

A non-hybrid approach to sign language agreement

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1 Introduction¹

- Sign language (SL) agreement has intrigued scholars for quite some time because it seems to display properties clearly distinct from spoken language agreement (e.g. Fischer & Gough 1978; Padden 1988; Janis 1995; Bahan 1996; Meir 1998ab, 2002; Mathur 2000; Keller 2001; Rathmann & Mathur 2002, 2005, 2008; Hong 2009); even applicability of the term “agreement” is debated (Liddell 2000, 2003).
- Across SLs, only a subgroup of verbs (agreement verbs, AVs) agree with their subject and object while other verbs (plain verbs) cannot be modified to express agreement.
- It has been argued that group membership (plain vs. agreement) is determined by (i) the Lexical-Conceptual Structure (LCS) of a verb, i.e. whether it expresses transfer, and (ii) by phonological factors, which may block the realization of agreement.
- In this talk, we will maintain that phonological factors play a role, but we shall argue against proposals which seek to explain SL agreement in terms of LCS, i.e. thematic properties, and propose that sign language agreement is consistently syntactic. Crucial empirical evidence will come from the role of auxiliaries.
- This talk is organized as follows:
 - Meir’s Thematic Structure Agreement (TSA) analysis (Section 2);
 - conceptual and empirical challenges for the TSA-analysis (Section 3);
 - de Quadros & Quer’s alternative proposal (section 4);
 - analysis: V-incorporation, ergative agreement, and multiple agreement (Section 5).

2 Meir’s Thematic Structure Agreement (TSA) analysis

- In many SLs, AVs come in two types: regular agreement verbs (RAV), in which movement proceeds from the subject location to the object location (1a), and backward agreement verbs (BAV), which involve movement from object towards subject location (1b). Crucially, in both types, the agent is the syntactic subject.

- (1) a. YESTERDAY POSS₁ MOTHER INDEX_{3a} BOOK_{3a}GIVE₁ [DGS]
 ‘Yesterday my mother gave me a book.’
 b. POSS₁ BIRTHDAY PARTY, INDEX₁ ₂INVITE₁
 ‘As for my birthday party, I will invite you.’

- Additionally, AVs show object agreement whereby the hands face towards the object (agreement by orientation)
- Based on Israeli SL (ISL) data, Meir (1998ab, 2002) proposes a unified analysis for RAVs and BAVs. In particular, she proposes the Principles of Sign Language Agreement Morphology in (2).

¹ We thank Doreen Georgi and Fabian Heck for helpful discussions about head movement.

- (2) Principles of Sign Language Agreement Morphology (Meir 2002: 425):
- a. Direction of path movement of AVs is from source to goal (thematic agreement).
 - b. The facing of the hand(s) is towards the object of the verb (syntactic agreement).
- She thus assumes agreement is fundamentally linked to the notion of *transfer* and that AVs consist of three components: (i) the verb root, denoting an event of transfer: (ii) a directional morpheme DIR, indicating the direction of movement of the theme argument; and (iii) a verbal suffix denoting dative case.
- i. root: The LCS of an agreement verb (i.e. a verb denoting concrete or abstract transfer) is given in (3). Note that the LCS is underspecified for mapping of grammatical functions onto thematic functions (α =subject, β =object).
- (3) spatial tier $\left(\begin{array}{l} \text{CAUSE } ([\alpha], [\text{GO } ([]^\gamma, [\text{Path FROM } [\alpha/\beta] \text{ TO } [\beta/\alpha]])]) \\ \text{action tier} \quad \text{AFF } ([]^\alpha, []^\beta) \end{array} \right)$
- Crucially, it is DIR which realizes agreement with source and goal arguments and not the verb root itself. DIR is claimed to be a bound morpheme which fuses with the root.
- ii. There are two DIR-morphemes, one for regular (4a) and one for backwards verbs (4b); the two only differ in the assignment of grammatical to thematic functions.
- (4) a. $[\text{GO } ([]^\gamma, [\text{Path FROM } []^\alpha \text{ TO } []^\beta])$ → i.e. movement from subject to object
 b. $[\text{GO } ([]^\gamma, [\text{Path FROM } []^\beta \text{ TO } []^\alpha])$ → i.e. movement from object to subject
- iii. Finally, the verb also assigns dative case to the affected possessor, which is phonologically realized by facing of the hand(s), i.e. by orientation of palm and/or fingertips.
- Plain verbs cannot agree either because they do not express transfer (i.e. their LCS is different from (3)) or because their phonological specification does not allow for fusion with DIR.

3 Some problems with the TSA-analysis

3.1 Conceptual problems (see also de Quadros & Quer 2008)

- Meir's analysis relies on the assumption that AVs generally have the LCS in (3) and, vice versa, that verbs that have the LCS in (3) should agree by means of movement. This generalization, however, is too strong.
- **First**, while a DIR-component (denoting *path* or *trajectory*) may be plausible for verbs that express concrete transfer (like GIVE, TAKE, SEND), there are numerous AVs where the notion of transfer is less obvious (e.g. TEACH, INFORM, ASK, HELP, and esp. SEE).
- More generally, the argument runs the risk of being circular in that transfer (concrete or abstract) will be postulated whenever a verb shows agreement by movement.
- **Secondly**, there are AVs that agree only by orientation even though semantically, they do not seem to differ from AVs that express agreement by movement (and may thus be claimed to involve transfer); see (5) for some examples from DGS and SL of the Netherlands (NGT); also see Mathur (2000) and Hong (2009) for other SLs.
- (5) DGS: EXPLAIN, INFLUENCE, CRITICIZE, TEASE, KISS, STARE-AT, E-MAIL, a.o.
 NGT: EXPLAIN, INFLUENCE, TEACH, INFORM, CALL, CRITICIZE, TEASE, KISS, E-MAIL, a.o.

- Meir (1998b) explains these gaps with phonological factors: even though the verbs express transfer and are thus lexically specified for combining with DIR, combination of root + DIR would lead to a phonological clash → unification with DIR is ruled out.
- This, however, seems to imply that path movement remains unspecified in the LCS; as a consequence, the meaning/grammatical roles of the verbs should be underspecified.
- **Thirdly**, there is the issue of cross-linguistic and diachronic variation. Since thematic relations are taken to be universal, we expect the same verbs to show agreement by movement cross-linguistically. This, however, is not the case.
 - Verbs that differ minimally in form/meaning may be plain in one SL, but agreeing in another SL; e.g. TELEPHONE (Meier 2002: 118). Fischer (1996) reports that Japanese SL LIKE is an AV in Western Japan, but not in Eastern Japan.
 - The DGS verb TRUST developed from a plain verb into an object-AV and the into a subj/obj-AV; same for the NGT verb TELEPHONE. Apparently, the phonological specification which blocked agreement (body-anchoredness) is no longer active.
- **Finally**, and most crucially, Meir (2002: 432) assumes that verb roots are underspecified for path movement, i.e. it is not specified whether path movement proceeds from Source to Goal or Goal to Source. Specification of the path movement obtains through unification with one of the two prespecified DIRs in (4).
- Problem: How does one know which root combines with which DIR? In principle, there are two possibilities for each transfer verb, but in reality, only one is instantiated.
- In order to handle this problem, Meir (p.c.) assumes that the verb root is prespecified for combination with a particular DIR-morpheme. This assumption, however, weakens the point of having a separate DIR-morpheme: if there is lexical specification anyway, then one might as well fully specify the spatial-thematic tier in the LCS of each verb.
- These conceptual problems concern fairly general issues independent of an individual SL. In the next section, we present data from DGS that cast doubt on the assumption that the TSA-analysis can explain SL agreement across SLs.

3.2 Empirical problems with the TSA-analysis: agreement auxiliaries

- Some SLs have developed means to overcome the agreement gap caused by plain verbs, viz. dedicated agreement auxiliaries which express the agreement relation.
- These auxiliaries differ from spoken language auxiliaries in that they are not used for TAM-marking (Steele 1978). Rather, their basic function is to mark subject/object agreement, and just like AVs, they do so by means of path movement and hand orientation (see Steinbach & Pfau (2007) for a cross-linguistic survey).
- The DGS auxiliary PAM (*Person Agreement Marker*; Rathmann 2003) is used with plain verbs (6a) and adjectival predicates (6b); in the DGS variety we investigated, PAM occurs sentence-finally (but see Rathmann (2003) for another syntactic structure).

- (6) a. MOTHER INDEX_{3a} NEIGHBOR NEW INDEX_{3b} LIKE _{3a}PAM_{3b} [DGS]
 ‘(My) mother likes the new neighbor.’
- b. INDEX₁ POSS₁ BROTHER INDEX_{3a} PROUD ₁PAM_{3a}
 ‘I am proud of my brother.’

- Since PAM does not have any lexical content and therefore cannot contain a DIR-component, this agreement cannot be thematic, but has to be syntactic, despite the fact that PAM includes path movement, which – according to Meir – is the manifestation of thematic agreement (see de Quadros & Quer (2008, 2009) for a similar argument based on Brazilian SL and Catalan SL data; also see Section 4).

- PAM usually combines with verbs that do not express concrete or abstract transfer (e.g. KNOW, LIKE). The second argument of these verbs is not Goal but rather Theme. Moreover, PAM can be productively used with one-place predicates for argument structure extensions (like WAIT-PAM ‘wait for’ or PROUD-PAM ‘proud of’, see (6b)).
- The mere fact that PAM exists suggests that there is a need for syntactic agreement in DGS and casts doubts on the idea that agreement in SLs is fundamentally thematic.
- In addition, while PAM is most commonly used with plain verbs, it may also occasionally combine with the uninflected form of an AV (7a).
- Under Meir’s analysis, this implies that the lexical verb does not fuse with DIR, but then it is unclear how it can be interpreted semantically, given that the source-goal relation remains underspecified.
- Hence, it appears more plausible that agreement is not with DIR and therefore does not make a semantic contribution, but rather is syntactic and can therefore be omitted when expressed on an auxiliary.

- (7) a. NEXT WEEK INDEX₁ INDEX_{3a} ASK₁PAM_{3a} [DGS]
 ‘I will ask her/him next week.’
- b. POSS₁ FRIEND INDEX_{3a}, INDEX₁ 1TRUST_{3a} 1PAM_{3a}
 ‘As for my friend, I trust him.’
- c. NEXT WEEK INDEX₁ INDEX_{3a} 3aINVITE₁ 1PAM_{3a}
 ‘I will invite her/him next week.’

- Occasionally, PAM co-occurs with an inflected AV leading to multiple agreement (7b). Under Meir’s account, movement is determined by thematic roles, but movement of PAM, given the lack of the required LSC, can only be determined by grammatical roles.
- Interestingly, if the (un-)inflected verb is a BAV, PAM still shows subject-object agreement (i.e. movement from subject to object), not thematic agreement (7c). Again, this clearly shows that agreement on the auxiliary must be syntactic (Mathur 2000; Steinbach 2005).
- In the face of data such as (7bc), the TSA-analysis would be forced to assume that, next to thematic agreement, there are two types of syntactic agreement, viz. orientation (lexical verb and PAM) and movement (PAM). We take this to be yet another argument against treating agreement on lexical verbs as thematic.

4. Previous non-hybrid approaches to sign language agreement

- Our proposal will be non-hybrid in that it does away with the assumption that SLs combine thematic and syntactic agreement. Rather, we claim that agreement is consistently syntactic and comes in two guises: orientation of the hand and movement.
- Previously, Janis (1995) proposed an account that is non-hybrid in spirit, in which she disposes of the traditional verb classes and assumes that SL agreement is consistently case agreement, controlled by the case of the arguments, not by their thematic roles.
- De Quadros & Quer (2008, 2009; henceforth Q&Q) provide arguments against Padden’s (1988) tripartite classification of verbs (plain, agreeing, spatial) and a strict separation of syntactic vs. locative agreement (also see Rathmann & Mathur 2008).
- What is important in the present context is that, based on data from Catalan SL (LSC) and Brazilian SL (LSB), Q&Q also show that (i) the path morpheme is not always linked to transfer (see 3.1, *first*), and (ii) that in LSC/LSB, too, movement of the auxiliary AUX is clearly syntactically determined; compare (8ab) to (7c).

- (8) a. INDEX₁ CHILD₃ TAKE₁ AUX₃ [LSC] b. GIRL₂ AUX₃ TAKE₃ [LSB]
 ‘I did pick up the child.’ ‘You go pick up the girl.’

- In addition, Q&Q show that the thematic role of the second agreeing argument of an AV is not always Goal, but is often the Theme (e.g. PRESS, INVITE in LSC/LSB).
- Also, they mention attested variation across SLs: the verb ASK, for instance, is a RAV in LSB, but a BAV in LSC.
- Q&Q thus suggest to remove BAVs from the class of AVs altogether and to treat them as handling verbs in which the path agrees with locations and not with syntactic arguments, i.e. path agreement in BAVs is not syntactic, but locative.
- Clearly, in many cases, a metaphorical transfer from a literal handling operation to an abstract one has to be assumed (e.g. COPY in LSC/LSB, UNDERSTAND in LSC).
- As Q&Q point out themselves, the metaphorical transfer is less obvious with INVITE (which in NGT/DGS does not involve a handling handshape at all). Actually, this “transfer-problem” is reminiscent to the one in Meir’s account (see 3.1).
- Also, it remains unclear why this kind of “metaphorical transfer” should only be observed with BAVs. Some RAVs, like NGT HELP and SEND and DGS EXPLAIN, might as well be considered lexicalized handling verbs.
- Q&Q’s account is *non-hybrid* in the sense that they argue that SL verbs should be classified as agreeing and non-agreeing; within the former group path agreement can be either with locations or R-loci. Also, it is *non-hybrid* in that they don’t resort to a combination of thematic and syntactic agreement.
- However, their account is *hybrid* in the sense that they treat BAVs differently from RAVs in that only the latter agree with R-loci (person and number features).

5. Implementing agreement

- We suggest that plain verbs and AVs differ from each other with respect to incorporation of V into v:
 - agreement verbs: V → V+v → [V+v]+T
 - plain verbs: V; v+T
 - PAM is just the realization of the v+T complex (V is spelled-out separately).
- Derivations with backward agreement verbs involve ergative agreement.
- Agr by orientation involves an additional Agree relationship between V and object.

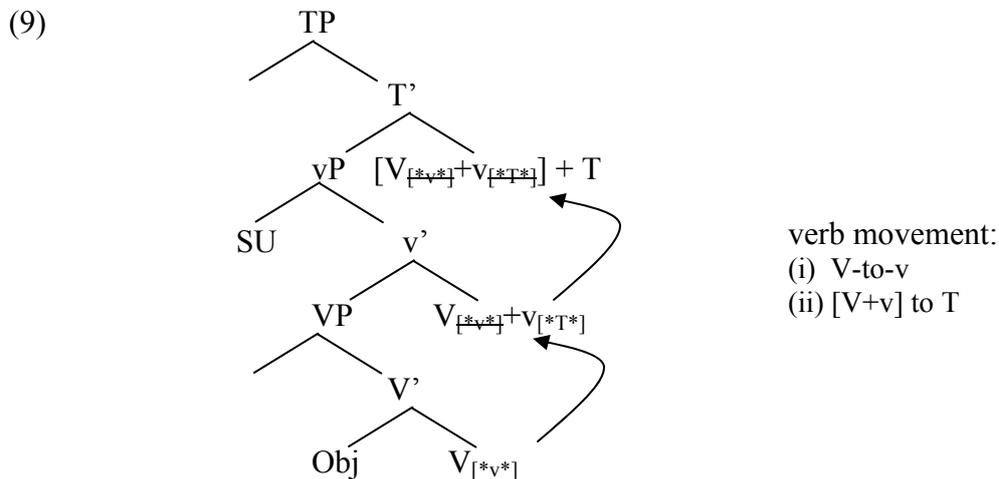
5.1 The basic patterns

- Assumption: verb movement is driven by features of the verbs themselves (Greedy-based movement).
- Notation [*X*] on head H means that H has to check [X], the categorial feature of some other head, which then triggers movement of H and adjunction to the higher head X, whereby [*X*] is checked/valued.

5.1.1 Derivation with regular agreement verbs

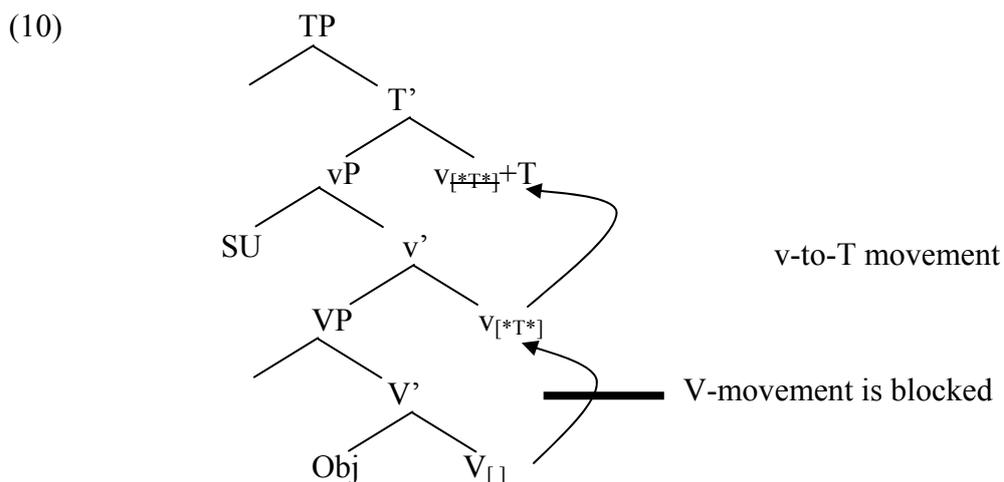
- V has [*v*], forcing head movement of V to v.
- v has [*T*], forcing head movement of v to T.
- The structure in (9) involves two Agree relations: Agree₁ (v, internal argument) and Agree₂ (T, external argument).

- The features indicating the R-loci of the referents are copied onto the heads (like phi-features in spoken languages).
- V moves to v and V+v moves to T. The movement results in a complex head [V+v+T], as indicated in (9).
- At PF, the Agr-features resulting from Agree between v and the object/T and the subject are realized phonologically as path movement (on the use of PAM with AVs (= multiple Agr), see section 5.3 below).



5.1.2 Derivation with plain verbs

- v has [*T*], forcing head movement of v to T.
- V does NOT have [*v*].
- No Verb-movement to v applies, but v moves to T; see (10).
- V and v+T are spelled-out separately (they belong to different phases); PAM is simply the realization of v+T without V.



- What remains unaccounted for so far is the combination of PAM with an uninflected AV, as in (7a). This combination suggests that [*v*] on agreement verbs is optional.
- Transitivity through PAM as in (6b) can be explained as the consequence of combining a transitive v with A/V: a transitive v can license an additional argument since it has an [uPhi]. Hence, PAM (like resultative constructions) is a syntactic transitivity marker.

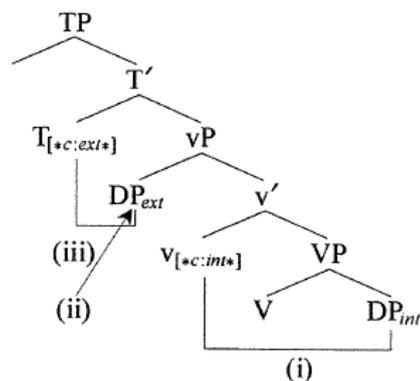
5.1.3 Derivation with backwards agreement verbs

- Clearly, backward agreement is not indicative of a change in grammatical relations: the agent is still the syntactic subject, cf. subject marker omission.
- Consequently, with backward verbs, the object is marked like the subject and the subject like the object as far as agreement is concerned.
- BAVs thus show an ergative-like pattern. See (11) and (12) for examples of ergative case-marking and ergative verb agreement in Yup'ik (Eskimo-Aleut; Alaska/Siberia).²

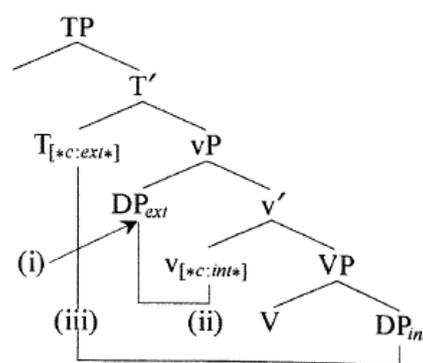
- (11) a. Doris-**aq** ayallruu-q. b. Tom-am Doris-**aq** cingallru-a.
 Doris-**ABS** travel.PST-3s.S Tom-ERG Doris-**ABS** greet.PST-3s.A
 'Doris travelled.' 'Tom greeted Doris.'
- (12) a. Ayallruu-**nga**. b. Ayallruu-q. c. Cingallru-a-**nga**.
 travel.PST-**1s.S** travel.PST-3s.S greet.PST-3s.A-**1s.P**
 'I traveled.' 'He traveled.' 'He greeted me.'

- Müller (2009: 290f.): ergativity/accusativity can be a property of v. That is, instead of referring to morphology for explaining differences between case systems, Müller attempts to derive such differences from the syntax.
- Languages thus differ as to how they handle an indeterminacy of rule application at the vP-cycle, i.e. whether external merge of the subject precedes agreement with the object or vice versa.
 - If agreement with the object applies first, the object is assigned an internal (= accusative) case (13a.i). Then, the subject is merged (13a.ii), agrees with T, and is assigned an external (= nominative) case (13a.iii) → accusative pattern (13a).
 - If external merge of the subject applies first (13b.i), the subject agrees with v, resulting in internal (= ergative) case on the subject (13b.ii). Then, the object agrees with T resulting in external (= absolutive) case on the object (13b.iii) (Müller 2009: 278) → an ergative pattern arises (13b).

(13) a. Agree before Merge: accusative



b. Merge before Agree: ergative



- Two types of alignment are available:
 - accusative alignment: SU-ext.case – DO-int.case: Nom – Acc.
 - ergative alignment: SU-int.case – DO-ext.case: Erg – Nom(Abs)
- What is special about SL: the ergative pattern is peculiar to certain verbs, it cannot be generalized to the entire language or certain tenses/aspects (split ergativity).

² Of course, in ergative languages, the marking of the intransitive subject is also crucial in that it is identical to that of transitive objects. Since there is no agreement with intransitive verbs in SLs, there is no parallel in this respect.

- We thus suggest to extend Müller's account in the sense that this indeterminacy does not only distinguish entire systems from each other but may also be active within a system (as is also the case in split ergative systems).
- Case and agreement are two morphological sides of the same syntactic coin, the Agree relationship is either marked on the dependent (case) or on the head v/T (agreement): internal case = internal agreement, external case = external agreement.³
 - SL: accusative alignment: T-ext.agr – v-int.agr.
 - SL: ergative alignment: T-int.agr – v-ext.agr.
- We adopt a late-insertion approach to morphology (Halle & Marantz 1993) and assume that T is realized before v:
 - In the case of RAVs/accusative verbs, this means that agreement with the subject is realized before agreement with the object → path movement from SU to Obj.
 - In the case of BAVs/ergative verbs, this implies that agreement with the object is realized before agreement with the subject → path movement from Obj to SU.
- The fact that SLs have both verbs with ergative and verbs with accusative agreement provides strong evidence for this lexically-based approach to ergativity.⁴

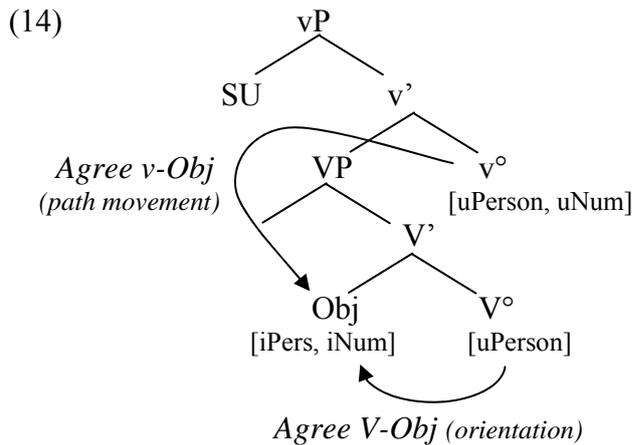
5.2 Agreement by orientation

5.2.1 General implementation

- Agreement by orientation raises three challenges:
 - Not all AVs are specified for orientation (e.g. GIVE, ASK in DGS and NGT). Agreement by movement and agreement by orientation are not simply a case of multiple exponence of just one Agree relationship (unless there is a phonological explanation for the fact that certain verbs do not express agreement by orientation).
 - Agreement by orientation is consistently accusative, i.e. with the object, even with BAVs. Hence, it cannot result from the Agree operation involving v and the external argument.
 - Moreover, agreement by orientation also occurs on PAM, which consists of v+T. Hence, orientation seems to be a feature of v.
- Solution:
 - Agr by orientation is the result of an additional Agree relationship between V and the object.
 - Some verbs bear an [uPerson] feature that is matched against the [iPerson] feature on the object.
 - Since V only looks within its m-command domain (the condition on Agree assumed in Müller 2009: 273), V can only probe internal arguments; see (14).

³ For the analysis to work, v/T have to register whether they have agreed with the internal or the external argument. This is far from trivial. One possibility consists in copying the case-features of the arguments onto their case-assigners (perhaps by means of two separate Agree operations; cf. Hamann (2011) for a solution for inverse languages). In the ergative case, v would be associated with NOM and T with ACC. Since T is realized before v, path movement would originate from the object. An alternative, suggested to us by Doreen Georgi, would be to copy the theta-roles of the arguments onto the probes as part of the Agree-operation. In the ergative case, T would be associated with theme and v with agent. If T is realized before v, the correct path movement from object to subject obtains.

⁴ To be precise, Müller takes ergativity to be a property of v, not V, and therefore does not locate ergativity/accusativity on single lexical items. For our approach to work, we have to assume an additional selectional relationship between a given v and V, i.e. accusative vs select for a regular agreement verb and ergative vs select for a backwards agreement verb. This selectional property seems to be a remnant of the thematic basis of verbal agreement in SL. The ergative v must be specified in a way that it cannot occur with plain verbs (because PAM always shows accusative alignment).



- Crucially, we assume that orientation only expresses Agr in person, but not number.
- This is important because if Agree were to involve all phi-features, the object would be deactivated so that it would be no longer available for Agree with *v* (the agreement realized by path movement).
- This becomes obvious e.g. in the (collective) plural form of verbs like DGS HELP or ANSWER, where orientation changes during path movement, but remains constant on the arc that marks plural.
 - Since Agree only involves [person] but not [number], the internal argument remains active for subsequent Agree with *v*.
 - At PF, [person] on *V* is realized as orientation towards the object.
 - Subsequent Agree between *v* and Obj involves [Person] and [Number]. As a consequence, the object is deactivated.
- The suggested derivation is similar to agreement of unaccusative subjects in French:
 - In (15), the subject first agrees with the participle in [number, gender]. Since Agree does not involve all features of the subject, it remains active for checking with *T*.
 - *T* probes for the subject and Agree involving [person, number] deactivates the subject.

(15) Les fille-s sont venu-es [French]
 the.PL girl-PL be.PL come-FEM.PL
 ‘The girls have come.’

- Here, we have to leave open why PAM shows agreement by orientation despite the fact that it spells out the *v*+*T* complex (10), while agreement by orientation has been claimed to be established lower in the structure (14).
- Possibly, Agree between *v* and the object involves not only path movement, but also orientation. On AVs, which already show agreement by orientation, this effect will not be visible, but it will be visible on PAM.

5.2.2 The problem with Agreement by orientation only verbs

- These verbs are not associated with path movement, but PAM does not occur either. Hence, these verbs are the only ones where the agreement features on *v*+*T* seem to remain unrealized.
- Since there is no PAM, the verbs arguably move via *v* to *T*. It seems that one has to assume that agr by path-movement (i.e. *v*+*T*) is realized as zero here, arguably for phonological reasons as in Meir (2002).

→ However, number agreement CAN be realized with agreement by orientation verbs. Since number agreement is associated with path movement, it seems that there is at least residual agreement by path movement with these verbs

5.3 Multiple agreement

→ Recall that occasionally, an inflected agreement verb (regular or backward) combines with the auxiliary (7bc). In these cases, PAM clearly realizes syntactic agreement.

→ Multiple agreement in auxiliary verb constructions is also attested in numerous unrelated spoken languages. In the Swahili example in (16a), both the Aux and the lexical verb are marked for subject agreement (Carstens 2001: 150).

→ In the Maasai example in (16b), a passive-like unspecified agent construction, a portmanteau morpheme marking subject and object agreement appears on the Aux and the verb (Anderson 2006: 160).

- (16) a. Juma a-li-kuwa a-me-pika chakula [Swahili]
 Juma 3SG-PST-be 3SG-PERF-cook 7food
 ‘Juma had cooked food.’
- b. á'á-púó-í áà-idòṅ [Maasai]
 3:1SG-come-VERB 3:1SG-beat
 ‘I shall be beaten.’
- c. POSS₁ FRIEND INDEX_{3a}, INDEX₁ 1TRUST_{3a} 1PAM_{3a} [DGS]
 ‘As for my friend, I trust him.’

→ At first sight, the DGS example (7b), repeated here as (16c), looks similar. Still, we assume that the phenomena are not easily compared.

→ For Bantu, Carstens (2001) assumes that compound tense structures like (16a) are raising constructions:

- The subject first agrees with the lower verb in Asp and moves to SpecAspP;
- Even though agreement involves all phi-features (phi-completeness), Carstens assumes that the subject is not deactivated because deactivation can only result from agreement with finite T;
- Therefore, subject is still eligible for Agree with T and moves further to SpecTP.

→ In DGS, however, a subject is normally deactivated after agreement with an inflected verb, i.e. with finite T; cf. (1a). Subsequent agreement with an auxiliary is therefore unexpected (the same holds for object agreement with v).

→ Proposal: Multiple agreement structures in DGS are bi-clausal, that is, the two sentences in (17) have different structures.

- (17) a. MOTHER INDEX_{3a} NEIGHBOR INDEX_{3b} KNOW 3aPAM_{3b} [DGS]
 ‘(My) mother likes the neighbor.’
- b. MOTHER INDEX_{3a} NEIGHBOR INDEX_{3b} TRUST_{3a} 3aPAM_{3b} [DGS]
 ‘(My) mother trusts the neighbor.’

→ Importantly, we find the following differences between (17a) and (17b):

- Cliticization of PAM to two-handed verbs by means of coalescence (Sandler 1999) is only possible in (17a) but not in (17b);
- Subject pronoun copy between verb and PAM is possible in (17b) but not in (17a);
- Modal verbs can intervene between verb and PAM in (17b) but not in (17a);

- Yet to be confirmed: in both examples, headshake is possible on PAM, with optional spreading onto verb; in (17b), however, headshake on verb only is also possible.
- We assume that the (somewhat marked) bi-clausal strategy triggers a M-implicature (Levinson 2000) and gives rise to an emphatic interpretation (\approx ‘My mother trusts the neighbor, she does him’).

5.4 On languages where plain verb derivations do not crash

- In many SLs (e.g. ISL, American SL, British SL), agreement auxiliaries are not available. Thus, in the context of plain verbs, agreement remains unexpressed.
- There are two ways to account for the lack of agreement in these languages:
- Agreement has a completely different status in these SLs, i.e. it is less syntactic, movement is a realization of thematic agreement;
 - Agreement works the same as in DGS, but for some reason, derivations do not crash if agr is not realized, i.e. when plain verbs are used.

6 Conclusion

- In this talk, we have proposed a *non-hybrid* account of SL agreement. We have argued that agreement in SLs is consistently syntactic – contra Meir (2002), who proposed a *hybrid* account that combines thematic and syntactic agreement.
- On the one hand, our account is in line with de Quadros & Quer (2008, 2009), who also argue against thematic agreement. On the other hand, it contrasts with their proposal in that we do not assume that BAVs show locative agreement.
- The central piece of evidence comes from agreement auxiliaries which express agreement by path movement without having any thematic structure.
- Agreement by movement results from Agree operations between object/subject and v/T, respectively.
- Backwards verbs are reanalyzed as showing ergative agreement.
- Agreement by orientation realizes an Agree relationship between V and the object.
- The mechanisms that we suggest for the implementation of agreement in DGS are independently motivated and modality-independent.
- Admittedly, even though we assume that **all** agreement verbs consistently show syntactic agreement with R-loci, our account still has a *hybrid* flavour to it in that we assume that RAVs and BAVs lexically differ from each other in that they combine with different types of v, which in turn imply different orders of Merge and Agree.
- While a syntactic analysis is inescapable for DGS/NGT (as well as for LSB and LSC), Meir’s analysis may have certain merits for ISL, ASL, and other SLs in which agreement auxiliaries are not available.
- Still, what has certainly become clear is that Meir’s account cannot serve as a general theory of agreement in sign languages and thus loses much of its appeal.

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