

PERSON AGREEMENT AND THE DETERMINATION OF ALIGNMENT

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ABSTRACT

The paper explores two issues arising from the extension of the notion of alignment from the domain of monotransitive to ditransitive clauses. The first is, To what extent should other than purely formal patterns of identification be taken into account in determining the ditransitive counterparts of the respective monotransitive alignments, i.e., accusative, ergative, active, etc.? The second issue is, How should conflicts between the formal criteria used in the determination of the alignment of person agreement be resolved? It is argued that only under a purely formal interpretation of alignment is it possible to discern ditransitive counterparts of all the major monotransitive alignments, and that once the notion of neutral alignment is distinguished from absence of agreement, form/order conflicts involving agreement markers can be consistently resolved in favour of phonological form.

1. INTRODUCTION

The term ‘alignment’ when used in regard to grammatical functions denotes how core grammatical functions are organised relative to each other. Traditionally the major patterns of alignment have been defined exclusively in relation to the arguments of intransitive and monotransitive verbs, i.e., in relation to the S (sole argument of intransitive verb), A (agentive argument of transitive verb) and P (patient-like argument of transitive verb), as characterised by Dixon (1972) and Comrie (1978). They are the familiar, neutral, accusative,

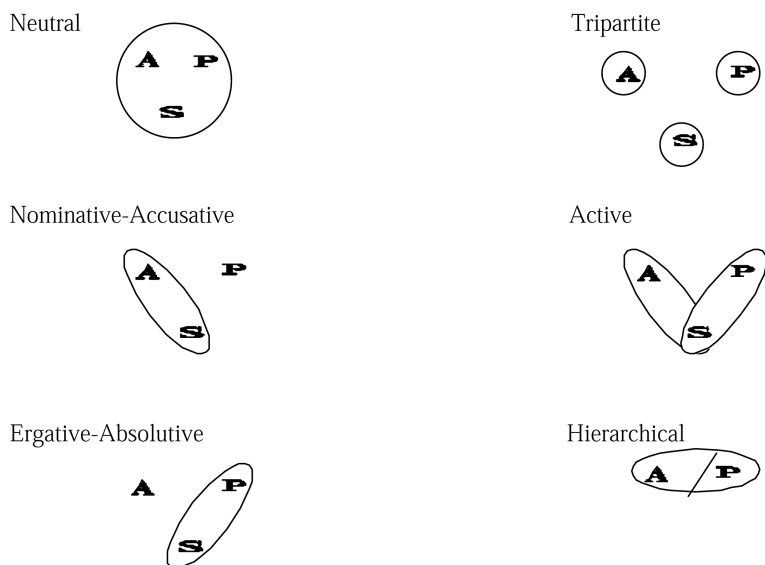


Figure 1. Morphological alignment types

ergative, active, tripartite and hierarchical alignments depicted in Fig. 1.

Recently Haspelmath (2001), elaborating on early work by Blansitt (1984), Dryer (1986) and Croft (1990: 100–8), has extended the notion of alignment to cover how the patient and recipient in a ditransitive clause are treated relative to the treatment of the P in a monotransitive clause. This extension of the notion of alignment raises various questions pertaining to the determination of alignment, which the present paper will explore in the context of person agreement.¹

¹ The notion of person agreement used here embraces both grammatical and anaphoric agreement in the sense outlined by Bresnan and Mchombo (1987) and does not differentiate between affixal and clitic markers. That the distinction between affixes and clitics is scalar rather than discrete and thus not a good basis for distinguishing between pronominals and agreement markers is nowadays widely accepted. For a discussion of the issue, see the articles in Aikhenvald and Dixon (2002) and Siewierska (Forthcoming: chapter two), for example.

Two main issues will be considered. The first is, To what extent should other than purely formal patterns of identification be taken into account in determining the ditransitive counterparts of the respective monotransitive alignments? The second issue is, How should conflicts between the formal criteria used in the determination of the alignment of person agreement be resolved? Regarding the first issue, linguists differ considerably in their approach to the notion of alignment. For some, alignment is simply the formal pattern of identities obtaining between three categories. Others have come to associate each of the major monotransitive alignments with a specific body of, sometimes domain-dependent, characteristics. Thus, for example, in the domain of case marking, accusative alignment is primarily associated with overt marking of the P and zero marking of the S and A, while in the domain of agreement marking, primarily with overt marking of the S and A. In fact, for some scholars such characteristics have come to play a more important role in defining alignment types than the actual formal patterns of identities. For example, Dixon (1994: 66) suggests that the overt case marking of the S and A and zero marking of the P is not a subtype of accusative alignment but constitutes a separate alignment type, which he calls marked nominative. And Bickel (2000: 4) labels the alignment of agreement in several Tibeto-Burman languages split-accusative rather than the more familiar split-ergative, since the split in alignment relative to person is not in line with Silverstein's (1976) hierarchy. Yet other scholars impose various semantic requirements on the particular alignment types. For example, Meira (1999: 249) rejects an active analysis of person agreement in the Carib language Tiriyo on the grounds that the two patterns of marking of the S are not semantically motivated. A similar argument against an active analysis of monotransitive agreement is presented by Quesada (2000: 117) for the Chibchan language Teribe. Given the diversity of approaches to alignment, the determination of the ditransitive counterparts of the monotransitive alignments is no straightforward matter. Needless to say, if only purely formal criteria are used, we are more likely to find ditransitive analogues of all the major monotransitive alignments than if other types of criterion are also considered. It will be argued that as far as agreement is concerned, only under a purely formal interpretation

of alignment is it possible to discern ditransitive counterparts of all the major monotransitive alignments.

As for the second issue, logically speaking, the determination of the alignment of person agreement may be based on four factors: which arguments do and which do not display agreement marking, the phonological form of the existing markers, their location and/or order relative to the verbal stem and/or each other and the conditions under which person agreement occurs. Thus, for example, a language may be classified as exhibiting accusative agreement on the basis of the fact that it exhibits agreement with the S and A but not with the P or, more rarely, with the P but not with the S or A. When there is agreement with all three core functions, the alignment may be labelled accusative on the basis of the formal distinctiveness of the S and A markers from the P markers. The decision as to the distinctiveness of the two sets of markers may be arrived at by considering their phonological form or in terms of their location, say prefixal versus suffixal, or on the grounds of both phonological form and location. And finally, the identification of the S with the A, in contradistinction to the P, may involve not only a consideration of the form and location of the markers but also the conditions under which they are used. Typically, the above four factors, the identity of the functions exhibiting agreement, the phonological form of the agreement markers, their order and conditions of use converge in defining a unique alignment, but they need not. For instance, in Chorti, a Mayan language of Guatemala, there is person agreement with the S, A and P. In the perfective aspect the alignment of the agreement is ergative both in terms of the phonological form and location of the person markers; the S and P markers are phonologically identical and are suffixed to the verbal stem, while the A markers are phonologically distinct and are prefixes. Compare the S/P forms for the second-person singular *-et* in (1a, b) with the form for the A, the *a-* prefix in (1c).²

² There is no aspect marking on the verb. Whether the verb is perfective or imperfective is indicated solely by the form and location of the person markers. Consequently the examples in (1a) and (2c), and (1c) and (2a) are identical.

(1) Chorti

a. in-ira-et.

1SG(A)-saw-2SG(P)

'I saw you.'

b. wayan-et.

sleep-2SG(S)

'You slept.'

c. a-ira-en.

2SG(A)-saw-1SG(P)

'You saw me.'

(Quizar 1994: 121–2)

In the imperfective aspect, however, the phonological and locational criteria for determining alignment do not converge in defining a unique alignment. The phonological forms of the S, A and P are all distinct, but whereas the S and A markers are prefixes the P markers are suffixes. This is illustrated in (2).

(2) a. a-ira-en.

2SG(A)-see-1SG(P)

'You see me.'

b. i-wayan.

2SG(S)-sleep

'You sleep.'

c. in-ira-et.

1SG(A)-see-2SG(P)

'I see you.'

(Quizar 1994: 134)

Thus, according to the phonological criterion the alignment is tripartite; according to the locational one, accusative. A similar conflict between the phonological and locational criteria may be observed in Reefs, a Papuan language of the Eastern Outer Islands, though here the person agreement is accusative if defined in purely phonological terms, but tripartite if location and order are also taken into account. In the non-singular the markers of the S and A are phonologically identical, but whereas the former are prefixes, the latter are suffixes as shown in (3).

(3) Reefs

a. dyi-ki-eŋi.

IDU:INC(S)-ASP-cry

'We cry.'

b. nyenaa ki-bwaki-dyi.

stick ASP-break-IDU:INC(A)

'We broke the stick.'

(Tryon 1994: 618–9)

Conflicts between form and order, such as those in Chorti and Reefs, illustrated above, are rare and, to the best of my knowledge, there has never been a discussion of how they should be resolved. Somewhat more common, particularly in ditransitive clauses, are form–order conflicts involving phonologically identical agreement markers. In such cases order is often taken as the relevant criterion for the determination of alignment. However, while a case can be made for treating morpheme order differently from word order, the latter is never used as a basis for the alignment of nominals, it is by no means clear whether this is the most desirable solution. It will be argued that once the notion of neutral alignment is distinguished from absence of agreement, form–order conflicts involving agreement markers can be consistently resolved in favour of phonological form.

2. DITRANSITIVE ALIGNMENTS

The extension of the notion alignment from monotransitive to ditransitive clauses is predicated on the assumption that the analogues of the S, A and P are the P, T and R, respectively, where the P stands for the transitive patient, the T for ditransitive theme (patient) and the R for ditransitive recipient. The postulated correspondences between the S and P, A and T, and P and R, respectively, are neither semantic nor morphosyntactic, but hold at a more abstract level. The parallel between the S and the P is that they are the arguments relative to which the treatment of the A and P in monotransitive clauses, and T and R in ditransitive clauses, are compared. The correspondence between the A and T is that each is semantically closer to the S and P, respectively, than their co-arguments, the P in monotransitive clauses and R in ditransitive clauses. And by the same token, the latter, the P and R, are united by virtue of their dissimilarity to the intransitive S and monotransitive P, respectively.

Assuming the above correspondences and adopting a purely

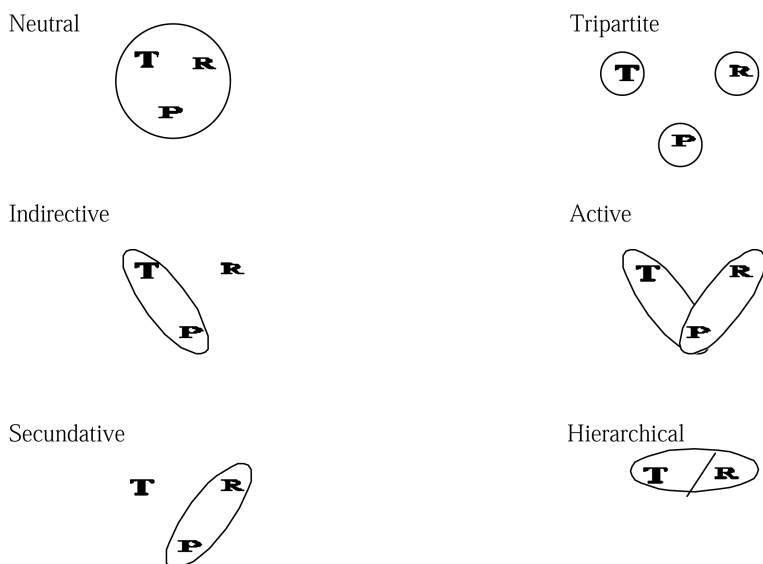


Figure 2. Morphological alignment types (ditransitive)

formal approach to alignment in terms of the patterns of identification obtaining between three distinct categories of whatever type, the ditransitive counterparts of the major monotransitive alignments are as depicted in Fig. 2.

Corresponding to monotransitive neutral alignment, where the S, A and P are treated in the same way, is ditransitive neutral alignment, where the P, T and R are all treated identically. The ditransitive analogue of accusative alignment which treats the S and A identically in contradistinction to the P is indirective alignment which treats the P and T identically in contradistinction to the R. The ditransitive counterpart of the identification of the S with the P in contradistinction to the A in ergative alignment is secundative alignment which groups the P with the R in opposition to the T. In tripartite alignment, both monotransitive and ditransitive, each of the three grammatical functions, the S, A and P, on the one hand, and the P, T and R, on the other, is treated distinctively. In monotransitive active alignment there are two patterns of identi-

fication of the S; sometimes it is treated like the A, and sometimes like the P. In ditransitive active alignment it is the P which exhibits two patterns of marking; sometimes it receives marking associated with the T and sometimes, marking associated with the R. And finally, in hierarchical alignment there is variation in the treatment not of the S or P, but of the A and P, and T and R, respectively. Either one or the other is singled out for special treatment depending on which is higher on the referential and ontological hierarchies.

Of the ditransitive counterparts of the monotransitive alignments depicted in Fig. 2, the three on the left, i.e., neutral, indirective and secundative are all relatively common in the domain of person agreement. An example of neutral ditransitive person agreement is given in (4) from the Omotic language of Ethiopia Wolaytta, in which there is no person agreement with the P, T or R.

(4) Wolaytta

a. Ali aa shoc'iis.

Ali him:ACC beat:3SG(A)

'Ali beat him.'

b. aa ?aa-w gutta haatka ehass^u.

she he-DAT some water brought:3SG(A)

'She brought him some water.'

(Lamertii and Sottile 1997: 91, 92, 203)

Indirective alignment is illustrated in (5) from the Mayan language Mam, in which there is person agreement with the P (5a, b) and T (5c) but not the R (5c).

(5) Mam

a. ma qo-.ok-t-tzeeq'an-a.

REC.PAST 1PL(P)-*pot*-2SG(A)-*grab*-EXCL

'You hit us.'

b. ma Ø-t-tzuy.

REC.PAST 3SG(P)-3SG(A)-*grab*

'He grabbed it.'

c. ma-a7 Ø-tzaj-ky-q'o-7n

REC.PAST-EMPH 3SG(P)-DIR-3PL(A)-*give*-DIR

q-ee.

1PL-to

'They gave it to us.'

(England 1986: 60, 62, 183)

And secundative alignment involving person agreement with the P (6a, b) and R (6c) but not the T is shown in (6) from the Uto-Aztecan language Cora.

(6) Cora

a. ha'am^wa-seih † ha'at† m^wehmi.

2PL(P)-see ART someone you(PL)

'Someone sees you (pl).'

b. pa-ra-a-m^wareh.

2SG(A)-3SGS(P)-COMPL-handle:PAST

'You handled it.'

c. hām^wa-a-ta-t†h m^wehmi † ha'at†

2PL(R)-COMPL-PERF-give you:PL ART someone

† čuaaša-ri.

ART pipe

'A certain man gave the pipe to you (pl).'

(Casad 1984: 329, 328, 330)

In contrast to the above three alignments of person agreement, ditransitive tripartite and hierarchical person agreement are rare. An instance of tripartite agreement is illustrated in (7) on the basis of Kanasi, a Trans-New-Guinea language of the Daga branch spoken in the Milne Bay area.

(7) Kanasi

a. ne na-'e-pa.

I eat-2SG(P)-1SG:FUT(A)

'I will eat you.'

b. kaire ema e-ne'e-pa.

sweet potato DEM 2SG(R)-give-1SG:FUT(A)

'I will give this sweet potato to you.'

(Pappenhagen 1985: 119, 110)

As in the case of Cora, while there is person agreement with the P and also the R, there is no person agreement with the T. Unlike in Cora, however, the alignment is not secundative, since both the form and location of the R person-agreement marker differ from that of the P; the former, for the second person, is the prefix *e-*, and the latter, the suffix *-'e*. Turning to hierarchical alignment, such

ditransitive alignment of person agreement is found in the Yuman language Jamul Tiipay (Miller 2001: 162–3). As shown in (8a) in transitive clauses there are portmanteau verbal prefixes which indicate the person/number of the A and the P. In ditransitive clauses whether it is the T or the R that is marked by the portmanteau prefix together with the A depends on which is higher on the person hierarchy of $1 > 2 > 3$. Thus, in (8b) since the R outranks the T, the person prefix marks the R, while in (8c) the T outranks the R, and consequently it is the T that is marked.

(8) Jamul Tiipay

a. *nye-wiiw.*

1:2-*see*

‘I saw you.’

b. *xikay ny-iny-ma.*

some 1:2-*give*-PROM

‘I’ll give you some.’

c. *nyaach maap Goodwill ny-iny-x.*

I:SUB *you Goodwill* 1:2-*give*-IRR

‘I’m going to give you to Goodwill.’

(Miller 2001: 141, 162)

The most controversial of the ditransitive alignments is active. Since the only potential instances of such an alignment of person agreement that I have come across are somewhat problematic, I will consider them in greater detail.

2.1. *Active alignment*

Since in monotransitive active alignment the S is sometimes identified with the A and sometimes with the P, the two patterns of identification could be interpreted not as defining a separate alignment type, but as involving split accusative/ergative alignment.³ Split accusative/ergative alignment has, however, come to be associated with one of two conditioning factors, namely, the semantic properties of nominals (their position on the personal or

³ In fact such an interpretation is not uncommon, particularly within the generative literature. But see also, for example, Koprís (1997).

ontological hierarchies) or tense and aspect. The two patterns of identification of the S found in monotransitive active alignment, by contrast, have been shown to be conditioned by factors such as affect, control and instigation (Van Valin 1990; Mithun 1991; Dixon 1994) and are largely tied to the semantics of predicates. Thus in seeking to establish the ditransitive analogues of active alignment, we must not only search for two patterns of marking of the P, corresponding to that of the T and R, respectively, but also for conditioning factors comparable to those characterising monotransitive active alignment.

Monotransitive active alignment comes in two guises, commonly referred to as split-S and fluid-S. In split-S systems the two marking patterns of the S occur with different verbs, in fluid-S systems, with the same verbs,⁴ The ditransitive analogues would thus be split-P and fluid-P, respectively, with the two forms of P marking corresponding to that of the T and R.

Ditransitive counterparts of active alignment, particularly of split-P marking, in the domain of case marking are not uncommon. For instance, various European languages have a small class of verbs such as *trust*, *believe*, *help* and *forgive* which take a second argument in the dative case rather than the accusative. Since in ditransitive clauses the T takes accusative case and the R, dative, the two patterns of P marking correspond to that of the T and R in ditransitive clauses. This is exemplified in (9) from Polish.

(9) Polish

- a. *jego naprawdę kocham.*
 he:ACC really love:1SG:PRES
 ‘Him, I really love.’
- b. *jemu naprawdę ufam.*
 he:DAT really trust:1SG:PRES
 ‘Him I really trust.’
- c. *jego jej dam.*
 he:ACC her:DAT give:1SG:FUT
 ‘Him, I’ll give to her.’

⁴ As we see below, the two are not mutually exclusive, i.e., split-S and fluid-S marking may occur in the same languages. For further examples see Payne (1984).

- d. ja jemu dam.
 her:ACC he:DAT give:1SG:FUT
 'Her, I'll give to him.'

In the domain of agreement, however, two patterns of marking of the P which could be seen as reflections of ditransitive active alignment are difficult to come by. Potential instances of split-P and fluid-P marking may be discerned in the Western Muskogean languages. However, it is by no means obvious whether they can actually be regarded as such.

According to Munro and Gordon (1982), while most transitive verbs in Chickasaw and Choctaw display person agreement with the P by means of accusative markers, 'non-active' transitive verbs, some of which are semantically similar to those taking dative second arguments in European languages, such as *beat* (in a contest), *love* and *forgive* display agreement by means of dative markers. Compare the examples in (10a, b) with those in (10c, d).

(10) Chickasaw

- a. chi-ssō-li.
 2(ACC)-hit-1(NOM)
 'I hit you.'
- b. is-sA-thaana.
 2(NOM)-1(ACC)-know
 'You know me.'
- c. chim-ambi-li.
 2(DAT)-beat-1(NOM)
 'I beat you.'
- d. in-kashoffi-li.
 3(DAT)-forgive-1(NOM)
 'I forgive him.'
- (Munro and Gordon 1982: 83, 86)

In ditransitive clauses the R exhibits person agreement by means of the dative markers, e.g.:

(11) Chickasaw

- aboha anō'k-ak folosh aa-im-a-li-tok.
 house in-NONSUBJ spoon LOC-3(DAT)-give-1(NOM)-PAST
 'I gave him a spoon in the house.'
- (Munro and Gordon 1982: 110)

However, as the example in (11) demonstrates, there is no overt accusative agreement marking with the T. The T in Choctaw and Chickasaw ditransitive clauses can only be third person, and third-person accusative (and also nominative) agreement markers are zero.⁵ There is nonetheless some marking of the verb when the T is human as opposed to non-human, namely by means of the verbal proclitic *pit-* (Munro and Gordon 1982: 110), as shown in (12).

- (12) Chickasaw
 Catherine-at Larry Bonnie-ak
Catherine-SUBJ Larry Bonnie-NONSUBJ
pit-im-pilash-tok.
pit-3(DAT)-send-PAST
 ‘Catherine sent Larry to Bonnie.’

The status of this proclitic is unclear. One possibility that has been entertained is that it is a directional, but Munro and Gordon do not endorse this view. Another possibility is that it is a de facto third-person-human agreement marker. Under such an analysis, the resulting alignment with human Ts would have to be considered as being tripartite. In any case, it is only with third-person inanimates that the T is unequivocally treated in exactly the same way as the P. Thus, the only split-P person agreement which qualifies as a potential ditransitive counterpart to active agreement in Chickasaw is with third-person inanimates. Note, however, that if the relevant agreement pattern is considered to be the ditransitive analogue of active alignment, ditransitive active alignment would emerge as being quite different from monotransitive active alignment in at least two respects. Whereas the latter typically involves speech-act participants and two patterns of overt marking, the potential ditransitive alignment in Chickasaw is restricted to inanimates and involves zero marking.

In Choctaw (Davies 1984a: 390; 1984b: 358), in addition to the split-P alignment, some verbs manifest what may be interpreted as fluid-P marking, as exemplified in (13) and (14).⁶

⁵ Such a constraint on the person of the T is found in many other languages. For some discussion see Haspelmath (2002).

⁶ Chickasaw also exhibits two patterns of marking with some verbs. However, the two patterns of marking are dependent on whether the P is human. As shown in (i)

(13) Choctaw

- a. *chi-alikchi-li-tok.*
 2(ACC)-*doctor*-1(NOM)-PAST
 'I doctored you.'
- b. *chim-alikchi-li-tok.*
 2(DAT)-*doctor*-1(NOM)-PAST
 'I doctored you.'

(14) Choctaw

- a. *issoba Ø-shilli-li-tok.*
 horse 3(ACC)-comb-1(NOM)-PAST
 'I combed the horse.'
- b. *issoba i-shilli-li-tok.*
 horse 3(DAT)-comb-1(NOM)-PAST
 'I combed the horse.'

However, if fluid-P marking is to be a strict counterpart of fluid-S marking, we would expect the above accusative/dative alternation to be accompanied by some semantic distinctions.⁷ For instance, fluid S-marking in Chickasaw is seen to be dependent on semantic factors such as control, volition and consciousness. As exemplified in (15), if

with non-human Ps there is no overt agreement marking, with human Ps the dative prefix *im-* is used.

(i) Chickasaw

- a. *Ø-iyimmi.*
 3(ACC)-*believes*
 'He believes it.'
- b. *i-iyimmi.*
 3(DAT)-*believes*
 'He believes him.'

(Munro and Gordon 1982: 86)

Given that the two patterns of marking of the P shown in (i) are conditioned by the humanness of the P (i.e., a factor which in the case of monotransitive alignments is taken to condition split alignment), they may be seen as reflections of split indirective/secundative alignment rather than of fluid-P marking.

⁷ Fluid P-marking, in the sense of the term used here, should not be confused with the phenomenon known as 'differential object marking', brought to my attention in this context by Bernard Comrie. Differential object marking is found, for example, in Finnish, where there is an alternation between the use of the accusative and partitive cases, and Slavonic, where there is an alternation between the accusative and genitive cases. The difference that I would like to point out is not that differential object marking involves case rather than agreement, but that the two patterns of marking in question do not correspond to the marking of the T and R in ditransitive clauses.

an essentially non-volitional verb is accompanied by A/S_A marking it receives a volitional interpretation.

(15) Chickasaw

a. sΛ-hotolhko.

1(ACC)-*coughed*

‘I coughed.’

b. hotolhko-li.

coughed-1(NOM)

‘I coughed (on purpose).’ (Munro and Gordon 1982: 81)

Unfortunately, Davies does not specify what the semantic differences between the two patterns of alternative P-marking in (13) and (14) are. Assuming that such differences do exist, then the Choctaw alternation qualifies uncontroversially as an instance of fluid-P marking. If, on the other hand, there are no semantic differences between the (a) and (b) clauses, a fluid-P analysis would for some scholars be questionable. As mentioned in the introduction, the lack of a semantic basis of two patterns of marking of the S is viewed by Meira (1999: 249) as adequate grounds for rejecting an active analysis of monotransitive person agreement in the Carib language Tiriyo. Such a position could also be extended to apparently semantically motivated instances of fluid-P marking.

An instance of split-P agreement, less constrained than in the Western Muskogean languages discussed above, is to be found in Kashmiri. In the perfective while most verbs exhibit absolutive person agreement with the P, a small number of verbs, which Wali and Koul (1997: 253) call exceptional transitives, manifest dative agreement. Compare (16a) and (16b).

(16) Kashmiri

a. tse vuch-u-th-as bi.

you:ERG saw-MSG-2SG-1SG (ACC) me:ABS

‘You saw me.’

b. təm’ lo:y-am.

he:ERG beat:1SG(DAT)

‘He beat me.’

(Wali and Koul 1997: 156, 88)

As shown in (17) in ditransitive clauses the accusative agreement is manifested by the T and the dative by the R.

- (17) kalam d'ut-un-am.
pen gave-3SG(T)-1SG(R)
 'He gave me a pen.'

Thus, provided that the two patterns of the marking of the P are semantically motivated, the relevant alignment of the ditransitive person agreement in the perfective may be considered to be active.

In the imperfective, there are also two patterns of marking of the P, corresponding to the marking of the T and R. This is illustrated in (18).

- (18) Kashmiri
- a. b_i chu-s-a-th ts_i
I be-1SG-FSG-2SG(ABS) you:ABS
 parina:va:n.
teaching
 'I am teaching you.'
- b. su chu-y tse parina:va:n.
he is-2SG(DAT) you:DAT teaching
 'He is teaching you.'
- c. b_i chu-s-an-ay su
I:NOM be-1SG-3SG(ABS)-2SG(DAT) he:ACC
 tse hava:li kara:n.
you:DAT hand over doing
 'I am handing over him to you.'

(Wali and Koul 1997: 87, 253)

However, the two patterns of marking of the P in the imperfective are hierarchically determined; the P is marked for dative agreement rather than absolutive whenever the A is lower on the person hierarchy than the P, as in (18b). The two patterns of marking are not extended to the T, presumably because in cases when the A is lower or equal on the person hierarchy to the T, the T and R would both receive dative marking. Since the two patterns of marking of the P are not dependent on the semantics of the verb, again it is questionable whether the ditransitive alignment in the imperfective can be considered to be split-P. If

not, then the most viable analysis of the ditransitive imperfective alignment would be indirective.⁸

I know of no other candidates for ditransitive active alignment. While they undoubtedly do exist, it should be clear from the above that two patterns of agreement marking of the P are quite rare as compared to two patterns of agreement marking of the S. This may in part be attributed to the fact that person agreement with the P is on the whole significantly less frequent than with the S. Moreover, when person agreement with the P does occur it tends to exhibit more restrictions relating to person, animacy, definiteness, etc., than person agreement with the S. These restrictions, in turn, are more likely to lead to an identification of the P and R and thus secundative alignment of agreement rather than to ditransitive active alignment. Why this should be the case is also connected with the patterns of overt and covert marking characteristic of person agreement in ditransitive clauses, to which we now turn.

2.2. *The cross-linguistic realisations of ditransitive alignment*

Logically speaking, the identification or non-identification of the P with the T and/or R can be instantiated in different ways. Thus, for example, indirective alignment may involve person agreement with the P and T, but not the R, or with the P and T by one set of markers and with the R by another, or even just with the R. The same applies to the other alignment types. However, when we look at the cross-linguistic instantiations of the various alignment types we find that only some of the logically possible instantiations actually do occur.

First of all, there are no languages which exhibit person agreement with just the P to the exclusion of the T or R. The mono-transitive counterpart of this would be a language having person agreement just with the S but not with the A or P, which is also

⁸ Another language which may arguably be seen to have two patterns of marking of the P is Southern Tiwa (Rosen 1990), which will be discussed further below. The two patterns of marking do not, however, correspond to the marking of the T or the R since when both T and R are marked on the verb portmanteau prefixes are used.

unattested. Note that such a possibility is not even catered for in Figs 1 or 2.

Secondly, there are no languages which display person agreement with just the T. This is not very surprising. Most referents of Ts are third-person inanimates while those of Rs are typically human. As person agreement strongly favours humans and particularly speech-act participants, it would be very strange for a language to have developed person agreement with the T but not the R or P. The corresponding type of monotransitive agreement, solely with the A, does occur, but extremely rarely. For example, the Austronesian language Chamorro (Topping 1973; Cooreman 1988: 106–8) exhibits ergative person agreement with the A but not with the S or P in the realis mood. Note the lack of person markers for the P in (19a) and the S in (19b).

(19) Chamorro

- a. si tata-hu ha-tokcha' hulo' i lemmai.
 UNM *father-1SG 3SG(A)-spear up the breadfruit*
 'My father poked/speared the breadfruit.'
- b. man-gaige i serena gi tasi.
 PL-stay the mermaid LOC sea
 'The mermaids live in the sea.' (Cooreman 1988: 567)

In the irrealis mood, there is accusative agreement with the S and A.⁹ Unlike person agreement with just the T, person agreement solely with the R is attested, though it is rare. One language that has person agreement with the R but not the T (or P) is Gude, a Chadic language of Nigeria and Cameroon.¹⁰ As shown in (20b), in some dialects there is a pronominal agreement marker for the R, which is attached to the verb stem between the verb root and the following applicative extension.

⁹ According to Aikhenvald and Dixon (1999b: 348) in Yanomani languages (a dialect cluster of northern Brazil and southern Venezuela) there is person and number agreement with the A but only number agreement with the S/P.

¹⁰ In most varieties of Spanish there is obligatory agreement with the R but the agreement with the P is optional. The situation is thus similar but not the same as in Gude.

(20) Gude

- a. kə vii Musa kwafa ka ci.
 COMPL *give Musa money to him*
 ‘Musa gave money to him.’
- b. kə ka-nə-paa Musa buura.
 COMPL *set down-3SGM-APPL Musa bag*
 ‘Musa set down the bag for him.’

(Hoskinson 1983: 110–1)

In all the other languages that I know of which have R agreement, but no T or P agreement, namely, Malayalam, Kolyma Yukaghir, Lepcha, Enga, Kewa, Tsez and Waskia (all listed in Comrie 2001), the R agreement is highly exceptional in that it involves suppletion of the verb stem. In most of the above languages there is one stem of the verb ‘give’ for the third person, and another for the first and second person. Waskia, a Papuan language belonging to the Ismrud family (Ross and Paol 1978: 43), however, has four stems of the verb ‘to give’ dependent on the person in the singular and number in the plural of the R: *asi* for 1SG; *kisi* for 2SG; *tuw* or *tuiy* for 3SG and *idi* for all persons in the plural.¹¹ In Gude, Malayalam and Lepcha the R is the only verbal argument displaying any type of person agreement. The other languages mentioned have no person agreement with the T or P but do have agreement with the S and A.

The third and most interesting aspect of the actual realisation of the ditransitive alignments is the strong preference for person agreement with either the T or the R, but not both. This is quite different from what we find in monotransitive clauses which strongly favour person agreement with both the A and P. The fact that person agreement with both the T and R is not a very frequent phenomenon has often been noted (e.g., Blansitt 1984; Givón 1984; Gensler 2002). What has aroused my interest is the nature of the

¹¹ Person agreement with the R and not the P or T may also be observed in languages in which non-subject agreement is restricted to humans or animates. For example, in the Australian language Maranungku only the R exhibits person agreement in ditransitive clauses. Therefore with human or animate Ps the alignment is secundative involving the P and R, with non-humans, indirective and just with the R.

alignment that such instances of person agreement involve. It is to this issue that we now turn.

3. ALIGNMENT AND PERSON AGREEMENT WITH THE T AND R

In languages which exhibit person agreement with both the T and R, the alignment is uncontroversially indirective if the markers used for the T are phonologically the same as the ones used for the P, while those of the R are distinct. This is the case, for example, in Ekari (21), a Wissel Lakes language spoken in the West Central Highlands of New Guinea and Bulgarian (22), where the agreement is by means of clitics rather than affixes.

(21) Ekari

a. mee wedaba nemouga ne-epeemegai.

people many behind 1PL-follow

‘Many people followed us.’

b. niya-e-dokai

1PL-3SG-carry

‘Carry him for us.’

(Doble 1987: 90, 84)

(22) Bulgarian

a. običam go Ivan.

like:1SG: PRES 3SG:M: ACC Ivan

‘I like Ivan.’

b. na Ivana kniga-ta az mu ja dadox

to Ivan book-the I 3SG:M: DAT 3SG:F: ACC give: PAST: 1SG

‘I gave the book to Ivan.’

In most languages which have a phonologically distinct set of markers for the R, the relevant markers are used irrespective of whether or not the T exhibits agreement. Occasionally, however, the special R markers occur only in the presence of T agreement markers. This is the case in Maltese (Borg and Comrie 1984: 117, 125), though only in relation to the verb ‘give’, and in the Australian language Ngiyambaa, in which the relevant person agreement markers are encliticised to the first word of the clause. As shown in (23b), in Ngiyambaa when the T is indefinite, there is no

person-agreement clitic and the person marker of the R is the same as that of the P in (23a). When the T is definite (23c), it, rather than the R, is marked by an absolutive clitic and the R is marked by genitive forms, also used in nominal possession.

(23) Ngiyambaa

a. mirigu-na bura:y gadhiyi.
dog:ERG-3SG:ABS child:ABS bite:PAST
 ‘The dog bit the child.’

b. guya-ndu-na ŋu-nhi.
fish:ABS-2SGNOM-3ABS give-PAST
 ‘You gave him fish.’

c. ŋu-nhi -dju -lugu-na.
give-PAST-1NOM-3GEN-3ABS
 ‘I gave it to him.’

(Donaldson 1980: 128, 131–2)

Instances of uncontroversial secundative alignment, corresponding to those of indirective in (20) and (21) where one set of markers is used for the R and P and a phonologically distinctive set for the T, are unattested. Nor are there any instances of tripartite ditransitive person agreement with phonologically distinct marking of the T, R and P. Why this should be so is not difficult to explain. While it is not uncommon for a language to have a separate set of dative person pronouns used for the R, I know of none which has a set of personal pronouns distinct from the P and also R forms used for the T. And even if such forms were to exist, given that the referents of the T are typically inanimate and low in accessibility in the sense of Givón (1983) and Ariel (1990), there is little reason why they should develop into agreement markers either via a topicalisation scenario (Givón 1976) or an accessibility one (Ariel 2000). The opposite holds for special forms of dative pronouns. Since the referents of the R are typically human and highly accessible, it is not all that surprising that a language which already has person-agreement markers for the P and T should develop an additional set for the R.

Given the above, the vast majority of instances of person agreement with both the T and R, other than those which are uncontroversially indirective, involve markers which are phonologically the

same.¹² Phonologically identical T and R markers are found, for example, throughout the Bantu languages (e.g., Haya, Kinyarwanda, Nkore-Kiga, Shambala) in Diola Fogny, Doyayo, Wolof, Koromfe, Noon, Classical Arabic, Nahuatl, Chinookan, Slave, Amele, Manam and Kambera. In fact the only language which I have come across that constitutes an exception to the above is Southern Tiwa, a Tanoan language of New Mexico. Person agreement in Southern Tiwa is marked by a portmanteau prefix, which in ditransitive clauses expresses the person and number of the A and T, or of the A, T and R. In the former case (24a) the R occurs in a postpositional phrase; in the latter, if overt, it occurs with no morphological marking (24b).

(24) Southern Tiwa

a. *bi-musa-wia-ban* 'uide-áy.

1SG:3PL-cat-give-PAST child-to

'I gave the cats to the child.'

b. *Uide tam-musa-wia-ban.*

child 1SG:3PL:3SG-cat-give-PAST

'I gave the cats to the child.'

(Rosen 1990: 674)

The adpositional construction displays no person restrictions, the adpositionless one occurs only with first- and second-person As and third-person Ts. The person of the R is unrestricted. The portmanteau prefixes of the A and T in clauses where the R is adpositionally marked are the same as those found in transitive clauses. Note the same prefix *bi-* in (24a) and (25).

(25) *bi-musa-mu-ban.*

1SG:3PL-cat-see-PAST

'I saw the cats.'

The alignment is thus indirective. The alignment of the person agreement in clauses such as (24b) is rather difficult to classify. The portmanteau prefixes marking the A, T and R are quite distinct

¹² Typically the markers of the T and R are not only phonologically identical to each other but also to the markers of the P. In the Austronesian language, Kambera (Klamer 1994: 66), however, when there is person agreement with both the T and R (only in clauses with a first- or second-person R and a third-person T) the forms used for the T are the same ones as that used for the R but distinct from the P forms. This may be seen as an instance of double oblique alignment.

from those found in transitive clauses. The alignment is thus neither indirective nor secundative. Nor owing to the portmanteau nature of the prefixes is the alignment evidently tripartite. And despite the person restrictions on the construction itself, the person agreement is not hierarchically determined, since it always involves both the T and R, albeit always only a third-person T.

If person marking of both the T and R, other than the uncontroversially indirective, is by means of phonologically identical person markers, the question arises as to the alignment of the relevant forms. The answer depends on whether or not we take into account location and/or order in the determination of alignment. Let us consider a location/order-sensitive analysis first.

3.1. *Ditransitive alignment and affix order*

In the vast majority of languages that display person agreement with the P, T and R, both the T and R markers occur on the same side of the verbal stem as the P.¹³ Thus, most of the existing patterns of marking conform to one of the four simplified ordering schemes in (26).

- | | | | |
|---------|----------|----|----------|
| (26) a. | R-T-verb | b. | verb-T-R |
| | P-verb | | verb-P |
| c. | T-R-verb | d. | verb-R-T |
| | P-verb | | verb-P |

As noted by Gensler (2002), all of these ordering patterns are common and there does not appear to be any clear preference for preverbal as opposed to postverbal location, or positioning the R before the T (26a,d) or closer to the verbal stem than the T (26c,d). However, my data suggest that among the languages in which the P, T and R are not phonologically distinct, the patterns of marking in (26c,d), i.e., where the R is placed closer to the verbal stem than the T, are much more common than those in (26a,b) where it is the T that is positioned closer to the verbal stem than the R. In fact I have no example of pattern (26a) and

¹³ The five languages that I have come across in which the R and T occur on opposite sides of the verb are Basque, Kanusi, Sumerian, Ungarinjin and Yimas.

only one, from the Papuan language Amele, of pattern (26b). This is illustrated in (27).

(27) Amele

a. hina qet-ih-i-na.

you cut-2SG(P)-PRED-3SG:PRES(A)

'He is cutting you.'

b. ija sigin eu unan-ad-ih-ig-en.

I knife that sharpen-3PL(T)-2SG(R)-1SG(A)-FUT

'I will sharpen those knives for you.'

(Roberts 1987: 279–80)

By contrast, pattern (26c) is found in various Bantu languages, such as Kinyarwanda (Gary and Keenan 1977: 92) and Kichaga (Bresnan and Moshi 1990: 151) as well as in Lakhota (Van Valin 1977: 7) and the Wasco-Wishram dialect of Chinookan. It is exemplified in (28) on the basis of Chinookan.

(28) Chinookan

a. ga-c-l-u-lada.

PAST-3SGM(A)-3NEUT(P)-DIR-throw

'He threw it.'

b. ga-c-l-as-l-u-lada.

PAST-3SGM(A)-3NEUT(T)-3DU(R)-TO-DIR-throw

'He threw it at the two of them.'

(Silverstein 1976: 130)

And pattern (26d) illustrated in (29) from the Nilo-Saharan language Noon also occurs in Diola Fogny (Sapir 1965: 30, 92), Doyayo (Wiering and Wiering 1994: 74, 187, 75), Koromfe (Rennison 1997: 69) and Nama (Hagman 1973: 157).

(29) Noon

a. mi hot-ta-ri daa-ma.

I see-NARR-3SG(P) there

'I saw her there.'

b. mi amdoh-haa.

I help-2SG(P)

'I help you.'

c. mi teeb-pi-raa.

I present-3SG(R)-2SG(T)

‘I present you to her.’

(Soukka 2000: 104, 200–2)

The nature of the alignments of the P, T and R reflected in (26) depends on whether the alignment is established on the basis of relative closeness of the respective affixes to the verbal stem or in terms of their left-to-right order. Taking closeness to the verbal stem as the relevant criterion, the patterns in (26a, b) instantiate indirective alignment and those in (26c, d) secundative alignment. In terms of left-to-right order, on the other hand, (26a, d) constitute instances of secundative alignment and (26b, c) instances of indirective. Thus given the preference for (26c, d) among languages in which the T and R are not phonologically distinct, if we define alignment in terms of closeness to the verbal stem, the dominant alignment is clearly secundative. If, however, we take the relevant criterion for the determination of alignment to be left-to-right order, then both indirective and secundative alignments emerge as equally common. A preference for indirective may be discerned in prefixal position and for secundative in suffixal position.

We have just seen that affix order as a diagnostic of alignment is subject to interpretation; order may be viewed in terms of closeness to the stem or in terms of left-to-right placement. In the case of suffixes the two criteria converge in defining the same alignment, either indirective (26b) or secundative (26d), but in the case of prefixes they do not. Therefore if order is to be used as the basis for the determination of alignment in languages which have phonologically non-distinct agreement markers, some decision has to be made in regard to the nature of the ordering facts to be considered. However, in the absence of any firm basis for choosing between the two ordering criteria in question, it may be more desirable to adopt an alternative analysis of the nature of the alignment.

3.2. *Neutral alignment*

We have seen that there are languages which manifest agreement with the P, T and R by means of phonologically identical markers. In most of the languages in question it is possible to analyse the

alignment of the agreement markers as non-neutral on the basis of their relative order. There are, however, languages where the T and R do not have a unique order. This is the situation in several Bantu languages such as Lomongo and Haya, as illustrated in (30) and (31).

- (30) Lomongo
 a-o-ko-m-kaa.
 3SG-PAST-2SG-1SG-*give*
 'He gave you to me./He gave me to you.'
 (Duranti 1979: 35)

- (31) Haya
 a-ka-ba-mu-lee't-el-a.
 3SG-PAST-3PL-3SG-*bring*-APPL-IND
 'He brought them to him./He brought him to them.'
 (Hyman and Duranti 1982: 232)

Observe that both clauses are ambiguous as far as the identity of the referents of the T and R are concerned. In both instances either of the two non-subject affixes can correspond to the T or the R, irrespective of which is located closer to the verb stem or which comes first. For languages like Lomongo and Haya order does not constitute a possible basis for the determination of alignment. Since the T and R are not distinguished from each other (nor from the P) in terms of phonological form or order, the alignment must be characterised as neutral.

A neutral analysis of the agreement marking in languages like Lomongo and Haya is possible provided the term 'neutral with respect to alignment' is understood as meaning non-distinct rather than lacking in marking. Although this is the original meaning of the term neutral, it has come to be equated with the latter. This is especially so in relation to agreement. Neutral alignment in the case of monotransitive alignment has to date been invariably associated with absence of agreement. With the extension of the notion of alignment to ditransitive clauses, the equation between neutral alignment and absence of agreement can no longer be maintained. A distinction needs to be made between absence of agreement and

neutral agreement, with the latter denoting the use of the same agreement markers for each of the three categories in question.¹⁴

If the notion of neutral alignment is no longer equated with absence of agreement and is used to characterise agreement markers which are non-distinct, phonologically and in terms of order, as in Lomongo and Haya, might it not also be extended to agreement markers which are just phonologically non-distinct? If so, we could dispense with affix order as a criterion for identifying the alignment of agreement markers altogether. Accordingly, languages such as Noon, Chinookan and Kinyarwanda would be seen as exhibiting neutral ditransitive alignment of person agreement, on a par with languages such as Haya. The major difference between the two would then be that the former impose a strict ordering constraint on their agreement markers, while the latter do not.

One argument for a neutral characterisation of agreement systems in which the relevant agreement markers are not phonologically distinct is that clauses in which only one of the two markers occurs are potentially ambiguous. This is the case, for example, in Kinyarwanda and Modern Standard Arabic, as shown in (32b) and (33b).

(32) Kinyarwanda

a. Yohani y-a-yi-mw-oher-er-eje.

John 3SG:PAST(A)-3SG(T)-3SG(R)-send-APPL-ASP
‘John sent it to her.’

b. Yohani y-a-mw-oher-er-eje umugoe.

John 3SG:PAST(A)-3SG-send-APPL-ASP *woman*
‘John sent her to the woman.’/‘John sent the woman to her.’
(Gary and Keenan 1977: 92)

¹⁴ Actually this holds not only for agreement marking but also for nominal case marking. Overt marking of the P, T and R by the same case affix as, for example, in (i) is not all that rare.

(i) Modern Standard Arabic

a. 'alaja t-tabibu Hālid-an.

look after doctor:NOM Halid-ACC
‘The doctor looked after Halid.’

b. ?a'ty Zaydun Hālid-an hadiyyat-an.

gave Z:NOM H-ACC present-ACC
‘Zayd gave Halid a present.’

(Moutaoukil 1989: 56, 69)

(33) Modern Standard Arabic

a. ?a'tay-tu-ka-hu.

gave-1SG(A)-2SG(R)-3SGM(T)

'I gave him to you.'

b. ?a'taa-hu l-?ustaad-u ?iyyaa-k.

give-3SGM the-teacher-NOM you-ACC

'The teacher gave him to you/you to him.'

(Fassi Fehri 1993: 104-5)

Due to the fact that nominal Ts and Rs need not be distinguished from each other morphologically in Kinyarwanda or Modern Standard Arabic, *umugoe* in (32b) and *?iyyaa-ka* in (33b) can be interpreted either as an R or a T, and the person clitic on the verb, as a T or an R, respectively. This also holds for languages which allow only one of the two, either the T or the R, to be marked on the verb at any given time, such as Sesotho (Morolong and Hyman 1977) or Kimeru (Speed-Hodges 1976).

The other major argument for a neutral analysis of phonologically non-distinct agreement markers is consistency. If morphological form alone (to the exclusion of order) is used as the only criterion in regard to the determination of the alignment of case marking, the same should hold for the alignment of agreement markers. Is, however, morpheme order the same sort of phenomenon as word order? I presume that the overall consensus would be that it is not. Word order is always a matter of left-to-right sequencing, while morpheme order may involve positioning relative to the stem. Therefore, it could be argued that the two types of ordering phenomenon do not have the same effect on alignment.

4. CONCLUDING REMARKS

Which are the integral and which the contingent properties of a given category is often difficult to determine. This is especially so in relation to highly familiar notions the nature of which is assumed to be simply self-evident. Only when such notions begin to be applied in a novel way or to a new domain do we start questioning what exactly they entail. Such is the case with the notion of alignment.

The extension of the notion of alignment from monotransitive to

ditransitive clauses has forced us to reconsider our understanding of this notion and to critically review how different types of alignment are identified. In attempting to establish the existence of ditransitive counterparts of monotransitive alignments we abstracted away from the realisational, and arguably contingent, aspects of monotransitive alignments and concentrated on the patterns of identification. Thus we were able to identify evident counterparts of all the alignment types in the domain of person agreement marking, with the potential exception of active alignment. While there are languages which exhibit two types of person agreement with the P, the correspondences of these two types of agreement to the marking of the T and R appear to be only partial. Accordingly, they do not constitute direct counterparts of monotransitive active alignment. Further support for such a view comes from the apparent lack of semantic motivation for the two patterns of P agreement marking. However, this depends on whether or not semantic motivation is treated as a necessary property of active alignment.

The attempt to identify the nature of ditransitive alignments also highlighted the existence of several means of determining the alignment of person agreement and the need for establishing a consistent policy on how potential conflicts between the relevant criteria should be resolved. We have seen that conflicts between phonological form and order are relatively common in ditransitive clauses manifesting person agreement with both the T and R. Of particular interest are the agreement systems involving phonologically identical markers of the P, T and R. In such cases the nature of the alignment may be established on the basis of affix order or phonological form. The adoption of the latter criterion was suggested as being preferable, as it avoids the problem of the nature of the ordering facts to be considered, left-to-right order or closeness to the stem. However, it also necessitates a reconsideration of the nature of neutral alignment. To date, the notion of neutral alignment in the domain of agreement has been equated with lack of agreement. A consideration of person agreement in ditransitive clauses suggests that unless morpheme order is taken into account, such an equation can no longer be maintained. Neutral agreement is not absence of agreement but agreement via phonologically non-distinct markers.

While neutral agreement in the above sense is typical of ditransitive clauses, it is by no means confined to ditransitive clauses. For instance, according to Duranti (1979: 33) phonologically identical S, A and P agreement markers except for classes 1 and 9 are common throughout Bantu. Neutral S, A and P agreement is also often encountered in the non-singular among the Wambo languages of West Africa and Angola (Baucom 1974), and sporadically in the first person among the Mayan languages (e.g., in Acatec). Closer inspection of person-agreement systems which takes into account each person and number combination is likely to reveal many more such instances. Thus, the proposed distinction between neutral agreement and absence of agreement does not rest on the extension of the notion of alignment to ditransitive clauses. It is required independently.

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