

## Turkish Possessive Constructions by Upward Agree

Nazmiye Öyük & Ömer Demirok\*

**Abstract.** This paper explores possessive constructions in Turkish through the lens of the Upward Agree (UA) framework proposed in Bjorkman and Zeijlstra (2019). It addresses the technical challenge of how in possessive DPs, the possessee NP is able to control verbal agreement and anaphor binding, but not the possessor. While possessive DPs reflect the features of the possessee, these features appear to be projected upwards for verbal agreement and anaphor binding purposes despite the possessor being positioned higher in the structure. We argue that UA effectively captures two essential facts: (i) the possessor's features' appearing on the Poss head, and (ii) the features of the possessee being accessible in the maximal projection DP. The paper details a step-by-step derivation of a typical possessive construction, illustrating how the possessor interacts with the D head and allows feature checking and valuation. We argue that UA offers a cohesive explanation for both the projection of features from the possessee and the agreement seen with the possessor, providing a comprehensive account of complex agreement phenomena in Turkish.

**Keywords.** Upward Agree; syntax; agreement; possessive constructions; phi features

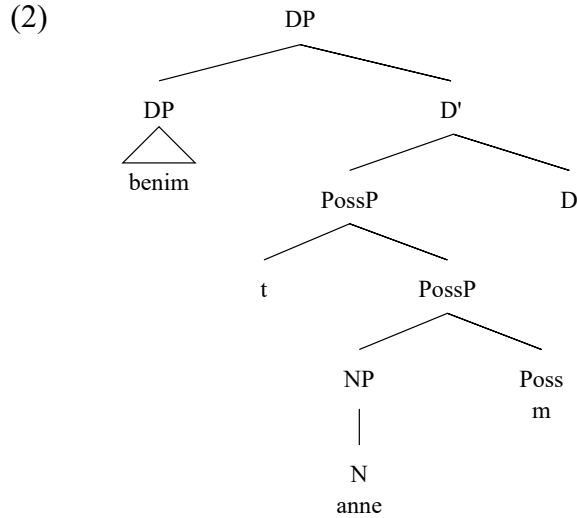
**1. Introduction.** In Turkish, complex DPs that have a possessor in them exhibit the anaphor binding and agreement patterns given in (1).

- |     |    |  |              |            |              |              |
|-----|----|--|--------------|------------|--------------|--------------|
| (1) | a. | Ben-im                                   | ke-di-m      | ay-na-da   | kendi-n-e    | bak-tı-∅.    |
|     |    | I-GEN                                    | cat-1SG.POSS | mirror-LOC | self-3SG-DAT | look-PST-3SG |
|     |    | ‘My cat looked at itself on the mirror.’ |              |            |              |              |
|     | b. | * Ben-im                                 | ke-di-m      | ay-na-da   | kendi-m-e    | bak-tı-m.    |
|     |    | I-GEN                                    | cat-1SG.POSS | mirror-LOC | self-1SG-DAT | look-PST-1SG |
|     |    | ‘My cat looked at myself on the mirror.’ |              |            |              |              |

In possessive DPs, it is the  $\varphi$ -features of the possessee, and not the possessor, which we see on the verb and the anaphor it binds. Principle A specifies that the binder should c-command the bindee REF<sub>X</sub>. However, in an expression like *benim annem* ‘my mom’, the possessee *anne* is merged very early on in the structure and remains lower than the possessor *benim* in the DP construction as illustrated in (2). For verbal agreement and binding to occur as it should, the  $\varphi$ -features of the possessee noun must somehow “project upwards” to the main DP without getting affected by the possessor DP’s features.

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As a complicating factor, Turkish complex DPs additionally exhibit  $\varphi$ -feature agreement with the possessor. This indicates that the possessor DP's  $\varphi$ -features must be present on the Poss head as well.

- (3) a. ben-im    anne-m  
 I-GEN    mother-1SG.POSS  
 'my mother'
- b. sen-in    anne-n  
 you-GEN    mother-2SG.POSS  
 'your mother'

Chomsky's (2000, 2001) Downward Agree would be able to capture the copying of features from possessee NP to the D head by positing the D head as a probe and the NP as a goal; however, it would be inadequate to explain how the Poss head can copy the features of the possessor DP. If we assume the configuration in (2), the Poss head as a probe cannot access the features of the possessor DP, which is merged later and is higher in the structure than the Poss head.<sup>1</sup> Therefore, our account has to capture two facts: (i) The possessor DP's  $\varphi$ -features must end up on the Poss head, (ii) possessee noun's  $\varphi$ -features must be available at the maximal projection DP for agreement and binding.

The paper is organized as follows. In Section 2, we summarize the different kinds of possessive structures in Turkish as described in Öztürk and Erguvanlı Taylan (2016). In Section 3, we describe Upward Agree proposed by Bjorkman and Zeijlstra (2019) and show the application of Upward Agree to account for the agreement facts of the different kinds of possessive DPs in Turkish. In Section 4, we discuss further questions, and Section 5 concludes the paper.

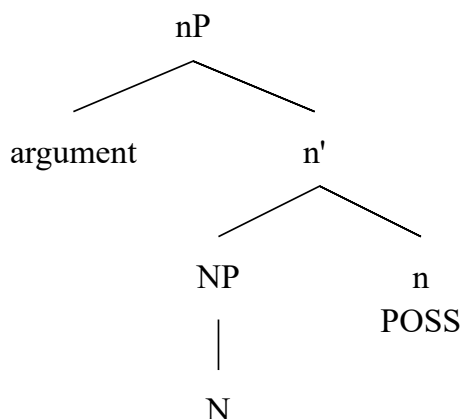
**2. Possessive DPs in Turkish.** Öztürk and Erguvanlı Taylan (2016) describe three different possessive constructions in Turkish: (i) genitive-possessive constructions (GP), (ii) possessive free genitives (PFG), and (iii) possessive compounds (PC). Genitive-possessives (GP) are possessive constructions which display both genitive case on the possessor, and a possessive marker on the possessee noun. Possessive free genitives (PFG) are possessives which have the genitive case on the possessor, but no possessive marker while possessive compounds (PC) only have the possessive marker on the possessee, but no genitive case on the possessor. The different kinds of possessives are exemplified in (4).

<sup>1</sup> There are accounts which take the possessor to be lower in the structure (see Paparounas & Akkuş, 2023), but we follow Öztürk and Erguvanlı Taylan (2016) in this paper.

- (4) (Öztürk & Erguvanlı Taylan, 2016: 89)
- |    |                         |               |                                    |
|----|-------------------------|---------------|------------------------------------|
| a. | Çocuğ-un                | kitab-ı       | (GP): Possessor-GEN Possessee-POSS |
|    | child-GEN               | book-3SG.POSS |                                    |
|    | ‘the child’s book’      |               |                                    |
| b. | Çocuğ-un                | kitap         | (PFG): Possessor-GEN Possessee-Ø   |
|    | child-GEN               | book          |                                    |
|    | ‘the book of the child’ |               |                                    |
| c. | Çocuk                   | kitab-ı       | (PC): Possessor-Ø Possessee-POSS   |
|    | child                   | book-3SG.POSS |                                    |
|    | ‘children’s book’       |               |                                    |

Öztürk and Erguvanlı Taylan (2016) argue that the possessive marker POSS is a valency marker which introduces the argument of the possessive construction. The possessor can only be introduced in the specifier of the nP if POSS surfaces in the head node of the functional nP.

- (5) (Öztürk & Erguvanlı Taylan, 2016: 102)

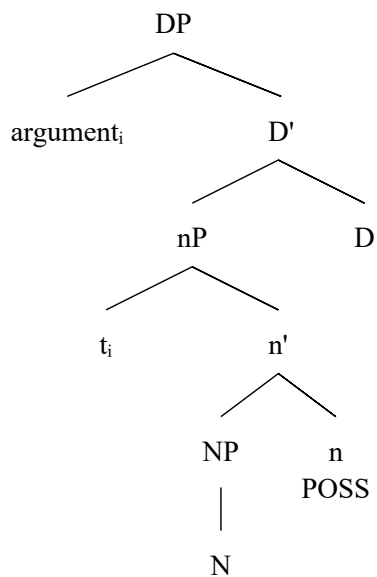


Öztürk and Erguvanlı Taylan (2016) propose that the configuration in (5) is how GPs and PCs are constructed. With PCs, the argument is non-specific, so it stays in Spec nP and does not receive genitive case. On the other hand, a GP’s argument is specific, so it moves up to the Spec DP and receives genitive case via Agree with the D head as illustrated in (6).<sup>2</sup>

<sup>2</sup> Note that there are other proposals distinguishing GP and PC constructions. Kharytonava (2009) makes a similar proposal to Öztürk and Erguvanlı Taylan (2016) but differentiates where Poss merges to the possessor noun. With GPs (Possessive Construction in their work), the Poss head merges to the NP node of the possessor, and it projects a specifier where the possessor moves and receives genitive case. With PCs (Nominal Compounds in their work), on the other hand, the Poss head merges to N<sup>0</sup> node, and the possessor stays in situ and does not receive genitive case.

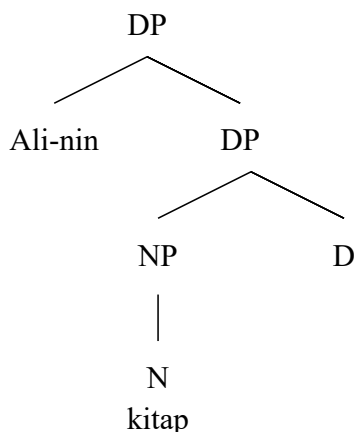
Yükseker (1998) also assumes that in PCs, possessors are generated lower with Poss<sup>0</sup> attaching to the possessor N<sup>0</sup>, and in GPs, they are base generated in Spec PossP. We follow Öztürk and Erguvanlı Taylan (2016) and Kharytonava (2009) in assuming that genitive-marked nominals are generated on a lower node and move to a higher one in the hierarchy because, under our analysis, the desired checking and valuation relations require the possessor to be merged low and subsequently move higher in the structure after receiving genitive case from the D head.

(6) (Öztürk & Erguvanlı Taylan, 2016: 103)



On the other hand, PFG constructions, which have genitive case on the possessor, but not a possessive marker on the possessee, is said to be lacking the POSS, which is present in both GPs and PCs. Öztürk and Erguvanlı Taylan (2016) argue that contrary to GPs and PCs, the genitive-marked noun is not an argument in PFGs, but a modifier; thus, PFG constructions lack the nP layer. According to Öztürk and Erguvanlı Taylan (2016), PFGs are constructed as in (7), and the genitive-marked noun is represented as a DP-level adjunct.

(7) (Öztürk & Erguvanlı Taylan, 2016: 105)



In the following section, we discuss the properties of Upward Agree as proposed by Bjorkman and Zeijlstra (2019) and show the implementation of this mechanism to the different types of possessive constructions described in this section.

**3. The implementation of Upward Agree to Turkish possessives.** Although Chomsky's (2000, 2001) Downward Agree proposal is well established and has been quite influential, there are natural language phenomena such as negative concord, sequence of tense, NPI licensing, etc. that led to models of formal co-variance that change the directionality of the operation Agree. While

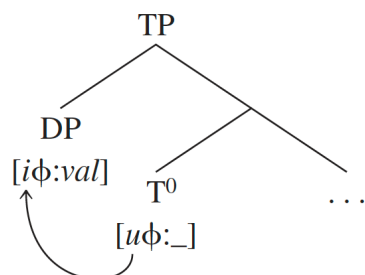
some research has suggested that the operation Agree can be bidirectional, rather than only downward (Merchant, 2006, 2011; Baker, 2008; Béjar & Rezac, 2009), Bjorkman and Zeijlstra (2019) argue for a unified Upward Agree account. In this paper, we follow Bjorkman and Zeijlstra (2019) in that we argue for a unified Upward Agree proposal in order to explain the agreement facts of possessive DPs in Turkish.<sup>3</sup>

3.1. BJORKMAN AND ZEIJLSTRA’S (2019) UPWARD AGREE. Bjorkman and Zeijlstra (2019) argue for a unified Upward Agree proposal in order to account for the natural language phenomena which Downward Agree cannot account for. Crucially, their proposal relies on the distinction between feature checking and feature valuation, as in Pesetsky and Torrego (2007), Arregi and Nevins (2012), and Bhatt and Walkow (2013).

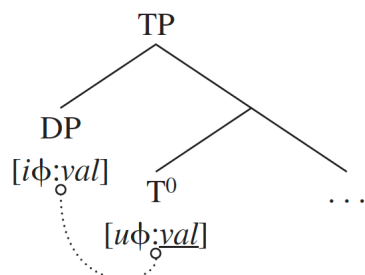
Feature checking (Agree) is an operation which allows an uninterpretable feature to be checked by an interpretable counterpart on a c-commanding goal. Feature valuation, on the other hand, is the copying of interpretable features from a goal to a probe. While checking always happens upwards, valuation can also happen downwards provided that there are no appropriate c-commanding goals to copy features from, and a checking relation between the probe and a lower goal has been established in a previous step. Feature checking always precedes feature valuation; thus, it is a prerequisite for any unvalued features to be valued from an appropriate goal.

(8) Feature checking and feature valuation (Bjorkman & Zeijlstra, 2019: 538)

a. *Checking via UA between  $[u\phi]$  and  $[i\phi]$*



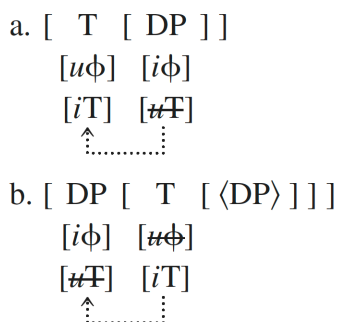
b. *Valuation, dependent on accessibility*



<sup>3</sup> We acknowledge the existing criticism of the Upward Agree framework and do not take a position on whether it is superior to downward or bidirectional models of Agree. Our claim is limited to showing that Turkish possessive constructions can be analyzed using Upward Agree, while recognizing that this is not the only possible account. A comparative evaluation of competing Agree frameworks lies beyond the scope of this paper. For readers interested in the broader debate, we refer to Zeijlstra (2012) and Bjorkman and Zeijlstra (2019) for arguments in support of Upward Agree, and to Bány and Van der Wal (2022), Rudnev (2021), and Diercks, Van Koppen, and Putnam (2020) for recent critiques of the approach.

If a probe H has uninterpretable  $\varphi$ -features  $[u\varphi]$ , and there are no goals c-commanding it which have the corresponding interpretable feature(s)  $[i\varphi]$ , a lower goal can move to Spec HP provided that there has been a previous checking relation between the goal and the probe. For example, Bjorkman and Zeijlstra (2019) claim that in SVO languages, in order to receive nominative case, the subject DP probes upwards to check its uninterpretable tense feature  $[uT]$ , which is checked by the corresponding interpretable  $[iT]$  on the T head. The T head, on the other hand, has uninterpretable and unvalued  $\varphi$ -features  $[u\varphi]$ . Since there are no available corresponding interpretable features higher than T, and there was a previous checking relation between T and DP, the subject DP can move to Spec TP and be the goal in order to check and value the uninterpretable/unvalued features on the T head. This configuration is illustrated in (9).

(9) (Bjorkman & Zeijlstra, 2019: 539)



Thus, Bjorkman and Zeijlstra's (2019) Upward Agree eliminates the need for the EPP feature and explains case assignment in terms of feature checking. The full details of Bjorkman and Zeijlstra's (2019) proposal are as follows.

(10) Upward Agree (Bjorkman & Zeijlstra, 2019)

- a. Checking and valuation takes place as soon as they can.
- b. Probing (i.e. feature checking) is always upwards: Goals (asymmetrically) c-command probes.
- c. Feature checking is a prerequisite for valuation (i.e., feature copying).
- d. If a probe can copy the features of its goal, it will get valued.
- e. If not, the probe can get valued from a lower goal provided that the two were in a checking relation in a previous stage of the derivation.

In the next subsection, we give a detailed derivation of genitive-possessives, possessive compounds, and possessive free genitive constructions in Turkish, following the Upward Agree framework described in this subsection.

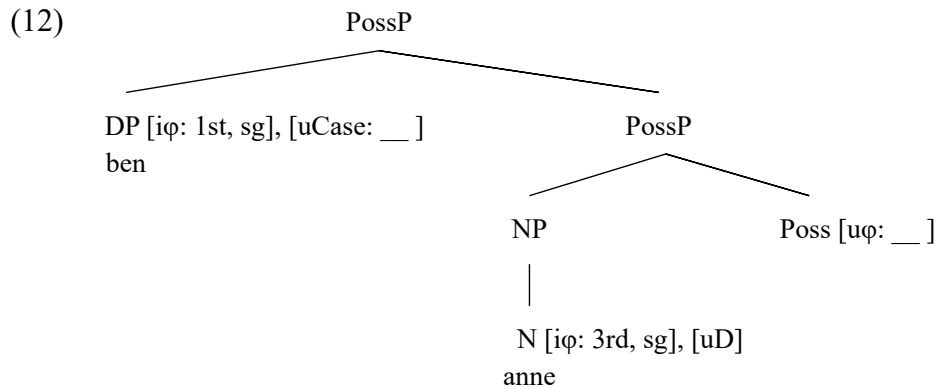
3.2. TURKISH POSSESSIVE CONSTRUCTIONS BY UPWARD AGREE. We argue that Bjorkman and Zeijlstra's (2019) Upward Agree account can be extended in order to account for the different types of possessive constructions in Turkish, illustrating the facts in (11).

- (11) a. The possessor DP's  $\varphi$ -features ends up on the Poss head in genitive-possessives (GP) and possessive compounds (PC).  
 b. Possessor DP gets valued as genitive in genitive-possessives (GP) and possessive free genitives (PFG).

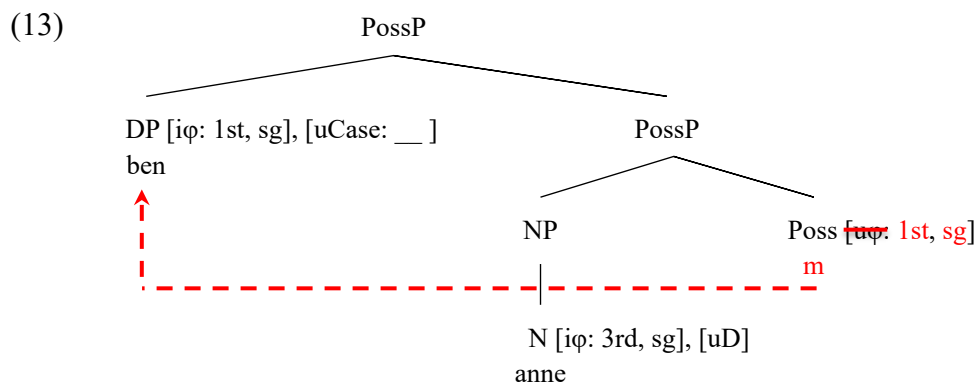
c. Possessee noun's  $\varphi$ -features must be available at the maximal projection DP for agreement and binding.

We need to make two crucial assumptions for our proposal to make the correct predictions. First, we assume that the possessee noun has an uninterpretable D feature [uD], which gets checked by [iD] on the D head. This assumption is necessary for the possessee noun and the D head to establish a relation so that the D head can value its  $\varphi$ -features from the possessee in later steps. The other assumption we make is that the genitive-marked DPs are opaque for agreement when they are embedded inside other DPs. This assumption is needed to prevent the D head from getting valued by the possessor. See Section 4 for more details of these two assumptions and how they are justified.

In this section, we show step by step the derivation of the genitive-possessive construction *benim annem* ("my mom") according to Bjorkman and Zeijlstra's (2019) Upward Agree. First, the possessor DP *ben* is merged in the Spec PossP in the derivation of the genitive-possessive *benim annem*. Before any checking and valuation happens, the Poss head has uninterpretable and unvalued  $\varphi$ -features, and the DP *ben* has an uninterpretable and unvalued case feature.



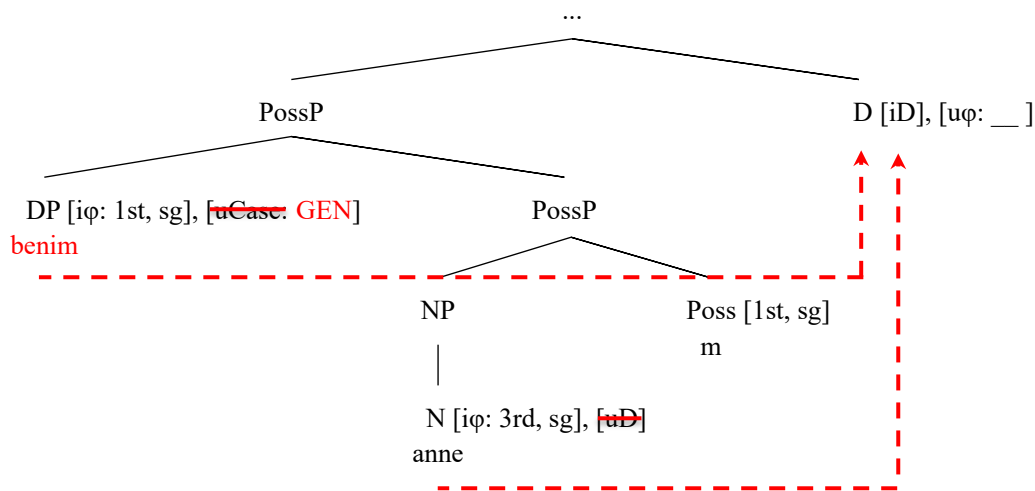
In Bjorkman and Zeijlstra's (2019) system, checking and valuation happen as soon as they can. Therefore, after the merge of DP *ben*, Poss head checks and values its  $\varphi$ -features [u $\varphi$ ] before the merging of the next node. Accordingly, the possessor's  $\varphi$ -features appear on the Poss head, accounting for (11a).



In the next step, D head merges to the tree; thus, it becomes a suitable goal for checking and valuing DP's uninterpretable case feature [uCase] and N's uninterpretable D feature [uD]. This step

accounts for (11b) by marking the possessor DP with genitive case, and it establishes the necessary relation between the N *anne* with the D for the next steps.

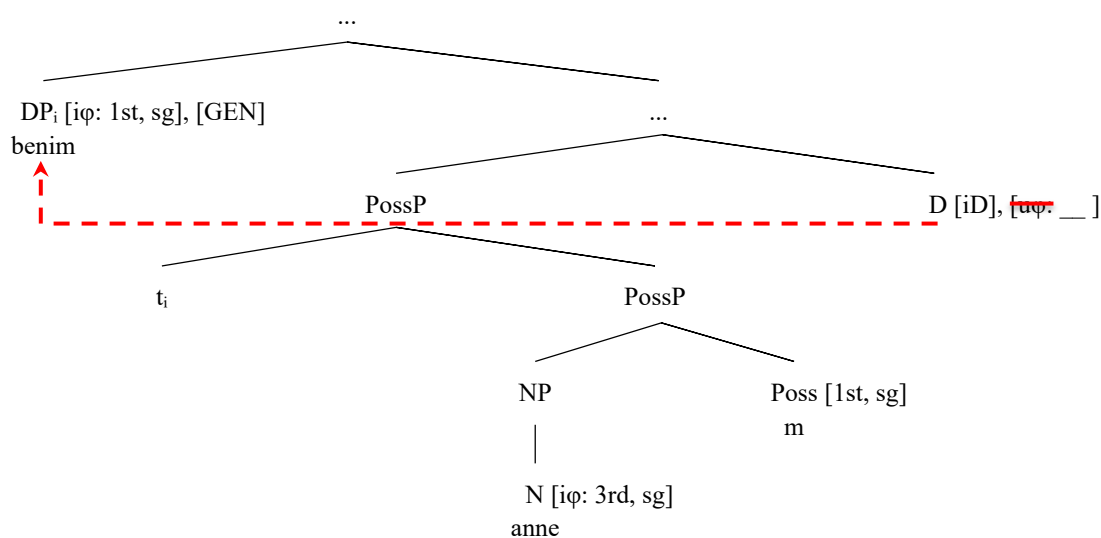
(14)



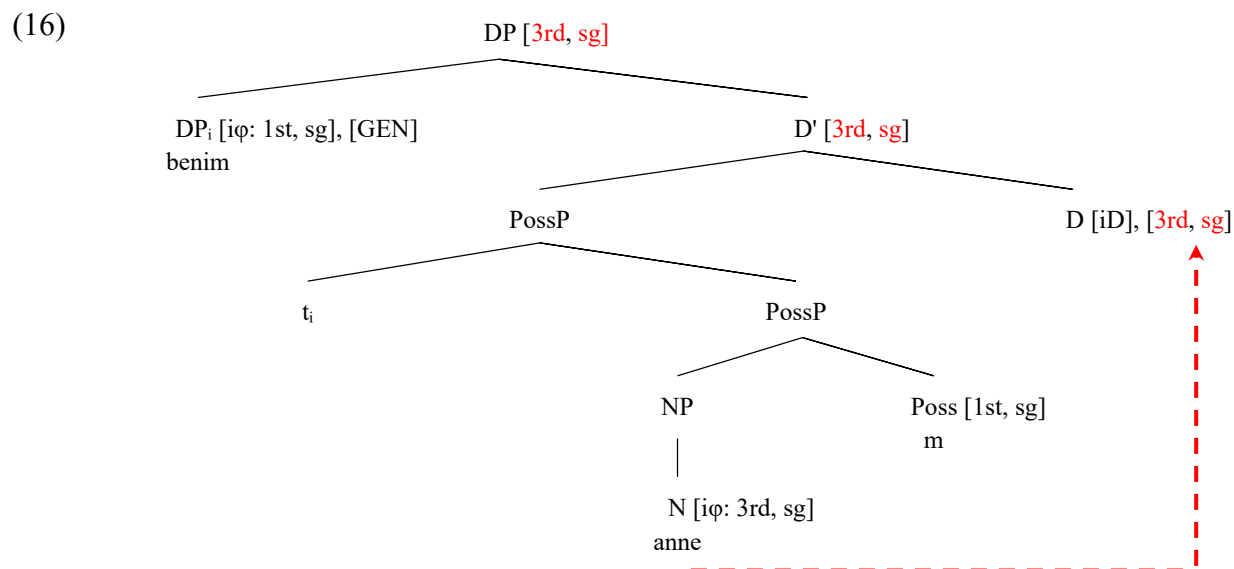
After this point, D head still has uninterpretable and unvalued features which motivates the DP *benim* to move to Spec DP to be an appropriate goal for D, similar to the subject DP moving to Spec TP described in (9). The DP *benim* can check the uninterpretable  $\varphi$ -features on the D head  $[u\varphi]$ ; however, we assume that genitive-marked nominals are opaque for agreement when they are embedded inside other DPs in Turkish. We make this assumption drawing from Paparounas and Akkuş (2023) who claim that genitive-marked Default-Triggering Nominals are opaque for agreement in Turkish and from Bjorkman and Zeijlstra (2019) who claim that some dative-marked DPs are embedded under KP/PP layers (e.g., in Icelandic), and their  $\varphi$ -features are not available for valuation. See Section 4 for more details on these two arguments.

From our assumption, since the genitive-marked DP's features are not available to value the unvalued features on the D head, the DP *benim* can only check the uninterpretable feature of the D head but cannot value it.

(15)



At this point, the D head has checked but unvalued  $\varphi$ -features. Since there are no other options, the unvalued features can be valued by the NP which has already built a relationship with the D head in (14). With this step, we make sure that the D head carries the features of the possessee, but not the possessor, accounting for (11c). After checking and valuation of all the elements, then, the D head can project its features to the main DP, which makes the correct predictions in line with binding and agreement facts.



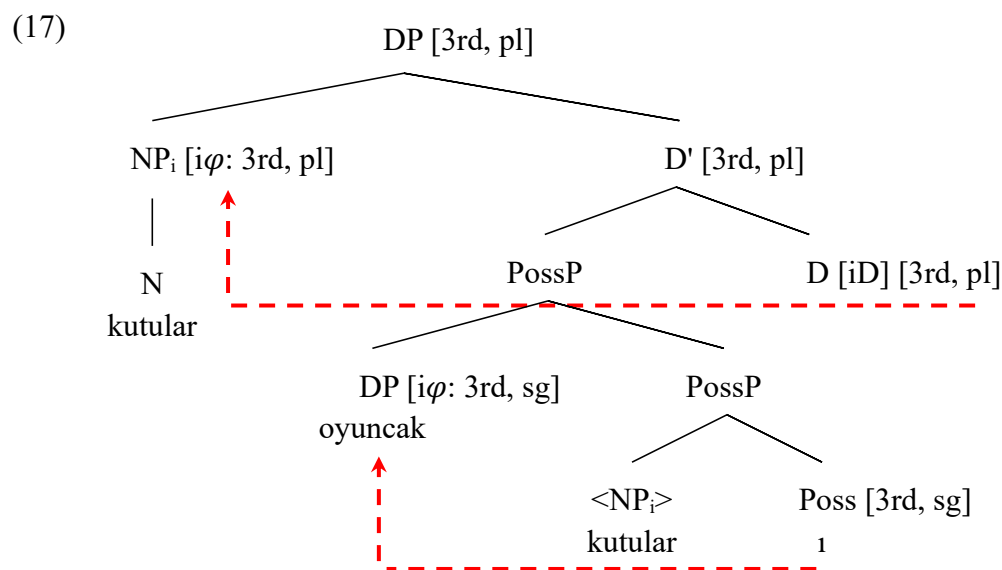
The other types of possessive constructions can also be explained by this framework. Contrary to genitive possessives (GP), possessive free genitives (PFG) do not have the Poss layer or alternatively, the functional nP layer as proposed in Öztürk and Erguvanlı Taylan (2016), displayed in (7). Thus, the step illustrated in (13) will be skipped, but the rest of the derivation will still be intact, preserving the assignment of the genitive case and the possessee noun's features percolating upwards through valuation with the D head.

Possessive compounds (PC), which lack the genitive case on the possessor but display the possessive marker on the possessee noun requires an additional restriction to explain. Öztürk and Erguvanlı Taylan (2016) argue that GPs and PCs are derived from the same construction with a functional nP layer, as illustrated in (5). If the argument/possessor has a referentiality/specificity feature, the possessor moves to the Spec DP to check its case via agreement with the D head with GPs, as in (6). If the possessor does not have referentiality/specificity feature, it stays in Spec nP with PCs, and it appears with zero-case marking.

Extending the Upward Agree account proposed in this section and drawing from the proposal of Öztürk and Erguvanlı Taylan (2016), PCs can be explained by the uninterpretable and unvalued features on the possessor noun. With GPs and PFGs, we have proposed that the possessor DP has an uninterpretable and unvalued case feature, and that feature triggers a checking relation between the possessor DP and the main D head. Since the possessor in PCs does not receive genitive case, it is possible that it does not have the uninterpretable and unvalued case feature, and it never establishes the relation between the possessor and the D head. In this spirit, the referentiality/specificity feature of Öztürk and Erguvanlı Taylan (2016) corresponds to [uCase] in our proposal in that only nouns that encode specificity carry the [uCase] feature.

Similar to the proposal in Öztürk and Erguvanlı Taylan (2016), possessor DP is not motivated to move to Spec DP as was the case in (15) because the relation between the DP and the D head has not been established. Therefore, the DP is zero-case marked as it does not have an uninterpretable and unvalued case feature to begin with. However, when the possessor DP does not move to main Spec DP, the D head cannot check its uninterpretable features because there are no accessible goals higher than the D head. Thus, the only possible candidate for movement is the possessee NP which has already established a checking relation with the D head in (14). The possessee NP moves to Spec DP with PCs so that it can check and value the  $\varphi$ -features of the D head.

The final step of the derivation of a PC like *oyuncak kutuları* (“toy boxes”) would be as in (17). While Poss head’s features get checked and valued by the possessor DP, the D head’s features get checked and valued by the possessee NP; thus, the whole possessive construction has the features of the possessee.



The obvious drawback of the possessee NP moving to Spec DP is that since the corresponding structure in (17) does not reflect the PF, this movement has to be covert or (string-vacuously) rightward. Either more empirical data is needed to justify the movement posited here, which is necessary in order to capture PC constructions in this framework, or some other solution must be proposed which does not require the NP to move to Spec DP.

**4. Discussion and further questions.** In this paper, we have proposed a unified Upward Agree account to explain the agreement facts within Turkish possessive DPs. However, this proposal may face criticism on two fronts. First, we have proposed that there is an uninterpretable D feature on the possessee noun in order for it to establish a relation with the D head so that the D head’s features can be valued by the possessee noun in a later step. While the uninterpretable feature on the possessee noun may seem stipulative, it is in fact reminiscent of the uninterpretable T feature on the subject DP proposed by Bjorkman and Zeijlstra (2019).

The subject DP carries an [uT] feature in order to check its nominative case and to establish a relation with the T head. When the T head probes upwards to value its unvalued  $\varphi$ -features, the subject DP is motivated to move to Spec TP in order to become an appropriate goal to check and value the  $\varphi$ -features on the T head, as illustrated in (9). This new configuration deals with the

EPP constraint and case assignment at the same time. A similar proposal can be made for the [uD] feature on the possessee NP. Regardless of what the entire possessive construction's case is, the possessee's case can be always valued as nominative. Therefore, the [uD] on the possessee NP checks its nominative case from the [iD] feature on the D head, similar to the [uT] checking the nominative case of the subject DP.

We have also claimed that genitive-marked DPs are opaque for agreement inside other DPs. This claim is crucial for our proposal to work; otherwise, the D head would get valued from the possessor DP, which will result in wrong predictions in terms of agreement and binding facts observed. This argument, however, has two independent supporting claims in the literature: one from Bjorkman and Zeijlstra (2019) and one from Paparounas and Akkuş (2023).

Bjorkman and Zeijlstra (2019) show that some nouns which are marked with quirky case are deficient in some or all  $\varphi$ -features for agreement/valuation. For example, while Icelandic follows a nominative-accusative case alignment, some verbs in Icelandic mark their subject exceptionally with dative case. When the subject is marked as default nominative, the (finite) verb displays agreement with the subject's  $\varphi$ -features, but when the subject is marked as dative, the verb displays agreement with the object instead. Drawing from Rezac (2008), Bjorkman and Zeijlstra (2019) claim that the reason for this discrepancy is dative-marked nominals are embedded under a PP/KP layer, and this results in a defectivity in the dative-marked nominal's  $\varphi$ -features, making only the 3<sup>rd</sup> person marking available for agreement.

(18) Icelandic (Bobaljik, 2008)

Mér virdast hestarnir vera seinir.  
 me.DAT seem.3PL the.horses be slow  
 'It seems to me that the horses are slow.'

Paparounas and Akkuş (2023), on the other hand, argue that what they call Default-Triggering Nominals (DTN) are opaque for agreement when they are marked with genitive case. DTNs are complex pronominals consisting of multi-plural pronouns (e.g. *biz-ler* "we all"), adnominal pronouns (e.g. *biz Türkler* "we Turks"), and coordinations of local + nonlocal persons (e.g. *biz ile Leyla* "we and Leyla"). Paparounas and Akkuş (2023) claim that DTNs are opaque for agreement when they are marked with genitive case, contrary to the behavior of simplex (pro)nominals. For instance, genitive-marked DTNs do not display agreement with the verb when they are embedded under nominalized clauses, and they do not show agreement with the Poss head when they are used as the possessor in genitive-possessive constructions; rather, they display default 3<sup>rd</sup> person agreement.

(19) (Paparounas & Akkuş, 2023: 641)

Kemal [	<i>biz-ler-in</i>	<i>oraya</i>	<i>git-tiğ-</i>	{	<i>*imiz</i>	<i>/in</i> }	]	-i
Kemal	<i>we-PL-GEN</i>	<i>there</i>	<i>go-NMLZ-</i>		<i>1PL.POSS</i>	<i>3SG.POSS</i>		<i>-ACC</i>

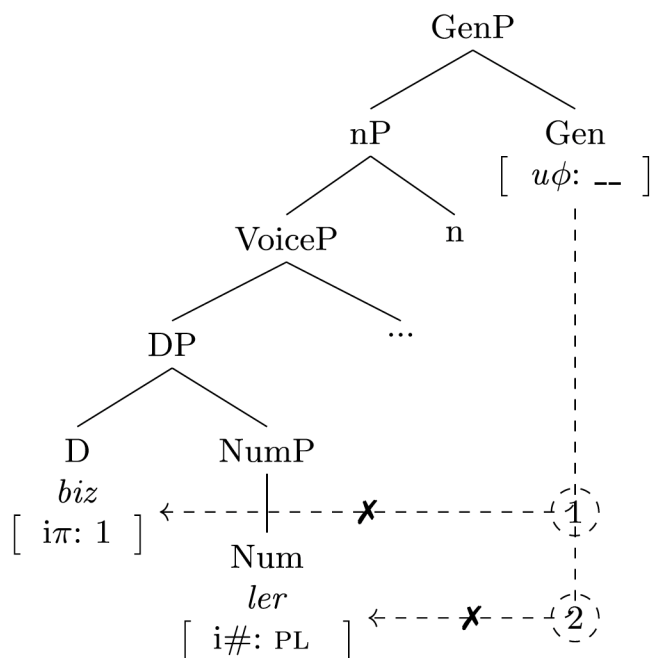
*san-dı-Ø.*  
 think-PST-3SG  
 'Kemal thought that we went there.'

Paparounas and Akkuş (2023) argue for a  $\varphi$ -feature split in DTNs which causes the discrepancy between DTNs and simplex (pro)nominals. They claim that the number and person features appear on separate nodes in the structure in DTNs, while with simplex (pro)nominals, they appear bundled together on the same node. Their proposal also includes an additional layer of GenP for

genitive-marked nominals, which is reminiscent of the PP/KP proposed for dative-marked nominals by Bjorkman and Zeijlstra (2019).

The extra layer GenP over the DP works similar to PP/KP layer in Icelandic in that it cannot be valued by the DTNs because it probes for both number and person but cannot get valued from separate heads as illustrated in (20). Thus, both the PP/KP and GenP layers are valued as default 3<sup>rd</sup> person.

(20) Derivation of the DTN *bizler* “we all” (Paparounas and Akkuş, 2023: 657)<sup>4</sup>



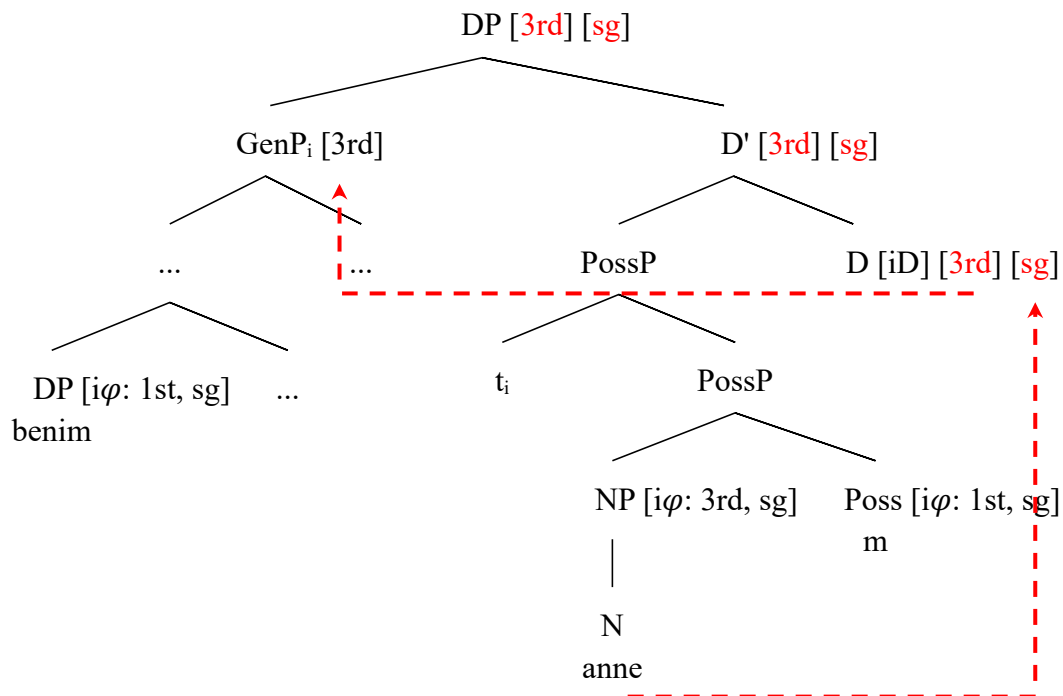
In sum, it seems cross-linguistically viable that some dative and genitive-marked nouns are opaque for agreement; instead, they are marked with default 3<sup>rd</sup> person. While more empirical data is needed to confirm our claim that genitive-marked DPs are opaque for agreement when embedded inside other DPs, it is not a far-fetched assumption based on the previous literature. On the other hand, our proposal can be modified in two ways to fit better with the existing accounts.

First, we can assume that the genitive-marked nominal is embedded under another layer similar to PP/KP in Bjorkman and Zeijlstra (2019) or GenP in Paparounas and Akkuş (2023). Moreover, instead of the  $\varphi$ -features of the genitive-marked DP being completely invisible, we can assume that it is marked with default 3<sup>rd</sup> person. Thus, the D head first gets valued from the possessor DP for the person feature; then, it gets valued from the possessee noun for the number feature.

The alternative derivation to the one in Section 3 would be as in (21). Steps (12) through (14) would be the same, but the last two steps would differ slightly. While GenP values the person feature on the D head, it cannot value its number feature since it is “deficient”. Thus, the D head gets valued from the N head as they had built a relationship in a previous step.

<sup>4</sup> This derivation uses the Downward Agree framework. For an alternative proposal on the agreement of possessive constructions in Turkish, see Paparounas and Akkuş (2023).

(21)



**5. Conclusion.** In this paper, we have investigated the internal structure of possessive constructions in Turkish. The main goal of this paper was to explain two facts on Turkish possessive DPs: (i) while possessees are merged earlier in the DP structure, and they are lower than possessors, their  $\varphi$ -features appear on the main DP, and (ii) the possessor's  $\varphi$ -features appear on the possessee noun. We have implemented the Upward Agree framework proposed by Bjorkman and Zeijlstra (2019) in order to account for these two facts in a unified fashion. We have followed the syntactic structure given in Öztürk and Erguvanlı Taylan (2016) for possessive constructions and their description of different types of possessives, namely, genitive-possessives (GP), possessive compounds (PC), and possessive free genitives (PFG). We have claimed that the agreement facts of these three possessive constructions can be captured under the Upward Agree framework.

Two key assumptions were needed in order to make correct predictions for the possessive structure carrying the  $\varphi$ -features of the possessee NP and the Poss head carrying the  $\varphi$ -features of the possessor. First, we have claimed that the possessee NP carries an uninterpretable D feature [uD] to check its nominative case from the D head and establish a relation with the D head in order to value the D head's  $\varphi$ -features. We have also argued that genitive-marked DPs are opaque for agreement when they are embedded inside other DPs.

While our account is not exhaustive (see also Öztürk & Erguvanlı Taylan, 2016; Paparounas & Akkuş, 2023), it offers a cohesive alternative to existing analyses and provides further empirical support for the Upward Agree framework over Downward and bidirectional Agree. Future research may test the assumptions proposed here and explore whether similar DP-internal agreement patterns are attested cross-linguistically.

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