

Interaction, satisfaction, and (a)symmetric object agreement*

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1. Introduction: Symmetric and asymmetric object agreement

In languages in which the verb cross-references an object argument using object markers (OMs), this marking can be *symmetric* or *asymmetric* (see e.g. Bresnan and Moshi 1990). When object marking is symmetric, OMs can refer to both recipients (or benefactives) and themes in ditransitive constructions (although not necessarily both in the same structure). When it is asymmetric, an OM can only refer to the highest object, generally the recipient (or benefactive) in a ditransitive construction. Examples of both types are shown in (1) and (2). Throughout, recipients are underlined while themes are in boldface.¹

(1) Zulu (Bantu) — *symmetric, one OM* (Zeller 2015:18)

- a. Ngi-m-theng-el-a u-bisi (u-Sipho).
1SG-1OM-buy-APPL-FV AUG-1 1.milk AUG-1 a.Sipho
'I'm buying him (Sipho) some milk.'
- b. Ngi-**lu**-theng-el-a u-Sipho (**u-bisi**).
1SG-1 1OM-buy-APPL-FV AUG-1 a.Sipho AUG-1 1 1.milk
'I'm buying **it** (the milk) for Sipho.'

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¹Abbreviations: 1 = first person, 3 = third person, APPL = applicative, AUG = augment, DAT = dative, DET = determiner, DJ = disjoint, FV = final vowel, IA = internal argument, INT = interaction, M = masculine, NPI = negative polarity item, OBJ = object, OBL = oblique, OM = object marker, PASS = passive, PFV = perfective, PL = plural, PRS = present, PST = past, R = recipient-like argument of a ditransitive verb, SAT = satisfaction, SBJ = subject, SG = singular, SM = subject marker, T = theme- or patient-like argument of a ditransitive verb, TOP = topic. For Bantu languages, numbers refer to noun class. Person is always marked in combination with number features (e.g. 3SG).

(2) *Swahili (Bantu) — asymmetric, one OM (Riedel 2009:62–63)*

- a. Ni-me-m-pa Juma vitabu vyote vitatu pale.
 1SG.SM-PFV-1OM-give 1.Juma 8.book 8.all 8.three 16.there
 ‘I have given Juma all three books there.’
- b. *Ni-me-vi-pa Juma **vitabu vyote vitatu** pale.
 1SG.SM-PFV-8OM-give 1.Juma 8.book 8.all 8.three 16.there
 intended: ‘I have given Juma **all three books** there.’

Zulu is a symmetric language: both the recipient, in (1a), and the theme, in (1b), can control an OM on a ditransitive verb. Swahili, in contrast, is asymmetric: only the recipient can control an OM on a ditransitive verb, (2a), not the theme (2b).

In this paper, I propose an analysis of symmetric and asymmetric agreement in the interaction and satisfaction framework (Deal 2015, 2022a,b). On this approach to Agree, probes have two sets of features. Interaction (INT) features can value a probe, while satisfaction (SAT) features halt probing when a probe encounters them. When a head starts probing, it will continue to do so until it encounters features contained among its SAT features which tell it to stop (or until there are no goals left). This means that a probe can probe or interact with several goals before it is satisfied.

I show that the difference between symmetry and asymmetry can be modelled as variation in a probe’s SAT features. A probe that is specified to be satisfied by a feature that only a subset of goals (e.g. TOP) carry will probe until it finds that feature (or runs out of goals). If in a ditransitive construction the theme but not the recipient carries the relevant feature, the probe will be able to interact with the theme, even if it is less local to the probe than the recipient. In contrast, a probe that is specified to be satisfied by a feature that all goals carry (e.g. ϕ) will never be able to probe past the first goal it interacts with. This distinction corresponds to symmetry and asymmetry: in symmetric systems, the probe is satisfied by a feature only available on a proper subset of goals. In asymmetric systems, the probe is satisfied by any goal it encounters. Thus in symmetric systems a probe can look beyond the most local argument while this option is ruled out in asymmetric systems (cf. Deal’s 2022b “higher or both” agreement pattern).

The paper is structured as follows. In Section 2, I describe the data underlying the analysis which is presented in Section 3. I briefly discuss consequences of the proposal and alternative approaches in Section 4 before concluding.

2. Data

Across languages, different kinds of properties are known to trigger OMs on the verb, among them animacy in, for example, Chichewa (Downing 2018) or Swahili (Riedel 2009, Henderson 2006), (aspects of) definiteness, for example in Hungarian (Bárány 2017, Coppock 2022), and Tigrinya (Nazareth Amlesom Kifle 2007, 2011), or information structure, as in Bembe (Iorio 2015), Chichewa (Bresnan and Mchombo 1987), Swahili (Seidl and Dimitriadis 1997, Mursell 2018, 2021), Zulu (Buell 2005, Adams 2010, Halpert 2012, Zeller 2012, 2014, 2015, van der Wal 2022), Itelmen (Bobaljik and Wurmbrand 2002), and Tigrinya

(Nazareth Amlesom Kifle 2007, 2011). In this paper, I will focus on information structure and agreement patterns which have been argued to reflect givenness in discourse.

The data to be discussed involve ditransitive constructions, that is structures in which a verb takes two object arguments. One of these is a recipient (or benefactive) and the other is a theme. I will assume that ditransitives in the relevant languages have the underlying structure shown in (3), with the recipient DP_R c-commanding the theme DP_T and both being c-commanded by v (Barss and Lasnik 1986, Marantz 1993, Harley 2002, Pytkäinen 2008, Bruening 2010, Stegovec 2020, Bárány 2021).

(3) $[_v v [_{AppIP} DP_R [_{AppI'} Appl [_{VP} V DP_T]]]]$

I will further assume that verbal object markers in the data discussed here are the spell-out of Agree relations established between a probe (v) and the goal DP. Whether OMs are agreement markers or clitics is not crucial, I believe, as many recent analyses of clitic doubling, clitic doubling follows an Agree relation between a probe and a DP (see e.g. Baker and Kramer 2018:1048, Yuan 2021:166, Coon and Keine 2021:667–668) and, as we will see, (the locality of) the Agree relation itself is what is at stake.

2.1 Zulu (Bantu)

The nature of object markers and their relation to the object in Zulu has been a matter of discussion. Cheng and Downing (2009), Adams (2010), for example, treat OMs as pronouns, while Buell (2005), Zeller (2012, 2015), Halpert (2015), van der Wal (2022) treat them as agreement markers. Zeller (2012:219) suggests that object markers in Zulu are changing from pronouns to object markers which could explain why they show properties of both. Jelinek (1984, 2006) discusses criteria for “pronominal argument” languages, in which bound pronominals represent arguments, while full DPs are adjoined. Zulu does *not* behave like pronominal argument languages with respect to the following properties: Zulu has (i) (object) arguments in A-positions, although these do not co-occur with OMs (Buell 2005, Zeller 2012, 2015, Jelinek 2006:263), (ii) pronouns (Buell 2005:50, Zeller 2015:219–220, Jelinek 2006:273), (iii) determiner quantification (e.g. *all the food*; Buell 2005:153, Halpert 2012:19, 21, Zeller 2012:223, Jelinek 2006:283), (iv) ellipsis (Buell 2005:160, Zeller 2012:227, Jelinek 2006:287–288), (v) embedded clauses, infinitives, raising, and control (Halpert 2015, 2019, Jelinek 2006:287–288), (vi) *wh*-movement (Sabel and Zeller 2006, Jelinek 2006:287–288). In addition, Zulu allows doubling of quantified objects (Zeller 2012:223), which Baker and Kramer (2018:1053–1054, 1085) treat as a diagnostic in favour of agreement markers rather than pronouns. With respect to Yuan’s (2021) criteria distinguishing object agreement from clitic doubling, Zulu behaves like Kalaallisut (with object marking, according to Yuan) rather than Inuktitut (with clitic doubling) with respect to allowing objects co-occurring with OMs to be interpreted like NPIs (Zeller 2012:226, Yuan 2021:163), although this also suggests that unlike in Kalaallisut, objects co-occurring with OMs do not always outscope negation in Zulu. Given this, I believe it is justified to analyse the OM as the spell-out of an Agree relation between a probe (v) and a DP object.

Crucially, not all objects trigger OMs in Zulu. Object marking in Zulu involves what Zeller (2015:32) calls an **antifocus** feature, which I take to indicate that contextually given objects co-occur with OMs. In addition, object-marked objects must be right-dislocated, that is they cannot appear inside *vP* together with a verb showing an OM. This is illustrated in (4b,c), where the object references by the OM is linearly separated from it by another argument (*i-mali* in (4b)) or an adverb.

(4) *Zulu* (Zeller 2012:222, 221, van der Spuy 1993:346)

- a. *U-John u-ba-nik-a a-ba-ntwana **i-mali**.
AUG-1a.John 1SM-2OM-give-FV AUG-2-child AUG-9.money
- b. U-John u-ba-nik-a **i-mali** a-ba-ntwana.
AUG-1a.John 1SM-2OM-give-FV AUG-9.money AUG-2-child
'John is giving the children money.'
- c. Si-**zi**-bon-e kaningi **i-zi-thsudeni**.
1PL-8OM-see-PST often AUG-8-student
'We saw the students often.'

Cheng and Downing (2009), Adams (2010) assume that right-dislocated objects are adjoined to *vP*, Zeller (2015) puts them immediately above. When both DP_R and DP_T are topical, *both* dislocate, even though only one of them is object marked (Adams 2010:22). In these cases, both orders of DP_R and DP_T are possible in principle. The orders depend on several factors: if both internal arguments are salient, they both move. The verb is in its "long form" (Adams 2010:16) when it is final in its clause, that is all other material has moved out. This is called the "disjoint" verb form elsewhere (Zeller 2012, 2015, van der Wal and Hyman 2017, van der Wal 2022), and is indicated by *-ya-* in (5).

Crucially, when both objects are given and dislocated, only the recipient can control the OM on the verb (Zeller 2012:224–225).

(5) *Zulu* (Zeller 2012:224)

- a. Ngi-ya-m-theng-el-a u-Sipho **u-bisi**.
1SM-DJ-1OM-buy-APPL-FV AUG-1a.Sipho AUG-11.milk
- b. Ngi-ya-m-theng-el-a **u-bisi** u-Sipho.
1SM-DJ-1OM-buy-APPL-FV AUG-11.milk AUG-1a.Sipho
'I am buying milk for Sipho.'

Dislocation can be seen as independent of agreement. Zeller (2015) argues that salient internal arguments (IAs) have to vacate *vP*. In contrast, Adams (2010:103–104) assumes that IAs dislocate if they co-occur with OMs but that only one OM can be pronounced. Dissociating agreement from movement seems more attractive to me, given that there are languages with two OMs that do not require dislocation either, such as Sambia (Riedel 2009).

Zulu allows both recipient or **theme** passives, with an asymmetry, however. In recipient passives, a theme OM is possible, (6a). In theme passives, there cannot be an OM cross-referencing the recipient, (6b).

(6) *Zulu (Adams 2010:26)*

- a. Aba-ntwana ba-ya-yi-fund-el-w-a **in-cwadi**
2-child 2SM-PRS-9OM-read-APPL-PASS-FV 9-book
'The children are being read the book.'
- b. ***In-cwadi** i-ya-ba-fund-el-w-a aba-ntwana
9-book 9SM-PRS-2OM-read-APPL-PASS-FV 2-child
intended: 'The book is being read to the children.'

2.2 Swahili (Bantu)

Object marking in Swahili is asymmetric. In ditransitives only the higher object, the recipient or benefactive, can control an OM on the verb, (7). In monotransitives, agreement is said to be differential (i.a. Allan 1983, Seidl and Dimitriadis 1997, Riedel 2009, Mursell 2018, 2021). Judgments differ in the literature with respect the source of differential agreement. Riedel (2009) suggests that animate objects with class 1/2 control agreement but shows that there is variation. Mursell (2018, 2021) provides data showing inanimate controllers of object agreement, while Henderson (2006) suggests that inanimates cannot control object agreement. Allan (1983), Seidl and Dimitriadis (1997), Mursell (2018, 2021) all argue that topicality is a crucial factor in determining the presence of an object marker.

In contrast to Zulu, objects in Swahili can co-occur with the OM in any domain. Objects can thus occur in A-positions. In addition, Swahili allows for determiner quantification and doubling of quantified objects, (8), embedded clauses and infinitives (Vitale 1981, Diercks 2012), and VP ellipsis (Ngonyani 1996). These are criteria that distinguish it from pronominal argument languages according to Jelinek (1984, 2006) and again justify treating the OM in Swahili as the spell-out of an Agree relation. Swahili also allows OMs to occur with NPIs in object position (Riedel 2009:50), patterning with object marking in Kalaallisut according to Yuan (2021).

(7) *Swahili — asymmetric (Riedel 2009:62–63)*

- a. Ni-me-m-pa Juma vitabu vyote vitatu pale.
1SG.SM-PFV-1OM-give 1.Juma 8.book 8.all 8.three 16.there
'I have given Juma all three books there.'
- b. *Ni-me-vi-pa Juma **vitabu vyote vitatu** pale.
1SG.SM-PFV-8OM-give 1.Juma 8.book 8.all 8.three 16.there
intended: 'I have given Juma **all three books** there.'

(8) *Swahili (Riedel 2009:105, cf. Marantz 1993:117)*

- a. Ni-li-m-somea kila mwandishi_i kitabu chake_i.
1SG.SM-PST-1OM-read.APPL every 1.writer 7.book 7.his
'I read for each author his book.'
- b. Ni-li-m-somea kitabu chake_i kila mwandishi_i.
1SG.SM-PST-1OM-read.APPL every 1.writer 7.book 7.his
'I read for each author his book.'

example (8) shows that (some) speakers of Swahili allow for two orders in applicative constructions while c-command relations remain the same, with the benefactive c-commanding the theme (Riedel 2009), as in (3).

2.3 Tigrinya (Semitic)

Nazareth Amlesom Kifle (2007, 2011) argues that contextually given, topical objects control an OM on the verb in Tigrinya (see also Dalrymple and Nikolaeva 2011; see Overfelt 2022 for an analysis in terms of prepositional dative vs. double object constructions). One diagnostic for the role of topicality is shown in (9), where a contextually established referent is referenced with an OM in the answer to a question. *Wh*-expressions cannot control the OM as they represent new information (Nazareth Amlesom Kifle 2011:250–251).

(9) *Tigrinya — symmetric (Nazareth Amlesom Kifle 2011:109–110)*

- a. Context: *What did Jonas give to the poor?*
gänzäb hib-u-wom.
money.SG PFV.give-SM.3SG.M-OM.3PL.M
‘He gave them money.’
- b. Context: *To whom did Jonas give **the money**?*
n-diḱa-tat hib-u-wo.
to-poor-PL PFV.give-SM.3SG.M-OM.3SG.M
‘He gave **the money** to the poor.’

Object markers on the verb can co-occur with full DP objects, as shown in (10).² Example (10) shows two sentences that only differ in whether the recipient (10a) or the theme (10b) controls the object marker.

(10) *Tigrinya — symmetric (Nazareth Amlesom Kifle 2007:9)*

- a. ʔit-i māmihiri n-ät-i mäṣihafi-ti n-ät-omi tämäharo
DET-3SG.M teacher.SG OBJ-DET-3SG.M book-PL OBJ-DET-3PL.M student.PL
ʃadil-u-wom.
PFV.distribute-SM.3SG.M-OM.3PL.M
‘The teacher distributed the books to the students’.
- b. ʔit-i māmihiri **n-ät-i** **mäṣihafi-ti** n-ät-omi tämäharo
DET-3SG.M teacher.SG OBJ-DET-3SG.M book-PL OBJ-DET-3PL.M student.PL
ʃadil-u-wo.
PFV.distribute-SM.3SG.M-OM.3SG.M
‘The teacher distributed **the books** to the students’.

Tigrinya also has free pronouns which can be doubled on the verb (e.g. Kievit and Kievit 2009:62, Nazareth Amlesom Kifle 2011:132–133) and determiner quantification (Nazareth

²Plurals of inanimate nouns such as *books* have a collective reading in Tigrinya and are morphosyntactically singular, as indicated by the determiner *n-ät-i* in (10a) (Nazareth Amlesom Kifle 2007:9, fn. 3).

Amlesom Kifle 2011:166), suggesting that it is not a pronominal argument language in Jelinek's (1984, 2006) sense. More data is, however, necessary to establish the properties of OMs with respect to the diagnostics for agreement markers and clitics discussed by Baker and Kramer (2018) and Yuan (2021).

2.4 Itelmen (Southern Chukotko-Kamchatkan)

In Itelmen, (11), a contextually given referent is more likely to control agreement according to Bobaljik and Wurmbrand (2002). This is shown by examples such as (11) where questions set up salient referents, which are then cross-referenced on the verb in the following discourse. Object agreement in ditransitives is therefore determined by which of the two objects is more salient.

(11) *Itelmen — symmetric (Bobaljik and Wurmbrand 2002:17)*

- a. Context: *My brother came.*
i kma ənna-nk βaɬč t-zəl-nen.
and I him-DAT knife 1SG.SBJ-give-3SG.OBL
'And I gave the knife to him.'
- b. Context: *Where is the knife?*
qeɬnu zlatumx-enk t-zəl-č'en?
really brother-DAT 1SG.SBJ-give-1SG.SBJ>3SG.OBJ
'Didn't I give it to my brother?'

As (11a) shows, object markers and objects can co-occur, including free pronouns (see e.g. Bobaljik and Wurmbrand 2002:15). Bobaljik and Wurmbrand (2002:3) also stress that in ditransitives the features of all three arguments are never expressed simultaneously: where either the recipient or the theme can control agreement, there is competition (unlike in pronominal argument languages, Jelinek 2006:263). At least the Southern variety of Itelmen also has various non-finite forms lacking person marking (Georg and Volodin 1999:§3.7.6), another property not typical of pronominal argument languages (Jelinek 2006:288).

3. Analysis

Variation in (ditransitive) v across languages can derive (a)symmetry and agreement with topical objects, if v has information structural or δ -features (Miyagawa 2017) among its SAT and/or INT sets. I am assuming that δ -features are available in narrow syntax, following recent work by Aboh (2010), Miyagawa (2010, 2017), Kratzer and Selkirk (2020), Mursell (2021), van der Wal (2022), Diercks (2022) (as well as e.g. Dalrymple and Nikolaeva 2011 in a different framework; see also Baier 2018 on A'-features and agreement). I adopt this assumption here without further discussion (but see Fanselow 2008, Reinhart 2006, Neeleman and van de Koot 2008, 2010, Titov 2020 for different approaches).

Different feature specifications make it possible to distinguish asymmetric v_A , (12), from symmetric v_S , (13). These two v heads have all the same properties apart from the

specification of their SAT features: asymmetric v_A is satisfied by φ -features, while symmetric v_S is satisfied by δ -features, that is information structural features.

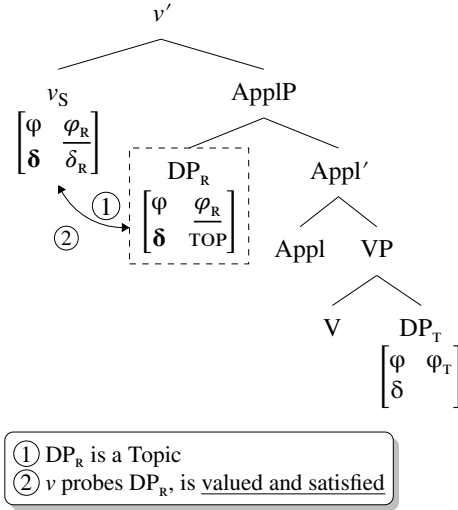
(12) *Asymmetric v_A*
 $v_A: \text{INT} = \{\varphi, \delta\}, \text{SAT} = \{\varphi\}$

(13) *Symmetric v_S*
 $v_S: \text{INT} = \{\varphi, \delta\}, \text{SAT} = \{\delta\}$

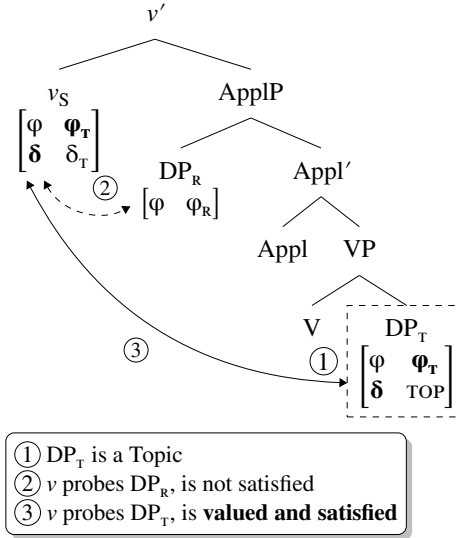
This way, both types of v start probing in the same way, but asymmetric v_A will be satisfied by any DP with φ -features that it encounters, while symmetric v_S will only be satisfied by a DP with a valued δ -feature. Both types of v are specified such that they interact with DPs with *both* φ - and δ -features. This restriction can model sensitivity to information structure (differential agreement).³ Agreement patterns can then be derived as follows.

Symmetric agreement In languages with symmetric agreement, such as Zulu, Tigrinya, or Itelmen, v_S is satisfied only satisfied by DPs with valued δ -features. For Zulu, I assume that probing takes place before right-dislocation. Right-dislocation is independent of agreement, as both objects can dislocate, even though only one can control an OM (see (5)).

(14) *Agreement with DP_R*



(15) *Agreement with DP_T*



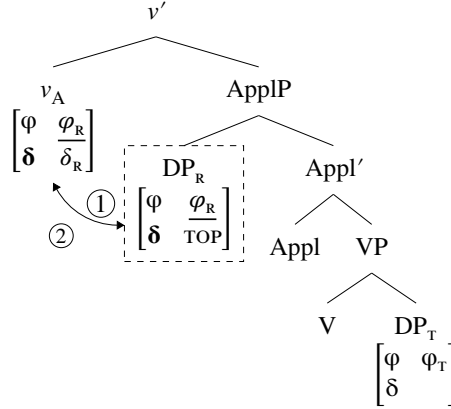
The derivations in (14) and (15) show agreement with the recipient DP_R and the theme DP_T respectively. In (14), DP_R is a topic and can interact with and satisfy v_S , which then spells out agreement with DP_R (e.g. (1a), (10a), (11a)). In (15), DP_R is not a topic and therefore cannot interact with or satisfy the probe. The probe looks further, finds DP_T which can interact with and satisfy it, giving rise to agreement with DP_T (e.g. (1b), (10b), (11b)).

Note that this approach also correctly predicts that if both DP_R and DP_T are topics, v_S will interact with and be satisfied by the most local argument, that is DP_R in ditransitives with the structure in (3). If, as argued for Zulu, Agree takes place before right-dislocation, agreement is predicted to be controlled by DP_R , as shown in (5).

³See Scott (2020, 2021) for discussion of patterns which require conjunctive **satisfaction** or two probes, in contrast to conjunctive **interaction** discussed here.

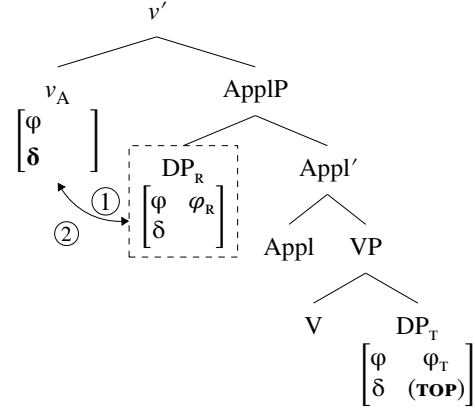
Asymmetric agreement In asymmetric agreement, for example in Swahili, v_A 's SAT features are simply φ -features. I assume that while the probe cannot *interact* with a DP without both valued φ - and δ -features, it can nevertheless be satisfied by such a DP. In such a case, no features will be copied onto the probe. This is shown in the derivations in (16) and (17).

(16) Agreement with DP_R



- ① DP_R is a Topic
- ② v probes DP_R , is valued and satisfied

(17) No agreement with DP_R



- ① DP_T is a Topic
- ② v probes DP_R , is satisfied but not valued

In (16) and (17), v_A can only interact with DPs with both φ - and δ -features but is satisfied by any DP (even if it lacks δ -features). This gives rise to differential agreement conditioned by topicality: only a DP with both φ - and δ -features will be able to value the probe. Yet, because the probe is satisfied by *any* DP, agreement must always be controlled by the most local DP and is thus asymmetric. DP_T , whether topical or not, can never control agreement.

In sum, the symmetric derivations in (14) and (15) and the asymmetric derivations in (16) and (17) are a consequence of how v 's SAT features are specified. In addition, the probe's INT features consisting of both φ - and δ -features can model differential agreement.

4. Discussion

This approach to agreement using INT and SAT features allows for modelling different agreement patterns by varying interaction and satisfaction feature sets. Table 1 shows variation that arises if φ - and δ -features are included in INT and SAT feature specifications.

In the top left corner of Table 1, both INT and SAT features are $\{\varphi\}$. A probe with this specification will be able to interact with any DP with φ -features and will be satisfied by that DP. This gives rise to an asymmetric system with non-differential agreement (under the assumption that any DP carries φ -features). The bottom left corner specifies probes with INT features $\{\varphi, \delta\}$ and a SAT feature $\{\varphi\}$. This corresponds to Swahili in the present paper (see (16), (17)). Since any DP with φ -features will satisfy the probe, this system is also asymmetric. Because the probe's INT features differ from its SAT features by including δ -features, too, the resulting system gives rise to differential agreement. Only DPs with *both* φ - and δ -features can interact with the probe and have their features copied onto it.

The bottom right corner also specifies systems in which a probe has both φ - and δ -features as its INT features but differs from an asymmetric system in that its SAT feature set $\{\delta\}$ is not available on all DPs. In the present paper, Zulu, Tigrinya, and Itelmen ditransitives represent this pattern. Agreement is differential, because a DP has to have both φ - and δ -features to interact with a probe. Agreement is symmetric because the probe does not stop probing if the first DP it encounters cannot interact with it. This allows the probe to “skip” the structurally closest DP if it lacks the right features for the probe. Agreement with a DP structurally further away, as in (15), conforms to **relativised locality** for which only DPs with both φ - and δ -features are accessible goals (cf. Starke 2001, Rizzi 2013).

INT \downarrow / SAT \rightarrow	SAT = $\{\varphi\}$	SAT = $\{\delta\}$
INT = $\{\varphi\}$	✓ asymmetric agr. with highest OBJ	(✗)
INT = $\{\varphi, \delta\}$	✓ asymmetric agr. with highest topical OBJ	✓ symmetric agr. with topical OBJ

Table 1: Symmetry and asymmetry, interaction and satisfaction with one probe on v

The top right corner of Table 1 shows a further possibility, in which the intersection of INT and SAT sets is empty, that is the two sets do not have any features in common. The specification INT = $\{\varphi\}$, SAT = $\{\delta\}$ describes a system in which a probe interacts with all goals until it finds a goal that has δ -features (as well). This would derive multiple Agree relations as the probe would agree with several goals. None of the languages discussed here exhibit this pattern, although it is possible that among features from multiple goals copied onto the probe, only one is morphologically realised (cf. Deal 2022b for discussion of interaction without spell-out). Whether this is a welcome prediction or whether systems in which INT and SAT sets do not share features should be ruled out is left open here.

Summarising, I have shown that both (a)symmetric and differential agreement can be modelled as a consequence of variation in INT and SAT features.

4.1 Van der Wal’s alternative

Van der Wal (2022:105–108) argues against relativised probing and an analysis in terms of INT/SAT features to account for (a)symmetry in Bantu object agreement. One issue she raises is that there is no morphological evidence for probing the higher argument in structures such as (15), where the probe ends up spelling out agreement with the lower argument (DP_T). Under the present proposal, this issue does not arise, as the probe does not interact with the higher argument in (15) and there is therefore nothing to spell out.

Van der Wal’s approach involves “flexible licensing”. She assumes that in ditransitives, the Appl head can license either a DP in its specifier or a DP in its complement. The DP that is not licensed is subsequently available for probing by v . Licensing is governed by the Flexible Licensing Parameter (van der Wal 2022:111), which, in some languages, restricts a head to only license features that match the features of the argument in its specifier. If

the specifier of ApplP is a topical DP, Appl can license a topical DP in its complement. If ApplP's specifier is not topical, Appl cannot license a topical DP in its complement, but must license the DP in its specifier. In the former case, *v* will be able to agree with the topical DP in SpecApplP, while in the latter, *v* will agree with the topical DP in VP, Appl's complement. This approach derives (a)symmetry correctly, but invokes a licensing mechanism whose main effect in deriving (a)symmetry is making certain DPs inaccessible. Van der Wal can also derive the prediction that languages with symmetric agreement also show symmetric passives (see e.g. van der Wal 2022:93–100, 118) by suggesting that instead of *v*, it is simply T that probes in a passive and can agree with the argument not licensed by Appl.

On the analysis proposed in this paper, symmetric passives can be derived by assuming that T (in passives) has the same set of features as *v* in the active. This way, with subject argument suppressed, T will agree with (and attract) a topical DP in the same way that *v* does in the active. However, as far as I can tell, neither my proposal nor van der Wal derives the distribution of object agreement in the Zulu passive in (6) without further assumptions.

5. Conclusions

In this paper, I proposed an analysis of symmetric and asymmetric object agreement in the interaction and satisfaction framework (Deal 2015, 2022b) in languages in which agreement is determined by information structural properties. I showed that (a)symmetry can be modelled as a consequence of variation in SAT features while probes sensitive to both ϕ - and information structural δ -features can account for differential agreement. (A)symmetry in object agreement can be accounted for without invoking Case or licensing. Variation in INT and SAT feature sets derives a typology of existing agreement systems.

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