

Noun classification in Siwu

1. Introduction¹

Siwu is a Kwa language from eastern Ghana classified as *na-Togo* by Heine (1968). Data presented in this paper was collected during fieldwork on the Akpafu dialect in 2007-2009. Previous analyses of noun classification and agreement in Siwu (Ford and Iddah 1973:9; Addae and Atsu 2002:42) and related GTM languages (e.g. Allan 1973; Harflett and Tate 1999; Delalorm 2008) have been modelled closely on an idealized model of the Bantu system. Such analyses tend to (1) ignore the fact that many of the resulting ‘noun classes/genders’ actually are a heterogenous bunch of morphological classes²; (2) overlook the fact that the agreement system hinges on the single morphological classes rather than on the pairings; and (3) downplay the existence of clusters of non-count nouns in several classes. These facts suggest a greater role for the unpaired classes and a less central role for the pairs of classes.

The system as it presents itself today in Siwu consists of ten single morphological classes, nine class pairings for number, and orthogonal to this eight agreement classes as determined by grammatical concord.

MORPH CLASS	NUMBER	examples
i-	SG	ì-yo ‘house’
a-	PL	à-yo ‘houses’, à-dziri ‘trees’
ma-	PL	mà-turi ‘persons’
ɔ-	SG	ɔ-turi ‘person’
si-	PL	sì-tu ‘guns’
	SG ¹	sì-ri ‘yam’
	NON-COUNT	sì-turi ‘personhood’
ka-	SG	kà-rodzai ‘bird’
ku-	PL	kù-rodzai ‘birds’
	SG	kù-dziri ‘tree’
	NON-COUNT	kù-kpi ‘death’
∅-	SG	gbā ‘crab’
N-	NON-COUNT	ndu ‘water’
	PL	ñ-dōrē ‘firewood’
mi-	PL	mì-ri ‘yams’

Table 1. *Morphological classes and number in Siwu*

¹ N.B. This paper, which was presented at CALL in Leiden, reports preliminary findings. Analysis of the system and especially its semantics is ongoing.

² Thus in Selee (Santrokofi), ‘class 3’ lumps together the singular class prefixes *li-*, *ni-*, *le-/le-*, *ku-/ko-/kɔ-* with the plural prefix *a* in the analysis of Harflett & Tate (1999:17).

2. Classes

Nouns are classified into MORPHOLOGICAL CLASSES based on the form of their prefix. Some of these classes are basically singular, others basically plural, and yet others contain a mixture of singular and plural, or of plural and mass nouns. Some nouns, like kinship terms and proper names, are probably classless.

3. Agreement

Nouns are classified into AGREEMENT CLASSES on the basis of agreement patterns. Thus *sì-ri* ‘yam’ and *sì-ko* ‘books’ belong to the same agreement class; as do *à-dziri* ‘trees’ and *à-yo* ‘houses’ (A class); as do *n-du* ‘water’ and *mì-ri* ‘yams’ (MI class). It will be observed that there is almost a one to one mapping between morphological class and agreement patterns. Class *ɔ-* and *Ø-* both belong to gender *ɔ*, while *N-* and *mi-* together belong to gender MI.

Agreement is marked on the verb, on the cardinal numbers from 1 (*ɔwê*) up to 7 (*kɔdze*)³, on demonstratives, on object pronouns, and on the relative pronoun. The verbal concord only appears when the subject of a verb is pronominalized.

AGREEMENT CLASS	VERBAL	NUMERAL	OBJECT	TOPICALIZED /POSSESSIVE	RELATIVE/ DEMONSTR
I	i-	i-	nẽ	nẽ	nɛ-
A	a-	a-	wã	wã	wa-
MA	ma-	i-	mã	mã	ma-
ɔ	ɔ-	ɔ-	ũ	ũ	gɔ-
SI	si-	si-	sẽ	sẽ	dze-
KA	ka-	ka-	kã	kã	ga-
KU	ku-	ku-	kɔ	kɔ	gɔ-
MI	mi-	mi-	mẽ	mẽ	mɛ-

Table 2. Agreement morphology

- (1) *kù-bɔibi* *gɔ* *sɛ* *kù-ferere* *i* *ka-tò* *ne*,⁴
 KU-small.animal KU.REL HAB KU-fly LOC KA-up TP
 ‘the small animals that have been flying up high...’

³ Compare this to closely related Lelemi, where only the numeral 1 takes full concord and a limited form of concord applies to the numerals 2-6 (Allan 1973:184-6; Höftmann 1971:49).

⁴ Abbreviations used include: 1 first person, 2 second person, 3 third person, A.x agreement where x is the noun class (e.g. I, KA, KU, ɔ), ADJ adjectival marker, DEM demonstrative, DEP dependent, FOC focus, HAB habitual, IDPH ideophone, INDEF indefinite, INGR ingressive, INTX expressive intensification where x is an impressionistic measure of intensity, LOC locative, NAME proper name, NEG negative, PF perfective, PL plural, POSS possessive, PROG progressive, PST past, REFL reflexive, SCR subject cross reference, SG singular, TP topic marker, OBJ undergoer, UFP utterance final particle.

kɔ̃ lo-ta sɔ kú-a-kɔ ɔ-rɔ̃gô
 KU.TP SCR-stand QUOT KU-FUT-take ɔ-woman
 ‘they stood up to take a woman.’

(2) *mà-bara àlà mà-bòrèni kù-dù gɔgbe ne,*
 3PL-do with MA-whiteman KU-gunpowder A.KU-DEM TP
 ‘they make with [X] this gunpowder (...)’

(3) *mà-bi nɛ, mà-lɛ oo ma-i-lɛ, fɔ̃ lo-ye mǎ*
 MA-child TP, MA-be.good oo MA-NEG-be.good, 2SG SCR.DEP-give.birth MA.OBJ
 ‘Children, whether good or bad, you’re the one who gives birth to them’

(4) *sàmùrà n-dɛ kɔ̃ ɔ-kpakpa*
 Tortoise SCR-be KU.POSS ɔ-elder
 ‘Tortoise is their_{KU} elder’ (i.e. of *kù-bɔ̃ibi fɛrɛrɛà* ‘the flying animals’)

(5) *kà-bɛku to kà-nyɛmɛnyɛmɛ*
 KA-snake PROG KA-IDPH.zigzag
 ‘The snake is wriggling/zigzagging’

In Siwu, agreement is robustly morphological (as opposed to semantic, as in some Bantu languages like Swahili). Number plays no role in the grammatical agreement system. The agreement pattern of the *KU* class for example is invariable and does not heed number; so a sentence in which the *ku*-subject is pronominally expressed is ambiguous with respect to number — the subject could be the singular *kù-dziri* ‘tree’ or the plural *kù-sɛsei* ‘baskets’. Some classes escape this number ambiguity (*A* is always plural, *ɔ* always singular), but for those another problem arises: for example, a sentence with pronominal reference to an *a*-noun will not tell us to which pairing the noun belongs (*ku/a* or *i/a*); all it tells us is that the subject is an *a*-noun. It seems best not to mix up agreement classes (genders) and class pairings synchronically.

Derived adjectives normally do not show concord in the presence of the head noun; but in a coordinate construction as in (6) the concord does show up. This shows their affinity to verbs (stative verbs and ideophones can be derived with *-à*).

(6) *n-du tɔ̃tɔ̃-à gu mi-yululu-a*
 MI-water hot-ADJ and A.MI-IDPH.chill-ADJ
 hot water and chill one

4. Paucal

There is a previously undescribed distinction for paucal number in Siwu.⁵ For small numbers, the prefix of the head noun and the agreement on the numeral (if present) are replaced by the paucal prefix *i-* (7).⁶ The paucal appears in my data for the plural *ma-*, *si-*, and *N-* classes (8), although in some of these cases the prefix of the head noun is not replaced. It is not available for the plural *a-* class, perhaps because the corresponding singular for that class is *i-*, leading to a clash. Speakers seem not always sure whether to use full agreement or the paucal form; this may indicate that the system is in a state of flux. The paucal meaning of the construction is confirmed by compatibility with *irésã* ‘few’ and incompatibility with *bebrébe* ‘many’ (9), while the plural, expectedly, shows the inverse pattern (10).

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|-----|--|----------------|--|
| (7) | <i>ì-ko i-nyô</i> | ‘two books’ | (<i>ò-ko/sì-</i>) |
| | <i>ì-sa i-kòdzê</i> | ‘seven towers’ | (<i>ò-sa/sì-</i>) |
| | <i>ì-tu i-ruù</i> | ‘five guns’ | (<i>ò-tu/sì-</i>) (but see below) |
| (8) | <i>sì-tu i-ruù</i> | ‘five guns’ | (<i>ò-tu/sì-</i>) |
| | <i>mà-kpakpa i-nyô</i> | ‘two elders’ | (<i>ò-kpakpa/mà-</i>) |
| | <i>òn-gba i-naà</i> | ‘four legs’ | (<i>kù-kpa/òn-</i>) |
| | <i>*à-yo i-naà</i> | ‘four houses’ | (<i>ì-yo/à-</i>) |
| (9) | <i>lò-ba i-tu i-résã</i> | | (10) <i>lò-ba sì-tu bebrebee</i> |
| | 1SG-have PAUC-gun AGR.PAUC-few | | 1SG-have C.SI:PL-gun many |
| | ‘I have few _{PAUC} guns _{PAUC} ’ | | ‘I have many guns _{PL} ’ |
| | <i>*lò-ba i-tu bebrebee</i> | | <i>*lò-ba sì-tu i-résã</i> |
| | 1SG-have PAUC-gun many | | 1SG-have C.SI:PL-gun PAUC-few |
| | ‘I have many guns _{PAUC} ’ | | ‘I have few _{PAUC} guns _{PL} ’ |

5. Number

Number is closely intertwined with both the individual morphological classes and the way they pair up. Some pairs, like *i/a* and *ka/ku*, tend to pair up reciprocally (so that all nouns with the singular prefix always co-occur with the plural prefix and vice versa). Some classes (*si-*, *ku-*) are ambiguous with respect to number, playing for singular in one pairing and for plural in another. So certain classes only convey plurality insofar as they alternate with another class for singularity. For example, the *N*-class conveys plurality for some nouns that have a singular in *ka*, e.g. *kà-tõrê/òn-dõrê* ‘firewood’; for most of its other members, it conveys a non-count sense.

⁵ The Siwu situation resembles Kulango, where some of the genders are expanded to make another number distinction with paucal in addition to singular and plural (Elders 2008). In Logba, Dorvlo (2008:47) writes about ‘the numbers one to six which have *i*-prefix when counting’, but from his further description it appears this *i*-prefix is actually only present in the citation form of the numerals.

⁶ Note that the citation form for lower numerals in Siwu also has a prefix *i-* (*ì-wê*, *ì-nyô*, *ì-tê*, *ì-nâ*, *ì-ruù*, etc.).

CLASS PAIRING	FREQ	<i>example</i>
i/a	277	ì-yo/â- ‘house’
ka/ku	143	kà-rɔdzaì/kù- ‘bird’
∅/ma	132	kpise/ma- ‘ghost’
ɔ/si	127	ḡ-tu/sì- ‘gun’
ɔ/ma	58	ḡ-turi/mà- ‘person’
ka/N	32	kà-yeè/ḡ- ‘mortar’
ku/a	30	kù-dziri/â- ‘tree’
si/mi	13	sì-ri/mì- ‘yam’
ku/N	3	kù-kpaà/ḡ- ‘leg’
N	16	n-du ‘water’

Table 3. Class pairings and their relative frequencies

Number does not always involve a simple singular/plural opposition. For certain nouns, pluralization brings the connotation of ‘different types of X’ (11). For others, the plural form is the most common one and singularization may bring more specialized semantics (12).

- (11) *dɔti/mà-* ‘thread’, plural means ‘different types of thread’
 ?*mà-dɔti ma-wê* ‘some threads’ (barely acceptable)
- (12) *a-nɔmi* ‘eyes’ (SG *i-nɔmi* is rare)
à-wururù ‘sweat’ (SG *ì-wururù* ‘drop of sweat’)

Non-individuated nouns

There are groups of non-individuated nouns in at least three classes: a group of liquids and masses in the *N*-class (16 items in my database), a group of uncountables in the *ku*-class (7 items), and a group of non-count abstract concepts, often derived, in the *si*-class (30 items).

- (13) Non-count nouns in *N*: liquids and (dispersed) masses
- ḡ-dã* palmwine
 - ḡ-dɔ̃* ashes
 - m-mi* faeces
 - n-nɔmɛ* tears
 - m-ma* salt
 - n-gbã* life
- (14) Non-count nouns in *KU*: bad concepts
- kù-kpi* death (cf. *kpi* ‘to die’)
 - kù-kã* hunger

<i>ku-tukã</i>	thirst	(‘lit. water hunger’)
<i>kù-sa</i>	poverty	
<i>kù-kpɛ</i>	dry season	

(15) Non-count nouns in SI: abstractions

<i>sì-gara</i>	chieftaincy	(<i>ì-gara</i> ‘chief’)
<i>sì-bena</i>	leftness	(<i>kà-bena</i> ‘left hand/side’)
<i>sì-nyatu</i>	saliva	(<i>kà-nya</i> ‘mouth’ + <i>n-du</i> ‘water’)
<i>sì-turi</i>	personhood	(<i>ḡ-turi</i> ‘person’)
<i>sì-dzimi</i>	stupidity	(<i>ḡ-dzimifó</i> ‘fool’ < Akan?)
<i>sì-kpakpa</i>	seniority	(<i>ḡ-kpakpa</i> ‘elder’)
<i>sì-rɛ</i>	sleep	(<i>rɛ</i> ‘to sleep’)
<i>sì-ruù</i>	fifty	(<i>ì-ruù</i> ‘five’)

6. Semantics

The class allocation of nouns in any noun class system is motivated. By ‘motivated’ I mean the opposite of ‘arbitrary’. Noun class systems often reflect culturally salient distinctions (e.g. Lakoff 1987; Palmer 1996) and offer an interesting window onto a long history of cultural evolution (Dingemanse 2006).

As an illustration of the semantics of the different classes, consider example (16). The different stages in the life of a palm tree are distributed over the noun class system in an interesting way.

(16) <i>kù-brɛ/à-</i>	palm tree (generic name for the species)
<i>kà-brɛguri/kù-</i>	palm tree, very small and young
<i>ì-bɛku/à-</i>	palm tree, grown big and ready to be tapped
<i>ì-rɔ/à-</i>	palm tree, lying on the ground ready to be <i>processed</i>
<i>ɔ-besã/sì-</i>	palm tree when it has grown very old and long

Some more examples of the semantic affordances of the system: Referring to a person using agreement morphology for a non-human class makes for serious (dehumanizing) insults (17). Also, body-parts not in their normal state move out of their normal class (18-19).

(17) <i>ì-rɛ̃rɛ̃ pɛ́</i>	useless man [<i>ḡ-rɛ̃rɛ̃</i> → <i>ì-rɛ̃rɛ̃</i>]
<i>kà-turi totorii</i>	very tiny person [<i>ḡ-turi</i> → <i>kà-turi</i>]
(18) <i>kã-rã/nrã</i>	arm/hand
<i>ḡ-rã-ĩ/sì-</i>	paralysed arm
(19) <i>ku-kpaà/n-</i>	leg
<i>ɔ-kpaĩ/sì-</i>	abnormally small leg
<i>ɔ-kpaĩ/ma-</i>	person with a permanent leg problem

UNIT	NUMBER	SEMANTICS	EXAMPLES
i/a	SG/PL	INANIMATE; food items; edible animals; tools; buildings;	<i>ì-dòdì</i> ‘watersnail, sp.’, <i>ì-worebi</i> ‘garden egg’, <i>i-tuì</i> ‘broom’, <i>ì-yo</i> ‘house’
ka/ku	SG/PL	small things and animals; household items; disabled persons	<i>ka-se</i> ‘piece’, <i>kà-pũ</i> ‘fruit fly’ <i>kà-kpekpeyuù</i> ‘hawk, small sp.’, <i>kà-kpere</i> ‘phone’, <i>kà-nògàlami</i> ‘squinter’
ɔ/ma	SG/PL	ANIMATE; people; animals	<i>ɔ-turi</i> ‘person’, <i>ɔ-rɔgò</i> ‘woman’, <i>ɔ-bi</i> ‘child’, <i>ɔ-fɔ</i> ‘stranger’ <i>ɔ-bɔi</i> ‘animal’
∅/ma	SG/PL	types of persons (derived words) animals; loanwords	<i>gbere</i> ‘hunter’, <i>torese</i> ‘blacksmith’, <i>rɔkpaí</i> ‘tapper’, <i>rārɔdze</i> ‘prostitute’, <i>tàrédzè</i> ‘drunkard’, <i>yùkukpe</i> ‘thief’, <i>kpisere</i> ‘widow’, <i>tidzè</i> ‘teacher’, <i>sefofo</i> ‘flower’
ka/n	SG/PL	places; body-parts (locative)	<i>ka-sakɔ</i> ‘hospital’, <i>ka-rũ</i> ‘ground’, <i>kà-kɔi</i> ‘anyplace’, <i>kà-bɔdzokɔ</i> ‘lower pt. of back’, <i>kà-ma</i> ‘back’, <i>kà-tɔ</i> ‘face’, <i>kà-to</i> ‘top’
ku/a	SG/PL	trees, natural phenomena, body-parts	<i>kù-dziri</i> ‘tree’, <i>ku-rɔdɛ̀</i> ‘silk cotton tree’, <i>ku-yɛ</i> ‘sun’, <i>ku-dokpo</i> ‘sky’, <i>kù-be</i> ‘mountain’
ɔ/si	SG/PL	material culture, (useful) parts of plants, (animal) body-parts, household items	<i>ɔ-kàti</i> ‘cloth’, <i>ɔ-yu</i> ‘blast furnace’, <i>ɔ-dziri</i> ‘stick’, <i>ɔ-duù</i> ‘root’, <i>ɔ-kã</i> ‘tail’
si/mi	SG/PL	(too few nouns to tell?)	<i>si-a</i> ‘farm’, <i>si-a</i> ‘cutlass, old type’, <i>sì-ri</i> ‘yam’, <i>sì-na</i> ‘meat’, <i>sì-rɛ̀</i> ‘arrow’, <i>sì-yuù</i> ‘thorn’, <i>sì-de</i> ‘language’, <i>sì-lɔ</i> ‘voice’
si	NON-COUNT	abstractions	<i>sì-dzimi</i> ‘stupidity’, <i>sì-gara</i> ‘chieftaincy’, <i>sì-turi</i> ‘personhood’, <i>sì-re</i> ‘sleep’
N	NON-COUNT	liquids, mass nouns	<i>n-du</i> ‘water’, <i>m-ma</i> ‘salt’, <i>m-mi</i> ‘faeces’, <i>n-dɔ</i> ‘ashes’, <i>n-gu</i> ‘sheabutter’
ku	NON-COUNT	negative concepts	<i>kù-kpakpi</i> ‘accident’, <i>kù-kpi</i> ‘death’, <i>kù-sa</i> ‘poverty’, <i>kù-kpe</i> ‘dry season’, <i>kù-kã̀</i> ‘hunger’

Table 4. Some semantic clusters in the Siwu noun class system

Two main semantic clusters can be distinguished in the *ka* class: small things/DIMINUTIVE, and places/LOCATIVE. The two are distinguished by the plural prefixes they take: the pairings are *ka/ku* for the small things and *ka/n* for the locations. A *kà- ... -í* derivation⁷ places its products in the *ka-* class and effects a diminutive meaning. The products take their plural in *ku-*. Example (21) comes from a corpus of natural discourse. The singular form would be *kàrai weà*. Some new household items are also in this cluster (22).

- (20) *ǝ-bi* ‘child’ → *kà-bi* ‘baby’
ì-kolòmò ‘vulture’ → *kà-kolomo-í* ‘small vulture’

- (21) *kù-ra-i wewe-à*
 PL:DIM-small.things-DIM chew.PLUR-ATTR
 ‘small things to chew’

- (22) *kà-kpere* ‘mobile phone’ (< *kpere* ‘call *v*’)
kà-fututu ‘television’ (< *fututu* ‘white IDPH’, probably because of white noise)

Examples of the locative meaning can be found in table 4. The word *Kawu* ‘place of the Mawu’, doesn’t have a plural, but if it would have, it would be *ŋwu*. A plural *Kuwu* would make it ‘too much thing-like’, as one consultant put it. There is a *kà-...-kĩ* derivation that roughly means ‘place related to X’, e.g. *kàyakĩ* ‘standing place [during collaborative farming]’, *kàsakĩ* ‘hospital [place of healing]’.

Loanwords

Most loanwords are absorbed in the \emptyset/ma class pairing (i.e. they take concord like \emptyset/ma nouns). However, if there is a possibility of reanalyzing part of the loan as a prefix, as in (23).

- (23) *i-gbedi/a-* ‘cassava’ (< Ewe *agbeli*)
kápintà/kú- ‘carpenter’

7. Has the system undergone simplification?

Siwu being a minority language under stiff influence of dominant regional languages without noun class systems, one might suspect that its noun class system has been simplified in recent years. Indeed we know this to be the case for at least two other GTM languages: Logba, where certain plurals are now formed with a $-w\emptyset$ suffix borrowed from Ewe (Dorvlo 2008:48)⁸; and Nyangbo, where certain distinctions noted by Heine (1968) are no longer being made. Unlike these southern GTM

⁷ I am not sure actually whether this should be analyzed as (1) a unitary simulfix *kà ... í* or (2) derivational use of the *kà* class prefix plus use of an additional $-í$ suffix.

⁸ Dorvlo also reports that students between 16-21 years of age used this $-w\emptyset$ marker to form plurals, but that these forms were frowned upon by older speakers (2008:48).

languages, the noun class system of Siwu seems not to have undergone significant changes in the past fifty to hundred years — certainly the period in which the influence of Ewe (particularly through church and education) has been most intense. Class allocations or singular/plural pairings have not changed compared to the data recorded by Bertho (1952), Kropp (1967), and Ford (n.d., late sixties). A less reliable indicator, but one that may be informative nonetheless, is the relative frequency of the classes and class pairings; this, too, has not changed significantly in the forty years since Ford and Dakubu's wordlists. We can actually gain a little more time-depth by considering older sources like Plehn (1898), Seidel (1899), Funke (1920) and Westermann (1922). Though the data is scanty⁹ and not always reliable, the information on the noun classes is clear enough (esp. in Westermann) and a comparison shows no loss of any of the distinctions that were made one century ago. The statement by Obeng (1998:201n3) that 'Siwu, like most of the Togo Remnant languages, has lost most of its noun class and concordial systems and now has what Welmers (1973) calls a vestigial noun class and concordial system' can only be attributed to a lack of familiarity with the language.¹⁰

All the same, the system is of course not immutable and has certainly seen changes over the centuries. One may hypothesize that the current situation has come about as a result of several class splits, mergers, and changes in the agreement system; additionally, the loss of the vowel harmony system (still active in close relatives *Sɛlɛɛ*, *Sɛkplɛlé*, and *Lɛlɛmɪ*) and a vowel merger no doubt have also contributed their share to the somewhat unwieldy, but fascinating outlook of the current system in Siwu.

8. Bibliography

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⁹ Especially if we note that Seidel is but a slightly edited version of Plehn's data and that Westermann (1922) is in turn based on a combination of Plehn's data and the texts in Funke (1920).

¹⁰ I have noticed that some young people (<25) who have lived outside of Kawu for some years (e.g. for schooling or work) occasionally have difficulty finding the right plural for obscure words (never for common words) and fall back on the \emptyset/ma pairing which also, incidentally, accommodates the majority of loanwords (as well as plurals in instances of codeswitching, e.g. *mà-geckos* 'geckos'). It is not impossible that Obeng worked with such a consultant.

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