

# IRREGULARITY AND PRONOMINAL MARKEDNESS: WHERE FAVORITISM SETS IN

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The principles associated with the ordering of two agreement markers on one verb are discussed in detail for Asmat. An argument is presented that some languages have agreement ordering systems that are simply irregular and cannot be modeled, short of being totally stipulative.

**1. PRONOMINAL SYSTEMS.** Much work has been published on the different types of pronominal systems to be found in different languages, and indeed in different subsystems of languages. This paper is concerned with the relative ordering of pronominal agreement suffixes with respect to one another when occurring bound to a verb in Asmat, a language of southwestern New Guinea (Drabbe 1953, 1963; Voorhoeve 1965, 1980). In Asmat, the majority of the verbal paradigm regularly shows a V-o-s ordering, but the position of the 1SG suffixes is difficult to model.

**2. ORDERING AGREEMENT.** There have not been many attempts to explain the different orders of subject and object agreement markers on verbs. In his survey of characteristics of the Papuan languages of New Guinea, Foley (1986:105) classifies the relative orderings of affixes for subject and object (at that time, the existence of Papuan languages with ergative-absolutive agreement systems was unknown), showing that all possible combinations of positions for subject marker, object marker, and verb stem are found. In this environment, we can find four out of the six agreement ordering possibilities (of those that involve agreement with two arguments; agreement with one argument is not discussed) that have both affixes on the same side of the verb: V-o-a, o-a-V, V-a-o, and a-o-V. These are all robustly attested in the languages of New Guinea (except for o-a-V, which is only attested in part of some paradigms, never as the sole option in an agreement set).

**3. DISORGANIZATION.** In addition to the systems described above, which are all amenable to modeling with differing degrees of complexity, we can also

recognize languages in which there simply is not a set of nonstipulative principles governing the organization of the morphemes. There is a degree of irregularity in an otherwise ordered system.

**3.1 ASMAT.** Asmat (Asmat-Kamoro family, southwestern West Papua) is a language with verbs containing suffixes for both subject and object. We examine materials from a range of dialects of Asmat, and analyze the resulting paradigms of subject and object suffixing to show that, while the majority of the paradigm is regular, there are some unexplainable but not quite suppletive discrepancies in the forms.

The verb *por-* 'see' has the forms shown in table 1 for different combinations of subject and object in the ultimate past paradigm, which is typical of the other paradigms but lacks complicating tense suffixes (Voorhoeve 1965:107). (Some cells have been left blank, because they represent combinations that can only be expressed by means of reflexive morphology.)<sup>1</sup> It is clear that the root does not have morphophonemic interactions with the suffixes, and also that there are no suffixes other than those needed to mark the person and number of the subject and object. Furthermore, these suffixes do not significantly interfere with either other, and do not result in portmanteau forms. The only variation we see are some vowel-harmony phenomena that are easily factored out. The one exception to this is the cell for 3PL SUBJ → 2PL OBJ, in which only the object form appears, not the expected \**pornés*.

Basic segmentation of the suffixes produces the groups shown in table 2, where each suffix is subscripted "s" if it indicates the subject (transitive or intransitive) and "o" if it indicates the object of the verb. We note that there is not a simple one-to-one assignment of form to person/number category-marking function in Asmat. The O-marking suffix *-n*, for instance, appears in the table to mark a 1SG, 2SG, and 2PL object. In contrast to this, the 1PL object is marked with *-aw*, which does not serve any additional functions.

In table 3, we can see that the usual order of suffixes and verb is V-o-s. This is transparently true for all of the cells involving 2SG, 1PL, 2PL, and 3PL subjects, with the only complication being that there is no object suffix for the 3SG object, leaving only the subject suffix and no obvious means of determining the order. The absence of marking for third person is not unusual, and in fact is also found in the paradigm of subject suffixes. When the subject is third-person singular, we can see all the cells filled with only the object suffix, meaning that these forms, too, are not problematic in interpretation. This leaves only the 1SG subject row, which we discuss below. The affix ordering is shown in table 3.

1. The abbreviations A, S, and O represent (following Heath 1975) the most agentive argument of a primary transitive verb, the single argument of an intransitive verb, and the least agentive argument of a primary transitive verb, respectively, plus other arguments that behave in the same way morphosyntactically. For a fuller explication, see Andrews (1985:68). SUBJ is used to refer to the grouping of S + A as a morphological class, and OBJ is used as an alternative to O. Other abbreviations include 1, first person; 2, second person; 3, third person; ASPECT, aspect marker; DL, dual; FUT, future; LOCAL, local person (1st or 2nd); NON:2, nonsecond person; PAST, past tense; PL, plural; PRES, present; SG, singular.

**TABLE 1. THE VERB *POR-* IN THE FLAMINGO BAY DIALECT OF ASMAT (VOORHOEVE 1965)**

SUBJ\OBJ	1SG	2SG	3SG / Ø	1PL	2PL	3PL
1SG	—	por-ín	por-í	—	por-ín	por-í
2SG	por-ném	—	por-ém	pór-awóm	—	por-ém
3SG	por-én	por-én	por	por-áw	por-én	por-áw
1PL	—	por-nóm	por-óm	—	por-nóm	por-óm
2PL	por-nokóm	—	por-kóm	por-awkóm	—	por-kóm
3PL	por-nés	por-nés	por-és	pór-awós	por-én	por-és

**TABLE 2. PRONOMINAL SUFFIXES IN FLAMINGO BAY ASMAT**

SUBJ\OBJ	1SG	2SG	3SG / Ø	1PL	2PL	3PL
1SG	—	-ís-n <sub>O</sub>	-ís	—	-ís-n <sub>O</sub>	-ís
2SG	-n-ém <sub>S</sub>	—	-ém <sub>S</sub>	-aw <sub>O</sub> -óm <sub>S</sub>	—	-ém <sub>S</sub>
3SG	-én <sub>O</sub>	-én <sub>O</sub>	Ø	-áw <sub>O</sub>	-én <sub>O</sub>	-áw <sub>O</sub>
1PL	—	-n <sub>O</sub> -óm <sub>S</sub>	-óm <sub>S</sub>	—	-n <sub>O</sub> -óm <sub>S</sub>	-óm <sub>S</sub>
2PL	-n <sub>O</sub> -okóm <sub>S</sub>	—	-kóm <sub>S</sub>	-aw <sub>O</sub> -kóm <sub>S</sub>	—	-kóm <sub>S</sub>
3PL	-n <sub>O</sub> -és <sub>S</sub>	-n <sub>O</sub> -és <sub>S</sub>	-és <sub>S</sub>	-aw <sub>O</sub> -ós <sub>S</sub>	-én <sub>O</sub>	-és <sub>S</sub>

**TABLE 3. SUFFIX ORDERING IN FLAMINGO BAY ASMAT**

SUBJ\OBJ	1SG	2SG	3SG / Ø	1PL	2PL	3PL
1SG	—	-ís-n <sub>O</sub>	-ís	—	-ís-n <sub>O</sub>	-ís
2SG	V-o-s	—	V-o-s	V-o-s	—	V-o-s
3SG	V-o-s	V-o-s	V-o-s	V-o-s	V-o-s	V-o-s
1PL	—	V-o-s	V-o-s	—	V-o-s	V-o-s
2PL	V-o-s	—	V-o-s	V-o-s	—	V-o-s
3PL	V-o-s	V-o-s	V-o-s	V-o-s	V-o-s	V-o-s

It is immediately apparent that the 1SG → 2(SG/PL) forms are problematic. In these forms, the order of the affixes is clearly V-s-o, and not the other way around. This might be argued to be an anomaly, applying only to this unusual interaction of two local persons, but that would ignore the fact that a 1PL subject involves no such unusual ordering, with forms like *pornóm* ‘We saw you’ and V-o-s ordering. Exactly this point was noted by Voorhoeve (1965:85), who writes that “the suffix indicating the subject only occurs before the suffix indicating the object in form 2 [I – you, you (pl.)].” Furthermore, examining materials from other dialects of Asmat reveals that this is a more regular trait.

In Drabbe’s (1963:37–38) description of the Kawenak dialect of Asmat (closely related to the Flamingo Bay variety in Voorhoeve’s description, both being members of the same dialect of Central Asmat) a similar set of verbal pronominal suffixes can be found. Table 4 is comparable to Table 1, for the same verb, but representing the immediate past tense.

We can see that in this variety of Asmat there is an overt suffix for third-person object, *-r*, which appears as the object marker in all instances, making several decisions about affix ordering less arbitrary.<sup>2</sup> The only irregularity in this paradigm (other than the 3PL → 2PL cell, already mentioned for table 1) is that the third-person object suffix has the allomorph *i* after a full lexical vowel (here found only in the 1SG suffix, all the other suffixes being C-final). Schwas (indicated by Drabbe with *e*), as opposed to *é* [ɛ], *â*, or *o*, are inserted between the tense-marking *m* and the object marking *r*. This is explained by Drabbe as a regular morphophonemic rule that applies to other combinations in the language, and should not be thought of as ad hoc.<sup>3</sup> A summary of the different suffixes is given in table 5 (hyphens follow Drabbe's use; subscripting is the same as in table 2).

Comparing this table with the equivalent forms from Flamingo Bay Asmat, we can see that the placement of the 1SG suffix (*-i* in Flamingo Bay, *-è* in Kawenak Asmat) is regularly preceding any object suffix. The Keenok and Keenakap dialects, also described by Drabbe, lack the 3OBJ suffix, and otherwise behave almost identically to the dialects above, appearing morphologically to be closely related transition dialects. An *-r* for third person is also found occasionally in Voorhoeve's data. For a fuller treatment of Asmat dialects, see Voorhoeve 1980.

These tables can be reduced to sets of distinctive features on the different morphemes, given in table 6. Note that the differences in vowels are largely differences in transcription practices, or of degrees of writing epenthetic vowels, and do not reflect different morphemes (see Voorhoeve 1965:85). The subject suffixes are listed first, using an unproblematic set of fairly standard binary features.

Although we could state additionally that, for instance, the *-om* suffix was specified as being [-second person], this is redundant, given a morpheme with overt specification for the value [+first person]. Other instances of underspecification are indicated by a full stop (.) in the table. Morphological blocking (Andrews

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2. The 1PL object marker *-arou* might not be reflecting a difference to Voorhoeve's described dialect, but may simply reflect an orthographic choice (*ou* is pronounced [aw] in Dutch); Voorhoeve notes that his *-aw* is sometimes heard as *-raw*, and Drabbe notes that in Keenok and Keenakap the suffix is *-arao*, closer to *-raw*. This all suggests that the transcription differences in the 1PL object marker do not reflect a real difference in speech. Nevertheless, the transcription differences between Drabbe and Voorhoeve have been maintained here.
3. Furthermore, it is a feature of this western variety of (Central) Asmat that what corresponds to *r* in other varieties is often palatalized near a front vowel. Consider the following comparisons, showing the preservation of *r* when adjacent to phonemically nonfront vowels in Kawenak, and its palatalization to *c* when next to high front vowels.

	KAWENAK	KEENOK (NORTHERN)	KEENAKAP (INLAND)
'we'	ndar	ndar	ndar
'buttocks'	mbor	mber	mbor
'dog'	juur	juuri	zuuri
'crowned pigeon'	jur [jür]	jir	zu
'thorn'	ici	iri	iti
'dark'	jjwic	jjir	züütü

Exceptions such as *wir* 'thunder' are clearly innovations, as can be seen comparatively. For example, Keenok *wur*, Keenakap *wur* point to Proto-Asmat *\*wuru* (Voorhoeve 1980: 116).

1990) accounts for the nonuse of, for instance, *-es* as a marker of any but third-person plural: there are more highly specified forms available for both first (*-om*) and second (*-[o]kom*) person plural. If we did not wish to adopt this model of morphological patterning, we could simply specify *-es* as having the features [–first person] and [–second person], thus requiring it to be third person. Neither choice would affect the analysis here.

The object suffixes are a little more complicated, involving some under-specification of features in order to deal with the *-n* suffix that can mark three different person/number combinations as object, but crucially cannot appear with third-person objects. It is specified as being either first or second person, and must bear a positive value for one or the other.

**TABLE 4. KAWENAK BAY DIALECT OF ASMAT (DRABBE 1963)**

SUBJ\OBJ	1SG	2SG	3SG	1PL	2PL	3PL
1SG	—	por-m-èn	por-m-èi	—	por-m-èn	por-m-èi
2SG	por-m-enèm	—	por-m-erèm	por-m-arouèm	—	por-m-erèm
3SG	por-m-àn	por-m-àn	por-m-òr	por-m-arou	por-m-an	por-m-òr
1PL	—	por-m-onòm	por-m-oròm	—	por-m-onòm	por-m-oròm
2PL	por-m-onokòm	—	por-m-orokòm	por-m-arouokòm	—	por-m-orokòm
3PL	por-m-enès	por-m-enès	por-m-erès	por-m-arouòs	por-m-àn	por-m-eres

**TABLE 5. SUFFIXES IN KAWENAK BAY ASMAT**

SUBJ\OBJ	1SG	2SG	3SG	1PL	2PL	3PL
1SG	—	-ès-n <sub>o</sub>	-ès-i <sub>o</sub>	—	-ès-n <sub>o</sub>	-ès-i <sub>o</sub>
2SG	-e-n <sub>o</sub> -è <sub>m</sub> <sub>s</sub>	—	-e-r <sub>o</sub> -è <sub>m</sub> <sub>s</sub>	-arou <sub>o</sub> -è <sub>m</sub> <sub>s</sub>	—	-e-r <sub>o</sub> -è <sub>m</sub> <sub>s</sub>
3SG	-à-n <sub>o</sub>	-à-n <sub>o</sub>	-ò-r <sub>o</sub>	-arou <sub>o</sub>	-à-n <sub>o</sub>	-ò-r <sub>o</sub>
1PL	—	-o-n <sub>o</sub> -ò <sub>m</sub> <sub>s</sub>	-o-r <sub>o</sub> -ò <sub>m</sub> <sub>s</sub>	—	-o-n <sub>o</sub> -ò <sub>m</sub> <sub>s</sub>	-o-r <sub>o</sub> -ò <sub>m</sub> <sub>s</sub>
2PL	-o-n <sub>o</sub> -okòm <sub>s</sub>	—	-o-r <sub>o</sub> -okòm <sub>s</sub>	-arou <sub>o</sub> -okòm <sub>s</sub>	—	-o-r <sub>o</sub> -okòm <sub>s</sub>
3PL	-e-n <sub>o</sub> -ès <sub>s</sub>	-e-n <sub>o</sub> -ès <sub>s</sub>	-e-r <sub>o</sub> -ès <sub>s</sub>	-arou <sub>o</sub> -òs <sub>s</sub>	-à-n <sub>o</sub>	-e-r <sub>o</sub> -ès <sub>s</sub>

**TABLE 6. FEATURES DESCRIBING THE SUBJECT SUFFIXES**

KAWENAK	FLAMINGO BAY	1	2	PL	OBJ
-è	-i	+	.	.	—
-è <sub>m</sub>	-ém / -óm	.	+	.	—
-ò <sub>m</sub>	-óm	+	.	+	—
-okòm	-(o)kóm	.	+	+	—
-ès	-és	.	.	+	—

**TABLE 7. FEATURES DESCRIBING THE OBJECT SUFFIXES**

KAWENAK	FLAMINGO	1	2	PL	OBJ
-arou	-aw	+	.	+	+
-(à/o/e)n	-n	α	-α	.	+
-r / -i	-θ	.	.	.	+

The complexities here are not great. The *-arou / -aw* suffix is simply restricted to marking a first-person plural object; the *-n* suffix, on the other hand, is fairly unrestricted, and (based on the interpretation of the features set up in table 7) may mark any of 1SG, 2SG, 1PL, or 2PL. It may not be used to mark a third-person object, as a third person would necessarily be one that specifies both [-first person] and [-second person], and *-n* requires that the values for first and second person be opposite: either [+first person] and [-second person] or [-first person] and [+second person]. The nonappearance of *-n* with a 1PL object is explained by appeal to morphological blocking again, and this same appeal justifies the nonuse of the Kawenak *-r / -i* on any but third persons.

**3.2 ATTEMPTS TO MODEL ASMAT.** The preceding section has presented a detailed account of verbal agreement in Asmat. The suffixes that mark subject appear, in transitive verbs, predominantly following a suffix that marks the object of the verb.<sup>4</sup> The feature specification of these object suffixes is severely depleted, with one form, *-n*, serving to mark agreement with half the paradigm.

In this section, I present attempts to model the ordering of Asmat agreement suffixes by appealing to the syntactic roles that they monitor, or by the relative animacy of the two arguments, or by a combination of these factors.

**3.2.1 Asmat by syntactic roles.** If we attempt to model the Asmat agreement system through syntactic roles, we can quickly find one rule that generalizes over most of the paradigm. Recalling the orders shown in table 3, we can immediately state the ordering preferences for the majority of cases as

Align (S/A, Right) » Align (O, Right),

which gives a V-o-s order in the verb, because the constraint calling for a rightmost object marker is less strong than the one that requires the subject marker to be rightmost. Crucially, however, this fails to account for the V-s-o order found with the 1SG subject, and so we can see that appeal to syntactic roles alone cannot provide an accurate model of the affixes.

**3.2.2 Asmat by animacy.** Appealing to the animacy of the arguments in Asmat as a means of modeling the orders of the suffixes is not without its merits. Consider these two examples:

(1) Por-n-ém.  
see-1SG.O-2SG.A  
'You saw me.'

(2) Por-í-n.  
see-1SG.A-2SG.O  
'I saw you.'

Despite the suffixes showing the syntactic roles of the arguments that they index, we can see that there is a requirement operating that makes the actual order of the

4. Through a fairly invariant set of suffixes that do not form portmanteau forms with tense marking, as is so often the case in Papuan languages.

two affixes independent of the syntactic roles, and depends on the animacy of the arguments, with the ISG suffix in both cases being placed closer to the verb, despite its marking subject in one case, and object in the other. This would be modeled with the following formalism:

Align (Low animacy, Right) » Align (High animacy, Right)

This analysis comes into trouble when we also consider the forms with plural subjects. Compare the animacy-based orderings in (1) and (2) with the following pair, which show no such animacy constraints.

- |  |   |
|--|---|
| (3) Por-n-okóm.<br>see-1SG.O-2PL.A<br>'You (PL) saw me.' | (4) Por-n-óm.<br>see-2SG.O-1PL.A<br>'We saw you.' |
|--|---|

In both of these examples, the object suffix is aligned closer to the verb stem than the subject suffix, despite the reversal in animacy relationships. Clearly animacy, like syntactic roles, is not in and of itself a sufficient predictor of affix ordering.

**3.2.3 Syntactic roles and animacy.** Combining the two approaches detailed above might be thought to provide a solution to the ordering problems. The syntactic-roles approach accounts for all of the forms except those involving high animacy subjects, so we might state a combined schema as

Align (Low animacy, Right) » Align (S/A, Right) » Align (O, Right),

which states that object marking precedes subject marking, as long as the animacy of that object is lower than that of the subject. This successfully predicts the position of the ISG subject marker before the markers for object, because first person outranks all others on the animacy hierarchy.

Unfortunately, this very ascendancy of first person is also the undoing of this model, because, again, the IPL forms fail to show V-s-o order. We might evade this with a statement that only ISG "counts" as far as animacy ordering goes, not just animacy: this is in any case necessary, because for a second-person subject and third-person object, we do not find V-s-o order, but rather V-o-s:

- |   |                            |
|---|----------------------------|
| (5) Por-m-or-okòm.<br>see-TENSE-3.O-2PL.A<br>'You (PL) saw them.' | (Drabbe's Kawenak dialect) |
|---|----------------------------|

The set of constraints that we would need would be something like

Align (S/A, Right) » Align (O, Right) » Align (1SG, Right),

which states simply that the ISG forms cannot appear to the right of any other agreement forms. This is an adequate characterization of the relative ordering of the affixes, but is also completely stipulative, and does not appeal to principle. A model of this sort is not predictive for any other situation, and bears no explanation or account of why the ISG affix should be treated so differently, because neither syntactic role nor relative animacy serves a predictor of its special treatment.<sup>5</sup>

**4. IRREGULARITY AND LEXICAL EXCEPTIONS.** In the discussion of Asmat agreement, we have seen that there are, in the end, no regular conditions that model the position of the 1SG subject prefix, other than a purely stipulative set. A regular approach, based on the syntactic roles borne by the different affixes or on the relative animacy of the two, does not work.

It appears that the only way to account for the position of the 1SG subject suffix in Asmat is to simply stipulate it as appearing before all the other pronominal suffixes.<sup>6</sup> While doing this, we may iron out the other irregularity in the verbal paradigm, and account for the exceptional 3PL → 2PL form. The resulting four positions for pronominal suffixes are more numerous than the two proposed by Drabbe and Voorhoeve, but more able to account for the irregularities of the data.

**TABLE 8. REVISED PICTURE OF ASMAT VERBAL AGREEMENT POSITIONS**

ROOT	POSITION I	POSITION II	POSITION III	POSITION IV
		1/2SG.O -n	2PL.O -n	
				2SG.A -ém
V-	1SG.A -í	1PL.O -aw	2PL.A -ok	
				1/2PL.A -óm
		3.O -r	3PL.A -és	

This table separates the 2PL.O suffix *-n* from the other suffixes of the same form, the 1SG and 2SG. This is done simply to put it in the same morpheme position as the 3PL subject suffix. In table 1, we noted that the only irregularity, apart from the ordering of the 1SG subject suffix, was that the 3PL → 2PL form was simply *-én*, marking just the object, and not the expected *\*-n-és*, with both object and subject marked. If the two affixes are competing for the same morpheme position, then this is no longer an irregularity in the paradigm; we simply need to add a condition that the marking of an object is more important than the marking of a subject, if the two come into competition (Parse [OBJ] » Parse [SUBJ]). The separation of the 2PL subject suffix into a 2PL component, *-ok*, and a more general 1/2PL component, *-óm*, is less motivated by morphological requirements and more by an appeal to symmetry. This solution reflects the same distribution of features as was found in the object set, making the object and subject suffixes more similar in that respect (under this analysis, the *-óm* morpheme would be specified as [α 1st person], [-α 2nd person], [+PL], [+OBJ]; compare these features with the values for *-n* given in table 7).

5. It is worth noting that in the closely related Kamoro language (Drabbe 1953), which has a similar set of pronominal agreement suffixes (the 1PL form *-aw* is replaced with the even more general *-n* suffix; the same irregularity of 3PL → 2PL exists), the third-person object suffix (*-r*) consistently precedes the subject marker, even the 1SG suffix: *makaom-ar-i* (hit:TENSE-ASPECT-3SG-1SG) 'I hit him.' (Drabbe 1953: 13), indicating that this feature of the Asmat agreement system is a diachronic, as well as synchronic, irregularity.

6. Stipulations involving the interaction of both local persons are not uncommon, but stipulations that globally affect one of these persons with respect to all other arguments are unusual.



**4.1 SUPPLETIVE VERB FORMS ELSEWHERE.** In this section I present briefly some evidence from other languages in New Guinea that there are often parts of a verbal paradigm that do not behave as transparently as might be hoped.

**4.1.1 Yimas.** The prefixal system of verbal agreement in Yimas (Papua New Guinea, Foley 1991; similar facts hold in Abinomn of West Papua) orders two prefixes according to animacy. In the following pair of examples, we can see that the higher animacy 1SG argument is always placed closest to the verb, regardless of the syntactic role it bears:

- |  |   |
|--|---|
| (6) Pu-ka-tay.<br>3PL-1SG.A-see<br>'I saw them.' | (7) Pu-ŋa-tay.<br>3PL-1SG.O-see<br>'They saw me.' |
|--|---|

This is repeated with a 2SG argument, showing that this is not just a quirk of the 1SG paradigm, but a regular expression of the fact that first or second persons outrank third persons ([Local] » 3, in Aissen's 1998 terms, using the label "local" where others have also used SAP for "speech act participant" to refer to [either of] the first or second persons) on the animacy hierarchy.

- |   |   |
|---|---|
| (8) Pu-n-tay.<br>3PL-2SG.A-see<br>'You saw them.' | (9) Pu-nan-tay.<br>3PL-2SG.O-see<br>'They saw you.' |
|---|---|

Given equal animacy, the O is outermost, as seen with these two examples involving third-person Os:

- (10) Pu-n-tay.  
3PL-3SG-see  
'He saw them.'

Perhaps most interestingly, and most indicative of the fact that animacy is the key determiner of affix ordering in Yimas, is the result of two local persons acting on each other. Here the requirement that the object be outermost (seen in the 3 → 3 part of the paradigm) is again overruled in 2 → 1:

- (11) Ma-ŋa-tay.  
2SG.S-1SG.O-see  
'You saw me.'

This system collapses in certain contexts, namely for a 1SG A and a 2SG O, in which case the regular system of prefixes is no longer used, and a suppletive portmanteau form, *kampan-*, encoding both these arguments and their syntactic roles, is used instead.

- (12) Kampan-tay.  
1SG.A/2SG.O-see  
'I saw you.'

When the object is nonsingular, there is no suppletive form, and only the object is marked. The subject, if present, is shown with the intransitive subject pronoun.

- (13) (Ama) ŋkul-cay.  
 1SG.S 2DL.O-see  
 ‘(I) saw you two.’

A perhaps more expected set of morphemes would be:

- (14) \*Nan-ŋa-tay.  
 2SG.O-1SG.A-see  
 ‘I saw you.’

This is not attested; the 2SG.O prefixes must appear word-internally only. The only exception to this is *ma-*, a normally intransitive form used to mark transitive subjects only when acting on first-person objects. The use of these intransitive pronominals, as with the intransitive (free) pronoun in (13), marks these parts of the verbal paradigm as exceptional, and not predictable by normal means.

**4.1.2 Sentani.** Sentani is a language with a normal ordering of agreement suffixes on the verb as V-s-o; the data concerning verbal suffixing can be found in D. Hartzler (1976). This can be seen in (15) and (16) (presented in orthography; a discussion of the phonology of Central Sentani can be found in M. Hartzler 1976).

- |  |   |
|--|---|
| <p>(15) Ere-k-Ø-e-te.<sup>7</sup><br/>         see-PAST-(3SG)-2SG-2SG<br/>         ‘He saw you.’</p> | <p>(16) Ere-k-ai-ne.<br/>         see-PAST-3PL-3SG<br/>         ‘They saw him.’</p> |
|--|---|

With a first- or second-person singular subject, we find the object suffix preceding the subject suffix, the opposite ordering from that with non-[first- or second-person singular] subjects. The next two examples show that the order of the affixes is reversed for a first-person singular subject compared to the order found with a third-person subject.

- |  |  |
|--|--|
| <p>(17) Ere-k-an-a-lé.<br/>         see-PAST-3SG-1SG-1SG<br/>         ‘I saw him.’</p> | <p>(18) Ere-k-eu-fe.<br/>         see-PAST-3SG-1SG<br/>         ‘He saw me.’</p> |
|--|--|

The next pair shows that the V-o-s order is also found with a second-person singular subject, even when the object is first person.

- |  |   |
|--|---|
| <p>(19) Ere-k-an-ae.<br/>         see-PAST-3SG-2SG<br/>         ‘You saw him.’</p> | <p>(20) Ere-k-ar-ae.<br/>         see-PAST-1SG-2SG<br/>         ‘You saw me.’</p> |
|--|---|

7. There is a third agreement position in Sentani that follows all other suffixes, and that is not fixed in terms of its reference. The portmanteau morphemes that fill this position sometimes index S/A, sometimes S/O, and sometimes just O, depending on the person and number of the argument(s) of the verb, and the tense (future versus nonfuture) of the clause. This is not discussed here, as it does not affect the orders of the first two affixes.

Here, as with the situation with Asmat, there is no set of nonstipulative principles that guides the placement of object suffixes. In Sentani, if a suffix represents a (singular) local person, then it must precede the other suffixes. This may be modeled as

Align (O, Right) » Align (S/A, Right) » Align (Local-SG, Right).

Even this highly stipulative model encounters problems, however. In Sentani, the tense of the verb is also a determiner of suffix ordering, and in future tense, the order for all suffixes is V-s-o, including the local singular subjects. A pair of examples illustrates this change.

- |   |  |
|---|--|
| (21) Ere-re-m-bo-ndé.<br>see-1SG.FUT-3SG-ASPECT-NON:2<br>'I shall see him.' | (22) Ere-n-se-bo-ndé.<br>see-3SG.FUT-1SG-ASPECT-NON:2<br>'He will see me.' |
|---|--|

An attempt to provide a consistent model for all of this variation meets with too many stipulations to be meaningfully predictive. As with Asmat and Yimas, we need to acknowledge that this part of the Sentani verbal paradigm is not governed by the same (complex set of) rules of ordering that govern the rest of the paradigm, and that an attempt to provide a single principled model for the whole paradigm, while possible, will be too stipulative to be usefully predictive.

**4.2 WHY FIRST AND SECOND PERSON?** In many of the systems that have been examined above, we have seen that the irregularities appear in conjunction with first and second persons, and particularly when both arguments of the verb are first or second person. Given this cross-linguistic tendency, we must ask why this might be so, because it appears more often than can be attributed to chance.

The fact that the irregularities all involve local persons is striking, and probably reflects the greater salience in discourse that these persons must necessarily hold. It is a fact (as pointed out by Foley and van Valin 1984:2) that most studies of discourse and descriptions of language are based on narrative texts, involving third persons acting on each other. This is not a totally biased perspective, because a highly salient function of language is to narrate accounts of unobserved happenings, and the fact of their nonobservation by either the speaker, the hearer, or both, entails that this is the part of the grammar that should be maximally differentiated and maximally regular.<sup>8</sup>

For a speech act involving the speaker and the hearer alone, it is not surprising that a degree of irregularity can creep in to the otherwise regular paradigms. In most types of speech act, there is no doubt as to the roles that the speaker and hearer play, and so there is less need to be exact. Even disregarding the affix ordering conundrum in Asmat, we have the fact that the object marker for first

8. We might ask why the third person is more often encoded by zero than the local persons. I suggest that this reflects the formal specifications that are encoded by those pronouns: local persons are (usually) [+first person] or [+second person], whereas third-person pronouns are simply underspecified.

person and second person are identical: this is, however, never a problem in real discourse, because the speaker and the hearer are in communication with each other, and the hearer can either extract additional meaning by reference to intonation or speech-act type, or can sort out the misunderstanding with a simple question for clarification. While this does not explain why there should be irregularity in a paradigm, even a well-used one, it does offer a slight explanation for why that irregularity should consistently cluster about the first and second persons.

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