

Agreement in the Skou Language: A Historical Account

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Skou, a language of the central north coast of New Guinea, presents a rare example of multiple exponence of features in the agreement paradigms for subject. While this is a challenge for theories of morphology, because each morphological realization presents exactly the same featural information in Skou, there is a simple historical explanation for the modern complexities, involving cycles of cliticization. After the initial impetus toward developing an agreement system, the subsequent cycles were probably inspired by the progressive loss of differentiation in the inflected verb form due to sound changes in the language that simplified clusters and collapsed contrasts. This account allows us to understand many of the irregularities in Skou agreement.

1. SKOU AGREEMENT. Skou is a language from the center of the north coast of New Guinea. Agreement marking for subject precedes the verb, which is somewhat unusual for non-Austronesian languages in New Guinea (though common in an area starting west of Timor and extending through Halmahera, Yapen, and across the north coast of New Guinea to the eastern languages of the putative Toricelli family, and in New Britain). Often the agreement is indicated in more than one morpheme, as in the following textual examples. In some there is no overt NP representing the argument that is coded by the agreement morphology, as in (1). Here the subject, 'they', can be determined only through reference to the agreement morphology on the verb.¹

- (1) ... ojíng te=r-í hì, ...
 chicken 3PL=3PL-get.PL go.down
 '... they dropped lots of chickens, ...' (*Amerika:4*)

1. The sentences in (1)–(7) are taken from texts in Skou collected between 1998 and 2002. The following abbreviations have been used in glosses. Portmanteau agreement markers use the following abbreviations: 1, 2, 3: first, second, and third person; SG, PL: singular and plural number; F, feminine; NF, nonfeminine. The other glosses used are: INCL, inclusive; INSTR, instrumental; NEG, negative; OBV, obviate; RED, reduplicant. The clitic *ing a* is bimorphemic, but will be glossed with the single word 'the'; it is written as two orthographic words in keeping with local preferences. In addition to the regular and semiregular verbal alternations discussed here, some verbs also show suppletive stems for different absolutive arguments; prominent in this paper is 'get', which takes the stem *lœ* for plural object, *wé* for singular feminine object, and *ké* in other circumstances.

This is possible if the subject of the clause has already been established as a topic of discourse; sentence (1) occurs as the fourth intonation group in a text describing the Skou people's first encounters with Americans in World War II, and at this point the American forces are clearly the protagonists. The following sentences show clear topic-establishment patterns, followed by a clause in which the agreement marking alone identifies the subject.

- (2) Ku [Patipeme] ne, ápólè-ha ne=n-ang ka.
 child [Patipeme] 1PL tulip-leaf 1PL=1PL-cat NEG
 'Us Patipeme clan descendants, we can't eat tulip leaves.' (*Tangí:64-66*)
- (3) Te=ing, te=ra=wò, te=r-í=pa ya, ...
 3PL=DEIC 3PL=only=EMPH 3PL=3PL-get.PL=INSTR thing
 'Them, that lot, they took it, the thing, ...' (*Tè bà pílàng te ti e húhú:36-39*)

If the subject is not particularly topical, then it must be mentioned overtly in the clause in addition to the agreement marking, as in (4)–(6).

- (4) Te=Jáwung ya nawò te=r-i nì, ...
 3PL=Nyao thing many 3PL=3PL-get.PL 1SG
 'Those Nyaos got many things for me, ...' (*Nyao:28*)
- (5) Te móe te=r-í e ti-ti.
 3PL fish 3PL=3PL-get.PL 3PL.be 3PL.do-RED
 'They catch fish.' (*Ang:11*)
- (6) Te hòe te=j-á te hì, ...
 3PL sago 3PL=3PL-pound 3SG.F.go go.down
 'They're pounding sago so it goes down (to the catcher), ...' (*Hòe:5*)

The following example has a sentence-initial topic establishing the identity of the protagonist in the following discourse (this text was collected immediately following a text about how men go fishing), and then inside the clause we find another reference, not to the discourse function but marking grammatical information with a free NP as the pronominal subject, and finally a doubly agreeing verb.

- (7) Ne=ueme, ne núng ne=r-óe=ko, ...
 1PL=woman 1PL k.o.net 1PL=1PL-get.PL=OBV
 'We women, we get the nets, and then, ...' (*Móe II:1*)

This pattern of multiple agreement marking is unnecessary from the point of view of successfully parsing features, and irregular, both lexically within the language, and comparatively within the family to which Skou belongs. This article presents an account of the multiple exponence that is found on verbs in the subject agreement marking, concluding that rather than a synchronic account (either formal or functional), a historical account is best suited to explain the morphological complexities of agreement in Skou.

Skou is spoken with minimal dialectal variation by the 700 inhabitants of three villages, Skou-Yambe, Skou-Mabu, and Skou-Sai, in the center of the north coast of New Guinea (in Papua, formerly Irian Jaya; see Silzer and Clouse 1991). The Skou language is known from the work of Cowan (1952a, 1952b, 1957), Galis (1955),

Voorhoeve (1971, 1975, and elsewhere), Donohue (1999, 2000, 2002a, 2002b, 2002c), and Donohue and San Roque (2000). It is related to other languages in the Skou family of which it is the westernmost member, stretching across the north coast of New Guinea, extending past Vanimo to Leitre (Donohue 2002a). More distant relations can be established with other members of the Macro-Skou family (see Donohue and San Roque 2003). These more distantly related languages have morphological structures different from those in Skou, but are relevant for an understanding of some of the more idiosyncratic processes that are found in Skou and its close relatives (as described in figure 2, section 3).

Skou has a fairly simple segmental phonology, with 13 consonants and seven vowels, arranged in strictly (C)V syllables (sequences of two vowels are always pronounced as two separate nuclei, and may carry separate tone melodies, such as *ái* ‘father’). Nasalization is contrastive on vowels, as are five word-level tones (only three patterns surface on monosyllables). Tone and nasalization contrast in the following sextuple: low tone, [ta] ‘hair’, [tã] ‘canoe’; high tone, [ta] ‘elephant grass’, [tã] ‘bird’; falling tone, [ta] ‘arrow’ and [tã] ‘machete’. Examples are presented in Skou orthography: nasalization is indicated by an *-ng* in coda position, and /t/ and /ø/ are written with the digraphs *ue* and *œ*, respectively. The representation of consonants follows IPA (and Indonesian) conventions, except that *y* represents [j ~ ʒ ~ dz ~ dʒ] (in a cline from younger to older speakers), and *j* represents [g̊ ~ ʃ] for older speakers, and [dʒ] for younger ones. High pitch is shown with an acute accent (´), falling pitch with a grave accent (`), and low pitch is left unmarked. A more detailed account of the tonal system of Skou can be found in Donohue (2002c).

2. VERBAL PARADIGMS. In this section I present a structured description of agreement phenomena in the verb in Skou. I call it a structured account because there is not one simple template that describes the form and function of agreement in all verbs in Skou. The following account omits reference to outright suppletion, as it is beyond the scope of this paper to deal with lexical idiosyncracies such as the complete suppletion of one verb root by another (see footnote 1).

2.1 PROCLITIC AGREEMENT. Some verbs—approximately one third of the recorded verbal lexicon—in Skou inflect for subject simply by means of a clitic, and take no further marking for agreement. One such verb is *e* ‘board, get onto, travel by means of’, which is shown in its full paradigm in (8).

(8) Nì	nì=e.	Ne	ne=e.
1SG	1SG=board	1PL	1PL=board
Mè	mè=e.	E	e=e.
2SG	2SG=board	2PL	2PL=board
Ke	ke=e.	Te	te=e.
3SG.NF	3SG.NF=board	3PL	3PL=board
Pe	pe=e.		
3SG.F	3SG.F=board		
	‘I/You/He/She/We/You lot/They boarded.’		

The proclitics shown above are not quite identical in form to the corresponding free pronouns, because for all but the first and second person singular they are most often produced with a slightly fronted schwa as their vowel, [ɜ], not the [ɛ] that is heard in free pronouns. They can be shown to be a separate grammatical class by the fact that the ‘plural’ (nonsingular might be a better label) proclitics are used to index dual pronoun forms. The dual category is also distinguished in the form of separate free pronouns in Skou (showing more complex internal morphology, and more extensive gender marking, on all persons, than is found in the singular or plural). Because the dual is not distinguished from a general nonsingular category in verbal agreement, it is not shown here or in subsequent paradigms.

- (9) Amanè ne=e.
 IDU.INCL IPL=board
 ‘You and I boarded.’

There is no variation in the proclitic agreement paradigm: both the forms and their use are constant.

2.2 PREFIXAL AGREEMENT. While agreement by proclitic alone is well attested, it is more normal for a verb to be found with the inflection for subject marked by both proclitic and by initial consonantal prefix. An example of this is the verb *e* ‘go east, ascend’. This verb is clearly related historically to *e* ‘board, get onto, travel by means of’, though it is equally clear that synchronically they represent two distinct verbal paradigms. The paradigm for *e* ‘go east, ascend’ is shown in (10).

- | | | | | |
|------|--------|----------------------|-----|----------------|
| (10) | Nì | nì=e. | Ne | ne=n-e. |
| | 1SG | 1SG=1SG-ascend | 1PL | 1PL=1PL-ascend |
| | Mè | mè=m-e. | E | e=e. |
| | 2SG | 2SG=2SG-ascend | 2PL | 2PL=2PL-ascend |
| | Kc | kc=k-e. | Te | te=t-e. |
| | 3SG.NF | 3SG.NF=3SG.NF-ascend | 3PL | 3PL=3PL-ascend |
| | Pe | pe=p-e. | | |
| | 3SG.F | 3SG.F=3SG.F-ascend | | |
- ‘I/You/He/She/We/You lot/They ascended.’

The prefixes found on the verb are not as similar to the free pronominal forms as the proclitics are, but are still clearly related to them (or at least, in most cases, to the consonantal portions of them). Examining a wider body of data allows us to posit the following underlying paradigm for consonant alternations on verbs (there are very strong similarities between this prefix set and that proposed by Ross [1980] for Dumo [Vanimo]). The variation in the 1SG part of the paradigm reflects the fact that three verbs (*a*

TABLE 1. THE “UNDERLYING” PREFIXES IN SKOU

	SG	PL
1	Ø-, k-, n-	n-
2	m-	Ø-
3.NF	k-	t-, y-
3.F	p-	

‘carry’, *-ang* ‘eat’, and *hung* ‘drink’) inflect for this cell not with \emptyset but with *k-*. For *-ang* and *hung*, this nonstandard *k-* inflection is obligatory, while with *-a* it is optional.

- (11) Hang=*ing a* *nì=k-ang*.
 coconut=the 1SG=1SG-eat
 ‘I ate the coconut.’
- (12) *hang=*ing a* *nì=ang*
- (13) Hang-pong=*ing a* *nì=k-ung*.
 coconut-juice=THE 1SG=1SG-drink
 ‘I drank the coconut juice.’
- (14) *hang-pong=*ing a* *nì=hung*
- (15) Hang=*ing a* *nì=k-a* *re*.
 coconut=the 1SG=1SG-carry 1SG:go
 ‘I carried away the coconut.’
- (16) *hang=*ing a* *nì=a* *re*.

Furthermore, one predicate, *oeng -e* ‘refuse, reject’ (the complex predicate consists of a nominal and a verbal root), inflects for 1SG with an obligatory *n-*:

- (17) Hang=*ing a* *oeng* *nì=n-e*.
 coconut=the refusal 1SG=1SG-refuse
 ‘I refused the coconut.’
- (18) *hang=*ing a* *oeng* *nì=e*

The variation in the 3PL cell reflects two productive inflectional classes: some verbs inflect with a palatal consonant, others with an alveolar stop. Of the six regular inflectional classes (which are phonologically based, depending on the onset or lack of onset in the verb root—see table 2), contrast is only present in the velar and glottal paradigms. The sole known member of the velar paradigm to show the palatal inflection is *ká* ‘hit’, which inflects as *ká bá ká wá ká ká já* (compare with *ké* ‘get’ in table 2). An example of the alveolar inflection for the glottal paradigm (the minority case for this set) is *há* ‘stand’; compare *há má ká wá ná há tá* to the paradigm for ‘walk’ in table 2.

We need to posit the prefixes above as “underlying” because they are not always as obviously realized as in the paradigm for ‘ascend’ in (10). When the prefixes are found with verbs that have consonantal onsets, a degree of syncretism, varying

TABLE 2. REGULAR INITIAL CONSONANT ALTERNATIONS ON DIFFERENT PHONOLOGICAL VERB CLASSES

	VOCALIC	BILABIAL	ALVEOLAR- <i>l</i>	ALVEOLAR- <i>r</i>	VELAR	GLOTTAL
1SG	e	wé	lú	re	ké	ha
2SG	me	pé	pú	me	bé	ma
3SG.NF	ke	wé	lú	tí	ké	ka
3SG.F	pe	wé	rú	te	wé	wa
1PL	ne	wé	rú	ne	ké	na
2PL	e	wé	lú	re	ké	ha
3PL	te	wé	rú	te	ké	ya
	‘go east’	‘get.F’	‘release’	‘go’	‘get’	‘walk’

depending on the phonological class of the verb, arises, as may be seen in table 2. Here we can see that while the vocalic and glottal paradigms quite transparently reflect the underlying prefixes, these inflections are all but lost in the bilabial paradigm, and are severely reduced in the velar paradigm. The alveolar paradigms show a greater retention of distinction than do the bilabial and velar paradigms, but in a substantially reduced form. There is, in fact, evidence that the changed agreement forms in the alveolar-*l* paradigm represent the same cluster simplification that is observed historically with nouns; this is discussed in 3.2.

There are, especially in the alveolar-*l* paradigm (the alveolar-*r* paradigm has only one member, the verb *re* 'go'), a great number of variations on the paradigm shown in table 2, usually involving the form of the third person singular feminine or the third person plural cell. Following the same order as in table 2, we can observe the differences in *lá* 'roast': *lá pá lá wá rá lá rá*, with an irregular 3SG.F (but typical of a number of verbs in this respect); *láng* 'hit (feminine object)': *láng páng láng wáng táng láng táng*, where the 3PL and 1PL forms are irregular; *loe* 'work': *loe poe loe poe toe loe toe*, in which the 3SG.F form is again different; and *loe* 'come': *loe poe toe toe loe loe toe*, in which it appears the 3PL form has spread to all third persons (and is identical to the 1PL form). These irregularities do not concern us here, because it is the nature of agreement (prefixes, with degrees of mutation) rather than their specific form that is important.

Before leaving this section we should consider an alternative analysis that would treat the clitics simply as part of the prefix. This would assume that the paradigm in (10) is in fact better analyzed as shown in (19), illustrating with the 1PL inflection.

(19) ALTERNATIVE ANALYSIS OF PROCLITIC+PREFIX DOUBLE AGREEMENT

Ne nen-c.
IPL IPL-ascend
'We went up.'

This analysis is not, however, tenable, because of the positioning of the agreement morphemes when some (but not all) adjunct nominals are involved. To illustrate, consider the placement of the subject agreement morphemes *ke=* and *k-* in (20), in which the adjunct nominal *ta* 'seating' is separated from the inflecting verb *hùng* 'sit' by one agreement marker, the prefix, but is bracketed by another, the proclitic.

(20) Títí-nì=ne ke=ta k-ùng tang.
FeB-1SG.POSS=1SG.DAT 3SG.NF=seating 3SG.NF-sit canoe
'My uncle sat down in the canoe.'

Additionally, it is possible for the proclitics to be separated from simple agreement prefixes by various pragmatic or discourse markers, as seen in (21), adapted from (19) and glossed to show the now-apparent morpheme divisions.

(21) Ne ne=ra=n-c.
IPL IPL=also=IPL-ascend
'We went up as well.'

These properties make it clear that there are two morphemes involved in sentences such as (19). (I am not claiming, however, that the 1SG cell in (10) has two morphemes, but rather would assume that there is no prefix assigned to this verb [and most others] in the 1SG and 2PL cells of the paradigm.)

2.3 VOCALIC AGREEMENT. Another means of marking values for subject on the verb involves alternations in the vowel of the verb root. Examine the following paradigm for the verb *lúe* ‘hear, know’, which displays the expected proclitic marking for subject, as well as initial consonant alternations consistent with the alveolar (*l*) paradigm as described above, and additionally, vowel alternations that covary with the features of the subject.

(22)	Nì	nì=lúe.	Ne	ne=r-úe.
	1SG	1SG=1SG-know	1PL	1PL=1PL-know
	Mè	mè=p-úe.	E	e=lúe.
	2SG	2SG=2SG-know	2PL	2PL=2PL-know
	Ke	ke=lúe.	Te	te=r-í.
	3SG.NF	3SG.NF=3SG.NF-know	3PL	3PL=3PL-know.PL
	Pe	pe=r-ú.		
	3SG.F	3SG.F=3SG.F-know.F		

‘I/You/He/She/We/You lot/They knew.’

The nonprefixing verb *fue* ‘see’ shows the same alternations in its vowel: the high central vowel ue [ɥ] for most cells in the paradigm, but the high back vowel [u] in the 3SG.F, and the high front vowel [i] for 3PL. Examples of the more common alternations are shown in table 3. Only some verbs show these vowel alternations, or a subset of them. It is quite clear that the vowel alternations are systematic, and not random: in all cases the feminine form is more back and round, and the plural form is more front, and unrounded. This can be seen in figure 1.² Regular alternations from full alternating

TABLE 3. COMMON VOWEL ALTERNATION PATTERNS

EXAMPLES:		VOWEL INDICATES:		
		PLURAL	(PLAIN)	FEMININE
li	‘do’	i	i	ue
leng	‘give’	ing	eng	ung
lúe	‘hear’	i	ue	u
lóc	‘get many’	i	oe	ue
lóeng	‘say’	ing	oeng	ung
lú weng	‘sleep’	e	u	o

2. The rule that describes the feminine alternation is [α front, β back] → [-front, -α back, -β high], with further complications due to nasalization. The plural alternation follows the rule [α back] → [+ front, (-back), (-round), -α high]. Both [back] and [front] are needed to account for Skou vowel behavior.

paradigms are shown with thicker lines headed by arrows, while the less commonly attested alternations (just one or two instances) are shown only with thin lines.

Vowel alternations are not restricted to covarying with subjects alone, but can also serve to index values of the object argument. Compare the pair of sentence paradigms for the verb *fue* 'see' in (23) and (24), which show that the vowels can vary according to either the subject or the object of the clause.

(23) VOWEL ALTERNATION BASED ON THE FEATURES OF THE SUBJECT

a. Ke ke=angku ke=fue.
 3SG.NF 3SG.NF=child 3SG.NF=see
 'He saw the boy.'

b. Pe ke=angku pe=fu.
 3SG.F 3SG.NF=child 3SG.F=see.F
 'She saw the boy.'

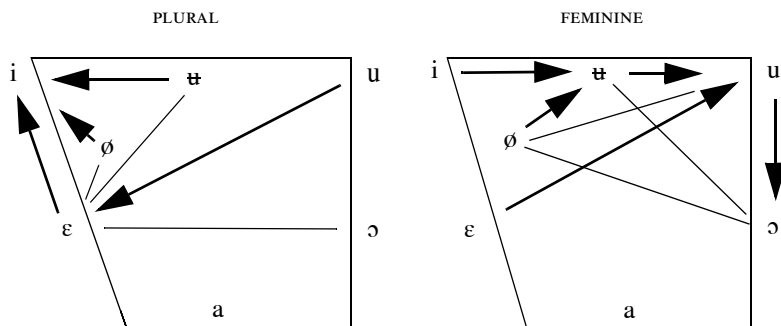
(24) VOWEL ALTERNATION BASED ON THE FEATURES OF THE OBJECT

a. Ke ke=angku ke=fue.
 3SG.NF 3SG.NF=child 3SG.NF=see
 'He saw the boy.'

b. Ke pe=angku ke=fu.
 3SG.NF 3SG.F=child 3SG.NF=see.F
 'He saw the girl.'

Agreement for object by vowel alternation is not as common as agreement for subject, but there are reasons to believe that it is more basic. One reason is the fact that the majority of verbs with vowel alternations are bivalent; this process is rare in monovalent verbs. The main reason, however, is that when there is a choice of putatively possible vowel alternations in a given sentence, preference is always given to marking the object, not the subject. To take a concrete example, if we consider a

FIGURE 1. DIRECTIONS OF CHANGE
 IN VOWEL ALTERNATION PARADIGMS



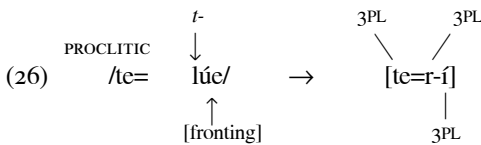
predicate in which the subject is third person plural and the object is third person singular feminine, the values for subject will be uncomplicatedly marked by both clitic and, if appropriate, prefix. We are faced with competing candidates for the vowel, however: if the plural subject dominates the choice of vowel alternation, then we will expect a higher front vowel allomorph. If, on the other hand, the feminine object is the determiner of vowel alternation, we will expect a more back round vowel. Both of the logical possibilities are shown in (25).

- (25) CODING QUANDARY WITH VOWEL ALTERNATION
- | | | | | | | |
|-----|-------|------------|----|-----|-------|-----------|
| ?Te | pe | te=fe. | or | ?Te | pe | te=fu. |
| 3PL | 3SG.F | 3PL=sec.PL | | 3PL | 3SG.F | 3PL=sec.F |
- ‘They saw her.’

This is always resolved in favor of marking the object by means of vowel alternation. Thus for the clause above, *Te pe te fu* is grammatical, while **te pe te fe* is not. This suggests that vowel alternations are more closely associated with the object, and not the subject. This point is relevant to the discussion in 3.5.

2.4 MULTIPLE EXPONENCE AND REDUNDANCY. The previous sections have shown that there is, for most verbs, a large degree of redundancy in the inflectional paradigm. The full range of distinctions in person, number, and gender are all carried by the proclitic agreement markers; from a purely functional or formal perspective, these are all that we would require to mark agreement.

Examine the verbal form *te=r-í* ‘they know’, from (22). Here the category [third person plural] is marked in three distinct places on the verb, as shown in (26).



For this verb the initial [r] is ambiguous between third person plural, and third person singular feminine, but the other markers of agreement are individually sufficient to uniquely identify the correct set of agreement features. From a functional perspective, the proclitic is unnecessary. From a formal perspective, the vowel alternation should not take place. How can we account for this agreement overkill?

3. HISTORICAL EXPLANATIONS FOR THE SKOU AGREEMENT DATA. Some explanation for the apparent arbitrariness of the verbal agreement pattern in Skou can be proposed from a historical perspective. Other closely related languages also display many of the morphosyntactic features described for Skou: the same word order constraints and the same (underlying) consonant alternations on verbs to show agreement (but no agreement clitics). In this section we examine the agreement paradigms from these other Skou family languages in an attempt to understand the historical origins of multiple exponence seen in Skou.

The internal grouping of the closer Skou languages is shown in figure 2 (Donohue 2002a). Of these languages, only Skou is found in the Indonesian province of Papua; the rest of the languages discussed here are located on and behind the coast in Sandaun province, Papua New Guinea. Further comparison with more distantly related languages refers to the tree in figure 3 (Donohue and San Roque 2003). To avoid ambiguity I refer to the group of languages closely related to Skou (as shown in figure 2) as the “smaller Skou family,” or simply the “Skou family,” while reference to the larger grouping shown in figure 3 is always to the “Macro-Skou family.”

3.1 HISTORICAL CHANGES IN SKOU. The correspondences given in table 4 are found between Proto-Skou and contemporary Skou (presented here in outline; for argumentation, see Donohue 2002a). We can note that there are many collapses of contrasts in the simple consonants; the phonemic system of 16 contrasts in Proto-Skou is reduced to 11 in modern Skou. The most extreme case of a collapse of con-

FIGURE 2. THE SKOU FAMILY

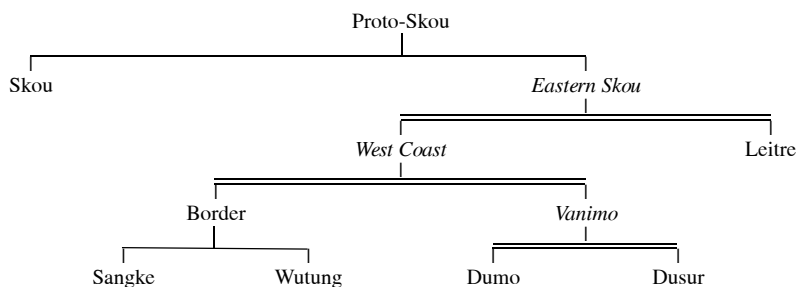
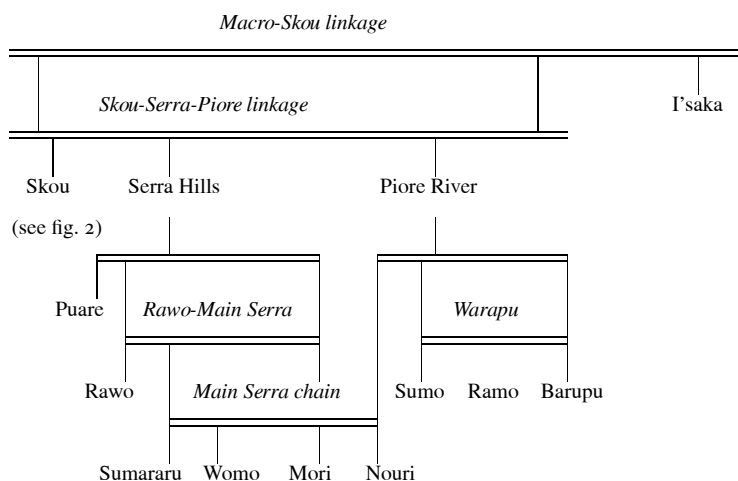


FIGURE 3. THE MACRO-SKOU FAMILY



trasts involves contemporary *p*, which reflects all of **p*, **g^w*, **bl*, **ml*, **fl* in Proto-Skou. Compared to its parent language, Skou may be characterised by the loss of voicing contrasts (only *p* and *b* show such a contrast), the loss of **s*, merging with **t* as *r* in most cases, by the loss of a distinction between *e* and *ɛ*, *o* and *ɔ*, and by having two contrastive nonnasal sonorants, *r* and *l*. This latter feature is the result of influence from the languages to the west, and is partly copied in Sangke/Nyao. Cluster simplification (see 3.3) is most advanced in Skou, with even the complex unit phonemes (*k^v* and *g^w*) being lost, even in verbal paradigms.

In addition to these consonants and vowels, a highly circumscribed range of initial clusters could begin a syllable: bilabials+*l*, voiceless (simple) stops+*l*, or **hy*. As can be seen in table 4, these clusters are all reduced to single consonants in contemporary Skou, whereas in all the other Skou languages, with the exception of Leitire, clusters are maintained for most of these Proto-Skou clusters (though the Vanimo languages also show reduction of **tl* and **hy*). Note that, apart from **pl*, all the other bilabial clusters reduce to *p* in modern Skou. Table 5 (from Donohue 2002a) presents some lexical information for the Proto-Skou voiceless stop + lateral clusters (*N/C* = not cognate).

In the following section this information will be used to propose an explanation for the synchronically observed alternations in onsets in prefixing verbs.

3.2 FORMS OF THE REDUCED CLUSTERS. We have seen that cluster reduction is a feature of Skou historical phonology. We can now address the question of the putative cluster reduction that is found in the inflectional system. In 2.2 the discussion suggested that an analysis of the agreement by consonant variation in the onset of the verb should refer to a set of “underlying” prefixes, described in table 1 and in 3.3. We can now shed some light on the somewhat arbitrary nature of actually realized forms of the putative reduced clusters.

The analysis in 2.2 would suppose the clusters given in table 6 as underlying the surface forms for the alveolar-*l* paradigm. The attested forms suggest that a process

TABLE 4. CORRESPONDENCES FROM PROTO-SKOU TO MODERN SKOU

Proto-Skou	Skou	Proto-Skou	Skou	Proto-Skou	Skou
* <i>p</i>	<i>p</i>	* <i>m</i>	<i>m</i>	* <i>i</i>	<i>i</i>
* <i>t</i>	<i>r</i>	* <i>n</i>	<i>n</i>	* <i>e</i>	<i>ɛ</i>
* <i>s</i>	<i>r</i>	* <i>ŋ</i>	<i>n, k, Ø</i>	* <i>ɛ</i>	<i>ɛ, a</i>
* <i>k</i>	<i>k</i>	* <i>f</i>	<i>f</i>	* <i>a</i>	<i>a</i>
* <i>k^w</i>	<i>w</i>	* <i>h</i>	<i>h</i>	* <i>ɔ</i>	<i>ɔ, a</i>
* <i>b</i>	<i>b</i>	* <i>l</i>	<i>l</i>	* <i>o</i>	<i>ɔ</i>
* <i>d</i>	<i>t</i>			* <i>u</i>	<i>u</i>
* <i>j</i>	<i>t</i>	* <i>pl</i>	<i>l</i>	* <i>ʈ</i>	<i>ʈ, Ø</i>
* <i>g</i>	<i>Ø</i>	* <i>tl</i>	<i>r, t</i>	* <i>θ</i>	<i>Ø, u</i>
* <i>g^w</i>	<i>p</i>	* <i>kl</i>	<i>l</i>		
		* <i>hy</i>	<i>h</i>		
* <i>bl</i>	<i>p</i>	* <i>ml</i>	<i>p</i>	* <i>fl</i>	<i>p</i>

of cluster reduction consistent with those that have been attested diachronically are operating in the verbal system. There are some proposed clusters that find no support from our reconstructions of monomorphemic lexical items, such as the *nl for IPL, but those that can be checked with reconstructed lexical materials show a pattern consistent with the historical phonology. The expected *p* for the 3SG.F cell is attested in lexemes such as *lœ* ‘work’ (see 2.2).

3.3 PREFIXATION IN THE SKOU LANGUAGES. As mentioned above, the set of consonant prefixes (that fuse with an initial consonant of the verb, if present) which we find in Skou show cognates in both form and function in the other Skou family languages, shown in table 7. The realization of these prefixes has been illustrated for Skou in table 2, and is shown for three other languages in tables 8, 9, and 10. (Data from other languages related to Skou is cited in an orthography compatible with the Skou data for ease of comparison; the only non-IPA addition to the Skou orthography is the digraph *ny* for a palatal nasal. Nasalization is not written consistently through a paradigm, because of the loss of contrast after nasal consonants in the eastern languages—see Donohue and San Roque 2000.)

TABLE 5. SAMPLE CORRESPONDENCE SETS INVOLVING CLUSTERS

	*pl	*tl	*kl
	*plu	*tl̥k ^w ɛ	*kl̥(pa)
Skou	pu	rø-bi	lø
Sangke	pru	nukɔ	krø(dø)
Wutung	plu	hlübø ~ hnübø	ʔf̃i
Dumo	plu	tũ	ʔf̃ipa
Dusur	N/C	tühø	hf̃ipa
Leitre	pu	tũke	kõpa
	‘marsupial’	‘head’	‘ear’

TABLE 6. CLUSTERS UNDERLYING THE ALVEOLAR-L PARADIGM

	ATTESTED	PUTATIVE PREFIX	RESULTING ONSET	HISTORICAL TREATMENT
1SG	lœ	(∅)	*l	*l > l
2SG	pœ	m-	*ml	*ml > p
3SG.NF	lœ	k-	*kl	*kl > l
3SG.F	rœ	p-	*pl	*pl > p
IPL	rœ	n-	*nl	(not attested)
2PL	lœ	(∅)	*l	*l > l
3PL	r̃i	t-	*tl	*tl > r, t

**TABLE 7. UNDERLYING AGREEMENT PREFIXES
IN SKOU FAMILY LANGUAGES**

	Skou	Nyao	Wutung	Dumo	Dusur	Leitre	*Skou
1SG	∅-, k-, n-	∅-, k-	∅-	∅-	ŋ-	∅-, ŋ-	*ŋ-
2SG	m-	m-	m-	m-	m-	m-	*m-
3SG.NF	k-	k-	ʔ-	ʔ-	h-	k-	*k-
3SG.F	p-	tʃ-, w-	tʃ-	b-	β-	g ^w -	*g ^w -
IPL	n-	n-	n-	n-	n-	n-	*n-
2PL	∅-	∅-	∅-	∅-	∅-	∅-	*∅-
3PL	t- / y-	t- / y-	d- / y-	d- / y-	d- / y-	d- / y-	*d- / y-

While the underlying sets of agreement prefixes are clearly cognate across the languages, the range of verbs that they can attach to and the phonological changes that arise from the prefixes interacting with root-initial consonants are not comparable.³ In the Eastern Skou languages verbs can only begin with a highly restricted range of consonants. Yet, because initial clusters are allowed, the verbal paradigms in the West Coast languages are the most complete (Wutung, Skou’s immediate eastern neighbor, presents some exceptions to this, possibly under influence from Skou). The paradigms from Dumo, Dusur, and Leitre can be compared with the Skou data in table 2. The same labels are used in these tables, with the addition of “alveolar N,” which is a variant of the alveolar paradigm used when the syllable has a nasal vowel. Leitre does not allow clusters, but does have very explicit verbal paradigms. Again, Leitre shows a wider range of syllable onsets than does Skou.

TABLE 8. DUMO VERBAL AGREEMENT PARADIGMS

	VOCALIC 'be at'	BILABIAL 'sit'	ALVEOLAR 'do'	ALVEOLAR N 'push'	PALATAL 'hit'	GLOTTAL 'put'	GLOTTAL N 'go'
1SG	ónɡ	βe	le	lung	yí	ʔú	ʔa
2SG	mónɡ	pe	ble	mlung	sí	bú	ma
3SG.NF	mó	ʔβe	ʔle	ʔlung	ʔyí	ʔú	ʔa
3SG.F	mú	se	pli	nung	sí	pú	βa
1PL	nónɡ	ʔβe	de	nung	ní	dú	na
2PL	ónɡ	βe	le	lung	yí	ʔú	ʔa
3PL	mú	ʔβe	dí	nyung	sí	tú	nya

TABLE 9. DUSUR VERBAL AGREEMENT PARADIGMS

	VOCALIC 'go'	BILABIAL 'fly'	ALVEOLAR 'do'	ALVEOLAR N 'hit her'	PALATAL 'put'	VELAR ₁ 'hit him'	VELAR ₂ 'fetch'
1SG	ŋá	βa	le	láng	yí	ɡá	go
2SG	má	pa	ble	mláng	sí	bá	bo
3SG.NF	há	hβa	hle	hláng	hyí	hyá	ho
3SG.F	βá	pa	hβi	náng	sí	pá	bi
1PL	ná	hβa	de	náng	sí	dá	do
2PL	á	βa	le	láng	yí	ɡá	go
3PL	yá	hβa	dí	nyáng	sí	tá	dí

TABLE 10. LEITRE VERBAL AGREEMENT PARADIGMS

	VOCALIC 'dig'	BILABIAL 'hit'	ALVEOLAR 'do'	ALVEOLAR N 'know'	PALATAL 'swim'	VELAR 'boil'
1SG	nyì a	wì	le	nù	yu	ŋù
2SG	nyì ma	pì	wɛ	mù	su	mù
3SG.NF	nyì ka	kʷì	ke	kùŋ	su	kùŋ
3SG.F	nyì g ^w a	pì	wɛ	tùŋ	su	bùŋ
1PL	nyì na	wì	dì	tùŋ	du	nù
2PL	nyì a	wì	le	nù	yu	ŋù
3PL	nyì ya	wì	dì	sùŋ	du	dùŋ

3. The fact that different languages simplify clusters in different ways suggests that the simplification of complex onsets was not part of the grammar of Proto-Skou (Donohue 2002a).

The differences that are found with Skou verbs, compared to the Eastern languages, are fourfold (largely summarizing traits from Donohue 2002a):

- phonological mergers have collapsed a number of contrasts: Skou has merged *p and *g^w as p; *j and *d as t; *t and some *s as r; *k, *g, and *k^w as k. Proto-Skou had 18 consonant onsets, and seven cluster onsets; Skou has 13 consonant onsets and no clusters, showing a loss of almost half the contrasts in onset position;
- there are less productive paradigms based on onset types in Skou than in any of its eastern relatives;
- phonotactic constraints rule out clusters in onsets;
- a large number of verb roots in Skou are uninflecting.

Given the simple syllable patterns in Skou languages (see footnote 1), the reduction of consonant clusters means that a large number of verb forms in a paradigm lose their contrast. Comparing, for example, Skou with Dumo, we find the four Skou paradigms lose contrast in 11 out of 28 cases, or 39 percent; this can be seen in paradigms such as *ké*, which is the form of the verb *ké* ‘catch’ in 1SG, 3SG.NF, 1PL, and 2PL). In Dumo we see loss in 14 out of 49 cases, or 29 percent. Dusur has the same proportion of collapse of contrasts, and Leitre and Wutung are slightly higher at 33 percent (Leitre is higher because it, too, forbids complex onsets, and Wutung because it, influenced by its neighbor Skou, has reduced several consonant contrasts).

We can illustrate the effect of the ban on complex onsets on the verbal inflection in pre-Skou in terms of cluster simplifications in the modern language (see table 11). For full verbal forms, see 2.2, where the more regular paradigms are exemplified.

Synchronically there are three allomorphs for 1SG: \emptyset -, *k*-, and *n*-. The consonantal allomorphs reflect pre-Proto-Skou *ŋ, which has been lost in most languages (see Donohue 2002a). In Skou *ŋ is lost ($> \emptyset$) in nominals, $> n$ in the 1SG free pronoun, and in verbal inflection is either lost (the majority case), preserved without nasality but retaining the velar place (*ŋ $> k$) (this is found in two verbs, *hung* ‘drink’ and *ang* ‘eat’), or else retains the nasal feature but loses the velar place (*ŋ $> n$) (found in one verb, *oeng -e* ‘refuse’). Most of the cluster reductions in the modern verbal paradigms are also compatible with regular historical changes.

In these examples we can see that in the process of cluster simplification a lot of contrasts are lost, with in some cases most of the paradigm reflecting only the initial C of the verb root. This is probably the origin of a number of the nonprefixing verb

TABLE 11. CLUSTER REDUCTION IN MODERN SKOU

	VOCALIC	BILABIAL	ALVEOLAR	VELAR	GLOTTAL
1SG	\emptyset - + V = V k- + V = k n- + V = n	\emptyset - + w = w	\emptyset - + l = l	\emptyset - + k = k	\emptyset - + h = h k- + h = k
2SG	m- + V = m	m- + w = p	m- + l = p	m- + k = b	m- + h = m
3SG.NF	k- + V = k	k- + w = w	k- + l = l	k- + k = k	k- + h = k
3SG.F	p- + V = p	p- + w = w	p- + l = w, t, r	p- + k = w	p- + h = w
1PL	n- + V = n	n- + w = w	n- + l = t, r	n- + k = k	n- + h = n
2PL	\emptyset - + V = V	\emptyset - + w = w	\emptyset - + l = l	\emptyset - + k = k	\emptyset - + h = h
3PL	t- + V = t	t- + w = w	t- + l = r	t- + k = k y- + k = j	t- + h = t y- + h = y

forms. As noted in 3.1, verbs can begin with a larger range of initials than *wlkhao* or *œ* (described in table 11)—additionally, *pjm.fhy* are found, but these verbs do not inflect by prefix. Historically it is likely that these forms showed inflection, just as in the Eastern languages. Extreme simplification in Skou has resulted in the complete loss of the inflectional system with these verbs; there is no longer any evidence in the paradigm for any inflection.⁴ Taking these verbs into account and assuming seven distinct paradigm sets as in the majority of the Eastern languages, we arrive at a figure of 79 percent for loss of contrast in verbal paradigms.

These factors would appear to be sufficient to bring about a second process of cliticization onto the verb in order to preserve contrastive verbal agreement. Taking into account the clitic/agreement/verb root complex in Skou, the percentage of loss-of-contrast in the verbal paradigms drops to zero percent, a functionally more satisfactory situation. For example, compare in table 12 the nonclitic-bearing, putative premodern Skou paradigm for ‘do, make’, in which the verb shows only four contrasts, with the modern Skou clitic+verb equivalent, which has seven contrasts.

Assuming that the modern underlying consonantal prefixes had their origins in cliticized forms of the free pronouns in Proto-Skou, we can chart the development of agreement marking on the verb in table 13 (the evidence for a VP in Skou is not presented here; the disapproving reader can simply disregard the posited phrase, if desired). This table shows a first stage in which there is no agreement on the language. None of the Skou languages reflects this stage, but the striking similarity of the verbal prefixes with the free pronouns suggests that the development of verbal agreement lies in the not-too-distant past. Following this unmarked stage, we find cliticization of the free pronouns onto the verb, the beginnings of the consonantal prefix system, which is realized in stage III, a stage partially preserved in the West Coast languages, which show the sorts of clusters seen in tables 8 and 9. The next

TABLE 12. ‘I/YOU/HE/SHE/WE/YOU(PL)/THEY DID/MADE.’

	pre-Skou	Modern Skou		pre-Skou	Modern Skou
1SG	li	nì=li	1PL	tì	ne=tì
2SG	pi	mè=pi	2PL	li	e=li
3SG.NF	li	ke=li	3PL	ti	te=ti
3SG.F	toe	pe=toe			

TABLE 13. THE DEVELOPMENT OF VERBAL AGREEMENT IN SKOU LANGUAGES

	DP _{SUBJ}	VP	LANGUAGE
STAGE I	C ₁ V	OBJ C ₂ V	(hypothesized nonagreeing stage)
STAGE II	C ₁ V	OBJ C ₁ V=C ₂ V	early Proto–Macro-Skou family?
STAGE III	C ₁ V	OBJ C ₁ -C ₂ V	West Coast languages
STAGE IV	C ₁ V	OBJ C ₁₊₂ V	Leitre, pre-Skou
STAGE V	C ₁ V	OBJ C ₁ V=C ₁₊₂ V	Skou

4. Similar to English verbs such as *hit*, which have no overt past tense marker, but in Skou there is no person inflection on the verb at all.

stage is one in which cluster simplification takes place, at which point there is a greater degree of merger between the prefix and the verb root. This stage is still found in Leitre, but in Skou, with a smaller consonant inventory, the under-differentiation has resulted in a second wave of cliticization, paralleling the earlier development seen between stage I and stage II. Although the status of this double agreement marking in Skou is synchronically awkward for morphological modeling, it appears to have a historical explanation that is in line with what we know of the development of agreement systems cross-linguistically (Givón 1971, 1976, etc.).

3.4 OTHER MACRO-SKOU COMPARISONS IN PREFIXAL AGREEMENT. Although it does not bear directly on the question of the historical development of Skou prefixes, it is instructive to examine the prefixal agreement patterns found in some other Macro-Skou languages. Recall that Skou groups with Leitre, Puare with Womo, and Barupu with Sumo (see figures 2 and 3). The languages shown here have been selected as typical for their subgroup. Only the consonantal portions of the pronouns are reconstructed, as there is a lot of variation in vowel quality. Furthermore, only clear correspondences have been listed; no attempt has yet been made to reconstruct the history of the development or loss of pronominal contrasts in these languages. For Barupu and Sumo, where two forms are listed, the first is the masculine inflection, and the second is the feminine. (The Piore River languages differentiate gender in almost all person/number combinations.)

There is a clear correspondence pattern in some forms, with the first and second person singular forms the most regular, along with the masculine. The feminine forms are innovative in Serra Hills languages, with a neuter gender spreading its function, and the first and second person plurals are suppletive in both Serra Hills and Piore River, the former grouping of which also has suppletive third person plural. Based just on this evidence, we would want to group Serra Hills and Piore River together as part of a primary three-way split involving this Serra-Piore group, a Skou group, and I'saka as an isolate. The regular sound changes (see Donohue and San Roque 2003) are not clear enough to posit a subgroup that joins the Serra Hills and Piore River groups together, and so the tree presented in figure 3 shows these two groups, along with the Skou group, as sisters.

3.4.1 The antiquity of the irregular conjugations. The irregular paradigms of the 1SG and 3PL cells in the subject prefix tables needs some comment. I have reconstructed an * η as the consonant for the 1SG pronoun to account for the split in mark-

TABLE 14. SUBJECT AGREEMENT MARKERS

	I'saka	Skou	Leitre	Puare	Womo	Barupu	Sumo	Proto-Macro-Skou
1SG	n ~ d-	θ-, k-, n-	θ-, η-	n-	n-	Vn(a)-	ana-	*nV / (?*ηV)
2SG	m ~ b-	m-	m-	m-	m(y)-	Vm(u)-	Vm(u)-	*m
3SG.M	k-	k-	k-	ɸ-	(k)θ	a-	a-	*k
3SG.F	w-	p-	g ^w -	ɸ-	z ^w	o-	o-	*g ^w
IDU	si-	—	—	h-, n ^y -	n ^y -	epi-	epe-	? *[i] / *p
1PL	ni ~ di-	n-	n-	b-	b-	emi-	e-	?
2PL	i-	θ-	θ-	h-	p-	opu-, eve-	umu-, eve-	? *pV
3PL	e-	t-, y-	d-, y-	p-	kw-	e-, ere-	i-, ere-	? *r / *y

ing in Skou; data from the verbal inflections in Dusur and Leitre provide strong support for this reconstruction. The question as to the point at which the irregular conjugations developed must be asked.

In table 7, Nyao is listed as also showing a *k*- for 1SG inflection. Examining the available data, we find that this restricted (and irregular) conjugation occurs with some of the same verbs as it is found with in Skou: ‘eat’ and ‘carry’. And looking at the 3PL inflections, which show both **d*- and **y*-, we find that in large part the same verbs are found with the same conjugation in the different languages in the smaller Skou family. This, however, is not surprising, because it appears from table 14 that this split can be reconstructed further back; it is also reflected in the Piore River languages, in which it marks a gender difference.

3.5 SUFFIXAL AGREEMENT IN THE MACRO-SKOU LANGUAGES.

We have presented an account of the historical processes that lie behind the clitic and prefixal agreement marking in Skou, but have not yet accounted for the agreement by vowel alternation. In this section I propose that the origins of this process can be found in what is also productive in most Macro-Skou languages, with the exception of the smaller Skou family: object agreement on the verb.

Although Skou and its near relatives do not have regular object suffixing, this is a common feature in the more distantly related languages of the family. Examples of the modern reflexes of these suffixes in languages that still have productive object marking are shown in (27)–(29). In I’saka we can see that *k* consistently appears in the inflections for 3SG.M, and *w* or *u* in the inflection for 3SG.NM, across the three different object marking paradigms. In (27) and (28) the regular (though lexically restricted) object suffixes mark masculine and nonmasculine, respectively. In (29) the plural object suffix is found, along with a feminine dative suffix. In (30) we can see the masculine object prefix, which is restricted to the one word ‘take’.

- I’SAKA
- (27) Nai d-esi d-epa-ki yang-yang.
 boy 1SG-carry 1SG-put-3SG.M.H.OBJ leg-leg
 ‘I’ll hold the boy on my lap.’
- (28) M-opa-wi.
 2SG-carry.on.shoulder-3SG.NM.H.OBJ
 ‘You carried her on your shoulders.’
- (29) Dakau yi-pa-i-ung.
 children 2PL-carry.on.shoulder-3PL.H.OBJ-3SG.F.DAT
 ‘You all carried the children on your shoulders for her.’
- (30) d-ak-ai.
 1SG-3SG.NPL.M-take
 ‘I take (masculine).’

In Womo, from the eastern Serra Hills, objects are suffixed as shown in the inflection of the verb *o* ‘do’. The feminine inflection, being vowel-initial, assimilates the vowel of the root.

WOMO				
'He saw...	<i>Ni</i>	<i>ǝ-o-n.</i>		...me.'
	<i>Ni</i>	<i>ǝ-o-m.</i>		...you (masculine).'
	<i>Ni</i>	<i>ǝ-o-k.</i>		...him.'
	<i>Ni</i>	<i>ǝ-u.</i>		...her.'
	<i>Ni</i>	<i>ǝ-o-nik.</i>		...them.'
eye		3SG.M.SUBJ-do-3PL.OBJ		

The Piore River family can be represented here by Sumo; other published information on verbal inflection in this group can be found in Donohue (2003). Again, the pattern of using high front vowels for then plural, high back for feminine, is clear.

- | | | | |
|------|--------------------------|------|--------------------------|
| (31) | B-ana-chara-ka. | (32) | B-ana-chara-u. |
| | REALIS-1SG-sec-3SG.M.OBJ | | REALIS-1SG-sec-3SG.F.OBJ |
| | 'I saw him.' | | 'I saw her.' |
| (33) | B-ana-chara-i. | | |
| | REALIS-1SG-sec-3PL.OBJ | | |
| | 'I saw them.' | | |

Using these data, as well as information from Puare (not shown here), we can construct a table similar to table 14, but representing agreement marking for objects on the verb: this is presented as table 15. It is clear that productive object marking is a feature of the languages of the Macro-Skou family. What, then, has become of this marking in the smaller Skou family?

I suggest that the vowel alternations described in 2.3 are the present-day reflexes of the older object suffixes. The high front unrounded umlaut that marks plural object in Skou reflects the older productive *-i* 3PL object marker, and the back round umlaut that marks feminine gender in Skou is a reflex of the earlier *-(ǝ)* 3SG.F object marker. In Skou synchronically there is no suffixal agreement, and the scope of the original object marking morphology has extended in many cases to marking subject as well as object (though not simultaneously). The umlaut probably developed while there was still productive marking by suffix, subsequent to which the suffixes were lost as part of the general process of monosyllabification that is a feature of the smaller Skou family more than of the Macro-Skou family.

A hypothetical example showing the development of umlaut is given in (34). In the earliest stage there are three distinct morphemes. Later the back rounded suffix

TABLE 15. OBJECT AGREEMENT MARKERS

	I'saka	Skou	Leitre	Puare	Womo	Barupu	Sumo	Proto-Macro-Skou
1SG	-de, -na	—	—	-n	-no	-nV	-na	*-na
2SG	-be, -ma	—	—	-m	-VmV	-mV	-mV	*-mV
3SG.M	-ke, -ka, -ak	—	—	-ǝ, -k	-ko	-ka	-ǝ	*-ka
3SG.F	-wi, -ū	—	—	-ǝ, -w	-u	-u, ǝ	-u, -ǝ	*-(ǝ)
IDU	-si	—	—	-h, -n ^y	?	-pi	-vi	*-Ci
IPL	?, -ni	—	—	-b, -p	-ne	-mi	-i	*-Ci (? *-ni)
2PL	-ya, -ye	—	—	-h, -ǝ	-pi	-opu, -eve	-mu, -ve	*-pV
3PL	-i, al-	—	—	-p, -h, -ǝ	-nik	-i, -re	-i, -re	*-rV / *i

causes the vowel of the verb root to display assimilation in terms of backness, following which the contemporary situation is reached by the dropping of the suffix, leaving the backed vowel as the only marker of feminine gender.

$$(34) \begin{array}{ccccc} *_{\text{I SG=sec-3SG.F}}\eta\text{j}=\text{f}\mathfrak{t}\text{-}(\tilde{\text{u}}) & \rightarrow & **_{\text{I SG=sec.F-3SG.F}}\eta\text{j}=\text{f}\text{u-}(\tilde{\text{u}}) & \rightarrow & \text{ni}=\text{f}\text{u} \\ & & & & \text{I SG=sec.F} \end{array}$$

‘I see her.’

A similar process of fronting and unrounding to mark plural can be assumed to be due to an earlier suffixation of *-i* to the verb, with subsequent (partial) assimilation of features by the vowel of the verb root. This umlaut process is also attested in the other smaller Skou family languages (Nyao, for instance, has the alternation *u: ø:i* for plain, feminine, and plural object, respectively, on the verb *hũpu* ‘see’, showing a similar, though different, set of umlaut rules), though it appears not to be as productive in these languages as it is in Skou. From my notes, Nyao, the eastern neighbor of Skou, shows the greatest amount of vowel alternations among the languages in the smaller Skou family, other than Skou.

4. SUMMARY. We have seen that there are good historical explanations behind the contemporary complexities of Skou agreement. The historical processes that have collapsed distinctions in Proto-Skou phonemes, and that have reduced clusters creating further collapses, have provided the functional motivation for successive cycles of encliticization. We do not have a good account of why the languages began to encliticize their free pronouns in the first place, but because this is a widely attested process (Campbell 1990, Comrie 1980, Givón 1971, 1976), its evaluation does not bear on the assessment of this case study.

While there is little motivation in a synchronic functional account for the multiple exponence in inflectional processes seen here,⁵ nor a convincing formal architecture, there are good reasons to consider the historical model presented here to be not only an adequate, but also an accurate, account of the complexities of Skou agreement. The system described here is one full of quirks that do not lend themselves to being readily unraveled synchronically—in short, it is one full of irregularities. It is most likely not coincidental that the number of attested verb roots in Skou, approximately 144, is of the same order as the number of so-called “strong” (irregular) verbs in Germanic languages.⁶ In the better-studied Germanic languages, the psycholinguistic evidence strongly suggests that these verbs are learned piecemeal, and not as parts of regular, synchronically derivable paradigms. A similar analysis for Skou would explain the extreme irregularity that is found in so many of the verbs in this language, too: essentially the entire (small) verbal lexicon is irregular, the result of the erratic application of historical processes to different members of the lexicon.

5. And beyond; possessive marking in Skou also involves degrees of multiple exponence, using both genitive suffixes and dative clitics.
 6. Additional predicates are expressed as complex predicates, built either by means of adjunct nominal constructions, in which a nominal unit is combined with semantically underspecified verb, or by means of a serial verb construction, or both.

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