Semantically-based functions of noun-class markers in Tagbana

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Abstract
This paper addresses the use of noun-class markers in Tagbana from the perspective of a cognitively-inspired approach based on Langacker (2000)’s semiological principle. Drawing on this basic tenet of cognitive grammar according to which the symbolic function of language consists in making speakers’ conceptualizations auditorily or visually perceptible, it demonstrates that in syntactic constructions composed of ‘noun-stem + noun-class marker’ and ‘noun-class marker + identifier’, noun-class markers fulfil the semantic function of making explicit the way the speaker conceives of the experiential entity referred to in the utterance. This view goes beyond form-centred functions such as referent-tracking to include the signifying of complex conceptualizations involving more than one noun-class marker with the same noun-stem, as well as the discourse functions of indicating topicality, insistence on a referent’s existence and contrastive focus.

Keywords: noun-class marker; gender; classifier; identifier; salience; Niger-Congo; Gur; Senufo; Tagbana

1. Introduction

Although it is the Bantu languages which are most commonly associated with noun-class systems, in all branches of the Niger-Congo family except Mande nouns
typically consist of a stem and an affixal noun-class marker\(^1\) (cf. Welmers 1973: 159). Such nominal classes have been compared to the gender systems of Indo-European, and indeed Corbett (1991: 47) treats Bantu nouns as falling under seven different genders, which he opposes to classifiers by the fact that the latter do not trigger agreement in other elements in the utterance, the “determining criterion” of gender being agreement. He concedes however (1991: 146–147) that “there is little point in trying to maintain a strict distinction between ‘gender’ and ‘noun-class’ since similar systems are described as genders in one language family and as noun-classes in another.” Because of the association of gender with sexual distinctions which are not relevant for Tagbana, we will follow Welmers (1973), Grinewald (1999) and Creissels (1999) in using the term ‘noun-class’ in this study.

In Bantu languages, which we will use to illustrate the typical functioning of NCMs, there are from 10 to 20 different markers, most of which can be paired off with one another in binary oppositions of ‘singular’ to ‘plural’. Here is the Swahili system as provided by Corbett (1991: 47):

<table>
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<tr>
<th>Controller gender (sing/plur)</th>
<th>Nominal prefix (sing/plur)</th>
<th>Verbal prefix</th>
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<tr>
<td>1/2</td>
<td>m-/wa-</td>
<td>a-/wa-</td>
</tr>
<tr>
<td>3/4</td>
<td>m-/mi-</td>
<td>u-/i-</td>
</tr>
<tr>
<td>5/6</td>
<td>Ø ~ ji-/ma-</td>
<td>li-/ya-</td>
</tr>
<tr>
<td>7/8</td>
<td>ki-/vi-</td>
<td>ki-/vi-</td>
</tr>
<tr>
<td>9/10</td>
<td>N-/N-</td>
<td>i-/zi-</td>
</tr>
<tr>
<td>11/10</td>
<td>u-/N-</td>
<td>u-/zi-</td>
</tr>
<tr>
<td>15</td>
<td>ku-</td>
<td>ku-</td>
</tr>
</tbody>
</table>

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\(^1\) Henceforth NCM.
According to Corbett, most noun-class assignment is semantically arbitrary, although meaning does come into the picture in some parts of the system in that animates are class 1/2, augmentatives class 5/6, and diminutives class 7/8. Verbs and adjectives agree in noun-class with their subjects/supports, but here the agreement is semantic rather than morphological. Thus a noun of class 7/8 such as the Swahili substantive *ki-boko* ‘hippopotamus’ referring to an animate being takes class 1/2 animate agreement on dependent adjectives and verbs:

(1) \[ \text{*ki-boko*} \quad \text{*m-kubwa*} \quad \text{*a-meanguka*} \]

\[ 7/8 \text{ hippopotamus} \quad 1/2 \text{ big} \quad 1/2 \text{ has fallen} \]

We can now turn to Tagbana to see how NCMs function in this language.

2. **Brief Tagbana tutorial**

Tagbana is a Gur language spoken in Katiola in the north of Côte d’Ivoire (cf. Clamens 1952: 1403; Garber 1991: 3; Katia 1988: 10; Miehe & Winkelmann 2007: 451). It differs from Bantu languages in that it has only six NCMs; moreover, these are not correlated with one another in singular/plural pairings. Here are the affixes along with our proposals for their basic semantics:

- **k-** inanimate (e.g. chair)
- **w-** human or higher animate (e.g. man, ghost, lion, dog)
- **l-** clearly delineated, often small entity demarcated from its environment (e.g. rabbit, tooth)
- **m-** homogenous mass-like substance (e.g. water)
- **p-** group made up of individuals (e.g. men, types of commodity)
- **t-** conglomerated grouping (e.g. money/coins)\(^2\)

\(^2\)We have deliberately avoided the term ‘collective’ due to the bewildering array of senses in which it has been used by linguists, as remarked by Gil (1996: 66–70) and Corbett (2000: 13). Both \(p\) and \(t\)
We follow Contini-Morava (1997)’s cognitive analysis of NCMs in Swahili in positing for each Tagbana NCM a “superschema” (cf. Langacker 1988), i.e. a maximally abstract representation that holds together the various instantiations. For the NCM \( l \)-, the network of instantiations would look something like Figure 1:

![Figure 1](https://mc.manuscriptcentral.com/cogl)

**Figure 1**

Our goal in this article will not be to go into the internal semantics of each NCM, but rather to show how its functioning within the noun phrase is motivated by its semantic content.

Unlike in Swahili, Tagbana verbs do not show NCM agreement with their subjects. Concord is restricted to adjectives\(^3\), with which it is morphological and not semantic (cf. Clamens 1952: 1413):

\[
(2) \quad pë-l-é \quad l-i \quad kmā-l-ã
\]

\( pë \)-, \( l \)-, and \( kmā \)- evoke the notion of ‘more than one,’ which makes them semantically plural in the sense in which this term is employed by Corbett (2000: 20). However, we will argue below that they are not exponents of the grammatical category of number.

\(^3\)Except for adjectives following stems of the \( k \) and \( w \) classes.
As can be seen from the above examples, Tagbana NCMs are both affixed to the noun-stem, into which they are incorporated by being followed by a reduplicative vocalic element that reiterates the last vowel of the stem, and repeated after the classified noun in combination with a suffixed vowel which is either -i, -a or -é. The latter element, which occurs in other Gur languages, has been called a “stabilizer” by some authors, a term which Welmers (1973: 191) criticizes for its vacuity and proposes to replace by “identifier” (here abbreviated as ID), since it serves “to identify a noun as the answer to a question or the topic under discussion.” In Tagbana there are three different forms of identification: definite (i), indefinite (a) and augmentative/plural/emphatic (é), as illustrated in:

\[\text{rabbit + NCM } l- \quad \text{NCM } l- \quad \text{cute + NCM } l-\]

‘The rabbit is cute.’

\[\begin{array}{lll}
\text{hū-} & \text{m-ū} & \text{m-i} \\
\text{alcohol + NCM } m- & \text{NCM } m- & \text{hot + NCM } m- \\
\end{array}\]

‘The alcohol is hot.’

\[\begin{array}{lll}
\text{kpē-} & \text{r}^4-é & \text{t-}i \\
\text{chair + NCM } t- & \text{NCM } t- & \text{red + NCM } t- \\
\end{array}\]

‘The chairs are red.’

\[\begin{array}{lll}
\text{aka-} & \text{b}^5-a & \text{p-}i \\
\text{type of food + NCM } p- & \text{NCM } p- & \text{delicious + NCM } p- \\
\end{array}\]

‘These types of food are delicious.’

\[\begin{array}{l}
\text{pé-} & \text{l-é} & \text{l-}i \\
\text{rabbit + NCM } l- & \text{NCM } l- + \text{definite ID } -i \\
\end{array}\]

‘the rabbit’

\(^4_r\) is the intervocalic realization of the NCM \(t\).

\(^5_b\) is the intervocalic realization of the NCM \(p\).
(7) \[ \text{pê-l-ê} \quad l-a \]
\text{rabbit + NCM } l- \quad \text{NCM } l- + \text{ indefinite ID } -a
\text{‘a rabbit’}

(8) \[ \text{pê-r-ê} \quad t-é \]
\text{rabbit + NCM } t- \quad \text{NCM } t- + \text{ augmentative/plural/emphatic ID } -é
\text{‘rabbits’}

In some cases, one even finds two identifiers after the same noun-stem, as in:

(9) \[ \text{pê-l-ê} \quad l-a \quad l-é \]
\text{rabbit + NCM } l- \quad \text{NCM } l- + \text{ ID } -a \quad \text{NCM } l- + \text{ ID } -é
\text{‘This rabbit’}

Here the postposed identifier-combination \textit{la lé} signifies more or less ‘it is one (la) that I am emphatically focusing on (lé)’.

3. The focus of this study

Much of the literature on NCMs has focused on their classificatory, morphosyntactic and anaphoric functions, as will be illustrated in the brief literature review to follow. Exceptions to this morphology-centred perspective are Spitulnik (1989), Contini-Morava (1997) and Moxley (1998), who explore the internal semantic coherence of noun-classes from a cognitive point of view. Our study is complementary to their work and will highlight phenomena in Tagbana that are predicated on the meaningfulness of NCMs.

4. Morphology-centred approaches

4.1. The morphological-agreement approach
In the morphological-agreement approach, the syntactic configurations NS$^6 + \text{NCM}$ and NCM + ID which characterize the construction of NPs in Gur languages are treated as cases of grammatical agreement between the noun-stem and the incorporated NCM, and between the noun containing the NCM and the identifier. The use of NCMs in both syntactic configurations, i.e. NS + NCM and NCM + ID, is not seen in this approach as making any meaningful contribution to the speaker’s conceptualization of the entity referred to by the NP. The following statement makes this view explicit:

The essential features of Niger-Congo classification systems which characterize them as strongly grammaticalized systems are these three: (i) nouns divide into subsets (noun-classes) according to their behavior in agreement mechanisms; (ii) the forms involved in these agreement mechanisms (nouns, noun modifiers, pronouns, and verbs) include affixes (class markers) that determine their agreement behavior; (iii) all nouns enter the classification, which is basically a classification of nouns, not of the referents.

(Grinevald & Seifart 2004: 246)

This approach thus treats NCMs as mere manifestations of an agreement phenomenon linking a trigger noun to its targets (identifiers, adjectives, verbs). Although this type of configuration represents a characteristic structure of NPs in Gur languages, in Tagbana it is possible to have NPs which do not show agreement between the NCM in the noun and the one in the postposed identifier, as illustrated by the following pair of sentences with the NCMs $w$ and $l$ in alternation with the very same noun-stem $yiemãfɔ$ denoting the notion of ‘boss’:

(10) a. $yiemãfɔ-w-o$ $w-i$ $mã$ $pã$ $ala$

$^6$ Our abbreviation for noun-stem.
b. \textit{yiɛ́mãfɔwɔ} \textit{l-i mā pā ala} \\
\text{boss-NCM} \quad \text{NCM-ID} \quad \text{PFV} \quad \text{arrive today} \\
‘The deputy boss has arrived today.’ (a boss with limited power)
In this approach, NCMs are treated as linguistic expressions lacking independent reference and receiving their interpretation through their connection with a nominal antecedent. Although it covers certain of their uses, this way of characterizing NCMs does not reflect the complexities of their usage in Tagbana however.

It is true that Tagbana NCMs are used in anaphoric function, as is the case with the last wi in the second line of the sequence below:

(11) ʧɛ́v l-ɛ́ w-i da bo nā kɔ̃lɔ̃
woman-NCM NCM-ID NCM-ID past be my girlfriend

mi go nyiɛ̃ri w-i n'ga yérė nā adi
I when to ask for marriage NCM-ID NEG accept on anymore
‘The woman was my girlfriend, but when I asked her to marry she refused.’

Their role cannot be reduced however to that of merely providing a set of tags which can stand in for the relevant nouns in order to avoid having to repeat the latter, as can be seen from (12) below:

(12) a.  w-i nā djiré hâbè
NCM-ID PROG come where
‘Where is he coming from?’

b.  k-i nā djiré hâbè
NCM-ID PROG come where
‘Where is that coming from?’

Here the NCMs are used independently of any noun to make deictic reference to elements present in the utterance situation. In addition, there are also cases of the very same noun’s referent being evoked anaphorically by means of different NCMs. In the dialogue below, for instance, a young man named Éli is first referred
back to by the NCM \( w \), which denotes a view of him as a human being. In responding to the question as to whether or not the young man was behaving like a mature person, however, speaker B (Éli’s father) refers to him initially by using the same NCM as speaker A (\( w \)), but then after the interjection \( Eh! \) refers to his son twice by means of the NCM \( k \), which denotes an inanimate view of the young man. The anaphoric use of \( k \), which can be considered as deviant usage with regard to the type of referent being referred to (a human being), expresses however the speaker’s attitude toward Éli at that moment, i.e. the fact that the young man is momentarily viewed by his father, caught up in an outburst of negative emotion, as unworthy of human status.

(13) Speaker A: \( \text{Éli} \ w-i \ bo \ w-i \ ma \ lë \)
PN NCM-ID be NCM-ID PERF grow up
‘Does Éli behave like a mature person now?’

Speaker B: \( Eh! \ Eli \ w-i \ ka \ kɔ \ nã \ nã \)
Interjection PN NCM-ID it make tough me for
‘Ah! Éli is making it (life) very tough for me.’

\( k-i \ di \ bo \ nãhã \ mi \ mã \ prɔ \)
NCM-ID PAST be here I PERF expel
‘That thing was living with me here but I have expelled it!’

\( k-i \ yo \ niʧërë \ niʧërë \)
NCM-ID do banditry banditry
‘Banditry is the only thing it likes to do.’

\( w-i \ mã \ tun \ ka \ ta \ déé \ ka \ nã \)
NCM-ID PERF job a get place some at
‘He has got a job some place.’
Thus, while we would agree that NCMs do facilitate referent-tracking, it would be reductionist to confine their role to this function. Cases in which one noun is used with two different NCMs as in (10b) above (\(\text{yiem\dhat{a}f\dhat{o}} \, l\)) are not amenable to a tracking account: such double noun-class marking would only be a source of confusion for a referent-tracking device, as it would send an ambiguous message to the hearer concerning the referent to be tracked. The same point can be made concerning the dialogue in (13), where switching back and forth between two different NCMs to refer to the same person would appear more conducive to losing track of the referent than to tracking it.

4.3. The classificatory approach

With regard to NCMs, the classificatory approach considers that the syntactic constructions \(NS + \text{NCM}\) and \(\text{NCM} + \text{ID}\) which characterize NPs in Gur languages pre-exist as ready-made units stored in the lexicon to be retrieved from memory on each occasion of their use. The following statement explicates this position:

Une langue est reconnue « à classes nominales » quand elle remplit au moins l’une des conditions suivantes: (1) son substantif comporte d’emblée, \(\text{déjà au stade notionnel}\)\(^7\), deux constituants de base, un radical et un suffixe\(^8\), (2) les affixes sont variés et les substantifs sont regroupés par affixe et, enfin (3) l’affixe impose une marque d’accord aux déterminants et/ou des anaphoriques pronominaux du substantif auquel il est associé.

(Tchagbalé 2007: 2)

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\(^7\)Our italics.

\(^8\)The term “suffixe” is used here to denote an NCM.
A language is recognized as having “noun classes” when it meets at least one of the following conditions: (1) the noun as stored in the lexicon has two basic components, a stem and a suffix, (2) there are various affixes and nouns are classified by affix, and (3) the affix imposes agreement marking on determiners and/or anaphoric pronouns referring to the noun with which it is associated.

According to Contini-Morava, this view regards the function of NCMs as that of separating noun-stems into fixed classes on the basis of morphological similarities:

The function of NCMs is to partition noun-stems into classes for the purpose of discourse co-reference. NCMs differ fundamentally from grammatical signs that give instructions about how to integrate lexical items into an ongoing communication [...]. Unlike grammatical signs such as tenses or case markers, the association of an NCM with a given stem is not motivated by the context-specific message that the speaker wants to convey in a particular utterance.

(Contini-Morava 2002: 39)

While it is doubtless the case that many NS + NCM sequences are stored in memory, observation of the actual uses of NPs in Tagbana does not support the position that each NS must co-occur with a given NCM. The very same noun-stem prɔ ‘marriage’, for instance, can occur either with the NCM l, to refer to a wedding, as in (14a), or with the NCM m, to refer to the state of being married, as in (14b):

(14) a. prɔ-l-ɔ l-i di bo
    marriage-NCM NCM-ID PAST be

    nã hiɛ nã
    1SG face on
‘I did attend the wedding.’

b. \textit{prɔ-m-5} \textit{m-i} nā p-é glā

marriage-NCM NCM-ID PROG their appreciate

\textit{wa hémé ni}

LOC family in

‘Being married is well-appreciated in their family.’

The occurrence of the NCMs \textit{l} and \textit{m} with the very same noun-stem \textit{prɔ} calls into question the equation ‘one noun-stem = one NCM in the lexicon’. This fact is also problematic for the gender/number-based approach, to which we now turn our attention.

4.4. The gender/number-based approach

Closely related to the classificatory approach is the traditional division of nouns in African languages into gender classes based on correlations between NCMs in the singular and the plural, as in Corbett (1991), Miehe (2007) and Tchagbalé (2007). In Tagbana, Miehe (pp. 452–457) identifies three double gender classes, with both singular and plural forms, and two single classes that have no plural forms:

(a) Gender \textit{wi/pe}, which denotes human beings and animals and also contains loanwords

(b) Gender \textit{li/ke}, which denotes small animals, small body parts, some inanimate objects, distant objects, God, and has a diminutive derivational function

(c) Gender \textit{ki/ti}, which denotes animals, body parts and tools, and has an augmentative or pejorative derivational function

(d) Gender \textit{mi}, which denotes liquids and abstracts
(e) Gender *pi*, whose semantic content is uncertain, but seems to be associated with collectives.

A first problem to be noted with this approach is the distinction that it makes between the ‘grammatical’ and ‘derivational’ functions of NCMs. Thus *l* is treated as having a grammatical gender-marking function in the noun *mudrala* ‘ant’, but a derivational role in *hêla* ‘loser, nobody’ (cf. Clamens 1952: 1411–1412), based on the fact that the usual NCM with the NS *hê* ‘man’ is *w*. However, in (14) above, on what basis can one designate one of the two NCMs occurring with the noun-stem *prö* as the ‘grammatical’ category to which this noun belongs and the other as ‘derivational’? This would ultimately depend on how one translates *prö*: if rendered as ‘wedding’, *l* would be the ‘grammatical’ gender of this noun; if however one translates *prö* as meaning ‘marriage’, *m* would be its semantically redundant grammatical gender and *l* would have to be treated as ‘derivational’. Lucy (2000: 331–332) demonstrates however that translations can create a false appearance of redundancy: thus if the Yucatec noun-stem *kib’* is translated as ‘candle’, the classifier *untziit* used with it, which denotes long thin objects, appears to be redundant; in fact, however, *kib’* means ‘wax’, and it is the classifier that identifies the referent as being a candle. Kilarski (2013: 333–334) concurs with Lucy that the description of classifiers and noun-class markers as redundant classifications of nouns is often a projection of Indo-European onto NCM languages: analysts have assumed the conceptual equivalence of noun-stems in NCM languages with Indo-European nouns, whereas the former are in fact “underspecified for individuation and other semantic properties.” This means that there is no exact translation of *prö* in English, as all that this stem signifies is the general notion of anything having to do with marriage.

Another problem with the gender-based approach concerns the treatment of some NCMs as being the singular or plural forms of other NCMs. Thus the Tagbana NCM *k* is treated as functioning both as the plural of *l* in gender *liike* and the
singular of \( t \) in gender \textit{ki/ti}. Since these two meanings contradict one another, this would imply that there are two homophonous NCMs sharing the same sign \( k \) in Tagbana, a situation which seems unlikely in a tightly-knit system of only six noun markers. More importantly, Miehe’s analysis fails to take into account the semantic contribution of the identifier \(-é\) which is suffixed to \( k \) in (b) above and which has augmentative/plural/emphatic meaning. One notes a similar problem with Miehe’s treatment of the NCM \( p \), where the notions of plurality and collectivity clearly have a common semantic basis, but are hived off from one another in the gender-based approach because the first is treated as the plural of \( w \), while the second is categorized as a single gender class denoting collectives.

Tagbana thus diverges from the traditional division of genders in Niger-Congo languages according to singular/plural pairings. The noun-class system in this language appears to be organized around three binary oppositions:

1. ‘inanimate’ versus ‘human or higher animate’

2. ‘grouping with maintenance of individuality’ versus ‘grouping with loss of individuality’

3. ‘clearly delineated entity’ versus ‘homogenous mass’

This makes one wonder just how adequate the application of the notion of ‘plural’ is to other Niger-Congo languages in which genders are generally treated as having singular and plural versions. \textit{Per se}, it certainly does not apply to Tagbana, which has no abstract notion of plurality, but rather two different ways of conceptualizing a grouping.

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\(^9\)What Miehe gives as the gender \textit{li/ke} is actually a compound form made up of the NCMs \( l \) and \( k \), followed respectively by the identifiers \( i \) (‘definite reference’) and \( e \) (‘augmentative/emphatic/plural reference’).
5. The semantic function of noun-class markers

In the approach that will be taken to NCMs in the rest of this article, they will be seen as fulfilling the semantic function of signifying the way the entity referred to by the noun phrase in discourse is conceptualized by the speaker. For Hirtle (2009: 177–178), the speaker’s goal in assembling various linguistic means in order to constitute a noun phrase is to actualize the noun and give the latter’s intended referent mental visibility in the mind. In this respect, Taylor (1996: 98–99) observes that the representation evoked by a noun phrase of the entity that it refers to is twofold, involving both a type view and an instance view: viewing a referent as an instance presupposes that the latter has already been identified as belonging to a general category, i.e. as a type of entity that is part of the speaker’s knowledge. In order to see something as ‘light,’ for example, one must attend to the features of the referent and recognize the latter as a particular manifestation of the general category of luminescence corresponding to this noun. However, the notion of light can be conceptualized in two different ways – as unitized by the fact of emanating from a clearly-circumscribed source, as in *I can see a light*, or as non-unitized and diffuse, as in *I can see light*. These correspond to two different instance views of a referent already conceptualized as belonging to the type in question. In English, these two ways of construing light are signified by the presence or absence of the indefinite article. As Taylor (1996: 98–99) argues, in English “the noun profiles a kind or type, while the determiner profiles an instance. The instance cannot exist without the type.” In this respect, Delplanque (1995: 54) argues that in Mooré NCMs allow speakers to actualize general concepts as applying to particular instances falling under them. We will argue that NCMs fulfil a similar function within the noun phrase in Tagbana.

This is why in Tagbana the speaker can use the very same noun-stem *prɔ* ‘having to do with marriage’ with either the NCM *l*, which denotes clearly-delineated entities such as actions that have a definite beginning and end, in order to refer to a
wedding as in (14a), or with the NCM \( m \), which denotes homogenous entities, to refer to the state of being married as in (14b). In the nominal forms \( prələ \) and \( prəmə \), the NCMs \( l \) and \( m \) signify that the speaker has in mind two different types of instantiation of the general notion signified by \( prə \): a clearly-delineated ‘act of getting married’ in (14a), a homogenous ‘state of being married’ in (14b).

Another manifestation of the interaction between the categorizing and instantiating functions of NCMs in Tagbana is found in the pluralization of inanimates. Tagbana has two collectivizing NCMs: \( p \), which denotes a group in which the members’ individuality is maintained, and \( t \), which designates a grouping in which individuality is lost. The former is used to evoke the plural of higher animates, whose singular form employs \( w \):

(15) \( yiɛmãf̩-e̩ p-e̩ \)
    boss-PL NCM-ID
    ‘the bosses’

The latter is used to denote the plural of inanimates, whose singular is in \( k \):

(16) \( kpɛv r-e̩ t-a \)
    chair-NCM NCM-ID
    ‘some chairs’

The reason for the two different modes of pluralization has an obvious cognitive basis: humans and higher animals are high on the scale of individuation and are treated as unique individuals, as evidenced by the assigning of proper names to human beings and domestic animals; inanimates, on the other hand, are low on the scale of individuality, and so easily lose their individual profile when lumped
together\textsuperscript{10}. The form \textit{yiɛ́mãfvɛ́vɛ́} in (15) above signifies plurality by the iconic device of reduplication of the final vowel \textit{ɛ́}. Due to its iconic nature, in Tagbana reduplication signifies a type of plurality in which one individual is added to another to constitute a group, and so reduplicated plurals are only compatible with the NCM \textit{p} denoting a grouping in which the members’ individuality is preserved. Striking confirmation of this analysis is provided by the one class of inanimates in Tagbana that exceptionally pluralizes with the NCM \textit{p}—nouns whose initial element is the prefix \textit{a-} referring to types of things:

\begin{equation}
\begin{array}{ll}
\text{aka-b-} & \text{p-a} \\
\text{types-of-food-NCM} & \text{NCM-ID} \\
\end{array}
\end{equation}

\textquote{some types of food}

Here it is the notion of what a type is that is the key to understanding this usage: types necessarily maintain their individuality even when grouped together, as the very definition of a type implies a distinct nature setting that type off from other kinds of related things. From the semantic point of view, consequently, it is no surprise that inanimate nouns in \textit{a-} should pluralize with \textit{p} and not with \textit{t}.

5.1. Complex conceptualizations involving two different NCMs in the same noun

Another phenomenon that can only be fully understood from a semantic perspective is the incorporation of two different NCMs into the very same noun, as in the word for ‘syringe’ illustrated in (18):

\textquote{kpɛ́rɛ́ kogunu} (‘five chairs’), much as in English one can combine the collectivizing zero plural with a numeral, as in \textquote{There were five aircraft on the runway}. There is a difference between a homogenous substance that cannot be counted and a conglomerate containing a certain number of entities that can be. (Cf. Hirtle 2009: 96–103 for a discussion of this phenomenon in English.) It should also be noted that numerals denote sum totals, not distinct individuals.
You can find a syringe at someone’s place.’

The prefix a- in afuɔ has a nominalizing function here: it indicates a mental operation of conceptualizing an abstract entity through the notion of ‘type of thing’. The function of this prefix is made explicit in the paraphrase in (19) below, and its use in an utterance is illustrated in (20):

(19) afuɔ: a- ‘type of thing’ + -fuɔ ‘to cure’

‘anything that can cure, medical supplies’

(20) mi nã afuɔ ʧa
1SG PROG anything-that-can-cure look for

‘I am looking for medical supplies.’

Preceded by the NCM k as in (18), reference is not made to a general type of thing that has a curative capacity as in (20), but rather to an inanimate object of a curative nature, and because this object is conceived as restoring human life, the NCM w is also used in this nominal form.11

Another example of this phenomenon, involving a combination of the NCMs k and l, is given in (21):

(21) k-apé-l-é  l-a ma
NCM-witchcraft-NCM NCM-ID PFV

11Our analysis departs here from the traditional treatment of ka as a prefix, found in Clamens (1952: 1428) and Miehe (2007: 454). The fact that a can occur all by itself as a prefix in (20) implies that it is not just part of a prefix here; the fact that a has an identifiable meaning in this sequence leads to the conclusion that k probably has one too.
nyĩni nã nã ala
happen me on today
‘An action related to witchcraft happened to me today.’

This can be compared to:

(22) apé bi nyĩni mã nã ala
witchcraft might happen you to today
‘Something related to witchcraft might happen to you today.’

The prefixed noun-stem a-pé can be analyzed as: a-‘type of thing’ + -pé ‘witchcraft’. With no incorporated NCMs, as in (22), reference is made to a general type of thing related to witchcraft in a hypothetical situation; with the two NCMs k and l as in (21), in contrast, reference is made to a real action of witchcraft-like nature, the NCM l being used because actions are well-demarcated, having a precise beginning and end.

From a cognitive perspective, the use of the NCMs k and w within the nominal form k-afwɔ-wɔ is thus indicative of the fact that Tagbana speakers associate two different but complementary views with the experiential entity ‘syringe’: as a medical instrument, it is seen as an inanimate entity signified by the NCM k; however, since a syringe is used for curative purposes, it is also viewed as endowed with the property of restoring human life, signified by the animate NCM w. For the Tagbana speaker, therefore, both impressions, animate and inanimate, are present in the conceptualization of a syringe. The occurrence of two NCMs within the very same noun-stem constitutes further evidence of their cognitive-semantic function of signifying the way the speaker conceptualizes the experiential entity denoted by the noun-stem.
The NCM $k$ is the only member of the six-unit Tagbana system found in preposed position in the noun. It is always followed by the prefix $a$, denoting the type or nature of the thing designated, and is compatible with all six NCMs, even with itself:

(23) $k$, as in $kadyo-k-o$ = ‘drink’ (something inanimate for drinking) – Miehe (2007: 456)

(24) $l$, as in $kadyo-l-o$ = ‘cup’ (something small and delineated for drinking) – Miehe (2007: 455)

(25) $p$, as in $kadyo-b-o$ = ‘wild animals’ (something ‘plural + individuated’ for consuming) – Miehe (2007: 457)

(26) $w$, as in $kafuɔ-w-ɔ$ = ‘syringe’ (something containing human life for curing)

(27) $t$, as in $kapé-r-ɛ$ = ‘evil actions’ (something ‘plural + non-individuated’ of an evil nature)

(28) $m$, as in $kanyɛ̃-m-ɛ$ = ‘truth’ (something homogenous of a true nature)

$K$ signifies the notion of ‘something’, $a$ that of ‘of a certain type or nature’, and the second NCM provides further specification regarding the something referred to by $k$. Thus in $kadyolo$, $k$ indicates that a something is being referred to, $l$ says that this something is small and well-delineated, $a$ that it belongs to a certain type of thing, and $dyo$ that it is characterized by the notion of consuming or drinking. The fact that $k$ is compatible with all five other NCMs would seem to be due to its more abstract meaning, as any sort of entity can be construed as a something$^{12}$.

$^{12}$ $K$ can even be used for instance to refer to the entire content of a preceding statement, as in Speaker B’s contribution to the following dialogue about a premarital ceremony:

Speaker A: $Pa \ p-ɛ \ nyɛ \ năhâ \ fafa \ p-ɛ \ to \ mâ$

Since they be here numerous their father to

$Yɛ \ bi \ w-i \ kâ \ p-ɛ \ mâ$

you going to her give them to

‘She should be given to them, because the father has got many of them here (in his house).’
We now turn to the function of the NCM in postnominal ‘NCM + ID’ phrases.

5.2. The cognitive-semantic function of the NCM in postnominal ‘NCM + ID’ phrases

For the proponents of the agreement approach, the NCM used in the postnominal ‘NCM + ID’ construction represents an instance of morphological agreement between the noun and the NCM. However this view cannot account for cases where the postposed identifier does not simply repeat the NCM that occurs within the noun itself, as in (10b) above, where \( w \) occurs within the noun and \( l \) in postnominal identifier position, or for cases in which there is no NCM incorporated into the noun for the identifier to agree with, such as (29) below:

(29) \( n’dě \ k-i \ nyě \ tulugu \)
stone NCM-ID be heavy
‘The stone is heavy.’

It will be argued here that the NCM used in the postnominal ‘NCM + ID’ construction fulfils an important cognitive-semantic function – it denotes both the general type and the form of instantiation of the referent that the speaker has chosen as topic in the discourse. The role of the postposed NCM-identifier is clear with nouns that incorporate two different NCMs. Thus in (30) below the discourse topic is the medical instrument and not its capacity to restore life:

(30) \( dɔtr-ɔ-ɔ \ p-ɛ \ k-afu-ø-ɔ \ k- \ nā \ ya \)
doctors NCM-ID syringe NCM PROG painful

Speaker B: \( k-i \ o \ nyě \ bā \)
It neg be like
‘That is not the case!’
‘The syringe used by doctors to restore life is painful.’

Consequently, one finds postposed *ki* and not *wi* after this form. In contrast, in the following use of the word for an ambitious person, in which the initial inanimate NCM *k* denotes the generic idea of a something and the penultimate animate NCM *w* represent that something as a human of higher animate, since reference is made to a person and not to a generic something, the postnominal NCM-identifier is *wi* and not *ki*:

(31) *w*-i nyê *k*-ayagafɔ-w-ɔ *w*-i
    NCM-ID be NCM-ambitious-person-NCM NCM-ID

‘He is an ambitious person.’

And in (21) above, reference is made to an action related to witchcraft and consequently the postposed NCM is *l*.

In Tagbana, both the general type and the form of instantiation must be specified in a postnominal ‘NCM + ID’ phrase for definite NPs that are subjects or topics. Neither (32a) with an identifier-vowel but no NCM, nor (32b) with an NCM but no identifier-vowel are possible; the identifier and the NCM must be used conjointly in order to represent the referent as an instance of a general type:

(32) a. yiɛmãfɔ-w-ɔ *ϕ*-i mã pã ala
    boss-NCM-ID PFV arrive today

b. yiɛmãfɔ-w-ɔ *w*-ϕ mã pã ala
    boss NCM NCM PFV arrive today

This recalls the use of the augment or pre-prefix in Bantu languages, in which an initial vowel is affixed to the pre-stem NCM with nouns that are referential or
referential-definite (cf. Givón 1978: 300–303). This augment is obligatory on subject nouns (von Staden 1973: 176) and has been described as a “topic marker” by Petzell (2003). Further analogies with this type of element are discussed below.

6. The salience of the NP’s referent

In the course of our discussion, two examples have been given of noun phrases in subject function with no postposed NCM-ID, repeated here as (33) and (34):

(33) n’dë bi do mā nā ala
    stone might fall you to today
    ‘A stone might fall on you today.’

(34) apé bi nyĩni mā nā ala
    Witchcraft might happen you to today
    ‘Something related to witchcraft might happen to you today.’

This occurs only with NPs that have indefinite hypothetical referents. It is also possible to find cases of non-subject NPs that are exceptionally construed with NCMs, as in:

(35) Mā bi k-afwɔ-wɔ k-a ta hēwa mā
    You can NCM-syringe-NCM NCM-ID find someone with
    ‘You can find a syringe at someone’s place.’

---

13 Non-hypothetical generic subject nouns are followed by an NCM-ID, as in (i):

(i) prọl l-a nyē pērē ni
    wedding NCM-ID be expensive very
    ‘A wedding is very expensive.’

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This can be compared with the use of the same noun-stem with no NCM:

(36) \[ Mi \quad nå \quad afuɔ \quad tå \]
1SG PROG anything-related-to-healthcare look for

‘I am looking for anything related to healthcare.’

The noun phrases in the last two sentences involve a very different form of reference: in (35) the existence of a syringe is strongly presupposed, whereas in (36) the referent is both vague (‘anything related to healthcare’) and perhaps non-existent. Another case exists in which a non-subject NP can be followed by a postposed identifier containing an NCM; this can be illustrated by (37):

(37) \[ Wi \quad gøri \quad golo \quad ka-r-a \quad t-å \quad nå \]
He need chicken meat-NCM NCM-ID on

‘He needs chicken meat’ (the only type of meat he needs is chicken meat, not veal or pork)

Here emphasis is placed on the fact that the person needs chicken meat, and not any other kind. This usage can be compared to (38), in which no contrastive focus is placed on the notion of ‘chicken’:

(38) \[ Wi \quad gøri \quad golo \quad ka-r-a \quad \phi \quad nå \]
He need chicken meat on

‘He needs chicken meat.’

The contrastive value manifested by Tagbana NCMs in such uses is analogous to the meaning proposed for the augment in the Cameroonian Bantu language Bulu by Barlew & Clem (2014), who relate it to focus in English in that it involves picking out an entity from a set of alternatives. Putting these facts together with the fact that an NCM-ID must be used with a definite NP occurring in subject function indicates
that in Tagbana postposed NCMs are tied up with salience. We use this concept in
the sense of Givón (1981) and Hopper & Thompson (1984), who characterize it in
terms of whether the specific identity of a participant is relevant because the latter
is important for the communicative intent of the speaker. High salience is
associated with “autonomous, usually quite concrete and individuated entities”
(Hopper & Thompson 1984: 718).

As regards subject function, Langacker (1997: 7) defines the subject of the sentence
as the figure or most salient element within the relational profile denoted by the
verbal predicate. It is thus no accident that NCMs defining the general type and
specific instance to which the referent corresponds should be required as the
identifiers of nouns used in this function. Our data also shows that insistence on a
referent’s existence (35) or a contrastive focus on a referent (37) can also make the
latter salient enough to require an NCM-ID in Tagbana even outside of the function
of subject, and that an indefinite subject whose existence is merely hypothetical has
low salience as a referent and so is not construed with an NCM in this language, as
in (33) and (34) above. Further confirmation of the connection between NCMs and
salience is found in the fact that most inanimate noun-stems are not used with an
incorporated NCM, as in (29) above, since inanimates are low on the scale of
individuality. The inclusion of an NCM in the noun-stem does occur however with
inanimates in contexts where emphatic demonstrative or contrastive reference is
made, as in:

(39) n’đè-g-è  g-a  g-è  k-i  nyè  tilugu
      stone-NCM  NCM-ID  NCM-ID  NCM-ID  be  heavy
‘This stone (it is one that I am pointing at), it is heavy.’

Here the postposed g-a signifies ‘it is one’ and g-è ‘that I am emphatically focusing
on’, a combination which produces the effect of an emphatic demonstrative. Since
the referent is highly salient here, its specific identity being the whole point of the
utterance, the noun-stem *n’diɛ* ‘stone’ incorporates an NCM even though it normally would not. Thus both syntactic and discursive salience are associated with the use of NCMs in Tagbana. A full treatment of postposed NCM + ID combinations would merit a study of its own and would require a more thorough investigation of the semantics of the identifier morphemes -i, -a and -é than can be provided in this article. The latter are not mere allomorphs of a unitary augment archimorpheme as in Bantu, but each has its own semantic content which needs to be described in detail.

7. Conclusions

The semantic functioning of NCMs in Tagbana has been explored in this article through their contribution to the noun phrase at two levels, the nominal level corresponding to the NS + NCM construction, and the identifier level expressed by the postnominal NCM + ID phrase. It has been demonstrated that in both constructions NCMs fulfil the cognitive-semantic function of indicating the speaker’s conceptualization of the general type to which the experiential entity denoted by the noun-stem belongs and the instance of this type being referred to. This concords with Tchagbalé’s (2007) study of the Tem language, in which he identifies five genders, each of which has a distinctive semantic content: (1) ‘+human’, (2) ‘-human, +augmentative’, (3) ‘+tiny, +deprecatory’, (4) ‘part of a whole’, (5) ‘dense continuant’. Tagbana coincides with Tem in having both a human and a continuant/homogenous class, two categories that Croft (1994:148) argues are universals among noun-class markers. Tagbana appears however to be more systematic than Tem in having three three binary subsytems of NCMs, one opposing ‘human or human-like animate’ (w) to ‘inanimate’ (k), a second opposing ‘homogenous’ (m) to ‘clearly delineated’ (l), and a third opposing ‘grouping with maintenance of individuality’ (p) to ‘grouping with loss of individuality’ (t).
The analysis of Tagbana proposed here thus supports Langacker’s view that:

Grammatical structures do not constitute an autonomous formal system or level of representation: they are claimed instead to be inherently symbolic, providing for the structuring and conventional symbolization of conceptual content. Lexicon, morphology, and syntax form a continuum of symbolic units, divided only arbitrarily into separate components; it is ultimately as pointless to analyze grammatical units without reference to their semantic value as to write a dictionary which omits the meanings of its lexical items.

(Langacker 2002: 1)

The morphological-agreement and referent-tracking approaches have been argued to be inadequate for accounting for the full range of NCM usage in Tagbana, while the cognitive-semantic approach based on Langacker’s semiological principle described above has been shown to do justice to both the morphological and anaphoric characteristics of these forms, as well as being able to handle dimensions of their use which escape these categories. Our analysis also resonates with Lucy’s (2000: 327) observation that in linguistic analysis “fundamental differences in the interpretation of experience all too often get reinterpreted as purely (merely) formal differences operating over a common or shared human cognition of reality.” With respect to NCMs specifically, he argues (p. 329) that “typically, the classifying forms have independent referential value and combine with other material in the noun phrase to help identify referents, indicate the perspective from which they should be interpreted, or track their identity within and across clauses.”

Tagbana is not alone in being able to use two or more different noun markers with the same noun-stem in certain contexts. Aikhenvald (2000: 39–40) cites the case of Baniwa, a North Arawak language of South America, in which the noun-stem for ‘bone’ can be followed by the classifier for human animates, in which case it
denotes a bone as part of the human body, by the classifier for long vertical objects, in which case it refers to a leg bone, and by the classifier for long thin objects, if it designates a bone used to make a flute. There are even a few instances of two different classifiers occurring with the very same noun-stem at the same time in Tariana, another Arawak language, in which the word for ‘flying’ can be combined with the classifier for ‘canoes’ to denote an airplane, and with both the classifier for ‘canoes’ and that for ‘stretch-like entities’ to denote an airstrip (Kilarski 2013: 297).

One thing that is distinctive of Tagbana is the fact that such phenomena usually occur in languages with larger sets of nominal markers (cf. Zavala 2000: 119–120), while in Tagbana they are operative in a language with a limited set of only six NCMs. Another phenomenon that does not seem to have been observed in any other language with NCMs is the fact that with some noun-stems Tagbana exploits all four possible permutations of a double-NCM configuration. Thus the noun-stem expressing the notion ‘boss’ is attested in the combinations $w + w$, $l + l$, $w + l$, and $l + w$:

(40) a. $\text{yiɛ́māfɔv\-w-ɔ} \quad w-i \quad mā \quad pā \quad ala$
    boss-NCM      NCM-ID      PFV  arrive today
    ‘The boss has arrived today.’ (neutral)

b. $\text{yiɛ́māfɔv\-l-ɔ} \quad w-i \quad mā \quad pā \quad ala$
    boss-NCM      NCM-ID      PFV  arrive today
    ‘The big boss has arrived today.’ (focussing on his special status as boss)

c. $\text{yiɛ́māfɔv\-w-ɔ} \quad l-i \quad mā \quad pā \quad ala$
    boss-NCM      NCM-ID      PFV  arrive today
    ‘The deputy boss has arrived today.’ (a boss with limited power)
d.  

\[
\text{yiɛ́mãfɔv l vɔ l vi mã pã ala}
\]

boss-NCM NCM-ID PFV arrive today

‘The ‘boss’ has arrived today.’ (not actually viewed as a member of the category, but as a person who is being bossy without having been appointed as boss)

The \( w + w \) structure corresponds to a neutral view of a person seen as belonging to the category of humans on both the type and instance levels. The \( l + w \) structure construes bosses as set off from other human beings on the level of the type by their function of holding authority over others, but as human animate on the level of the instance. Thirdly, the \( w + l \) configuration construes the type as not being set off from other human beings in nature, but the instance as distinguished from other bosses by having only limited power. Finally, the \( l + l \) construction evokes both the instance and the type as set off from the category of bosses: this produces the effect of a reference to someone who is not really a member of the category ‘boss’ but is merely acting in a boss-like way in a particular instance.

Such usage is clear evidence that Tagbana NCMs involve much more than the general claims made about the functioning of such markers in Niger-Congo languages as noun-classifying devices with which morphological agreement facilitates discourse co-reference. While this is part of the story, a cognitive-semantic approach can account both for this function and for those in which the NCM signals the sometimes highly complex way in which the speaker views the referent. As Lucy (2000: 330) advises, “one always needs to attend to the local facts and not presume uniformity across apparently similar systems.” The conclusions of this study also converge with recent studies of classifiers drawing on cognitive models of categorization which share an overall emphasis on semantic motivation: as Kilarski (2013: 304) observes, “all types of classifiers enrich the lexicon and allow speakers to highlight a specific property of the referent. (...) the
choice of a classifier cannot simply be interpreted as a reflex of nominal semantics or an automatic agreement-like matching of semantic features.”
References


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Semantically-based functions of noun-class markers in Tagbana

Abstract
This paper addresses the use of noun-class markers in Tagbana from the perspective of a cognitively-inspired approach based on Langacker (2000)’s semiological principle. Drawing on this basic tenet of cognitive grammar according to which the symbolic function of language consists in making speakers’ conceptualizations auditorily or visually perceptible, it demonstrates that in syntactic constructions composed of ‘noun-stem + noun-class marker’ and ‘noun-class marker + identifier’, noun-class markers fulfil the semantic function of making explicit the way the speaker conceives of the experiential entity referred to in the utterance. This view goes beyond form-centred functions such as referent-tracking to include the signifying of complex conceptualizations involving more than one noun-class marker with the same noun-stem, as well as the discourse functions of indicating topicality, insistence on a referent’s existence and contrastive focus.

**Keywords:** noun-class marker; gender; classifier; identifier; salience; Niger-Congo; Gur; Senufo; Tagbana

1. Introduction

Although it is the Bantu languages which are most commonly associated with noun-class systems, in all branches of the Niger-Congo family except Mande nouns
typically consist of a stem and an affixal noun-class marker\(^1\) (cf. Welmers 1973: 159). Such nominal classes have been compared to the gender systems of Indo-European, and indeed Corbett (1991: 47) treats Bantu nouns as falling under seven different genders, which he opposes to classifiers by the fact that the latter do not trigger agreement in other elements in the utterance, the “determining criterion” of gender being agreement. He concedes however (1991: 146–147) that “there is little point in trying to maintain a strict distinction between ‘gender’ and ‘noun-class’ since similar systems are described as genders in one language family and as noun-classes in another.” Because of the association of gender with sexual distinctions which are not relevant for Tagbana, we will follow Welmers (1973), Grinewald (1999) and Creissels (1999) in using the term ‘noun-class’ in this study.

In Bantu languages, which we will use to illustrate the typical functioning of NCMs, there are from 10 to 20 different markers, most of which can be paired off with one another in binary oppositions of ‘singular’ to ‘plural’. Here is the Swahili system as provided by Corbett (1991: 47):

<table>
<thead>
<tr>
<th>Controller gender (sing/plur)</th>
<th>Nominal prefix (sing/plur)</th>
<th>Verbal prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>m-/wa-</td>
<td>a-/wa-</td>
</tr>
<tr>
<td>3/4</td>
<td>m-/mi-</td>
<td>u-/i-</td>
</tr>
<tr>
<td>5/6</td>
<td>Ø ~ ji-/ma-</td>
<td>li-/ya-</td>
</tr>
<tr>
<td>7/8</td>
<td>ki-/vi-</td>
<td>ki-/vi-</td>
</tr>
<tr>
<td>9/10</td>
<td>N-/N-</td>
<td>i-/zi-</td>
</tr>
<tr>
<td>11/10</td>
<td>u-/N-</td>
<td>u-/zi-</td>
</tr>
<tr>
<td>15</td>
<td>ku-</td>
<td>ku-</td>
</tr>
</tbody>
</table>

\(^1\)Henceforth NCM.
According to Corbett, most noun-class assignment is semantically arbitrary, although meaning does come into the picture in some parts of the system in that animates are class 1/2, augmentatives class 5/6, and diminutives class 7/8. Verbs and adjectives agree in noun-class with their subjects/supports, but here the agreement is semantic rather than morphological. Thus a noun of class 7/8 such as the Swahili substantive *ki-boko* ‘hippopotamus’ referring to an animate being takes class 1/2 animate agreement on dependent adjectives and verbs:

(1)  

<table>
<thead>
<tr>
<th><em>ki-boko</em></th>
<th><em>m-kubwa</em></th>
<th><em>a-meanguka</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8 hippopotamus</td>
<td>1/2 big</td>
<td>1/2 has fallen</td>
</tr>
</tbody>
</table>

We can now turn to Tagbana to see how NCMs function in this language.

2. **Brief Tagbana tutorial**

Tagbana is a Gur language spoken in Katiola in the north of Côte d’Ivoire (cf. Clamens 1952: 1403; Garber 1991: 3; Katia 1988: 10; Miehe & Winkelmann 2007: 451). It differs from Bantu languages in that it has only six NCMs; moreover, these are not correlated with one another in singular/plural pairings. Here are the affixes along with our proposals for their basic semantics:

- **k-** inanimate (e.g. chair)
- **w-** human or higher animate (e.g. man, ghost, lion, dog)
- **l-** clearly delineated, often small entity demarcated from its environment (e.g. rabbit, tooth)
- **m-** homogenous mass-like substance (e.g. water)
- **p-** group made up of individuals (e.g. men, types of commodity)
- **t-** conglomerated grouping (e.g. money/coins)²

---

²We have deliberately avoided the term ‘collective’ due to the bewildering array of senses in which it has been used by linguists, as remarked by Gil (1996: 66–70) and Corbett (2000: 13). Both *p* and *t*
We follow Contini-Morava (1997)’s cognitive analysis of NCMs in Swahili in positing for each Tagbana NCM a “superschema” (cf. Langacker 1988), i.e. a maximally abstract representation that holds together the various instantiations. For the NCM l-, the network of instantiations would look something like Figure 1:

![Figure 1](image)

**Figure 1**

Our goal in this article will not be to go into the internal semantics of each NCM, but rather to show how its functioning within the noun phrase is motivated by its semantic content.

Unlike in Swahili, Tagbana verbs do not show NCM agreement with their subjects. Concord is restricted to adjectives\(^3\), with which it is morphological and not semantic (cf. Clamens 1952: 1413):

\[
\begin{align*}
\text{pé-}\text{l-è} & \quad \text{l-ì} & \quad \text{kmà-}\text{l-à} \\
\end{align*}
\]

evoke the notion of ‘more than one,’ which makes them semantically plural in the sense in which this term is employed by Corbett (2000: 20). However, we will argue below that they are not exponents of the grammatical category of number.

\(^3\)Except for adjectives following stems of the k and w classes.
As can be seen from the above examples, Tagbana NCMs are both affixed to the noun-stem, into which they are incorporated by being followed by a reduplicative vocalic element that reiterates the last vowel of the stem, and repeated after the classified noun in combination with a suffixed vowel which is either -i, -a or -é. The latter element, which occurs in other Gur languages, has been called a “stabilizer” by some authors, a term which Welmers (1973: 191) criticizes for its vacuity and proposes to replace by “identifier” (here abbreviated as ID), since it serves “to identify a noun as the answer to a question or the topic under discussion.” In Tagbana there are three different forms of identification: definite (i), indefinite (a) and augmentative/plural/emphatic (é), as illustrated in:

(6)   pé-l-é   l-í
    rabbit + NCM l-   NCM l- + definite ID -í
    ‘the rabbit’

4 r is the intervocalic realization of the NCM t.
5 b is the intervocalic realization of the NCM p.
In some cases, one even finds two identifiers after the same noun-stem, as in:

```
(9) pé-l-é  l-a  l-é
    rabbit + NCM l-  NCM l- + ID -a  NCM l- + ID -é
    ‘This rabbit’
```

Here the postposed identifier-combination la lé signifies more or less ‘it is one (la) that I am emphatically focusing on (lé)’.

3. The focus of this study

Much of the literature on NCMs has focused on their classificatory, morphosyntactic and anaphoric functions, as will be illustrated in the brief literature review to follow. Exceptions to this morphology-centred perspective are Spitulnik (1989), Contini-Morava (1997) and Moxley (1998), who explore the internal semantic coherence of noun-classes from a cognitive point of view. Our study is complementary to their work and will highlight phenomena in Tagbana that are predicated on the meaningfulness of NCMs.

4. Morphology-centred approaches

4.1. The morphological-agreement approach
In the morphological-agreement approach, the syntactic configurations NS\(^6\) + NCM and NCM + ID which characterize the construction of NPs in Gur languages are treated as cases of grammatical agreement between the noun-stem and the incorporated NCM, and between the noun containing the NCM and the identifier. The use of NCMs in both syntactic configurations, i.e. NS + NCM and NCM + ID, is not seen in this approach as making any meaningful contribution to the speaker’s conceptualization of the entity referred to by the NP. The following statement makes this view explicit:

The essential features of Niger-Congo classification systems which characterize them as strongly grammaticalized systems are these three:

(i) nouns divide into subsets (noun-classes) according to their behavior in agreement mechanisms;
(ii) the forms involved in these agreement mechanisms (nouns, noun modifiers, pronouns, and verbs) include affixes (class markers) that determine their agreement behavior;
(iii) all nouns enter the classification, which is basically a classification of nouns, not of the referents.

(Grinevald & Seifart 2004: 246)

This approach thus treats NCMs as mere manifestations of an agreement phenomenon linking a trigger noun to its targets (identifiers, adjectives, verbs). Although this type of configuration represents a characteristic structure of NPs in Gur languages, in Tagbana it is possible to have NPs which do not show agreement between the NCM in the noun and the one in the postposed identifier, as illustrated by the following pair of sentences with the NCMs \(w\) and \(l\) in alternation with the very same noun-stem yiɛmɛ́fɔ denoting the notion of ‘boss’:

(10) a. yiɛmɛ́fɔ-\(w\)-\(ɔ\) \(w\)-i mā pā ala

\(^6\) Our abbreviation for noun-stem.
boss-NCM NCM-ID PFV arrive today
‘The boss has arrived today.’ (neutral)

b. yiɛ́mâfɔwɔ  l-i  mã  pã  ala
boss-NCM NCM-ID PFV arrive today
‘The deputy boss has arrived today.’ (a boss with limited power)

The agreement approach runs into a problem with the postposed identifier phrase in (10b), where the noun yiɛ́mâfɔwɔ contains a different NCM (w) from the one used with the identifier -i (l). This indicates that the use of NCMs in Tagbana is not triggered by an automatic agreement mechanism operating between a noun incorporating an NCM and an identifier. Not even the principle of semantic concord used to explain why Bantu nouns referring to animate beings take class 1/2 animate agreement on the verb even though they show the morphology of some other class can explain the pattern observed in (10b), as the referent of yiɛ́mâfɔwɔ is just as human in (10b) as it is in (10a).

4.2. The referent-tracking approach

The following statement can serve to describe the basic thrust of the referent-tracking approach:

In many communicative situations speakers need to track referents, i.e. they need to refer back to something that has already been mentioned. The process of referring back is carried out through what is called anaphora, which in turn is defined as the phenomenon whereby one linguistic expression (the anaphor), lacking clear independent reference, can pick up reference or interpretation through connection to another linguistic expression (usually an antecedent).

(Seifart 2005: 267)
In this approach, NCMs are treated as linguistic expressions lacking independent reference and receiving their interpretation through their connection with a nominal antecedent. Although it covers certain of their uses, this way of characterizing NCMs does not reflect the complexities of their usage in Tagbana however.

It is true that Tagbana NCMs are used in anaphoric function, as is the case with the last wi in the second line of the sequence below:

(11) ʧɛ́-lɛ́  w-ɛ́  w-i  da  bo  nā  k3lɔ
woman-NCM  NCM-ID  NCM-ID  past  be  my  girlfriend

mi  go  nyiɛri  w-i  n’ga  yɛrɛ  nā  adi
I  when to ask for marriage  NCM-ID  NEG  accept  on  anymore

‘The woman was my girlfriend, but when I asked her to marry she refused.’

Their role cannot be reduced however to that of merely providing a set of tags which can stand in for the relevant nouns in order to avoid having to repeat the latter, as can be seen from (12) below:

(12) a.  w-i  nā  djirɛ́  hābɛ́
NCM-ID  PROG  come  where

‘Where is he coming from?’

b.  k-i  nā  djirɛ́  hābɛ́
NCM-ID  PROG  come  where

‘Where is that coming from?’

Here the NCMs are used independently of any noun to make deictic reference to elements present in the utterance situation. In addition, there are also cases of the very same noun’s referent being evoked anaphorically by means of different NCMs. In the dialogue below, for instance, a young man named Éli is first referred
back to by the NCM \textit{w}, which denotes a view of him as a human being. In responding to the question as to whether or not the young man was behaving like a mature person, however, speaker B (Éli’s father) refers to him initially by using the same NCM as speaker A (\textit{w}), but then after the interjection \textit{Eh!} refers to his son twice by means of the NCM \textit{k}, which denotes an inanimate view of the young man. The anaphoric use of \textit{k}, which can be considered as deviant usage with regard to the type of referent being referred to (a human being), expresses however the speaker’s attitude toward Éli at that moment, i.e. the fact that the young man is momentarily viewed by his father, caught up in an outburst of negative emotion, as unworthy of human status.

(13) Speaker A: Éli \textit{w-i bo w-i ma lé}  
PN NCM-ID be NCM-ID PERF grow up  
‘Does Éli behave like a mature person now?’

Speaker B: \textit{Eh! Eliw-i ka kɔ nā nā}  
Interjection PN NCM-ID it make tough me for  
‘Ah! Éli is making it (life) very tough for me.’

\textit{k-i di bo nāhā mi mā prɔ}  
NCM-ID PAST be here I PERF expel  
‘That thing was living with me here but I have expelled it!’

\textit{k-i yo niféré niféré}  
NCM-ID do banditry banditry  
‘Banditry is the only thing it likes to do.’

\textit{w-i mā tun ka ta déé ka nā}  
NCM-ID PERF job a get place some at  
‘He has got a job some place.’
Thus, while we would agree that NCMs do facilitate referent-tracking, it would be reductionist to confine their role to this function. Cases in which one noun is used with two different NCMs as in (10b) above (yémàfo wò lì) are not amenable to a tracking account: such double noun-class marking would only be a source of confusion for a referent-tracking device, as it would send an ambiguous message to the hearer concerning the referent to be tracked. The same point can be made concerning the dialogue in (13), where switching back and forth between two different NCMs to refer to the same person would appear more conducive to losing track of the referent than to tracking it.

4.3. The classificatory approach

With regard to NCMs, the classificatory approach considers that the syntactic constructions NS + NCM and NCM + ID which characterize NPs in Gur languages pre-exist as ready-made units stored in the lexicon to be retrieved from memory on each occasion of their use. The following statement explicates this position:

Une langue est reconnue « à classes nominales » quand elle remplit au moins l’une des conditions suivantes: (1) son substantif comporte d’emblée, déjà au stade notionnel7, deux constituants de base, un radical et un suffixe8, (2) les affixes sont variés et les substantifs sont regroupés par affixe et, enfin (3) l’affixe impose une marque d’accord aux déterminants et/ou des anaphoriques pronominaux du substantif auquel il est associé.

(Tchagbalé 2007: 2)

7Our italics.
8The term “suffixe” is used here to denote an NCM.
[A language is recognized as having “noun classes” when it meets at least one of the following conditions: (1) the noun as stored in the lexicon has two basic components, a stem and a suffix, (2) there are various affixes and nouns are classified by affix, and (3) the affix imposes agreement marking on determiners and/or anaphoric pronouns referring to the noun with which it is associated.]

According to Contini-Morava, this view regards the function of NCMs as that of separating noun-stems into fixed classes on the basis of morphological similarities:

The function of NCMs is to partition noun-stems into classes for the purpose of discourse co-reference. NCMs differ fundamentally from grammatical signs that give instructions about how to integrate lexical items into an ongoing communication [...] Unlike grammatical signs such as tenses or case markers, the association of an NCM with a given stem is not motivated by the context-specific message that the speaker wants to convey in a particular utterance.

(Contini-Morava 2002: 39)

While it is doubtless the case that many NS + NCM sequences are stored in memory, observation of the actual uses of NPs in Tagbana does not support the position that each NS must co-occur with a given NCM. The very same noun-stem pro ‘marriage’, for instance, can occur either with the NCM l, to refer to a wedding, as in (14a), or with the NCM m, to refer to the state of being married, as in (14b):

(14) a. pro-l-ɔ l-i di bo
    marriage-NCM NCM-ID PAST be

    nā hiɛ́ nā
    1SG face on

12
‘I did attend the wedding.’

b.  \( pr\-m-\)  \( m\-i\)  \( n\ddot{a}\)  \( p\-\ddot{e}\)  \( gl\ddot{a}\)  
marrige-NCM  NCM-ID  PROG  their  appreciate

\( wa\)  \( h\ddot{e}\ddot{m}\ddot{e}\)  \( ni\)  
LOC  family  in

‘Being married is well-appreciated in their family.’

The occurrence of the NCMs \( l \) and \( m \) with the very same noun-stem \( pr\) calls into question the equation ‘one noun-stem = one NCM in the lexicon’. This fact is also problematic for the gender/number-based approach, to which we now turn our attention.

4.4. The gender/number-based approach

Closely related to the classificatory approach is the traditional division of nouns in African languages into gender classes based on correlations between NCMs in the singular and the plural, as in Corbett (1991), Miehe (2007) and Tchagbalé (2007). In Tagbana, Miehe (pp. 452–457) identifies three double gender classes, with both singular and plural forms, and two single classes that have no plural forms:

(a) Gender \( wilpe\), which denotes human beings and animals and also contains loanwords

(b) Gender \( lilke\), which denotes small animals, small body parts, some inanimate objects, distant objects, God, and has a diminutive derivational function

(c) Gender \( kil\ddot{t}\ddot{i}\), which denotes animals, body parts and tools, and has an augmentative or pejorative derivational function

(d) Gender \( mi\), which denotes liquids and abstracts
(e) Gender *pi*, whose semantic content is uncertain, but seems to be associated with collectives.

A first problem to be noted with this approach is the distinction that it makes between the ‘grammatical’ and ‘derivational’ functions of NCMs. Thus *l* is treated as having a grammatical gender-marking function in the noun *mudrala* ‘ant’, but a derivational role in *hêla* ‘loser, nobody’ (cf. Clamens 1952: 1411–1412), based on the fact that the usual NCM with the NS *hê* ‘man’ is *w*. However, in (14) above, on what basis can one designate one of the two NCMs occurring with the noun-stem *prɔ* as the ‘grammatical’ category to which this noun belongs and the other as ‘derivational’? This would ultimately depend on how one translates *prɔ*: if rendered as ‘wedding’, *l* would be the ‘grammatical’ gender of this noun; if however one translates *prɔ* as meaning ‘marriage’, *m* would be its semantically redundant grammatical gender and *l* would have to be treated as ‘derivational’. Lucy (2000: 331–332) demonstrates however that translations can create a false appearance of redundancy: thus if the Yucatec noun-stem *kib’* is translated as ‘candle’, the classifier *unziit* used with it, which denotes long thin objects, appears to be redundant; in fact, however, *kib’* means ‘wax’, and it is the classifier that identifies the referent as being a candle. Kilarski (2013: 333–334) concurs with Lucy that the description of classifiers and noun-class markers as redundant classifications of nouns is often a projection of Indo-European onto NCM languages: analysts have assumed the conceptual equivalence of noun-stems in NCM languages with Indo-European nouns, whereas the former are in fact “underspecified for individuation and other semantic properties.” This means that there is no exact translation of *prɔ* in English, as all that this stem signifies is the general notion of anything having to do with marriage.

Another problem with the gender-based approach concerns the treatment of some NCMs as being the singular or plural forms of other NCMs. Thus the Tagbana NCM *k* is treated as functioning both as the plural of *l* in gender *liike* and the
singular of \( i \) in gender \( kili \). Since these two meanings contradict one another, this would imply that there are two homophonous NCMs sharing the same sign \( k \) in Tagbana, a situation which seems unlikely in a tightly-knit system of only six noun markers. More importantly, Miehe’s analysis fails to take into account the semantic contribution of the identifier -\( e \) which is suffixed to \( k \) in (b) above and which has augmentative/plural/emphatic meaning. One notes a similar problem with Miehe’s treatment of the NCM \( p \), where the notions of plurality and collectivity clearly have a common semantic basis, but are hived off from one another in the gender-based approach because the first is treated as the plural of \( w \), while the second is categorized as a single gender class denoting collectives.

Tagbana thus diverges from the traditional division of genders in Niger-Congo languages according to singular/plural pairings. The noun-class system in this language appears to be organized around three binary oppositions:

(1) ‘inanimate’ versus ‘human or higher animate’

(2) ‘grouping with maintenance of individuality’ versus ‘grouping with loss of individuality’

(3) ‘clearly delineated entity’ versus ‘homogenous mass’

This makes one wonder just how adequate the application of the notion of ‘plural’ is to other Niger-Congo languages in which genders are generally treated as having singular and plural versions. \textit{Per se}, it certainly does not apply to Tagbana, which has no abstract notion of plurality, but rather two different ways of conceptualizing a grouping.

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9What Miehe gives as the gender \( liike \) is actually a compound form made up of the NCMs \( l \) and \( k \), followed respectively by the identifiers \( i \) (‘definite reference’) and \( e \) (‘augmentative/emphatic/plural reference’).
5. The semantic function of noun-class markers

In the approach that will be taken to NCMs in the rest of this article, they will be seen as fulfilling the semantic function of signifying the way the entity referred to by the noun phrase in discourse is conceptualized by the speaker. For Hirtle (2009: 177–178), the speaker’s goal in assembling various linguistic means in order to constitute a noun phrase is to actualize the noun and give the latter’s intended referent mental visibility in the mind. In this respect, Taylor (1996: 98–99) observes that the representation evoked by a noun phrase of the entity that it refers to is twofold, involving both a type view and an instance view: viewing a referent as an instance presupposes that the latter has already been identified as belonging to a general category, i.e. as a type of entity that is part of the speaker’s knowledge. In order to see something as ‘light,’ for example, one must attend to the features of the referent and recognize the latter as a particular manifestation of the general category of luminescence corresponding to this noun. However, the notion of light can be conceptualized in two different ways – as unitized by the fact of emanating from a clearly-circumscribed source, as in *I can see a light*, or as non-unitized and diffuse, as in *I can see light*. These correspond to two different instance views of a referent already conceptualized as belonging to the type in question. In English, these two ways of construing light are signified by the presence or absence of the indefinite article. As Taylor (1996: 98–99) argues, in English “the noun profiles a kind or type, while the determiner profiles an instance. The instance cannot exist without the type.” In this respect, Delplanque (1995: 54) argues that in Mooré NCMs allow speakers to actualize general concepts as applying to particular instances falling under them. We will argue that NCMs fulfil a similar function within the noun phrase in Tagbana.

This is why in Tagbana the speaker can use the very same noun-stem *prɔ* ‘having to do with marriage’ with either the NCM *l*, which denotes clearly-delineated entities such as actions that have a definite beginning and end, in order to refer to a
wedding as in (14a), or with the NCM *m*, which denotes homogenous entities, to refer to the state of being married as in (14b). In the nominal forms *prolo* and *promδ*, the NCMs *l* and *m* signify that the speaker has in mind two different types of instantiation of the general notion signified by *pro*: a clearly-delineated ‘act of getting married’ in (14a), a homogenous ‘state of being married’ in (14b).

Another manifestation of the interaction between the categorizing and instantiating functions of NCMs in Tagbana is found in the pluralization of inanimates. Tagbana has two collectivizing NCMs: *p*, which denotes a group in which the members’ individuality is maintained, and *t*, which designates a grouping in which individuality is lost. The former is used to evoke the plural of higher animates, whose singular form employs *w*:

(15)  

*yiémf-ê-ê*  
boss-PL  
‘the bosses’

The latter is used to denote the plural of inanimates, whose singular is in *k*:

(16)  

*kpê-r-ê*  
chair-NCM  
‘some chairs’

The reason for the two different modes of pluralization has an obvious cognitive basis: humans and higher animals are high on the scale of individuation and are treated as unique individuals, as evidenced by the assigning of proper names to human beings and domestic animals; inanimates, on the other hand, are low on the scale of individuality, and so easily lose their individual profile when lumped
together. The form *yiɛ́m-ê-ê* in (15) above signifies plurality by the iconic device of reduplication of the final vowel ê. Due to its iconic nature, in Tagbana reduplication signifies a type of plurality in which one individual is added to another to constitute a group, and so reduplicated plurals are only compatible with the NCM *p* denoting a grouping in which the members’ individuality is preserved. Striking confirmation of this analysis is provided by the one class of inanimates in Tagbana that exceptionally pluralizes with the NCM *p* – nouns whose initial element is the prefix *a*- referring to types of things:

\[(17) \quad \text{aka-}b-a \quad p-a\]

\[
\text{types-of-food-NCM} \quad \text{NCM-ID}
\]

\[
\text{‘some types of food’}
\]

Here it is the notion of what a type is that is the key to understanding this usage: types necessarily maintain their individuality even when grouped together, as the very definition of a type implies a distinct nature setting that type off from other kinds of related things. From the semantic point of view, consequently, it is no surprise that inanimate nouns in *a*- should pluralize with *p* and not with *t*.

5.1. Complex conceptualizations involving two different NCMs in the same noun

Another phenomenon that can only be fully understood from a semantic perspective is the incorporation of two different NCMs into the very same noun, as in the word for ‘syringe’ illustrated in (18):

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10 The conglomerate form of plurality signified by the NCM *t* is compatible nevertheless with numerals expressing the number of entities in the conglomerate. Thus one can say *kpêrê kogunu* (‘five chairs’), much as in English one can combine the collectivizing zero plural with a numeral, as in *There were five aircraft on the runway*. There is a difference between a homogenous substance that cannot be counted and a conglomerate containing a certain number of entities that can be. (Cf. Hirtle 2009: 96–103 for a discussion of this phenomenon in English.) It should also be noted that numerals denote sum totals, not distinct individuals.
(18) mā bi k-afu-w-ɔ k-a ta hēwa mā
You can syringe NCM-ID find someone with
‘You can find a syringe at someone’s place.’

The prefix a- in afuɔ has a nominalizing function here: it indicates a mental operation of conceptualizing an abstract entity through the notion of ‘type of thing’. The function of this prefix is made explicit in the paraphrase in (19) below, and its use in an utterance is illustrated in (20):

(19) a-afuɔ: a-‘type of thing’ + -fuɔ ‘to cure’
     ‘anything that can cure, medical supplies’

(20) mi nā afuɔ fə
     1SG PROG anything-that-can-cure look for
     ‘I am looking for medical supplies.’

Preceded by the NCM k as in (18), reference is not made to a general type of thing that has a curative capacity as in (20), but rather to an inanimate object of a curative nature, and because this object is conceived as restoring human life, the NCM w is also used in this nominal form.11

Another example of this phenomenon, involving a combination of the NCMs k and l, is given in (21):

(21) k-apé-l-é l-a ma
     NCM-witchcraft-NCM NCM-ID PFV

11Our analysis departs here from the traditional treatment of ka as a prefix, found in Clamens (1952: 1428) and Miehe (2007: 454). The fact that a can occur all by itself as a prefix in (20) implies that it is not just part of a prefix here; the fact that a has an identifiable meaning in this sequence leads to the conclusion that k probably has one too.
nyîni nā nā ala
happen me on today

‘An action related to witchcraft happened to me today.’

This can be compared to:

(22) apé bi nyîni mā nā ala
witchcraft might happen you to today

‘Something related to witchcraft might happen to you today.’

The prefixed noun-stem a-pé can be analyzed as: a-‘type of thing’ + -pé ‘witchcraft’. With no incorporated NCMs, as in (22), reference is made to a general type of thing related to witchcraft in a hypothetical situation; with the two NCMs k and l as in (21), in contrast, reference is made to a real action of witchcraft-like nature, the NCM l being used because actions are well-demarcated, having a precise beginning and end.

From a cognitive perspective, the use of the NCMs k and w within the nominal form k-afu-w-ɔ is thus indicative of the fact that Tagbana speakers associate two different but complementary views with the experiential entity ‘syringe’: as a medical instrument, it is seen as an inanimate entity signified by the NCM k; however, since a syringe is used for curative purposes, it is also viewed as endowed with the property of restoring human life, signified by the animate NCM w. For the Tagbana speaker, therefore, both impressions, animate and inanimate, are present in the conceptualization of a syringe. The occurrence of two NCMs within the very same noun-stem constitutes further evidence of their cognitive-semantic function of signifying the way the speaker conceptualizes the experiential entity denoted by the noun-stem.
The NCM *k* is the only member of the six-unit Tagbana system found in preposed position in the noun. It is always followed by the prefix *a*, denoting the type or nature of the thing designated, and is compatible with all six NCMs, even with itself:

(23) *k*, as in *kadyo-k-o* = ‘drink’ (something inanimate for drinking) – Miehe (2007: 456)

(24) *l*, as in *kadyo-l-o* = ‘cup’ (something small and delineated for drinking) – Miehe (2007: 455)

(25) *p*, as in *kadyo-b-o* = ‘wild animals’ (something ‘plural + individuated’ for consuming) – Miehe (2007: 457)

(26) *w*, as in *kafu-w-o* = ‘syringe’ (something containing human life for curing)

(27) *t*, as in *kapé-r-é* = ‘evil actions’ (something ‘plural + non-individuated’ of an evil nature)

(28) *m*, as in *kanyɛ-m-ɛ* = ‘truth’ (something homogenous of a true nature)

*K* signifies the notion of ‘something’, *a* that of ‘of a certain type or nature’, and the second NCM provides further specification regarding the something referred to by *k*. Thus in *kadyo-lo*, *k* indicates that a something is being referred to, *l* says that this something is small and well-delineated, *a* that it belongs to a certain type of thing, and *dyo* that it is characterized by the notion of consuming or drinking. The fact that *k* is compatible with all five other NCMs would seem to be due to its more abstract meaning, as any sort of entity can be construed as a something.

---

12*K* can even be used for instance to refer to the entire content of a preceding statement, as in Speaker B’s contribution to the following dialogue about a premarital ceremony:

Speaker A:  

\[Pa \quad p-é \quad nyë \quad năhă \quad fafa \quad p-é \quad to \quad mă\]

Since they be here numerous their father to

\[Yé \quad bi \quad w-i \quad kă \quad p-é \quad mă\]

you going to her give them to

“She should be given to them, because the father has got many of them here (in his house).’
We now turn to the function of the NCM in postnominal ‘NCM + ID’ phrases.

5.2. The cognitive-semantic function of the NCM in postnominal ‘NCM + ID’ phrases

For the proponents of the agreement approach, the NCM used in the postnominal ‘NCM + ID’ construction represents an instance of morphological agreement between the noun and the NCM. However this view cannot account for cases where the postposed identifier does not simply repeat the NCM that occurs within the noun itself, as in (10b) above, where $w$ occurs within the noun and $l$ in postnominal identifier position, or for cases in which there is no NCM incorporated into the noun for the identifier to agree with, such as (29) below:

(29) *n’dē k-i nyē tulugu*

stone NCM-ID be heavy

‘The stone is heavy.’

It will be argued here that the NCM used in the postnominal ‘NCM + ID’ construction fulfils an important cognitive-semantic function – it denotes both the general type and the form of instantiation of the referent that the speaker has chosen as topic in the discourse. The role of the postposed NCM-identifier is clear with nouns that incorporate two different NCMs. Thus in (30) below the discourse topic is the medical instrument and not its capacity to restore life:

(30) *dɔtr-ɔ p-é k-afuɔ-w-ɔ k-i nā ya*

doctors NCM-ID syringe NCM PROG painful

Speaker B: *k-i o nyē bā*

It neg be like

‘That is not the case!’
‘The syringe used by doctors to restore life is painful.’

Consequently, one finds postposed *ki* and not *wi* after this form. In contrast, in the following use of the word for an ambitious person, in which the initial inanimate NCM *k* denotes the generic idea of a something and the penultimate animate NCM *w* represent that something as a human of higher animate, since reference is made to a person and not to a generic something, the postnominal NCM-identifier is *wi* and not *ki*:

(31)  
\[
\begin{array}{cccc}
  \text{w-i} & \text{nyè} & \text{k-ayagaf-} \text{-w-ɔ} & \text{w-i} \\
  \text{NCM-ID} & \text{be} & \text{NCM-ambitious-person-NCM} & \text{NCM-ID}
\end{array}
\]

‘He is an ambitious person.’

And in (21) above, reference is made to an action related to witchcraft and consequently the postposed NCM is *l*.

In Tagbana, both the general type and the form of instantiation must be specified in a postnominal ‘NCM + ID’ phrase for definite NPs that are subjects or topics. Neither (32a) with an identifier-vowel but no NCM, nor (32b) with an NCM but no identifier-vowel are possible; the identifier and the NCM must be used conjointly in order to represent the referent as an instance of a general type:

(32)  
\[
\begin{array}{ccccccc}
  \text{a. yiɛmaf-} \text{-w-ɔ} & *\text{φ-i} & \text{mā} & \text{pā} & \text{ala} \\
  \text{boss-NCM-} & \text{ID} & \text{PFV} & \text{arrive today}
\end{array}
\]

\[
\begin{array}{ccccccc}
  \text{b. yiɛmaf-} \text{-w-ɔ} & *\text{w-φ} & \text{mā} & \text{pā} & \text{ala} \\
  \text{boss NCM} & \text{NCM} & \text{PFV} & \text{arrive today}
\end{array}
\]

This recalls the use of the augment or pre-prefix in Bantu languages, in which an initial vowel is affixed to the pre-stem NCM with nouns that are referential or
referential-definite (cf. Givón 1978: 300–303). This augment is obligatory on subject nouns (von Staden 1973: 176) and has been described as a “topic marker” by Petzell (2003). Further analogies with this type of element are discussed below.

6. The salience of the NP’s referent

In the course of our discussion, two examples have been given of noun phrases in subject function with no postposed NCM-ID, repeated here as (33) and (34):

(33) n’dē bi do mā nā ala
stone might fall you to today
‘A stone might fall on you today.’

(34) apé bi nyĩmi mā nā ala
Witchcraft might happen you to today
‘Something related to witchcraft might happen to you today.’

This occurs only with NPs that have indefinite hypothetical referents. It is also possible to find cases of non-subject NPs that are exceptionally construed with NCMs, as in:

(35) Mā bi k-afu-w-ɔ k-a ta hēwa mā
You can NCM-syringe-NCM NCM-ID find someone with
‘You can find a syringe at someone’s place.’

---

13 Non-hypothetical generic subject nouns are followed by an NCM-ID, as in (i):

(i) prɔl l-a nyẽ pẽrẽ ni
wedding NCM-ID be expensive very
‘A wedding is very expensive.’
This can be compared with the use of the same noun-stem with no NCM:

(36) Mi nã afuɔ fã
    1SG PROG anything-related-to-healthcare look for
‘I am looking for anything related to healthcare.’

The noun phrases in the last two sentences involve a very different form of reference: in (35) the existence of a syringe is strongly presupposed, whereas in (36) the referent is both vague (‘anything related to healthcare’) and perhaps non-existent. Another case exists in which a non-subject NP can be followed by a postposed identifier containing an NCM; this can be illustrated by (37):

(37) Wi ʧori golo ka-r-a t-i nã
    He need chicken meat-NCM NCM-ID on
‘He needs chicken meat’ (the only type of meat he needs is chicken meat, not veal or pork)

Here emphasis is placed on the fact that the person needs chicken meat, and not any other kind. This usage can be compared to (38), in which no contrastive focus is placed on the notion of ‘chicken’:

(38) Wi ʧori golo ka-r-a φ nã
    He need chicken meat on
‘He needs chicken meat.’

The contrastive value manifested by Tagbana NCMs in such uses is analogous to the meaning proposed for the augment in the Cameroonian Bantu language Bulu by Barlew & Clem (2014), who relate it to focus in English in that it involves picking out an entity from a set of alternatives. Putting these facts together with the fact that an NCM-ID must be used with a definite NP occurring in subject function indicates
that in Tagbana postposed NCMs are tied up with salience. We use this concept in the sense of Givón (1981) and Hopper & Thompson (1984), who characterize it in terms of whether the specific identity of a participant is relevant because the latter is important for the communicative intent of the speaker. High salience is associated with “autonomous, usually quite concrete and individuated entities” (Hopper & Thompson 1984: 718).

As regards subject function, Langacker (1997: 7) defines the subject of the sentence as the figure or most salient element within the relational profile denoted by the verbal predicate. It is thus no accident that NCMs defining the general type and specific instance to which the referent corresponds should be required as the identifiers of nouns used in this function. Our data also shows that insistence on a referent’s existence (35) or a contrastive focus on a referent (37) can also make the latter salient enough to require an NCM-ID in Tagbana even outside of the function of subject, and that an indefinite subject whose existence is merely hypothetical has low salience as a referent and so is not construed with an NCM in this language, as in (33) and (34) above. Further confirmation of the connection between NCMs and salience is found in the fact that most inanimate noun-stems are not used with an incorporated NCM, as in (29) above, since inanimates are low on the scale of individuality. The inclusion of an NCM in the noun-stem does occur however with inanimates in contexts where emphatic demonstrative or contrastive reference is made, as in:

(39)  n’dē-g-ē  g-a  g-ē  k-i  nyē  tilugu
       stone-NCM  NCM-ID  NCM-ID  NCM-ID  be  heavy

‘This stone (it is one that I am pointing at), it is heavy.’

Here the postposed g-a signifies ‘it is one’ and g-ē ‘that I am emphatically focusing on’, a combination which produces the effect of an emphatic demonstrative. Since the referent is highly salient here, its specific identity being the whole point of the
utterance, the noun-stem *n’đè ‘stone’ incorporates an NCM even though it normally
would not. Thus both syntactic and discursive salience are associated with the use
of NCMs in Tagbana. A full treatment of postposed NCM + ID combinations
would merit a study of its own and would require a more thorough investigation of
the semantics of the identifier morphemes -i, -a and -é than can be provided in this
article. The latter are not mere allomorphs of a unitary augment archimorpheme as
in Bantu, but each has its own semantic content which needs to be described in
detail.

7. Conclusions

The semantic functioning of NCMs in Tagbana has been explored in this article
through their contribution to the noun phrase at two levels, the nominal level
corresponding to the NS + NCM construction, and the identifier level expressed by
the postnominal NCM + ID phrase. It has been demonstrated that in both
constructions NCMs fulfil the cognitive-semantic function of indicating the
speaker’s conceptualization of the general type to which the experiential entity
denoted by the noun-stem belongs and the instance of this type being referred to.
This concords with Tchagbalé’s (2007) study of the Tem language, in which he
identifies five genders, each of which has a distinctive semantic content: (1)
‘+human’, (2) ‘-human, +augmentative’, (3) ‘+tiny, +deprecatory’, (4) ‘part of a
whole’, (5) ‘dense continue’. Tagbana coincides with Tem in having both a
human and a continuate/homogenous class, two categories that Croft (1994:148)
argues are universals among noun-class markers. Tagbana appears however to be
more systematic than Tem in having three three binary subsytems of NCMs, one
opposing ‘human or human-like animate’ (*w) to ‘inanimate’(*k), a second opposing
‘homogenous’ (*m) to ‘clearly delineated’ (*l), and a third opposing ‘grouping with
maintenance of individuality’ (*p) to ‘grouping with loss of individuality’ (*t).
The analysis of Tagbana proposed here thus supports Langacker’s view that:

Grammatical structures do not constitute an autonomous formal system or level of representation: they are claimed instead to be inherently symbolic, providing for the structuring and conventional symbolization of conceptual content. Lexicon, morphology, and syntax form a continuum of symbolic units, divided only arbitrarily into separate components; it is ultimately as pointless to analyze grammatical units without reference to their semantic value as to write a dictionary which omits the meanings of its lexical items.

(Langacker 2002: 1)

The morphological-agreement and referent-tracking approaches have been argued to be inadequate for accounting for the full range of NCM usage in Tagbana, while the cognitive-semantic approach based on Langacker’s semiological principle described above has been shown to do justice to both the morphological and anaphoric characteristics of these forms, as well as being able to handle dimensions of their use which escape these categories. Our analysis also resonates with Lucy’s (2000: 327) observation that in linguistic analysis “fundamental differences in the interpretation of experience all too often get reinterpreted as purely (merely) formal differences operating over a common or shared human cognition of reality.” With respect to NCMs specifically, he argues (p. 329) that “typically, the classifying forms have independent referential value and combine with other material in the noun phrase to help identify referents, indicate the perspective from which they should be interpreted, or track their identity within and across clauses.”

Tagbana is not alone in being able to use two or more different noun markers with the same noun-stem in certain contexts. Aikhenvald (2000: 39–40) cites the case of Baniwa, a North Arawak language of South America, in which the noun-stem for ‘bone’ can be followed by the classifier for human animates, in which case it
denotes a bone as part of the human body, by the classifier for long vertical objects, in which case it refers to a leg bone, and by the classifier for long thin objects, if it designates a bone used to make a flute. There are even a few instances of two different classifiers occurring with the very same noun-stem at the same time in Tariana, another Arawak language, in which the word for ‘flying’ can be combined with the classifier for ‘canoes’ to denote an airplane, and with both the classifier for ‘canoes’ and that for ‘stretch-like entities’ to denote an airstrip (Kilarski 2013: 297).

One thing that is distinctive of Tagbana is the fact that such phenomena usually occur in languages with larger sets of nominal markers (cf. Zavala 2000: 119–120), while in Tagbana they are operative in a language with a limited set of only six NCMs. Another phenomenon that does not seem to have been observed in any other language with NCMs is the fact that with some noun-stems Tagbana exploits all four possible permutations of a double-NCM configuration. Thus the noun-stem expressing the notion ‘boss’ is attested in the combinations $w + w$, $l + l$, $w + l$, and $l + w$:

\[(40) \text{ a. yiemaf-w-} \quad w-i \quad m\check{a} \quad p\check{a} \quad a\check{l} \\]
\[
\text{boss-NCM NCM-ID PFV arrive today}
\]
\[
\text{‘The boss has arrived today.’ (neutral)}
\]

\[
\text{ b. yiemaf-l-} \quad w-i \quad m\check{a} \quad p\check{a} \quad a\check{l} \\]
\[
\text{boss-NCM NCM-ID PFV arrive today}
\]
\[
\text{‘The big boss has arrived today.’ (focussing on his special status as boss)}
\]

\[
\text{ c. yiemaf-w-} \quad l-i \quad m\check{a} \quad p\check{a} \quad a\check{l} \\]
\[
\text{boss-NCM NCM-ID PFV arrive today}
\]
\[
\text{‘The deputy boss has arrived today.’ (a boss with limited power)}
\]
d. yiémáfo-l-ɔ l-i mā pā ala
boss-NCM NCM-ID PFV arrive today

‘The ‘boss’ has arrived today.’ (not actually viewed as a member of the category, but as a person who is being bossy without having been appointed as boss)

The w + w structure corresponds to a neutral view of a person seen as belonging to the category of humans on both the type and instance levels. The l + w structure construes bosses as set off from other human beings on the level of the type by their function of holding authority over others, but as human animate on the level of the instance. Thirdly, the w + l configuration construes the type as not being set off from other human beings in nature, but the instance as distinguished from other bosses by having only limited power. Finally, the l + l construction evokes both the instance and the type as set off from the category of bosses: this produces the effect of a reference to someone who is not really a member of the category ‘boss’ but is merely acting in a boss-like way in a particular instance.

Such usage is clear evidence that Tagbana NCMs involve much more than the general claims made about the functioning of such markers in Niger-Congo languages as noun-classifying devices with which morphological agreement facilitates discourse co-reference. While this is part of the story, a cognitive-semantic approach can account both for this function and for those in which the NCM signals the sometimes highly complex way in which the speaker views the referent. As Lucy (2000: 330) advises, “one always needs to attend to the local facts and not presume uniformity across apparently similar systems.” The conclusions of this study also converge with recent studies of classifiers drawing on cognitive models of categorization which share an overall emphasis on semantic motivation: as Kilarski (2013: 304) observes, “all types of classifiers enrich the lexicon and allow speakers to highlight a specific property of the referent. (...) the
choice of a classifier cannot simply be interpreted as a reflex of nominal semantics 
or an automatic agreement-like matching of semantic features.”
References


