Agreeing Adpositions in Avar and the Directionality-of-Valuation Debate

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Given the central spot afforded to unvalued features in current theorizing, the directionality of feature valuation is the subject of a lively debate in the syntactic literature. The traditional conception of upward valuation, whereby the unvalued probe inherits features from a valued goal in its c-command domain (Chomsky 2000, 2001, Carstens and Diercks 2013, Preminger 2013), has to compete with downward valuation (Zeijlstra 2012), Hybrid Agree (Bjorkman and Zeijlstra 2019), and bidirectional Agree (Baker 2008), among others.

Here, using data from Avar, I discuss the crosslinguistically rare phenomenon of adposition agreement, whereby certain adverbs, postpositions, and locative case forms undergo agreement with an absolutive argument. I set the stage by sketching the mechanism of case assignment and argument-predicate agreement in Avar (section 1) and introducing the phenomenon of adposition agreement (section 2). I then show that the agreement morphology on agreeing adpositions is a result of agreement rather than concord (section 3). In sections 4–5, I explore the consequences of adposition agreement in Avar for upward and downward valuation, concluding that upward valuation is better equipped to account for the observed patterns. In section 6, I summarize the results of the discussion.

1 Argument-Predicate Agreement in Avar

All agreement in Avar is noun class agreement: traditionally, four noun classes—masculine (M), feminine (F), neuter (N), and plural (PL)—are identified.[1] Not all verbs spell out agreement but if a verb does, it agrees in noun class with its absolutive arguments in all clause types, as shown for a finite clause in (1a), an infinitival clause in (1b), and

I thank Magomed Malachiev for providing me with his Avar judgments. I am also grateful to Bernat Bardagil Mas, David Erschler, Charlotte Lindenbergh, Maria Polinsky, Craig Sailor, Anna Volkova, and Jan-Wouter Zwart for discussions that have helped shape my thinking on the matter of adposition agreement, and to David Erschler and Anna Volkova—again—for feedback on an early draft. Finally, I greatly appreciate the feedback of two anonymous *LI* reviewers and the Squibs and Discussion editors, which has improved the squib significantly. This squib is an output of a research project implemented as part of the Basic Research Program at the National Research University Higher School of Economics (HSE).

[1] Avar (ISO 639–3 ava) is an East Caucasian language spoken natively by roughly 700,000 people mostly in the Republic of Daghestan in the Russian Federation. This is according to the 2010 census: http://www.gks.ru/free_doc/new_site/perepis2010/croc/Documents/Vol4/pub-04-05.pdf (in Russian). It is a head-final, morphologically ergative language with an extensive use of nominalization in the realm of clausal embedding. There is no English-language reference grammar of Avar, but Rudnev 2015:chap. 2 and Forker to appear are two reasonably detailed grammar sketches of the language's syntax and morphology, respectively.

Linguistic Inquiry, Volume 51, Number 4, Fall 2020
829–844

https://doi.org/10.1162/ling_a_00360

a low nominalization in (1c), where the agreeing transitive verb *cm–ič-* 'sell' takes on the neuter agreement prefix *b–*, coreferencing the noun class feature of the absolutive object DP *mašina* 'car.ABS'.[2]

(1) a. *Finite*
was-as **mašina** **b**–ič- an- a
son-ERG **car.ABS** N–√sell-PST-FIN
'The son has sold the car.'

b. *Infinitive*
insu- e b–oł'- ana [was-as **mašina**
father.OBL-DAT N–want-PST son-ERG **car.ABS**
b–ič- ize]
N–√sell-INF
'Father wanted his son to sell the car.'

c. *Nominalization*
[was-as **mašina** **b**–ič- i] łik'a–b iš
son-ERG **car.ABS** N–√sell-NMLZ good–N thing.ABS
b–ugo
N–be.PRS
'The son selling the car is a good thing.'

In addition to the verb displaying identical agreement in both finite and nonfinite clauses, case marking on the arguments is also identical: in (1a), (1b), and (1c), the external argument *wasas* 'son' invariably carries ergative marking, whereas the internal argument appears unmarked.

The same uniform case marking and agreement patterns obtain in intransitive clauses, as shown in (2), for finite, infinitival, and nominalized clauses.

(2) a. *Finite*
was **w**–eker- an- a insuqe
boy.ABS M–√run-PST-FIN father.APL
'The boy ran to his father.'

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

[2] Unless otherwise indicated, the Avar examples in this squib come from my field notes. I use the following abbreviations: ABS = absolutive, APL = apudlative, CM = class marker, DAT = dative, ERG = ergative, F = feminine, FIN = finiteness, GEN = genitive, ILL = illative, INESS = inessive, INF = infinitive, LAT = lative, LOC = locative, M = masculine, N = neuter, NMLZ = nominalizer, NOM = nominative, OBL = oblique, PL = plural, PRS = present, PST = past, PTCP = participle.

c. *Nominalization*
[**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.'

I conclude from the identity of patterns of agreement and case assignment across finite and nonfinite clauses that high functional heads such as T are not implicated in negotiating either case or agreement, as has also been proposed for several related languages (see Gagliardi et al. 2014 for Lak and Tsez, Polinsky 2016 for Archi).

Two more sets of facts speak in favor of treating infinitival clauses like (1b) and low nominalizations like (1c) as vPs, and therefore divorcing case and agreement from the presence of T in the syntactic structure. First, neither clause type is compatible with clausal negation (Rudnev 2015:chap. 2), which signals their small size. In particular, I follow Wurmbrand (2001) in interpreting the incompatibility with clausal negation displayed by the infinitival and nominalized clauses in Avar as a hallmark of restructuring. Given the presence of the external argument, however, I depart from Wurmbrand (2001) and claim that the restructuring domain in Avar is vP rather than VP.

Second, nominalizations consist of a verbal root and a thematic vowel, and contain no tense-marking morphology. Avar infinitives, in turn, morphologically derive from nominalizations (cf. *b–ič-i* 'selling' and *b–ič-i-ze* 'to sell' in (1)) and serve as complements of the causativization head (Rudnev 2015:18). Given standard assumptions about causativization, those complements are more likely to be vP-sized than fully clausal. Therefore, I contend that the relevant domain for case assignment and agreement in Avar is vP.

With regard to structural relations between a verb's arguments, existing work on Avar and related languages (Gagliardi et al. 2014, Rudnev 2015, Polinsky 2016, Polinsky, Radkevich, and Chumakina 2017, Ganenkov 2019) is unanimous in claiming that the ergative argument in transitive clauses asymmetrically c-commands the absolutive one, displaying the characteristics of a prototypical subject in nominative-accusative languages. More specifically, the ergative can bind the absolutive but the converse does not hold; the ergative but not the absolutive changes to locative under causativization; the ergative but not the absolutive is the addressee of imperatives (Rudnev 2015:56–57).

We can therefore adopt the following (simplified) implementation of vP-internal case assignment and agreement licensing. To keep the discussion short, I adopt a configurational approach to case (Marantz 1991, Bittner and Hale 1996, Levin and Preminger 2014) whereby ABS is the unmarked case and ERG arises as a result of case competition applying upward (3a). Since only the unmarked case is accessible for the purposes of agreement in Avar, argument-predicate agreement in Avar arises as a result of a featural dependency between an [*u*ϕ] feature

on v and a corresponding valued feature on the absolutive argument (3b).[3]

(3) *Low case and agreement in Avar*

a. Case

$[_{vP}\ ^{\text{“ERG”}}\text{DP}_1 \ldots \text{DP}_2]$

dependent

b. Agreement

$[_{vP}\ \text{DP}_{[F]}\ [_{vP}\ [_{VP}\ \text{DP}_{[N]}\ \text{V}]\ \text{v}_{[u\phi]}]]$

Having sketched the mechanism for case assignment and argument-predicate agreement, I now turn to agreeing adpositions.

2 Adposition Agreement

In addition to verbs containing a slot for agreement with the absolutive argument, three kinds of adpositional expressions can display agreement with the absolutive argument of the host clause in Avar: some low adverbs, postpositions, and (PP-like) noun phrases in a number of locative cases. Let us consider them in turn.[4]

First, certain locative (4) and directional adverbs (5) can agree with the absolutive argument in Avar.

(4) a. jacał hani–**w wac** w–uχana
sister.ERG here–**M brother.ABS** M–beat.PST
‘The sister beat up her brother here.’

[3] This is for convenience only. I make no deep theoretical commitments regarding the status of the morphologically unmarked case in Avar: as far as I can see, viewing it as being absolutive/unmarked/nominative/accusative or referring to unmarked DPs as caseless (Kornfilt and Preminger 2015) has little bearing on the discussion of agreement in this squib so long as there is a mechanism rendering all nonabsolutive DPs inside a relevant domain unsuitable for agreement *before* ϕ-feature valuation can commence. What is clear, though, is that the Avar absolutive is neither the “high-ABS”/ABS = NOM nor the “low-ABS”/ABS = DEF (Legate 2008), being entirely independent of heads like T conventionally viewed as assigning the unmarked (nominative) case. I thank an anonymous reviewer for alerting me to the existence of several analytic options for what is traditionally called absolutive case.

[4] Avar is by no means unique in having agreeing adpositions, and the phenomenon is mentioned in passing in the existing grammatical descriptions of the language (Uslar 1889, Alekseev and Ataev 1997, Alekseev et al. 2012). In particular, similar phenomena have been documented for the Ripano dialect of Italian (D’Alessandro 2011), Kutchi Gujarati (Grosz and Patel-Grosz 2014), Archi (Bond and Chumakina 2016, Chumakina and Bond 2016). Unlike in Avar and Archi, whose agreeing adpositions are discussed from an Agree-based perspective in Polinsky 2016, in the other languages agreement is not confined to vP, with potentially different consequences for the directionality-of-valuation debate. Exploring these consequences is a promising direction for future research.

b. jasaz hani–**j jac** j–uχana
girls.ERG here–**F** **sister.ABS** F–beat.PST
'The girls beat up their sister here.'

The verb 'beat' in (4) takes ergative and absolutive arguments and has a slot for the agreement marker. The ergative argument is specified as F in (4a) and PL in (4b), whereas the absolutive one is specified as M in (4a) and F in (4b). The adverb *hani–CM* 'here' carries the noun class features of the absolutive argument.

Examples (5a) and (5b) illustrate noninterrogative and interrogative directional adverbs, *hani‹CM›e* 'here' and *ki‹CM›e* 'where to'. In both cases, the adverb contains a noun class suffix covarying with the noun class of the absolutive argument.

(5) a. insu- ca **jas** hani‹**j**›e **j**–it'- ana
father.OBL-ERG **girl.ABS** ‹**F**›here.LAT **F**–send-PST
'Father sent the girl here.'
b. ki‹**r**›e insu- ca **łimal** ___
‹**PL**›where.LAT father.OBL-ERG **children.ABS**
r– it'- a- ra– l
PL–send-PST-PTCP–PL
'Where did father send the children to?'

The verb in Avar *wh*-questions obligatorily takes the form of a (tensed) participle, and the *wh*-phrase can either be fronted or remain in situ.[5] I only illustrate the fronting option, but the in-situ option, which I omit for reasons of space, displays identical agreement properties.

The second class of adpositions displaying agreement with the clause's absolutive argument is represented by several locative and directional postpositions. These derive etymologically from corresponding adverbs and differ from them in having a dependent noun phrase to which they assign oblique case: *ce‹CM›e* 'in front of', *ask'o–CM* 'next to', *horł'o–CM* 'in the middle of', *žani–CM* 'inside (of)', *χadu–CM* 'behind'.

(6) a. školal- da ask'o–**w** jasał **was** **w**–uχana
school.OBL-LOC near– **M** girl.ERG **boy.ABS** **M**–beat.PST
'The girl beat the boy up near the school.'
b. školal- da ask'o–**r** jasał **wasal**
school.OBL-LOC near– **PL** girl.ERG **boys.ABS**
r– uχana
PL–beat.PST
'The girl beat the boys up near the school.'

[5] The participial morphology on the Avar verb is a hallmark of relativization. See Rudnev 2015:chap. 4 for a detailed discussion of the syntax of Avar *wh*-questions and their semantic interpretation, as well as an analysis in terms of clefting.

The transitive verb *см–uχ-* 'beat up' is an agreeing verb that agrees with the absolutive argument *was* 'boy' in (6a) and *wasal* 'boys' in (6b). The external argument's noun class specification, on the other hand, is the invariant F. We can see that the noun class morphemes on the postposition *ask'o–см* 'next to' are identical to the agreement morphology on the verb.

Finally, noun phrases in the inessive and illative cases agree with the verb's absolutive argument in the same manner as adverbs and postpositions. In Avar, the inessive is formed by attaching a class marker to the genitive form of the noun, and the illative is formed by attaching the lative suffix *-e* to the inessive. The pair of examples in (7) illustrates.

(7) a. čaɣir raʕini‹**b**› **b**–ugo
wine.ABS ‹N›barrel.INESS N–be.PRS
'The wine is in the barrel.'
b. čaɣir raʕini‹**b**›e t'una
wine.ABS ‹N›barrel.ILL pour.PST
'They poured wine into a/the barrel.'
(Alekseev et al. 2012:249)

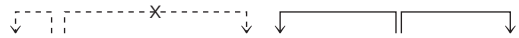
The DP *raʕin* 'barrel' is specified with the inessive case in the intransitive clause (7a) and the illative case in the transitive clause (7b), and agrees with *čaɣir* 'wine.ABS' in both examples.

3 Adposition Agreement Is Agreement, Not Concord

Before I proceed, I would like to address—and ultimately dismiss—the option of treating agreement morphology on agreeing adpositions in Avar as an instance of concord rather than agreement, which would arguably remove it from the purview of the theory of syntactic feature valuation (see Norris 2014 and references there). Three considerations support classing adposition agreement together with argument-predicate agreement.

First, as noted by Norris (2014), agreement establishes a relationship between two distinct extended projections, whereby features present in one can be realized on the other. In prototypical instances of concord, on the other hand, the features of a (nominal) head are realized on constituents inside the extended projection of that same head. In the Avar case at hand, the agreement relation is established between an adposition situated outside the extended projection of the agreement-controlling DP and that DP.

Second, the connection between agreement and case, which has so far not been established for concord (Bobaljik 2008, Preminger 2014), suggests that agreeing adpositions in Avar display agreement and not concord: as mentioned earlier, agreeing adpositions, like verbs and unlike demonstratives and adjectives, carry the noun class features of the absolutive DP rather than those of their own nominal complements, to which they assign oblique cases (8).



(8) [c'ija–b školal- da ask'o≠b / **w**] jasał **wac** **w**–uχ- ana
new–N school.OBL-LOC near– N **M** girl.ERG **brother.ABS** M–beat-PST
'Next to the new school, the girl beat up her brother.'

Sentence (8) contains both concord (dashed line) and agreement (solid line). Crucially, concord obtains, internally to the PP, between an AP (*c'ijab* 'new.N') and a neuter NP (*školalda* 'school.LOC') in the locative case but fails to obtain between the same noun phrase and the agreeing postposition *ask'ow* 'next to', which instead agrees with the masculine internal argument of *wuχ-* 'beat', just like the verb itself.

The third consideration is an Avar-internal observation concerning the exponents of concord and agreement. While the singular M (*w*), F (*j*), and N (*b*) are the same for agreement and concord, they diverge in the case of PL: *r* signals agreement and *l* concord.

(9) c'ija–l/*r łimal hani–r/*l-e r/*l–ač'- ana
new–PL children.ABS here–PL- to PL– come-PST
'New children have come here.'

The AP *c'ijal* 'new.PL' in (9) undergoes concord with the head noun *łimal* 'children.ABS' and, as a result, carries the plural concord suffix *-l.* The AdvP *hanir* 'here.PL', in contrast, is specified with the same plural morpheme *-r* as the finite verb *r–ač'ana.*

Having seen that adposition agreement in Avar is an instance of genuine ϕ-agreement, let us now consider the challenges that Avar agreeing adpositions pose for existing accounts of ϕ-agreement. The discussion to follow examines the structural relations between the ϕ-probes and absolutive goals in two distinct structural configurations: one where the adposition attaches to the vP, which already contains all of the verb's core arguments (*vP-peripheral adpositions*; section 4), and one where the adposition is situated low in the vP, lower than the external argument (*vP-internal adpositions*; section 5). That the two configurations are indeed distinct is evidenced by their semantic interpretation: vP-peripheral adpositions specify the location of the entire event, including the external argument, rather than exclusively the location of the internal argument. As for vP-internal adpositions, conversely they specify the location of the internal argument only, to the exclusion of the external argument. Neither construction is thus reducible to the other.

4 vP-Peripheral Adpositions

One set of prototypical environments for vP-level adverbials and PP-modifiers such as those in (10a) and (10b) involves their adjunction to vP, effecting event modification.

(10) a. školal- da χadu– **w** jasał **was** **w**–uχana
school.OBL-LOC behind–M girl.ERG **boy.ABS** M–beat.PST
'The girl beat the boy up behind the school.'

b. minajal- da ask'o–**b** jasal- da **moc'**
house.OBL-LOC near– **N** girl.OBL-LOC **moon.ABS**
b–ixana
N–see.PST
'The girl saw the moon near the school.'

As just mentioned, the locative PPs in (10) specify the location of the entire event involving both the internal and external arguments rather than that of the internal argument only: the beating event in (10a) can only be described as such if both the beater and the person being beaten are behind the school. Nor is it plausible for the moon in (10b) to be situated near the school—in order for the sentence to be felicitous, the person denoted by the external argument must be located near the school to perform the seeing. Consequently, event-modifying locative PPs in Avar cannot be viewed as being predicated of the lower argument inside VP, and are therefore not amenable to the small clause analysis discussed in the next section.

Given the relevance of absolutive case for adposition agreement alluded to above, case will be negotiated, as sketched in (3a), before ϕ-agreement can be licensed. With case taken care of, only absolutive DPs will be "visible" for the purposes of ϕ-agreement, which I notate by graying out the nonabsolutive ones in the representations below.

(11) $[_{vP}\ [_{PP}\ DP^{LOC}\ P_{[u\phi]}]\ [_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ DP^{ABS}_{[\phi]}\ V]\ v_{[u\phi]}]]]$

To model adposition agreement, I postulate unvalued noun class features ([*u*ϕ]) on agreeing adpositional heads alongside v.[6]

4.1 Consequences for Upward Valuation

Since the P^0 probe does not c-command any absolutive DPs, XPs should be able to act as probes alongside X^0s, per Bare Phrase Structure (Chomsky 1995), for upward valuation to obtain (Rezac 2003, Carstens 2011, 2015). The [*u*ϕ] feature on P will therefore also appear on PP. Once the PP merges with vP, the [*u*ϕ] feature on the PP will be valued either against the absolutive object directly or against the valued [ϕ] feature on v, which will act as an intermediate goal for valuation by virtue of being structurally closer to the ϕ-probe.

(12) $[_{vP}\ [_{PP[u\phi]}\ DP^{LOC}\ P]\ [_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ DP^{ABS}_{[\phi]}\ V]\ v_{[u\phi]}]]]$

Alternatively, the PP should in principle also be able to attach to VP, appearing lower than v but still c-commanding the absolutive internal argument, as schematized in (13).

[6] Given the identity of agreement patterns in adverbs and postpositions, I assume they arise under identical conditions, the nature of the particular head involved in such a relation (Adv/v) being immaterial for my purposes. Whether all locative and directional adverbs in Avar and crosslinguistically are PPs is beyond the scope of this squib.

(13) $[_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ [_{PP[u\phi]}\ DP^{LOC}\ P]\ [_{VP}\ DP^{ABS}_{[\phi]}\ V]\ v_{[u\phi]}]]]$

Here, too, upward valuation is able to operate without hindrance. Because the PP is now closer to the absolutive goal than v is, once its own [*u*ϕ] has been valued the PP will act as an intermediate goal for v. Upward valuation therefore derives the agreement facts effortlessly without introducing any additional assumptions.

4.2 Consequences for Downward Valuation

Turning to the implications of agreeing adpositions for downward-valuation approaches to ϕ-agreement, the assignment of ABS inside the vP rather than from T outside it, as well as the absolutive argument's low position with respect to the other arguments, makes it impossible for the [*u*ϕ] on v to find a c-commanding agreement controller.

(14) $[_{vP}\ [_{PP[u\phi]}\ DP^{LOC}\ P]\ [_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ DP^{ABS}_{[\phi]}\ V]\ v_{[u\phi]}]]]$

Even assuming feature percolation, it will be the unvalued [*u*ϕ] features that will percolate, and as a result, v will fail to have its [*u*ϕ] feature valued. Consequently, when P's [*u*ϕ] feature probes upward, it too will fail to find an agreement controller against which to be valued (14). The same reasoning applies in the case of VP-adjunction as in (13), since the absolutive DP carrying a valued ϕ-feature will still not c-command the [*u*ϕ] on P.

Two potential workarounds aimed at salvaging the downward-valuation analysis present themselves. The first is to assume that the absolutive DP moves to a higher Spec,vP, possibly followed by further, similar movements of the external argument and the agreeing PP to derive the linear order. While argument-rearranging movements in Avar are attested and therefore hard to argue against, they are optional, and it is unclear what purpose they would serve other than to re-create the original word order. Moreover, such derived orders are invariably accompanied by information-structural or discourse-structural effects, resulting in the prediction that the availability of adposition agreement should correlate with the information-structural status of the absolutive argument. This prediction is clearly false, since the adpositions at hand agree with the absolutive argument regardless of information-structural considerations. Furthermore, in the absence of such a movement there would be no way for agreement to obtain, which would entail that both verbal agreement and adposition agreement are optional, contrary to fact.[7]

[7] I thank an anonymous reviewer for formulating this prediction.

A second way to ensure that v's [*u*ϕ] feature is valued via downward valuation is to appeal, following Preminger and Polinsky (2015), to a structure like (15b) mimicking the effects of upward valuation (15a). In such a structure, the Agree relation would be established between an additional head F^0 in the c-command domain of the absolutive goal, followed by head movement of that head F^0 to the head spelling out the agreement features, X^0.

(15) *Upward valuation as downward valuation via head movement*

a. $[_{XP}\ X^0\ [_{FP}\ DP\ [_{F'}\ F^0\ [_{YP}\ Y^0 \ldots]]]]$

b. $[_{XP}\ F^0{+}X^0\ [_{FP}\ DP\ [_{F'}\ F^0\ [_{YP}\ Y^0 \ldots]]]]$

While Preminger and Polinsky (2015) conclude from the availability of the reanalysis in (15) that local ϕ-agreement is unreliable as a testing ground for the directionality-of-valuation debate, the combination of adposition agreement and argument-predicate agreement in Avar creates precisely the configuration not amenable to the reanalysis in (15). In the case at hand, either the additional head would have to appear lower than both the absolutive argument and the lexical verb, or V itself would have to be specified with [*u*ϕ] instead of v, followed by the head in question undergoing head movement to v (16). This captures the argument-predicate agreement facts.

(16) $[_{vP}\ [_{PP[u\phi]}\ DP^{LOC}\ P]\ [_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ DP^{ABS}_{[\phi]}\ V_{[u\phi]}]\ v{+}V]]]$

However, the second ϕ-probe within the same domain—the agreeing P—will still fail to get its [*u*ϕ] feature valued because, once valued, the ϕ-feature on V will not be able to reach a position from which it would c-command the agreeing P for reasons having to do with the nature of head movement. In particular, V moving to v in (16) would be an instance of word-forming head movement, which at least since Chomsky 2001 has been viewed by many as being postsyntactic and thus incapable of feeding feature valuation. However, it is equally far from obvious without additional assumptions that V will come to c-command the ϕ-probe out of the complex V + v head even if head movement is properly syntactic (see Matushansky 2006, Roberts 2010).

We have seen that downward valuation faces severe difficulties with deriving the adposition agreement patterns when the PP/AdvP/KP attaches to vP/VP. The traditional upward-valuation account, on the other hand, captures the agreement facts effortlessly.

5 vP-Internal Adpositions

A different set of syntactic environments obtains when agreeing adverbials are introduced low during the construction of the vP as adpositional objects in, for instance, the double object construction in (17), repeated from (7b).

(17) čaɣir raʕini‹b›e t'una
wine.ABS ‹N›barrel.ILL pour.PST
'They poured wine into a/the barrel.'

Two lines of analysis have been proposed for PP objects. According to one, schematized in (18a), PP objects like 'into a/the barrel' in (17) are generated as complements to the verb, with the direct object being introduced in the specifier (Larson 1988, Borer 2005, Ramchand 2008). The other analysis, shown in (18b), relates the direct object and the PP argument via a small clause (Hoekstra and Mulder 1990, Den Dikken 1995). In both cases, the external argument is introduced by v in the customary manner.

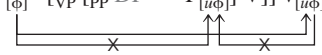
(18) a. *PP complement analysis of PP objects*
$[_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ DP^{ABS}_{[\phi]}\ [_{VP}\ [_{PP}\ DP^{GEN}\ P_{[u\phi]}]\ V]]\ v_{[u\phi]}]]$
b. *Small clause analysis of PP objects*
$[_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ [_{SC}\ DP^{ABS}_{[\phi]}\ [_{PP}\ DP^{GEN}\ P_{[u\phi]}]]\ V]\ v_{[u\phi]}]]$

The two analyses in (18) have distinct consequences for vP-internal agreement in Avar.[8]

5.1 Consequences for Upward Valuation

On an upward-valuation analysis, ϕ-agreement will be preceded by case assignment: first, the directional P will assign GEN to its complement, rendering it invisible for ϕ-agreement. Structure building will continue until v enters the structure and case is assigned configurationally according to the procedure outlined in (3a)—ABS to the internal argument *čaɣir* 'wine' and ERG to the silent *pro* in the position of the external argument—whereupon v's [*u*ϕ] feature can be valued against the absolutive DP. Now the two analyses of PP objects diverge: on the PP complement version of the analysis (19), the [*u*ϕ] feature on P will remain trapped inside the PP, being unable to find an appropriate goal in its c-command domain even given percolation, which will stop at the level of PP.

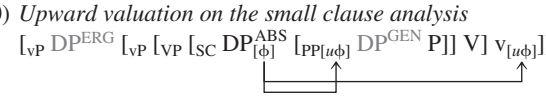
(19) *Upward valuation on the PP complement analysis*
$[_{vP}\ DP^{ERG}\ [_{vP}\ [_{VP}\ DP^{ABS}_{[\phi]}\ [_{VP}\ [_{PP}\ DP^{GEN}\ P_{[u\phi]}]\ V]]\ v_{[u\phi]}]]$



[8] An anonymous reviewer observes that upward valuation is indistinguishable from downward valuation in the case of the small clause analysis since the PP and the absolutive argument are merged as sisters, the resulting structure being unable to contribute to the directionality-of-valuation debate. While this observation regarding valuation under sisterhood is correct, the conclusion is not: as the discussion below shows, it is the existence of the second ϕ-probe within the same syntactic domain (V or v) that determines the viability of a particular analysis.

This problem does not arise for the small clause analysis schematized in (20): assuming feature percolation, PP will inherit the [*u*ϕ] feature from P, which will be valued against the absolutive argument under sisterhood. The [*u*ϕ] feature on v will be valued in the customary manner, as shown in (3b).

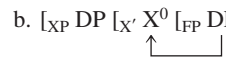
(20) *Upward valuation on the small clause analysis*



The success of upward valuation, therefore, crucially depends on the structure in (20) being the correct analysis of PP arguments (see Bruening 2010, 2018 for arguments against this), making the analysis fragile. Therefore, before discarding upward valuation in relation to the PP complement structure in (18a), let us check whether the purported downward valuation required for the [*u*ϕ] feature on P to be valued can be recast as upward valuation as sketched in Preminger and Polinsky 2015. As a part of their argument against using local agreement for testing theories of feature valuation, Preminger and Polinsky (2015) show that in most cases, structures involving downward valuation of a feature on a head X^0 from a c-commanding DP goal (21a) can be reanalyzed as upward valuation if the DP moves to Spec,XP from a lower position in the c-command domain of X^0 (21b). The unvalued features on X^0 are thus valued against the DP in its original, premovement position.

(21) *Downward valuation as upward valuation via short movement to Spec*

a. 

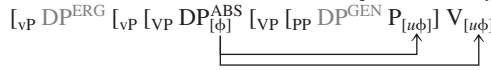
b. 

The availability of such a reanalysis of downward valuation as disguised upward valuation in the case of PP complements is contingent on the availability of a PP-internal position of the absolutive DP. There is, however, no evidence that the absolutive DP originated inside the PP. The PP complement analysis with upward valuation is untenable; moreover, we see once again that local agreement is relevant, *pace* Preminger and Polinsky 2015.

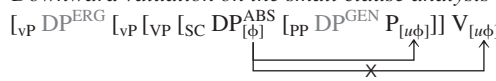
5.2 Consequences for Downward Valuation

Unlike upward valuation, downward valuation derives the adposition agreement facts on both the PP complement analysis and the small clause analysis of PP objects. However, the two analyses diverge when it comes to accounting for argument-predicate agreement, which, as shown in (16), can be made compatible with downward valuation if V is endowed with an [*u*ϕ] feature.

(22) a. *Downward valuation on the PP complement analysis*



b. *Downward valuation on the small clause analysis*



On the PP complement analysis in (22a), the absolutive DP occupies Spec,VP, thus c-commanding both ϕ-probes. Downward valuation can proceed unimpeded.

Because of the structural proximity of the PP object to the absolutive object enforced by the small clause analysis in (22b), the [*u*ϕ] feature on P will be able to probe upward and receive a value from the absolutive argument *čayir* 'wine'. This value will not, however, be able to reach a position c-commanding the [*u*ϕ] feature on V for downward valuation to obtain: since the absolutive DP is situated inside a symmetrical structure, neither its features nor those of PP will be inherited by the small clause, remaining invisible for the [*u*ϕ] on V. Thus, downward valuation can accommodate all the observed agreement facts on the PP complement analysis only.

6 Conclusions

In this squib, I have shown, by using the interactions of argument-predicate agreement with adposition agreement in Avar, that local agreement can inform theories of feature valuation (*pace* Preminger and Polinsky 2015). Having examined two distinct types of structure, vP-peripheral and vP-internal adpositions, I concluded that downward valuation is inferior to upward valuation (Chomsky 2000, 2001). In particular, the agreement pattern involving vP-internal adpositions can be reconciled with both upward and downward valuation but requires different analyses of PP objects (the small clause analysis for upward valuation and the PP complement analysis for downward valuation). Therefore, while vP-internal adpositions by themselves do not conclusively rule out the downward-valuation analysis, they make conflicting predictions about the analysis of PP objects (which I do not explore for reasons of space). The deciding case, then, is that involving vP-peripheral adpositions, whose behavior with respect to ϕ-agreement can only be accounted for on an upward-valuation analysis. Since only upward valuation captures *all* of the adposition agreement facts, it emerges as the clear winner.

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