   ʕali-ca   **ži‹w›go**   **w**–ecc-   ana
            Ali- ERG **‹M›REFL.ABS** **M**–praise-PST
            'Ali has praised himself.'

---

4. Some other exceptions to the AAE are found in Tamil (Sundaresan 2016; Murugesan 2019), Standard Gujarati (Murugesan 2019), Archi (Chumakina & Bond 2016) and Ingush (Nichols 2011).

b. ʕali-l insuca **ži‹w›go** **w**–ecc- ana
Ali- GEN father.ERG ‹M›REFL.ABS M–praise-PST
'Ali₁'s father₂ has praised himself*₁/₂.'

(13) *žincago ʕali w–ecc- ana
REFL.ERG Ali.ABS M–praise-PST
('Ali has praised himself.')

Second, Avar reflexives display a strong preference for sloppy readings in elliptical continuations:

(14) insuda ži‹w›go mat'ujału‹w› w–ix- ana, hedingo
father.LOC ‹M›REFL.ABS ‹M›mirror.INE M–see-PST also
wasasda-gi
son.LOC- CNJ
'Father saw himself in the mirror, and his son did too.'
= the son saw himself in the mirror
≠ the son saw father in the mirror (Rudnev 2017: 158)

Just like its counterparts in English, the Avar reflexive *ži‹w›go* is interpreted as a bound variable, the strict reading being dispreferred. I conclude that it is an anaphor that should fall under the purview of the AAE: Requirement I holds.

2.2 Requirement II: Reflexives trigger covarying φ-agreement

We have already seen in the foregoing examples (12a), (14) that the verbs display agreement with the absolutive argument realised as a reflexive pronoun: in both cases, the absolutive reflexive *ži‹w›go* carries a masculine class marker, as do the finite verbs *weccana* 'praised' and *wixana* 'saw'.

If the absolutive reflexive is specified with different φ-features, the verb's φ-features covary with those of the reflexive pronoun:

(15) a. jasał **ži‹j›go** **j**– ecc- ana
girl.ERG ‹F›REFL.ABS F–praise-PST
'The girl has praised herself.'

b. łimalaz **ža‹l›go** **r**– ecc- ana
kids.ERG ‹PL›REFL.ABS PL–praise-PST
'The kids have praised themselves.'

The covarying agreement pattern observed in third-person contexts in (15) above generalises to the other persons as well. In the first and second persons, the verb agrees with the reflexive in noun class and number, as expected: sentence (16a), for example, could have been uttered by the girl in example (15a) as a direct speech report of her actions; in it, the verb displays feminine agreement with the first-person singular reflexive pronoun *dungo*. Similarly, the verb in sentence (16b) displays plural agreement with the first-person plural reflexive *nižgo*.

(16) a. dica   dungo   j–ecc- ana
          1SG.ERG(F) ⟨F⟩1SG:REFL.ABS F–praise-PST
          'I have praised myself.'

      b. nižeca nižgo   r–ecc- ana
          1PL.ERG 1PL:REFL.ABS PL–praise-PST
          'We have praised ourselves.'

Before proceeding to discuss the nature of the agreement relation in the next subsection, let us also establish that the covarying agreement with reflexives illustrated above is obligatory rather than optional, the other option being for the verb to carry default agreement morphology. Default agreement is indeed attested in Avar, and is invariably singular nonhuman/neuter; it is triggered in the absence of a local absolutive argument, when a transitive verb's internal argument corresponds to an infinitival clause:

(17) die   **b**–oł'- ana [ɣo⟨j⟩e   t'ad-e   j–aχ-   ine]
      1SG.DAT **N**–want-PST ⟨F⟩DEM.LAT up- LAT F–move-INF
      'I wanted to go up there.'
                                              (modelled on Forker to appear: (35a))

In the context of reflexivisation, however, default agreement on the verb is unacceptable:

(18) *wasas/jasał   zi⟨w/j⟩go   b–ecc- ana
       boy.ERG/girl.ERG ⟨M/F⟩REFL.ABS N–praise-PST
       ('The boy/girl praised himself/herself.')

We can therefore conclude that Avar verbs display regular non-trivial agreement with absolutive reflexives in all contexts, which is in principle still

compatible with the view, advocated for other languages by, amongst others, Sundaresan (2016), that the φ-probe gets the required feature values not from the reflexive itself but from a third party, either covert or overt. The next subsection shows that this option is not viable for Avar.

2.3   Requirement III: No mediator

Having established v as the locus of φ-agreement in Avar, we are now in a position to show that the anaphor's φ-features are not inherited from the antecedent but must be present on the anaphor from the start. The requirement is inspired by reanalyses of exceptions to the AAE in the spirit of Sundaresan 2016.

Sundaresan (2016) shows that the reflexive pronoun *taan* in Tamil, when appearing in the nominative, can, descriptively speaking, trigger non-trivial agreement with the verb. A prototypical case would involve *taan* occupying the subject position of a finite embedded speech report, as shown in (19).

(19)   Mia$_i$ [Sri$_j$ [taan$_{\{i,*j\}}$ too- pp- aaɭ- ŭnnŭ]
       Mia.NOM   Sri.NOM   ANAPH.SG.NOM   lose-FUT-3FSG-COMP

         nene- tt- aan- nŭ   ] paar-tt-   aaɭ
         think-PST-3MSG-COMP   see- PST-3FSG

       'Mia$_i$ saw that Sri$_j$ thought that she$_i$/*he$_j$ would lose.'

                                                         (Sundaresan 2016: 91)

The anaphor in (19) is bound by the feminine subject of the matrix clause *Mia*; corresponding feminine agreement appears on the most deeply embedded verb *tooppaaɭ* 'lost', of which *taan* is the subject. Omitting irrelevant detail, Sundaresan's (2016) proposal is to posit a phonologically empty but syntactically real *pro* in the specifier position of a perspectival head in the left periphery of the most deeply embedded clause. On this analysis, *pro* is *taan*'s closest c-commanding binder with a full set of φ-features, and the AAE violation is merely illusory.

Its merits with regards to Tamil notwithstanding, Sundaresan's (2016) approach involving agreement with null perspective holders does not carry over to Avar. Unlike their Tamil counterparts, Avar anaphors triggering non-trivial agreement are not restricted to speech and attitude reports realised as full-sized finite clauses, which makes it difficult to appeal to perspective holders. Even though *pro* is attested in Avar, there are no plausible positions in which it could appear under reflexivisation without influencing argument structure, given that agreement in Avar occurs vP-internally and

significantly lower in the structure than any perspectival head. Consider (20b) and (20c), involving agreement with reflexives under causativisation:

(20) a. muradi-ca   ebel-   al- da **was**   w–oł'- iza‹w›-una
         Murad- ERG mother-OBL-LOC **son.ABS** M–love-CAUS- PST
         'Murad made mother love the boy.'

    b. muradi-ca   ebel-   al- da **žiwgo**   w–oł'- iza‹w›-una
         Murad- ERG mother-OBL-LOC **self.ABS** M–love-CAUS- PST
         'Murad made mother love himself.'

    c. muradi-ca   ebel-   al- da **žijgo**   j– oł'- iza‹j›- una
         Murad- ERG mother-OBL-LOC **self.ABS** F–love-CAUS-PST
         'Murad made mother love herself.'

To summarise this section, I have shown that Avar reflexivisation is a genuine counterexample to the AAE in all existing formulations: the reflexive pronoun triggering covarying φ-agreement on the verb is an anaphor, and the agreement relation is established internally to the vP directly between the anaphor and the φ-probe.

3 Against Agree-based analyses of the AAE

As stated in the introduction, Agree-based approaches to anaphora in general and the AAE in particular postulate an inherent featural deficiency for referentially dependent expressions: either a φ-deficiency in the case of anaphors (Heinat 2006; Rooryck & Vanden Wyngaerd 2011), or a referential deficiency encoded in terms of a dedicated referential feature (Hicks 2009; Sundaresan 2016). What matters is that anaphors acquire their φ-feature specifications from their binders.[5]

To keep the discussion concrete, I begin this section by considering a recent Agree-based account of the AAE due to Murugesan (2019) since it formulates an especially clear set of predictions concerning the structural conditions for the AAE to arise. I show that the Avar data introduced in the preceding section falsify Murugesan's (2019) prediction. In §3.2, I demonstrate that attempts to salvage the analysis as formulated in §3.1 by appealing to differences in the timing of syntactic operations result in a contradic-

---

5. For the purposes of this paper I set aside the conceptual and empirical objections to upwards probing/downwards valuation and concentrate on the empirical challenges for the Agree-based approaches.

tion. In doing so, I rely on Preminger's (2019) discussion of the deficiencies of timing-based approaches to the AAE.

3.1 A false prediction

Murugesan (2019) discusses several exceptions to the AAE (Tamil, Standard Gujarati, Archi and Ingush) and develops an Agree-based analysis aiming to account both for those languages that obey the AAE and the exceptions. His account capitalises on the structural position of the φ-probe with respect to the antecedent.

(21) **Pattern A:**   (22) **Pattern B:**

XP   XP

Antecedent   YP   Agr probe   YP

Agr probe   ZP   Antecedent   ZP
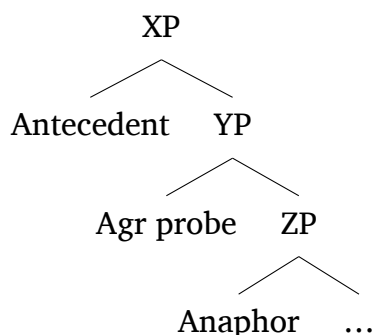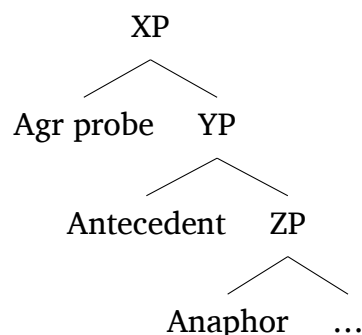
Anaphor   …   Anaphor   …

Taking anaphors to be φ-deficient, Murugesan (2019) suggests that it is the low position of the φ-probe with respect to the antecedent that gives rise to the AAE in Pattern A: since in (21) the φ-probe appears earlier in the structure than the antecedent, φ-agreement obtains first, yielding default/trivial/deficient agreement, and only then does the anaphor acquire φ-features from the antecedent. Murugesan (2019) then attempts to show that the attested exceptions to the AAE (Tamil, Standard Gujarati) are in principle reconcilable with the approximate syntax of Pattern B in (22), whereby the anaphor will have valued its [$u\varphi$] against the antecedent before the verbal φ-probe is merged. In addition to Pattern A, Murugesan (2019) formulates Pattern Ā as a means of falsifying his theory: Pattern Ā describes exactly the same configuration as Pattern A but with the opposite outcome of the AAE not holding.[6]

---

6. When addressing the question as to the number and location of φ-probes in Archi and Ingush, Murugesan (2019) crucially relies on agreement in periphrastic verb constructions. Because both the lexical verb and the auxiliary in (i) agree with the object, he reasons, there must only be one φ-probe, *viz.* T.

We have seen in §2 that the antecedent-Agr probe configuration in Avar is the one in (21): the Agr probe carrying the unvalued φ-features is v, which enters the derivation earlier than the (ergative) antecedent. The AAE is predicted to arise, yet, given what we have seen in §2, this prediction is false. Avar instantiates Pattern Ā, falsifying Murugesan's (2019) theory. An illustration follows immediately below.

Given the irrelevance of T for Avar agreement and case established earlier, and in the interests of space, let us abstract away from finiteness and consider instead the implications of the Agree-based analysis the binding-*cum*-agreement facts inside a low nominalisation such as (23), which is a nominalised counterpart of (12).

(23) ʕali-ca   ži‹w›go   w–ecc- i
      Ali- ERG ‹M›REFL.ABS M–praise-NMLZ
      'Ali praising himself'

Omitting the nominaliser from the representation, (23) will have the following rough structure, which is effectively a variant of (21): hierarchically speaking, the φ-probe is situated between the anaphor (*ži‹w›go*) and the antecedent *ʕalica* 'Ali.ERG'.

(i) laha-s   dija   w-ak:u-r-ši   w-i   [Archi]
     child(II).SG.OBL-DAT father(I).SG.ABS   I.SG-see-IPF-CVB I.SG-BE.PRS
     'A girl sees her father.'   (Chumakina & Bond 2016: 92)

This is a wrong conclusion, however, as shown in (ii), which features the lexical verb agreeing with the object while the auxiliary agrees with the absolutive subject:

(ii) lo   dija   w-ak:u-r-ši   d-i   [Archi]
      child(II).[SG.ABS] father(I).SG.ABS   I.SG-see-IPF-CVB II.SG-BE.PRS
      'A girl sees her father.'   (Chumakina & Bond 2016: 92)

The agreement pattern in (ii) from Archi is identical with the one from Shona (Murugesan 2019: 105) that Murugesan (2019) interprets as there being two distinct φ-probes in Shona based on considerations of minimality. There is, thus, no evidence that Archi (and probably also Ingush, which, as Forker (2012) shows, patterns with Archi with respect to agreement in biabsolutive constructions) only has T as the φ-probe. On the other hand, Polinsky (2016) and especially Polinsky, Radkevich & Chumakina (2017) provide detailed and intricate arguments, partially overlapping with mine for Avar, for vP as the locus of agreement in Archi. Since Murugesan (2019) does not engage with those arguments and his own argument is faulty, I conclude that Murugesan (2019) must err about Archi and Ingush, which, together with Avar, instantiate the problematic Pattern Ā falsifying Murugesan's φ-deficiency theory.

(24)

$$\text{vP}$$
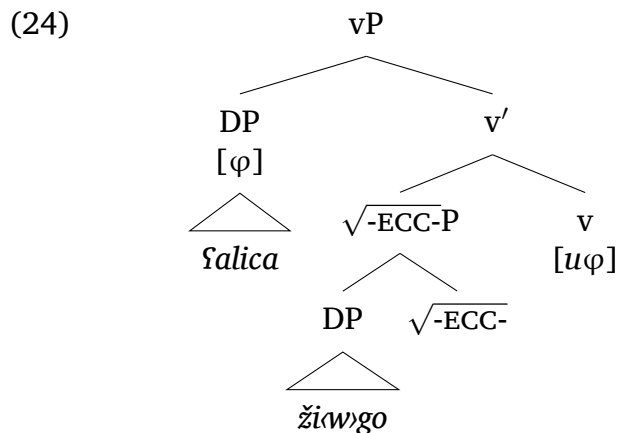
Crucially, there is no sensible way of reanalysing (23) as projecting the structure in (22), as there is no higher φ-probe available.[7]
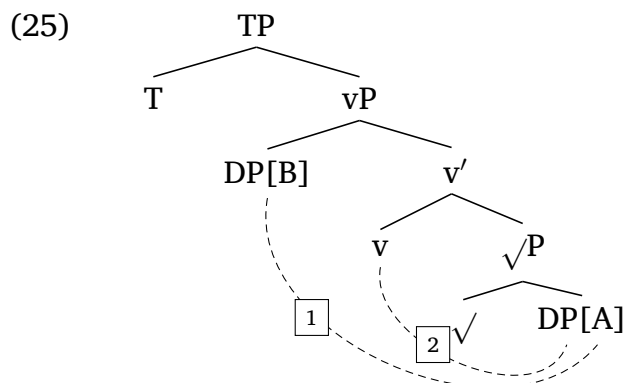
The following section shows that supplementing the Agree account with specific provisions regarding derivational timing results in a theory lacking a principled way of predicting for a given language whether that language will display the AAE.

3.2   *Timing analyses predict AAE obeisance and violations*

Arguing that Agree-based analyses of the AAE are incompatible with appeals to the differential timing of syntactic operations, Preminger (2019) observes that in an imaginary ergative-absolutive language with a low ABS and v probing for φ-features, Agree must be able to apply countercyclically. Indeed, if anaphors obtain their φ-features from the antecedents, then they must do so after v has Agreed with the φ-deficient anaphor.

This scenario is schematised in (25), inspired by Preminger (2019: (23)), where DP[B] stands for the binder, and DP[A] the anaphor.

---

7. Appealing to Agree applying simultaneously at the phase level (Chomsky 2008 *et seq.*) with a view to rescuing the Agree analysis makes an obviously incorrect prediction involving the optionality of full agreement. While simultaneous operations would indeed allow v to agree with the reflexive whose features have already been valued, there is also the possibility of v unproblematically agreeing with the anaphor while the anaphor is still φ-deficient, which should result in default agreement. Notably, delaying the valuation processes until the phase is completed is incompatible with Murugesan's (2019) view of cyclicity (Murugesan 2019: 45). Default agreement, moreover, is unattested under reflexivisation, as shown in (18): of the two options predicted to be possible, only one is. I thank an anonymous reviewer for bringing this point to my attention.

(25)

```
                 TP
                /  \
               T    vP
                   /  \
              DP[B]    v′
                      /  \
                    v     √P
                         /  \
                 1      √    DP[A]
                      2
```

In the absence of an explicit prohibition to the contrary, the anaphor countercyclically valuing its φ-features against those of the antecedent *prior* to Agree obtaining between it and v (Step 1 in (25))

> (…) would yield full, nontrivial φ-agreement with the anaphor, in violation of the AAE. (Preminger 2019: 11)

While Preminger (2019) labours under the assumption of this being an incorrect prediction of the Agree analysis, we have seen in the preceding subsection that the full agreement pattern in Avar arises under exactly these circumstances. The ability of the Agree analysis to derive the agreement pattern inside Avar vPs is, however, a blow to the Agree analysis rather than an argument in its favour, since the analysis now predicts both the presence of the AAE *and* its absence in essentially identical configurations.

On the one hand, if Agree applies cyclically, then the [*u*φ] feature on v fails to get valued against the φ-defective anaphor *žiʕwᵊgo*. Once the antecedent enters the derivation, it can value the anaphor's [*u*φ] feature, resulting in trivial agreement on the verb and full agreement on the anaphor, thus failing to derive the full agreement pattern, contrary to fact.

If, on the other hand, Agree applies countercyclically, then, as Preminger (2019) observes, the antecedent can first value the anaphor's [*u*φ] feature, which would subsequently go on to value v's features, resulting in full agreement on the verb, in accordance with the observations about Avar, but failing to derive the AAE where it holds.

Summary

In this section, we have seen that timing-based analyses of the AAE predict the effect to arise and not to arise in exactly the same circumstances, revealing the accounts' internal inconsistency. The AAE, therefore, cannot be used in support of φ-deficiency analyses of anaphoric binding reducing it to an application of Agree.

4   AAE as a consequence of encapsulation

Preminger (2019) provides a novel analysis of the AAE designed to account for the existence of both the AAE-obeisant languages and the offenders. The gist of the proposal is that anaphors are structurally complex expressions carrying their own sets of φ-features that are then encapsulated—and, consequently, hidden from the φ-probe—due to extra layers of structure (4a). Preminger's (2019) proposal is buttressed by a typological study of syncretism and containment patterns inside anaphoric expressions (Middleton 2018).[8]

(26)   **The Encapsulation Hypothesis** (Preminger 2019)
          a.   b.
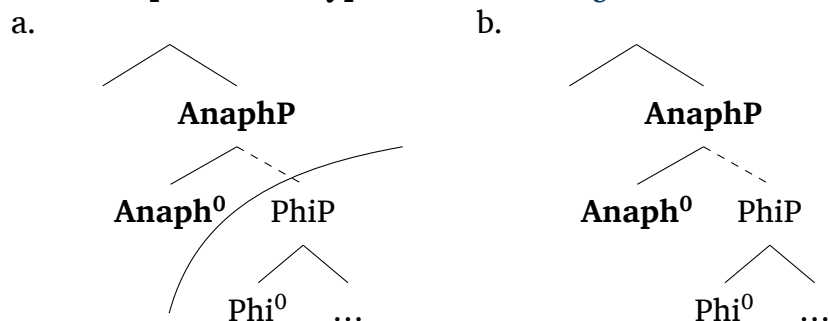
Preminger confesses that, since his account of the AAE is universal, it predicts identical cross-linguistic behaviour of anaphors with respect to triggering the AAE, which makes it vulnerable in light of potential exceptions to the AAE. Rather than dismiss the AAE as effectively coïncidental, Preminger takes the universalist stance and proposes instead that the opacity

---

8. Preminger (2019: §11.2) notes that his approach does not predict which of the two possible outcomes—default agreement or ungrammaticality—a reflexive appearing in an agreeing position will trigger, as the corresponding behaviour is simply not predictable based on the properties of either the anaphor or the language. Crucially, neither does any of the Agree-based theories.

brought about by encapsulation need not be absolute. In particular, citing the crosslinguistic distribution of preposition stranding, he argues that a domain's opacity for syntactic operations in one language does not entail the opacity of comparable domains in other languages. This is essentially his account of the exceptions to the AAE: they arise when the anaphors' internal complexity extends the domain containing the φ-features (PhiP) thus keeping them accessible for probing (26b).

Even though Avar is a genuine exception to the AAE, as argued in §2, I contend that it is nevertheless compatible with the encapsulation view: *žičwɨgo*, by virtue of being an anaphor, is the source of the valued φ-features on v. However, for Preminger's (2019) theory to be a plausible account of the Avar facts under discussion, the premises upon which it itself rests should be shown to hold in that language as well. The key question here is whether the anaphor possesses the kind of internal complexity that Preminger's (2019) account demands.

As a first approximation, and setting aside the issues of non-complementary distribution of the various types of anaphoric expression in Avar (though see Testelets & Toldova 1998; Rudnev 2017 for an overview and discussion), the internal composition of Avar anaphors, diaphors, exophors and pronouns are broadly in line with Middleton's (2018) approach.[9]

According to Middleton (2018), anaphors and pronouns across languages display systematic containment relations, either overt or covert, represented in (27). Pronouns, which occupy low positions inside the pronominal expression, are contained inside anaphors and are intrinsically specified with φ-features. Applying this system to the Avar pronominal forms yields (28), where both the pronoun and exophor are realised as *pro*, the diaphor/long-distance reflexive is lexicalised as *žiw*, whereas the anaphor *žičwɨgo* consists of *žiw* and the emphatic particle *-go* cliticising to it.[10]
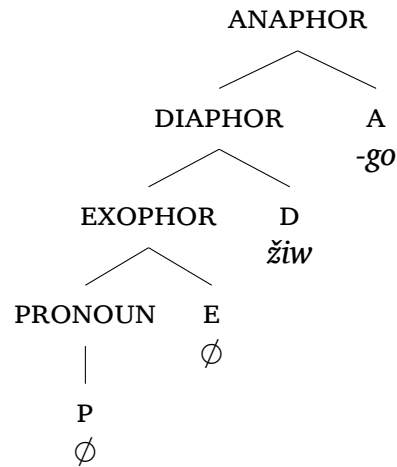
---

9. I thank Jane Middleton (p.c.) for an extensive discussion and helpful suggestions.

10. A different set of non-reflexive pronouns is instantiated by proximal, medial and distal demonstratives that can be used anaphorically. More work is required before any pronouncements can be made concerning the place of demonstrative and deictic pronouns in Middleton's (2018) approach.
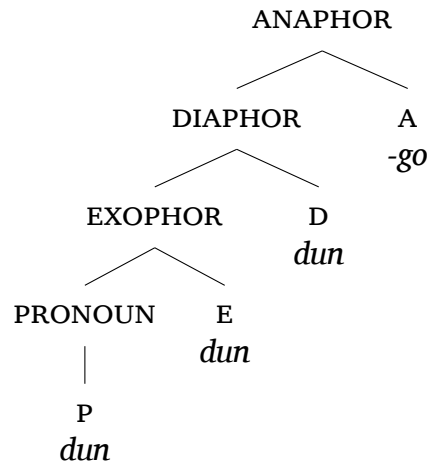
(27)   (28)

```
            ANAPHOR                                          ANAPHOR
           /      \                                         /       \
         A      DIAPHOR                              DIAPHOR         A
                /     \                              /      \       -go
               D    EXOPHOR                    EXOPHOR       D
                    /     \                    /      \     žiw
                  E    PRONOUN          PRONOUN       E
                          |                  |        ∅
                          P                  P
                                             ∅
```
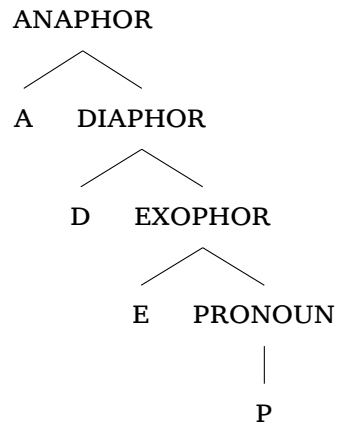
That Avar reflexives indeed possess the structural layers depicted above
(rather than lacking them altogether) is evidenced by the morphological
makeup of first- and second-person reflexives in the language. The absolu-
tive first-person singular reflexive pronoun *dungo* from Table 2 on p. 8, for
instance, would have the structure in (29), with the pronoun, the exophor
and the diaphor being syncretic.

(29)

```
                        ANAPHOR
                       /       \
                  DIAPHOR       A
                  /      \     -go
            EXOPHOR       D
            /      \     dun
      PRONOUN       E
          |        dun
          P
         dun
```

Preminger (2019) tentatively mentions two ways of making the interior of
AnaphP inaccessible for φ-probing from a higher functional head: either
Anaph demarcates a locality domain or it carries a set of valued φ-features
of its own. Consequently, there are two potential ways for a language to

become an exception to the AAE, *viz.* by violating either of the two requirements. If *-go* is the exponent of the Anaph head in Avar, then it is instructive to look at some of its other uses: as Forker (2015) shows, *-go* is an intensifying enclitic capable of attaching to nominals and non-nominals alike. It is not inherently nominal and therefore unlikely to be specified with valued φ-features. This raises the question whether Anaph in Avar is simply transparent for syntactic operations and what the evidence in favour of such a view could be.

Rudnev (2015) mentions in passing that certain nominals in Avar do not delineate a separate locality domain for φ-agreement, as evidenced by the optional availability of long-distance agreement into nominalised clauses. An illustration is given in (30) below.

(30)   di- da   [ʕali-e   jas   j– oɬ’- un j– ik’-in- ∅]
        1SG-LOC   Ali- DAT girl.ABS F–like-CVB F–be-NMLZ-ABS
         b/j– ix- ana
         N/F–see-PST
        'I saw that Ali liked the girl.'   (Rudnev 2015: 78)

If the matrix verb *bixana/jixana* 'saw' in (30) agrees with its nominalised absolutive complement clause (bracketed in the example above), it surfaces with the neuter agreement prefix *b*; it can, however, also agree with an absolutive argument of the nominalised embedded clause, and surface with a feminine agreement prefix. It is therefore not inconceivable that reflexives, which are also nominal, could be transparent for agreement. Given the current lack of understanding of the fine structure of the Avar noun phrase, however, this is a matter for future research and definitely beyond the scope of the present squib.

In summary, then, we have seen preliminary evidence of both parts of Preminger's (2019) proposal—structural complexity of reflexives and non-opacity of certain nominals for agreement—holding of Avar. The full agreement patterns between the Avar reflexive *žiⱮw₰go* and the v probe are thus compatible with Preminger's (2019) encapsulation view, and do not threaten the validity of the AAE as a crosslinguistic generalisation.

5 Conclusions

In this paper, I have adduced novel data from the Northeast Caucasian language Avar showing them to be a real counterexample to the Anaphor

Agreement Effect as formulated by Rizzi (1990), and subsequently refor-mulated by, amongst others, Woolford (1999); Sundaresan (2016): Avar reflexive pronouns are *bona fide* anaphors that can nevertheless appear in agreeing positions and trigger non-trivial, φ-covarying agreement in finite and non-finite clauses alike.

I have also demonstrated the non-viability of timing-based analyses of the AAE by pointing out the lack of a principled mechanism underlying the AAE and its violations as well as by elaborating on a false prediction such an account would inevitably make.

Finally, I have argued that the encapsulation analysis put forth by Pre-minger (2019) does not suffer from the deficiencies identified for the timing-based approach and accounts for the AAE and its exceptions in a systematic way.

Abbreviations

1 = First person, 2 = Second person, 3 = Third person, ABS = absolutive, ANAPH = anaphor, APL = apudlative, CAUS = causative, CM = class marker, CNJ = conjunction, COMP = complementizer, CVB = converb, DAT = dative, DEM = demonstrative, ERG = ergative, F = feminine, FIN = finiteness, FUT = future, GEN = genitive, I = first agreement class, II = second agreement class, INE = inessive, INF = infinitive, IPF = imperfective, LAT = lative, LOC = locative, M = masculine, N = neuter, NEG = negative, NMLZ = nominalizer, NOM = nominative, OBL = oblique, PL = plural, PRS = present, PST = past, REFL = reflexive, SG = singular.

Funding information

Acknowledgements

Competing interests

The author has no competing interests to declare.

References

Alsina, Alex. 1992. On the argument structure of causatives. *Linguistic Inquiry* 23(4). 517–555. http://www.jstor.org/stable/4178789.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: The MIT Press.

Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos P. Otero & Maria Luisa Zubizarreta (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, 133–166. Cambridge, MA: The MIT Press.

Chumakina, Marina & Oliver Bond. 2016. Competing controllers and agreement potential. In Oliver Bond, Greville G. Corbett, Marina Chumakina & Dunstan Brown (eds.), *Archi: Complexities of agreement in cross-theoretical perspective*, 77–117. Oxford: Oxford University Press.

Folli, Raffaella & Heidi Harley. 2007. Causation, obligation, and argument structure: On the nature of little v. *Linguistic Inquiry* 38(2). 197–218.

Forker, Diana. to appear. Avar grammar sketch. In Maria Polinsky (ed.), *Handbook of the languages of the Caucasus*. Oxford: Oxford University Press.

Forker, Diana. 2012. The bi-absolutive construction in Nakh-Daghestanian. *Folia Linguistica* 46(1). 75–108. https://doi.org/10.1515/flin.2012.3.

Forker, Diana. 2015. Towards a semantic map for intensifying particles: Evidence from Avar. *STUF - Language Typology and Universals* 68(4). https://doi.org/10.1515/stuf-2015-0021.

Gagliardi, Annie, Michael Goncalves, Maria Polinsky & Nina Radkevich. 2014. The biabsolutive construction in Lak and Tsez. *Lingua* 150. 137–170. https://dx.doi.org/10.1016/j.lingua.2014.07.003.

Gimbatov, M.M. (ed.). 2006. *Avarsko-russkiĭ slovar'* [Avar-Russian dictionary]. Makhachkala: Russian Academy of Sciences.

Guasti, Maria Teresa. 2017. Analytical causatives. In Martin Everaert & Henk van Riemsdijk (eds.), *The Wiley Blackwell companion to syntax, second edition*, 1–36. Wiley. https://doi.org/10.1002/9781118358733.wbsyncom038.

Heinat, Fredrik. 2006. *Probes, pronouns, and binding in the minimalist program*. Lund University dissertation.

Hicks, Glyn. 2009. *The derivation of anaphoric relations*. Amsterdam/Philadelphia: John Benjamins.

Horvath, Julia & Tal Siloni. 2011. Causatives across components. *Natural Language & Linguistic Theory* 29(3). 657–704. https://doi.org/10.1007/s11049-011-9135-3.

Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 109–137. Dordrecht: Springer. https://doi.org/10.1007/978-94-015-8617-7_5.

Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40(2). 187–237. http://dx.doi.org/10.1162/ling.2009.40.2.187.

Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39(1). 55–101. http://dx.doi.org/10.1162/ling.2008.39.1.55.

Li, Yafei. 1990. X^0-binding and verb incorporation. *Linguistic Inquiry* 21(3). 399–426. http://www.jstor.org/stable/4178682.

Middleton, Jane. 2018. *ABA syncretism patterns in pronominal morphology. Unpublished ms., University College London.

Murugesan, Gurujegan. 2019. *Predicting the Anaphor Agreement Effect and its violations*. Leipzig University dissertation.

Nichols, Johanna. 2011. *Ingush grammar*. University of California Press.

Polinsky, Maria. 2016. Agreement in Archi from a minimalist perspective. In Oliver Bond, Greville G. Corbett, Marina Chumakina & Dunstan Brown (eds.), *Archi: Complexities of agreement in cross-theoretical perspective*, 184–232. Oxford: Oxford University Press.

Polinsky, Maria, Nina Radkevich & Marina Chumakina. 2017. Agreement between arguments? Not really. In Roberta D'Alessandro, Irene Franco & Ángel J. Gallego (eds.), *The verbal domain* (Oxford Studies in Theoretical Linguistics), 49–84. Oxford: Oxford University Press. https://dx.doi.org/10.1093/oso/9780198767886.003.0003.

Preminger, Omer. 2019. The Anaphor Agreement Effect: further evidence against binding-as-agreement. Unpublished ms., University of Maryland at College Park. Version v7, accessed 4th August 2019. https://ling.auf.net/lingbuzz/004401.

Pylkkänen, Liina. 2008. *Introducing Arguments* (Linguistic Inquiry Monographs 49). Cambridge, MA: The MIT Press.

Ramchand, Gillian. 2008. *Verb meaning and the lexicon: a first phase syntax* (Cambridge Studies in Linguistics 116). Cambridge: Cambridge University Press.

Ramchand, Gillian. 2018. *Situations and syntactic structures: Rethinking auxiliaries and order in English.* Cambridge, MA: The MIT Press.

Ramchand, Gillian & Peter Svenonius. 2014. Deriving the functional hierarchy. *Language Sciences* 46. 152–174. https://doi.org/10.1016/j.langsci.2014.06.013.

Rizzi, Luigi. 1990. On the anaphor agreement effect. *Rivista di Grammatica Generativa* 2. 27–42.

Rooryck, Johan & Guido Vanden Wyngaerd. 2011. *Dissolving binding theory.* Oxford: Oxford University Press.

Rudnev, Pavel. 2015. *Dependency and discourse-configurationality: A study of Avar.* Groningen Dissertations in Linguistics 129. University of Groningen dissertation. http://ling.auf.net/lingbuzz/002465.

Rudnev, Pavel. 2017. Minimal pronouns, logophoricity and long-distance reflexivisation in Avar. *Studia Linguistica* 71(1–2). 154–177. https://dx.doi.org/10.1111/stul.12066.

Rudnev, Pavel. 2019. Agreeing adpositions in Avar and the directionality of valuation debate. *Linguistic Inquiry*. Just Accepted. Author's final version available at https://ling.auf.net/lingbuzz/004729. https://doi.org/10.1162/ling_a_00360.

Sundaresan, Sandhya. 2016. Anaphora vs. agreement: A new kind of Anaphor Agreement Effect in Tamil. In Patrick Grosz & Pritty Patel-Grosz (eds.), *The impact of pronominal form on interpretation.* Berlin/Munich/Boston: De Gruyter. http://dx.doi.org/10.1515/9781614517016.

Svenonius, Peter. 2008. Complex predicates and the functional sequence. *Nordlyd: Tromsø University Working Papers on Language & Linguistics* 35(1). 47–88. http://septentrio.uit.no/index.php/nordlyd/article/viewFile/137/127.

Testelets, Yakov G. & Svetlana Yu. Toldova. 1998. Refleksivȳ v dagestanskikh yazȳkakh i tipologiya refleksiva [*Reflexives in the Daghestanian languages and the typology of reflexives*]. *Voprosȳ yazȳkoznaniya* 4. 35–57.

Tucker, Matthew. 2012. On the derivation of the Anaphor Agreement Effect. Unpublished ms., UC Santa Cruz.

Woolford, Ellen. 1999. More on the anaphor agreement effect. *Linguistic Inquiry* 30(2). 257–287. https://dx.doi.org/10.1162/002438999554057.

Wurmbrand, Susanne. 2001. *Infinitives: Restructuring and clause structure* (Studies in Generative Grammar 55). Berlin: Mouton de Gruyter.