# Split Intransitivity and Saweru

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The phenomenon of split-intransitivity is discussed in a variety of languages, emphasizing the contrast between two-way and three-way split-intransitivity. The agreement system of Saweru, a Papuan language of West Papua, is examined, and there follows a discussion of where Saweru fits into a typology of split-intransitivity.

1. INTRANSITIVITY SPLITS AND ALIGNMENT. The simple, yet effective, diagnostic of alignment (whether morphological or syntactic) in a language relies on the examination of the treatment afforded to the single argument of an intransitive verb, and a comparison of this with the treatment of the arguments of primary transitive verbs. Using the labels A, S, and O to represent the syntactic roles found in these clauses (Heath 1975, Dixon 1979, 1994—the labels are defined as per Andrews 1985:68, with S corresponding to an intransitive predicate's sole argument, and A and O representing, respectively, the most and least agentive arguments in a transitive verb's subcategorization frame), we can plot the more common variations in treatment according to groupings of these arguments, and the labels that are used to describe them, as shown in figure 1.

When we are discussing morphological alignment, the morphology that encodes these groupings can be nominal case marking, or verbal agreement, or both; additionally, the most common system has one category being overtly marked morphologically, and the other not. Examples of morphological groupings leading to alignment classification can be found overtly in Japanese and Nias. In Japanese, the alignment is determined by examining the case marking, which utilizes the particles *ga* and *o*, marking S and A groupings and an O category respectively, thus leading to the conclusion that there is a nominative-accusative alignment.

FIGURE 1. ALIGNMENT
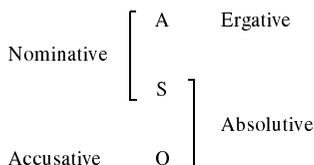
JAPANESE:

(1) [S Ano hito ga] ik-ta.
       that   person NOM   go-PAST
    'That person went.'

(2) [A Ano hito ga]   [O tori o]   mi-ta.
       that   person NOM   bird ACC   see-PAST
    'That person saw a bird.'

(3) Japanese case marking and syntactic roles

	A	S	O
ga	✓	✓	
o			✓

In Nias (Donohue and Brown 1999), we find alignment determined by verbal agreement, which has an overt category for A, and no agreement for S or O (thus following an ergative pattern). This alignment is confirmed by the case marking on NPs, which applies on NPs in S or O function and which is marked by initial mutation (illustrated here with the addition of *n-* on vowel-initial words), and is thus absolutive.

NIAS:

(4) Manavuli sui [S n-ama-da   Tohönavanaetu]ba Maenamölö.
    return   again MUT-father-1PL.IN.GEN Tohšnavanaetu   LOC Maenamšlš
    'Ama Tohönavanaetu came back again to Maenamölö.'[1]

(5) I-bözi   [O n-ama-gu]   [A Ama Dali].
    3SG.R-hit   MUT-father-1SG.POSS   Ama Dali
    'Ama Dali hit my father.'

(6) Nias case and agreement system, with syntactic roles

	A	S	O
AGREEMENT	✓		
MUTATION		✓	✓

Although this scheme seems neat and useful, not all languages fit into the categories defined in figure 1. One obvious problem lies in identifying transitive clauses: what is the algorithm for determining which of two basic transitive patterns should count, for instance, as is the case in Tagalog (Maclachlan 1995)? Additionally, a language could conceivably have separate coding strategies for each of A, S, and O—this is referred to as a "tripartite system," several varieties of which will be discussed in section 5. More profound problems are encountered when the single arguments of intransitive predicates are coded in different ways depending on the semantic form of the verb. In languages with this system, typically, more patient-like arguments (fall, be sick, yawn) tend to be coded as Os, and more agent-like arguments (run, sing, go) are coded in the same way as As; the unity of the S syntactic role is thus questioned, and this claim has been explicitly explored by Foley and Van Valin (1984), and Dowty (1991). Because the intransi-

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1. Adults are referred to with the 1PL.IN possessive marker in Nias society, so a translation of the subject of this sentence as 'our Ama Tohönavanaetu' would not be appropriate.

tive category is not coded in one consistent manner, these alignment systems can be called split-intransitive, after Merlan (1985).[2] These systems are discussed in more detail in section 2.

A challenge can be found in the morphosyntax of some languages that allow a three-way split in the coding of intransitive arguments. These systems are rare, being reported only in the languages of the Muskogean family of the southeast of North America (see, for instance, Davies 1986, and section 2 of this paper). In terms of the alignment paradigm presented above, these languages force us to acknowledge a fifth basic case (traditionally called "dative") and to examine the whole dichotomy of core versus oblique categories. At a more basic level, they present an interesting insight into coding choices and the categories that are subsumed in each category, an insight that has more perspective than a simple split-intransitive system, or one of the nonsplit systems. In section 5 we attempt to integrate these languages into the standard typologies of split-intransitivity, based on the system described in Saweru.

Saweru is a language with a two-way split in the coding of the single argument of an intransitive verb, but which has a system that appears to fit into the typology of three-way splits more readily than that of two-way splits. After a discussion of two-way and three-way split-intransitive systems in section 2, and the agreement system of Saweru in section 4, we examine the typology of split-intransitivity and the place that Saweru fills.

2. SPLIT INTRANSITIVITY SYSTEMS. Systems of case or agreement in which the single argument of an intransitive verb does not show uniform marking have been reported in a variety of forms for a range of languages from most parts of the world (see Merlan 1985, Mithun 1991 for discussion of the motivations and survey of the variation in morphology and semantic patterns found; for a summary and reference to other descriptions, see Dixon 1994). Typically, a language splits the intransitive predicates into two sets, such as seen in the following data from Aceh (Durie 1985, 1987, 1995), in which "Actor NPs are cross-referenced on their verbs by a (usually) compulsory proclitic. ... Undergoers may be cross-referenced by enclitics, but this is not obligatory" (Durie 1995: 294).

The following sentences illustrate the split-intransitive pattern. In the first, the A is marked by the proclitic *lôn,* and the O is marked by the enclitic *geuh.* The next two sentences are intransitive, but do not show the same coding strategy for their single arguments. In (8) the argument is nonagentive: it is an undergoer, semantically more aligned with an O than with an A, and so takes the enclitic agreement marker on the verb. This would suggest an ergative–absolutive pattern: proclitic to mark A, enclitic to mark S or O. In (9), however, the S is agentive, and so semantically more closely associated with an A, and it takes proclitics to indicate the actor.

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2. Dixon [1994] refers to them as "Split-S" and "Fluid-S," referring respectively to simple lexically determined split-intransitive systems and to systems in which the pragmatics of the situation determine the marking schema; these distinctions are irrelevant to the data discussed here, though Saweru fits the Split-S label more closely.

(7) Gopnyan   na-lôn-timbak-geuh.
     3SG   IND-1SG-shoot-3SG
     'I shot him.'

(8) Gopnyan   rhôt-geuh.
     3SG   fall-3SG
     'He fell.'

(9) Gopnyan ka-geu-jak u-keude.
     3SG   INCH-3SG-go to-town
     'He went to town.'

(10) Aceh agreement and syntactic roles

	A	S	O
PROCLITIC	✓	✓	
ENCLITIC		✓	✓

The crucial elements of this system are that there are two coding strategies for arguments, and both of them are used with (different) intransitive arguments.[3]

A rarer, and more interesting, example of split-intransitivity is when the language has a three-way split-intransitive system. In this case, in addition to the Ss showing more than one coding pattern, a third set of intransitive verbs has distinct case or agreement marking. Examples of this are rare, but Choctaw and Kolana illustrate two very different versions of this sort of system. A set of intransitive verbs in Choctaw (Southeastern U.S.A.; Heath 1977:204) is shown in (11–13).[4]

(11) Iš-iya-h.
      2SG.ERG-go-PRES
      'You are going.'

(12) Im-ačokma-h.
      3SG.DAT-feel.good-PRES
      'He feels good.'

(13) Si-yabi:ka-h.
      1SG.ACC-sick-PRES
      'I am sick.'

These sentences show that the S of an intransitive verb may be encoded in three different ways, with approximations to semantic correlations: the ergative set is used for more agentive verbs, and the accusative set with more affective verbs; the dative set is used with more experiencer-type semantic roles. There are further complications, however. In addition to having the S marked in more than one way,

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3. The proclitics that are used to mark an A are also used to mark a more agentive S; the enclitics (which are always optional) that are used to show agreement with an O are also used to mark a nonagentive S. Thus the schematization in (10).

4. Other writers use different labels for the three different pronominal agreement sets in Choctaw/Chickasaw. I have followed Heath because, although there are irregularities in the system, his labels allow for fast comparison with other languages that employ ergative, accusative, and dative cases in more familiar ways. It is clear, however, that traditional case labels do not fit easily in the Choctaw system in terms of syntactic categories, and are intended more as guides to semantic groupings.

the ergative and dative sets may also be used to mark the A of a transitive verb, and the dative and accusative sets are used to mark the O of a transitive verb (the most typical pattern found on transitive verbs is ergative-accusative). The following patterns are found with transitive verbs:

(14) Choctaw transitive agreement patterns

A	O
ERG	ACC
ERG	DAT
DAT	ACC

For most verbs, the choice of which agreement markers to use is lexically determined. The significance of these patterns will be seen in the typological discussion in section 5. We thus have an agreement system that is not directly inferable from knowledge of the syntactic roles of the arguments involved. The availability of different agreement paradigms for different syntactic roles is shown in (15):

(15) Choctaw agreement and syntactic roles

	A	S	O
ERG	✓	✓	
DAT	✓	✓	✓
ACC		✓	✓

A different system involving a three-way split in the marking of the S is found in Kolana (spoken in eastern Alor, eastern Indonesia; probably a Trans–New Guinea family language) (data collected by the author). In Kolana, there are three pronominal sets that can be used to mark the S of an intransitive verb or the O of a transitive verb. Unlike Choctaw, none of these three sets may be used to mark an A. I label these three cases absolutive, dative, and accusative. Absolutives are the most prevalent in both categories, with no particular semantic features associated with verbs following this coding pattern, and so seeming to represent the default marking pattern for either S or O (numerically, absolutive marked S or O arguments are most prevalent). Dative case is used to mark 'experiencer' and 'recipient' roles, and transitive objects that are relatively unaffected by the action (such as the O of *modo* 'discard', illustrated below, which is relatively unaffected by being thrown away). Accusative case is used for more affected arguments (with exceptions, pointing to a degree of lexical idiosyncrasy, typical of split-intransitive systems). Examples of the split in intransitive indexing on the verb can be seen in (16–18):

(16) Tomas   g-wai.
      Tomas   3ABS-go
      'Tomas went.'

(17) Tomas   gai-tain.
      Tomas   3ACC-fall
      'Tomas fell down.'

(18) Tomas   gadi-mditi.
      Tomas   3DAT-sick
      'Tomas is sick.'

With transitive verbs, the A is marked with an ergative pronoun at the end of the A NP, and the O is encoded on the verb with a clitic, as seen in (19):

(19) Tomas   getan-poin.
      Tomas   3ERG1SG.ABS-hit
      'Tomas hit me.'

As with Choctaw, however, we find a complication: there is more than one coding strategy for transitive verbs. In Kolana the A must always be coded with an ergative pronoun in the NP, but the verbal proclitic can be absolutive, dative, or accusative. The other two options are shown in (20) and (21):

(20) Tomas   geta   nai-suai.
      Tomas   3ERG   1SG.ACC-stab
      'Tomas stabbed me.'

(21) Tomas   geta   nadi-modo.
      Tomas   3ERG   1SG.DAT-discard
      'Tomas discarded me.'

The display in (22) shows which agreement patterns in Kolana are found with which syntactic roles:

(22) Kolana verbal agreement and syntactic roles[5]

	A	S	O
ABS		✓	✓
DAT		✓	✓
ACC		✓	✓

Unlike Aceh and Choctaw, we can see that, in Kolana, verbal marking can only refer to an S or an O argument, and none of the prefixes are used for S or O exclusively. It is clear, then, that, unlike the other two languages described, the coding for S is never the same as that for A. Kolana, then, represents an ergative-absolutive system that has developed affectedness marking patterns in the absolutive prefixes that have led to a split-absolutive system, which incidentally shows split-intransitive patterns. Crucially, however, the split in the marking of an intransitive argument never leads to that argument being coded as an A, and so does not represent the same system as is typically described with that label.

In both Kolana and Choctaw, the choice of case is lexically specified by the semantics of the verb and shows no variation for discourse context. This means that we must be able to account for this three-way case marking pattern without reference to pragmatic factors.

3. SAWERU. Saweru is one of two languages that form the Yawa language family, a non-Austronesian language group spoken by peoples living around central Yapen island, in West Papua (Anceaux 1961, Donohue 2000). Yawa (Jones 1986, 1991) is the larger language, spoken on mainland Yapen island by approximately

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5. An A in Kolana is indicated not on the verb, but with an ergative pronoun concluding the NP.

6,000 people. Saweru is spoken by the older population of Saweru island, half an hour by boat east of Serui and south of mainland Yapen. Due perhaps to its proximity to the city, the language is not in a healthy state, and is not being acquired by younger speakers; there are approximately 150 speakers, out of an ethnic group of perhaps 300. Yawa and Saweru have not been demonstrated to be related to any other languages on mainland New Guinea, and what is known about the structural or lexical characteristics of those languages on the edge of Cenderawasih Bay makes the possibility of such deeper genetic relationships unlikely.

In common with Yawa, there is a complicated and unusual system of person marking on the verb, which is the subject of the description in the following sections. Jones (1986) described the marking system of Yawa in terms of an ergative marking scheme, but it seems likely (based on the footnotes in the same article) that the Yawa system is in fact similar to that described here for Saweru.

4. SAWERU AGREEMENT PATTERNS. Saweru shows a complex pattern of agreement, with up to three arguments being marked on the verb, and without a one-to-one correspondence between the agreement markers and the grammatical functions that they are used to encode.

Saweru clause structure reflects grammatical functions closely, as is shown in abbreviated form in (23):

(23) S → NP$_{SUBJ}$ NP$_{OBJ}$ V   NP$_{OBL}$*

Simple positional tests indicate the grammatical function of an argument. Syntactic tests such as eligibility for relativization and control in complements, external possession, and clause linkages also provide tests for subjecthood and objecthood. Most transitive verbs in Saweru inflect for their object by means of prefixes. In addition to this, a small class of verbs uses verbal suffixes to mark object, and both transitive and intransitive verbs (with some exceptions) take a VP-initial Nominative proclitic to mark the subject. The pronominal forms found in Saweru are shown in table 1.

Free forms are encountered only rarely; the forms listed in table 1 can be used for a pronominal in any function, and in addition, there is an ergative form used for an emphatic A. The ergative free forms are "constructed" from the nominative clitics being attached to an emphatic *wo*, and appearing NP-finally (for instance, *wo* 1SG.ERG, *wono* 2SG.ERG, *womo* 3SG.F.ERG). These ergative pronouns are used either on their own or with a full NP preceding, and the choice of a plain free-form pronoun, or an NP with an ergative-form pronoun, does not influence the choice of verbal agreement.

An example of the use of these various forms can be seen in (24). In this sentence the A NP is *ruama* 'woman', and is marked ergatively by the use of *womo* NP-finally. The VP *rama abai* is preceded by the 3SG.F nominative clitic *mo=*, and the verb is marked for 3SG.M object with the genitive prefix.

(24) [$_A$ Ruama wo-mo]   mo=[$_{VP}$ [$_O$ rama]   a-bai].
       woman   EMPH-3SG.F   3SG.F.NOM=man   3SG.M.GEN-hit
       'The woman hit the man.'

TABLE 1. PRONOMINAL FORMS

	FREE	NOMINATIVE	GENITIVE1	GENITIVE2	DATIVE
1SG	inei	o=	ina-	isa-	-inai
2SG	iwei	no=	na-	ina-	-nai
3SG.M	afi	fo=	a-	afea-	-dai
3SG.F	ami	mo=	ra-	amea-	-dai
1DU	imai	imo=	isa-	imama-	-jai
2DU	iweri	i=	ya-	wawa-	-yai
3DU	enanai	yo=	ya-	yaya-	-jai
1PL	amai	amo=	asa-	imama-	-asai
2PL	wayawai	wa=	wa-	wawa-	-wai
3PL	enanawi	wo=	ya-	yaya-	-masai

Other notes on the pronominal forms: NOMINATIVE clitics are VP-initial, and required for most clauses, unless there is an overt nominal subject present; additionally, they are required in addition to a nominal subject if that subject is an A (not an S). With an S, the NP representing the S is enough, and the clitic is optional.

GENITIVE1 prefixes are obligatory on all inalienably possessed nominals, and are the normal means of marking an object of a verb, whether there is an overt nominal object or not.

GENITIVE2 prefixes are used exclusively to show possession on alienably possessed nominals, and so are not relevant to the discussion here,

DATIVE suffixes are used to indicate beneficiary, recipient, and the objects of certain low-affect verbs. They will be examined in closer detail in the following discussion, because they alone appear to be able to occur with verbs that do not subcategorise for the argument that the dative suffix encodes.

The restrictions on the use of these clitics and affixes to mark arguments on verbs are summarized in table 2. Types I and III are overwhelmingly the most commonly-encountered forms. Pseudo-versions of types IV and VII are also common, because the dative suffixes—which are mandatory for verbs in these classes—are also used to mark optional beneficiaries. Any transitive verb can take a beneficiary argument, which will be marked as a dative suffix, and any agentive intransitive can similarly be marked with a dative suffix to indicate a beneficiary. We can demonstrate the nonsubcategorized nature of these optional datives with the different interpretations that some verbs have with the different clitics, and

TABLE 2. PATTERNS OF VERBAL AGREEMENT†

	Clitic	Prefix	Verb	Suffix	
Intransitive:	NOM=		V		I
		GEN-	V		II
Transitive:	NOM=	GEN-	V		III
	NOM=		V	-DAT	IV
		GEN-	V	-DAT	V
		GEN- GEN-	V		VI
Ditransitive:	NOM=	GEN-	V	-DAT	VII

†   Grammatical function interpretation: the leftmost affix or clitic is always the S/A, the next one is always the O.

with clausal word order possibilities. When a dative clitic represents a subcategorised-for argument, that argument can appear preverbally or postverbally, as seen in (25–28). Sentence (25) shows that the SOV word order is normal in transitive clauses, with the O encoded by genitive prefixes. In (26) we can see that a verb that subcategorizes for a dative O still uses the SOV word order, even though the coding on the verb is with a different paradigm. Regardless of coding, a subcategorized-for object can appear preverbally.

TYPE III TRANSITIVE CLAUSE

(25) O=arian   efie ra-yamat-o
     1SG.NOM=child that 3SG.F.GEN-wait.for-TNS
     'I waited for that girl.'

TYPE IV TRANSITIVE CLAUSE

(26) O=arian   efie komi-dai
     1SG.NOM=child that search.for-3SG.DAT
     'I searched for that girl.'

When the nominal encoded by the dative agreement marker on the verb is not subcategorized for by the verb lexically, but is simply an optional benefactive, then the preverbal position is not possible for the beneficiary argument; these two positions are shown in (27) and (28).

TYPE I INTRANSITIVE CLAUSE WITH OPTIONAL DATIVE[6]

(27) *O=arian   efieraya-dai
     1SG.NOM=child that wash-3SG.DAT
     'I washed (myself) for that child.'

(28) O=raya-dai   arian efie
     1SG.NOM=wash-3SG.DAT   child that
     'I washed (myself) for that child.'

The different semantic interpretations of subcategorized-for arguments with dative suffixes, and optional beneficiaries encoded with dative suffixes, can be seen with the following examples, involving *mboambe* 'laugh'.

(29) O=mboambe.
     1SG.NOM-laugh
     'I laughed.'

(30) O=na-mboambe.
     1SG.NOM=2SG.GEN-laugh
     'I laughed at you.'

(31) O=mboambe-nai.
     1SG.NOM=laugh-2SG.DAT
     'I laughed (at something) for you.'

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6. Neither of these sentences could be interpreted as 'I washed the child'; unlike *mboambe*, discussed below, *raya* is lexically specified as being intransitive, and cannot appear without derivation to be used transitively. 'I washed the child' can only be expressed with a periphrastic causative verb *awe* 'give'.

From these sentences we can see that the verb 'laugh' is ambiguous in its transitivity, just as is 'eat' in English: *mboambe* can take simple nominative proclitics and no other agreement, and be used intransitively. Alternatively, it may appear, without any derivational morphology, with an object, marked by a genitive prefix, and be used transitively with the sense 'laugh at someone'; there is no evidence that either the transitive or intransitive usage is derived from the other, and the most elegant solution is to assume that it is lexically underspecified regarding the presence of an object. As a further alternative, the intransitive or transitive forms of the verb may appear with a beneficiary marked by dative suffixes 'laugh with someone (to cheer them up', or 'laugh at someone for someone else's benefit (to show solidarity)'. However, because dative suffixes may be added to verbs that are semantically not lexically associated with more than one argument, this is not evidence for a complex lexical transitivity specification.

Examples of the kinds of verbs that show membership in the different classes are given in 4.1. We can take the nominative S/A and the genitive O marking strategies to be the basic ones, and the use of the dative for Os, or the genitive for S/As, to be marked. Furthermore, the dative suffixes are never used to mark an S or A, and the nominative is never used to mark an O. This is summarized in (32).

(32) Saweru agreement and syntactic roles[7]

	A	S	O
NOM	✓✓	✓✓	
GEN	✓	✓	✓✓
DAT			✓

More discussion of basic versus marked patterns is presented in sections 4.1 and 5, where table 3 also gives a listing of class membership.

Although I have presented semantic categories that characterize the different verb argument-structure types, it must be admitted that many of the choices do appear to be arbitrary. The O of both 'remember' and 'forget' would be taken by most to bear the same semantic role, yet the latter is treated as a regular O with genitive prefixing, and the former as an exceptional O with dative suffixing.

So far we have looked at the Saweru agreement system according to how an argument is encoded. It is also insightful to examine the system according to how a clitic/affix/verb string might be decoded. There is only one absolute: an argument coded by means of a nominative clitic can only be interpreted as the S/A of the sentence. We might, from the above data, expect that a dative coding could only be interpreted as an O, but in fact, as mentioned earlier, the dative suffixes are productively used to encode nonsubcategorized beneficiaries as well as dative objects. Examine the use of the dative suffixes in the verb in (33).

(33) O=ra-aiya-nai.
        1SG.NOM=3SG.F.GEN-hold-2SG.DAT
        'I held her for you.'

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7. Double checks show the most common choices in coding strategies, where SUBJ = NOM and OBJ = GEN.

The verb form *oraaiya* alone would be an acceptable (minimal) form, meaning 'I held her'. This would satisfy the two-place subcategorization frame that the verb employs, and be complete. Optionally, however, as with most active verbs, *aiya* allows for a beneficiary to be coded on the verb with a dative suffix. With *mboambe* 'laugh' we have seen that even a sole dative suffix, in the absence of any genitive affixes on the verb, can be interpreted as a beneficiary, and not as a dative object.

4.1 VERBAL MEMBERSHIP OF DIFFERENT MARKING CLASSES.
A representative sample of the verb membership in the different classes of marking patterns is shown in table 3. In the intransitive verbs, it is clear that the NOM=V pattern is the majority one; the number of intransitive verbs with genitive agreement in Yawa is minimal, and consists of a group of nonvolitional predicates. Transitive verbs are overwhelmingly NOM=GEN-V, without regard for the semantic roles of the arguments of those verbs. In contrast to this, the NOM=V-DAT set consists entirely of verbs that can be regarded as low-transitivity verbs, with very low-affect Os. The remaining patterns, GEN-V-DAT and GEN-GEN-V, are also low-transitivity patterns.

We thus have two unmarked patterns (NOM=V and NOM=GEN-V) whose members cannot be grouped by semantic criteria; they are a "default" coding choice. In addition, there are marked categories whose members do display consistent semantic factors. Having exemplified the morphosyntactic patterns that make the Saweru agreement system atypical, we now consider a possible historical pathway that leads to this system.

TABLE 3. PATTERNS OF VERBAL AGREEMENT

NOM=V	I	nunu nei ta te yani	'sit' 'sleep' 'go' 'stand' 'be afraid'	sariari raya andai wanen wo	'be drunk' 'wash, bathe' 'eat (INTR)' 'be sick' 'paddle'
GEN-V	II	newawu	'sad'	onetata	'thirsty'
NOM=GEN-V	III	en bai yani i atafo mana aiya	'see' 'hit' 'fear' 'eat' 'shoot' 'drink' 'hold'	nggawawe fera yamat mau mboambe uawe karama	'hide' 'chop' 'wait for' 'throw at' 'laugh (at)' 'be angry (at)' 'scratch'
NOM=V-DAT	IV	komi kowe	'search for' 'like'	marisi yafafata	'like' 'help'
GEN-V-DAT	V	meme	'remember'		
GEN-GEN-V	VI	nemari	'forget'		
NOM=GEN-V-DAT	VII	awe	'give'		

5. THREE-WAY SPLIT-INTRANSITIVITY AND ALIGNMENT. In addition to the sketch of Aceh morphosyntax as it pertains to a discussion of split-intransitivity, we have also touched on the relevant aspects of split-intransitivity in the less typical Muskogean languages, namely Choctaw, and in Kolana. Comparing them, it is clear that Kolana is best thought of not as exemplifying a classic split-intransitive system, though it does show a three-way split in the coding of the single argument of intransitive verbs, but rather as a language with an ergative-absolutive alignment system that has gone on to split the absolutive category into three divisions, based loosely on semantic principles. Choctaw and Kolana both complicate the analysis of their splits by being three-way, rather than two-way. Choctaw additionally shows more than one marking pattern for A, and more than one for O.

The Choctaw and Saweru systems show considerable commonality. In both there is one morphosyntactic pattern used with both As and Ss, and a second that can appear to code an A, an S, or an O—a two-way split-intransitive system typically does not have one coding strategy that can be used for all three of A, S, and O, showing rather the Acehnese pattern. Both languages also have a third pattern that is used to code Os, and that can be used in Choctaw for Ss as well. In Saweru this latter category can also be freely added to agentive predicates, to code a beneficiary. This is reported in some Muskogean languages as well, where some scholars consider the "dative" pattern to be accusative marking fused onto an applicative. The disparity in form between the dative and the genitive affixes in Saweru, as well as the fact of the genitive being prefixal and the dative suffixal, makes this analysis unlikely to be true for Saweru.

The Choctaw and Saweru systems are compared in table 4, which shows the options that each language has for encoding each of A, S, and O. Clearly there are strong similarities in terms of functional matches between morphology and syntactic roles. Attempting a similar comparison of coding strategies in Kolana, we find that the lack of any marking for A on the verb, and the three-way split in marking of O, set this language apart from the other two. We are yet to see the relation of these languages to the more canonical split-intransitive system.

The problem we are faced with if we assume the three-way systems to have developed from conventional two-way split intrasnitive systems is that the development of a system with three marking choices from one with only two does not offer

TABLE 4. CHOCTAW AND SAWERU: CODING CHOICES

	CHOCTAW			SAWERU		
	ERG	DAT	ACC	NOM	GEN	DAT
A	✓			✓		
		✓			✓	
S	✓			✓		
		✓			✓	
			✓			
O		✓			✓	
			✓			✓

an obvious answer to the question of the origins of the third marking strategy. An examination of Axvax, a Daghestanian language with no trace of split-intransitivity, shows a possible connection to the Saweru situation, and through it Choctaw. Axvax does not have a split-intransitive system, but shows interesting developments of a tri-partite system that suggest a possible, and plausible, grammaticalization pathway.

In Axvax (Kibrik 1985) a "nominative" case can be used for A, S, or O (depending on the verb). In addition to this, there is an ergative case whose distri-bution is restricted to As, and an oblique case that can mark various obliques and some core Os. The system is shown in summary in (34).

(34) Axvax case marking and syntactic roles

	ERG	NOM	OBL
A	✓	✓	
S		✓	
O		✓	✓

The Axvax system, based on the very limited data presented by Kibrik, appears to have some relationship to the affectedness / agentivity criteria that are most often at work in split-intransitive languages: the case patterns for transitive verbs are given in (35).

(35) Case patterns for transitive verbs in Axvax

ERG - NOM   eg., 'beat'
ERG - OBL   eg., 'push'
NOM - OBL   eg., 'become frightened of'

Essentially, the language has two cases that are used only for arguments of the verb, the ergative, which may appear on (some) As, and the (unmarked) nominative, which can appear on arguments bearing any syntactic role (but typically intransitive subjects). Additionally, the "oblique" is used with core arguments to mark some Os. This system appears to be one that would be a stepping stone to developing split-intransitivity of the type exhibited by Choctaw and Saweru. There are two, intu-itively opposed, processes of grammaticalization that are suggested by a comparison of the evidence from Axvax, Choctaw, and Saweru. We could account for the (typo-logically) more divergent systems from an Axvax-like tripartite system by positing (1) an extension of the nominative so that it now marks some less agentive As; and (2) an extension of the same nominative case to mark less affected Os.

Both of these developments, unless applied purely randomly, would see the unmarked S-marking case of a tripartite system take on some role in the semantic differentiation of transitive clauses; the S-marked A would presumably be a less typ-ical transitive agent, and an S-marked O would be a less typical patient. We should note that neither of these positive grammaticalizations are essential in the develop-ment of a split-intransitive system, which can follow other pathways, outlined below. The other set of developments that work at expanding the case system available to Ss

are those normally associated with split-intransitive systems: (1) the case used for As extends to mark the single argument of more controlled intransitive predicates; and (2) the marking for the O is extended to mark more affected Ss. The Aceh marking system can be modeled with these two assumptions, as can other split-intransitive systems (with, perhaps, historical cachets to the effect that first one case extends, leaving a [partial] nominative-accusative or ergative-absolutive pattern, and then the other case follows into intransitive territory, leaving a split-intransitive system).

The first two developments, which appear to be crucial to modeling the history of Axvax, are not useful for modeling Aceh, but are essential to a model of three-way splits and to modeling languages with Hopper and Thompson-style transitivity information (Hopper and Thompson 1980) encoded in the case-marking or verbal agreement system. This is because there is more than one morphosyntactic pattern that can be used to encode two-place clauses, which is what, in addition to more than one coding pattern for Ss, is found in Saweru. Crucially, the pattern found in Aceh (and most other split-intransitive languages) does not offer any obvious pathways for development into a three-way split system, because there are only two marking strategies. It seems that positing some development in common with tripartite systems is more plausible, and the model is outlined below.

We can attempt to model these differences in table 5, using the neutral labels I, II, and III to represent the coding strategies available in different languages. For both the Axvax transitivity-monitoring system and the standard split-intransitive system of Aceh, we start in the middle of the table, with Ø; the difference between Øa and Øb is only one of acknowledging an overt marker for S or not. To get from Ø to 1, we extend the marking afforded to S to include some As, and some Os; this situation is not found with typical split-intransitive systems. The classical split-intransitive system involves the basic A and O markings extending into the S category, shown in the -1 development in table 5. The development from 1 to 2 is the extension of the A marking to include some Ss; this is the start of the process of developing elements of classical split-intransitivity in which some Ss are marked in the same way as an A or an O. This process is taken to completion in going from 2 to 3 (or from Ø to -1), in that with these stages we see the coding for O also used with some Ss, thus having all instances of transitive coding reflected in intransitive clauses, and (for the -1 column) the single arguments of any intransitive clauses coded in the same way as one of the arguments of a transitive clause.

TABLE 5. TWO- AND THREE-WAY SPLITS:
THE DEVELOPMENT OF CODING CHOICES

	-1 ACEH	Øa —	Øb TRIPARTITE	1 AXVAX	2 SAWERU	3 CHOCTAW
A	I	I	I	I	I	I
				II	II	II
S	I				I	I
			(II)	II	II	II
	III					III
O				II	II	II
	III	III	III	III	III	III

A pathway that attempted to go from the split-intransitive system (typified by Aceh, -ɪ) to Saweru or Choctaw is not feasible, unless we allow a large series of intermediate steps: there are two marking schemas in use for S, and no obvious place for a third one to come from, and no motivation for the development of a third marking system. Extending either of the cases used to mark S into transitive clauses would result only in confusion, at best a semantic/pragmatic blend of marking that should not be described in terms of syntactic roles.

Saweru thus is a rare example of a language type that is not quite a three-way split-intransitive language, but is perhaps the link between more familiar types of morphological alignment and the more exotic types seen in Choctaw. It provides evidence that the factors leading to the development of three-way split-intransitive systems are different to those found in two-way split-intransitive systems, because the distribution of morphological coding devices is quite different: having one coding pattern available for all of A, S, and O is not possible in a two-way split-intransitive system with only two morphological coding choices. It is possible, however, in languages with degrees of affect, or volition, or some such transitivity parameter, encoded in the choice of morphological marking given for different verbs.

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