1 INTRODUCTION

Gújjolaay Eegimaa (Eegimaa henceforth) has a noun class system whereby prefixes combine with noun stems to simultaneously mark class membership and number. The language distinguishes fifteen noun classes of which 12 are involved in singular-plural pairings. For example, the noun class prefixes a- and u- in (1) below, indicate membership to the singular classes 1 for humans and its plural correspondent class 2 respectively.

(1) a-rokka ‘worker’ u-rokka ‘workers’

There are three non-pairing locative classes (13-15) which encode precise location, location inside and temporal location. In Eegimaa and other Niger-Congo noun class systems (see e.g., de Wolf 1971, Sapir 1971, Welmers 1973), singular and the plural forms of a noun are traditionally assigned to different classes. In addition to noun class alternations to express singularity and plurality, a noun stem may allow more than two prefixes resulting in derivations such as augmentative expressions exemplified in (2) below, and the formation of collective and distributive expressions. Consequently, a ‘pairing’ view of the Eegimaa noun class system can only be a simplistic one.

(2) fu-how ‘head’ ga-how ‘big/ugly head’ bu-how ‘enormous head’

The goal of this paper is to describe the formation of distributives and the different collective categories found in the Eegimaa noun class system and their relation to basic number (singular and plural). Gil (1996: 54) points out that ‘the term collective is used in diverse contexts and with apparently different meanings.’ In this paper the term ‘collective’ will be restricted to noun class markers which are used to ‘indicate that [the denoted entities] are to be construed together, as a unit’ (Corbett 2000: 119). Distributives on the other hand, indicate...
‘the separation of members of a group, [each being] considered distinct in space, sort or time (Corbett 2000: 111)’. In the discussion, I will show that Eegimaa collective and distributive markers are primarily basic number markers. Collective meanings are expressed with singular noun class markers, whereas the one distributive meaning is obtained by use of a plural noun class marker. I will use prototype theory to argue that the existence of various collective classes reflect a culture-specific conceptual categorisation of entities in the Eegimaa speakers’ environment. This paper begins with a brief summary of the morphosyntactic properties of the Eegimaa noun class system in Section 2, followed by a short discussion of the data source and an outline of the theoretical approach used here in Section 3. In Section 4, I examine the different collective categories and the only distributive class encoded in the Eegimaa noun class system. In the discussion of the different collective categories, it is important to bear in mind that Eegimaa noun classes are associated with semantic content (see Sagna Accepted for further discussion). Section 5 provides a summary of the results of the analysis presented here and relates them to Corbett’s typological work on number.

2 SUMMARY OF THE EEGIMAA NOUN CLASS SYSTEM

The Eegimaa 15 noun classes are distinguished on the basis of agreement criteria (Corbett 1991). Morphological criteria are not determinant in the distinction of noun classes. In the Eegimaa noun class system, controller nouns trigger obligatory agreement on their dependents in a noun phrase and also on the verb. Nouns which trigger regular agreement markers on all their dependents and on the verb are assigned to the same class. Regularity in agreement marking may be expressed by the similarity between the initial segment (vowel or consonant) on the controller noun and the segments on its dependents and on the verb as exemplified in (3)³. In other cases, regularity is expressed by use of noun class markers and agreement markers which occur in complementary distribution as in (4) below⁴.

(3)  
\begin{align*}  
g]\-jja\-a & \quad g\-g\-u & \quad g\-u\-ya\-u\-l & \quad me \\
\text{CL9-light} & \quad \text{CL9:DEF} & \quad \text{CL9-prick-DIR} & \quad \text{SUBORD} \\
\end{align*}  
‘If the light reaches us.’ (ss2004Oct03_gasurummal)

³ The Abbreviations used in this paper are: CL = class/agreement marker, Coll = collective, DEF = definite determiner, DEM = demonstrative, DIR = directional, DUP = reduplication, Introsp = introspection, NEG = negative, Part-Obsv = participant observation, PFV = perfective, PL = plural, PROX = proximal, SG = singular, SUBORD = subordinate marker.

⁴ The semi-vowels y- and w- are in complementary distribution with the vowels e- and u- respectively (see Sagna 2010: 12 for discussion).

⁵ Eegimaa is a non-tonal language. The presence of an acute accent on the first vowel of a word indicates that the vowels on that word are [+ATR] whereas its absence means that they are [-ATR]. The language also distinguishes vowel height harmony between noun class prefixes having the form Cu- and Ci-. Vowel harmony does not indicate a change of noun class.
There are also cases where the prefix on the noun shows no similarity with the agreement markers it triggers on targets (except the determiners), and on the verb as in (5) and (6) below. In these examples, there are similarities between the noun class marker attached to the noun and the agreement marker on the definite determiner and the demonstrative, but not on the verb. These cases are termed multiple morphosyntactic and semantic categorisations. Here, class assignment is mainly based on the agreement on the verb.

(5)  
\[ w-aare \quad wawu \quad gu-yat-ul \quad me \]
CL6-woman CL6:DEF CL2-collect.wood-DIR SUBORD
‘If the women collect wood’ (ss2004Oct03_gasurummal)

(6)  
\[ sú-jur \quad sausu \quad gu-yavv-ut \]
CL4-young.woman CL4:DEM CL2-marry-NEG
‘These young women are not married.’ (Introsp)

For a detailed discussion of the complex singular-plural pairings, the Eegimaa agreement system and the use of agreement criteria for the identification of the Eegimaa 15 noun classes see Sagna (2010). The semantic principles underlying the multiple morphosyntactic parameters are discussed in Sagna (Accepted). Eegimaa collectives and distributives exhibit agreement markers of the type exemplified in (3)-(6) above. Therefore, their class membership is decided on the basis of agreement criteria relevant to each case.

3 THE DATA AND THEORETICAL FRAMEWORK

The data used in the study of collectives and distributives is derived from the documentation of Eegimaa. This documentation includes a database of audio and video recording of speech events from different genres, as well as cultural and religious events such as dances and ritual performances. It also includes an investigation of speakers’ knowledge of their environment e.g., ethno-botanic and ethno-zoological knowledge. The approach to documentation used is heavily influenced by categorisation theory as developed in Cognitive Linguistics. The aim of such an approach is to gain insight into the way entities and events is conceptualized by Eegimaa speakers. The idea is not only to collect rich variety of different speech genres, but to also understand the way of life and the world view of the speech community.

The analysis proposed here uses Prototype theory to argue that noun classes are cognitive categories. Categories, according to this approach, are viewed as having internal structures in which some members ‘are more central than others’
(Geeraerts 2010, Lakoff 1987, Taylor 2003). In their internal organisation, categories are structured by family resemblance, radial processes, metaphor, and metonymy. This theory also proposes that there are culture-specific parameters which motivate the semantic categorisation of certain entities i.e., they reflect a conceptualisation of the entities in the speakers’ environment (Aikhenvald 2000, Craig 1986, D’Andrade 1995, Palmer 1996). The formation of different collective types is therefore interpreted as a form of categorisation which reflects a conceptual organisation of entities in homogeneous groups i.e., a culture-specific-based mental organisation of different entities into classes.

4 DIFFERENT SEMANTIC CATEGORIES OF COLLECTIVES

Collective markers, as pointed out above, are noun class markers which are primarily used as singular markers for a different class. Thus collective expressions are formed by noun class prefix alternation rather than a dedicated collective noun class marker. The collective meaning of a given noun class marker is therefore a secondary function. Since a noun class marker cannot combine with another one, Eegimaa collective markers cannot cooccur with basic number markers as may be the case in other languages of the world (Corbett 2000: 18). There are three main classes in which collective meanings can be expressed in Eegimaa. The semantic differences between these classes are outlined below.

4.1 Collectives for human identity groups and colonies with CL 3 e-

In Eegimaa and other Jóola languages (e.g., Sapir 1965), class 3 is described as the ‘default’ or ‘unspecified’ class, because it is not associated with any single specific semantic content and includes most loanwords whose integration into the language is not based on clear semantic principles. This class is primarily a singular class and mainly includes nouns from various semantic fields e.g., most animals, most inanimate objects and special humans like deviants (Sagna 2008: 229-230). Singular nouns of class 3 are exemplified in (7) below (see example (4) above for an illustration of agreement markers for class 3). Nouns from class 3 combine with noun class prefix e- or its allomorph y- and form their plural using CL 4 su- or its allomorph s- or s-.

(7) é-munduŋo ‘hyena’ sú-munduŋo ‘hyenas’
   é-rajjo ‘radio’ sí-rajjo ‘radios’
   e-soŋ ‘mad person’ su-soŋ ‘mad people’

In addition to functioning as a singular marker, CL 3 e- is also used as a plural and collective marker for a subcategory of nouns of human denotation from class 2. The plural exemplified in (8) below implies a multiplicity of entities (humans in this case), which are conceived of as separate individuals, whereas the collective illustrated in (9) shows that they are conceptualised as a unit. Notice that the
agreement marking in these examples are, similar to those exemplified in (5) and (6) above instances of multiple morphosyntactic and semantic agreement.

(8)  
\[
\begin{array}{llll}
\text{é-} & \text{jjola} & g\text{u-} & \text{bbagir} \\
\text{CL3-jjola} & \text{CL2-four} & g\text{u-} & \text{om} \\
\text{CL2-be} & \text{bab}e & & \\
\end{array}
\]

‘There are only four Jóola people here (general location)’

(9)  
\[
\begin{array}{lll}
\text{é-} & \text{jjola} & g\text{u-} & \text{a}n\text{-}e\text{-}a\text{n} \\
\text{CL3-jjola} & \text{CL2-cultivate-HAB-DUP} & e\text{-} & \text{mmano} \\
\text{CL3-rice} & & \\
\end{array}
\]

‘Jóola people grow rice’

Example (10) shows further illustrations of the opposition between singular, plural and collectives for humans. As can be observed here, the distinction between plural and collective meanings for these humans is not morphologically marked. These meaning are clearer in context (see (8) and (9) above).

(10)  
\[
\begin{array}{llll}
\text{á-} & \text{jjola} & \text{é-jjola} \\
\text{Jóola person’} & \text{‘Jóola persons’/’Jóola people’} \\
\text{á-muse} & \text{‘teacher’} & \text{é-muse} & \text{‘teachers’/’teachers’ (Coll)} \\
\text{á-soddali} & \text{‘soldier’} & \text{é-soddali} & \text{‘soldiers’ (PL & Coll)} \\
\text{á-malien} & \text{Malian’} & \text{é-malien} & \text{‘Maliens/Malian people’} \\
\text{á-jangara} & \text{‘christian’} & \text{é-jangara} & \text{‘christians’} \\
\end{array}
\]

Nouns of human denotation that use CL 3 e- as a plural and collective marker are those that refer to human IDENTITY GROUPS and humans who are involved in the same professional activities.

CL 3 e- is also used as a collective marker with a subcategory of plant names. These plants always grow as a colony and spread all over their area while choking any other plant species in that environment. Examples (11) and (12) show the combination of nouns denoting colonizing plants with singular, plural and collective markers.

(11)  
\[
\begin{array}{lll}
\text{ga-} & \text{rarah} \\
‘Ipomea asarifolia plant’ & \text{u-} & \text{rarah} ‘Ipomea asarifolia plants’ \\
\text{e-} & \text{rarah} & ‘colony of Ipomea asarifolia plants’ \\
\end{array}
\]

(12)  
\[
\begin{array}{ll}
\text{gá-} & \text{gabal} \\
‘lily plant’ & \text{ú-} & \text{gabal} ‘lily plants’ \\
\text{é-} & \text{gabal} & ‘colony of lily plants’ \\
\end{array}
\]

Notice that when CL 3 e- is used as a collective marker, its corresponding agreement markers on the verb differ depending on whether the controller noun denotes a human or a plant. With nouns of human denotation, there is multiple morphosyntactic and semantic categorisation as can be seen in (13) below. Multiple categorisation means that humans are simultaneously identified as belonging to a ‘colony’ through the use of CL3 e- on the controller noun, while
their status as humans is marked by use of the class 2 (human plural) agreement marker on the verb (see Sagna Accepted for a detailed discussion of this notion). Nouns denoting plants do not exhibit multiple morphosyntactic and semantic categorisation. Contrary to nouns of human denotation, they use CL3 e- on the controller noun and trigger class 3 agreements on all their dependents. Such a distinction is probably due to a strong human versus non-human distinction which is present throughout the Eegimaa noun class system.

(13) é-ijola gu-añ-e-añ e-mmano
    CL3-jóola CL2-cultivate-HAB-DUP CL3-rice
    ‘Jóola people grow rice’ (Introsp)

(14) é-gabal yayu e-ggoñ-e e-mmano yayu
    CL3-lily.plant CL3:DEF CL3-dominate-PFV CL3-rice CL3:DEF
    ‘The colony of lily plants has dominated the rice plantation’ (Part_Obsv)

The discussion above shows that class 3 functions as a collective class for nouns which use other noun class markers as basic number markers. A group of entities is described as a collection using CL3 e- only if it is conceptualised as a ‘colony’. Collectives in class 3 describe ‘human colonies’ i.e., homogenous groups which are typically characterised by their cohesion, but which at the same time, exclude non-members. Prototypical human colonies are ethnic groups and geographical settlements. Multi-ethnic villages and cities are recent creations in the Eegimaa surroundings. Note that nouns denoting humans who share a profession are all loanwords. These professions involve activities from which non-initiates are excluded. They differ from traditional activities which, in general, are not viewed as professions restricted to a subcategory of people. Thus, it can be suggested that in the Eegimaa speaker’s world, the groups of humans and plants which are conceived of as colonies exhibit common properties and justify their conceptualisation as the ‘same’ kinds of units composed of sub-entities of the same type.

4.2 Assemblage collectives with CL 5 bu/- ba-
In previous work (Sagna 2008: 234), I have described class 5 as the class of assemblages, among other semantic categories. It includes nouns denoting, for example, entities which are made of assembled elements e.g., bu-ccaç ‘stretcher (made of assembled sticks)’, or those which are inherently composed of different parts e.g., bi-it ‘rice fields (composed of many plots). This singular class has two subclasses which are overtly marked by the prefixes 5 bu- and CL 5b ba-. As can be seen in examples (15) and (16) below, the nouns with which they combine trigger similar agreement markers on their dependents and on the verb.

(15) bu-nunuhen babu bú-jali-jali
    CL5a-tree CL5:DEF CL5-be.big-DUP
Collective meanings can be expressed by shifting a noun from another class to class 5. Two collective subclasses may be distinguished for this class. The first one, CL 5a bu- is used with a limited number of nouns in the language to refer to natural or purposeful assemblages of entities of the same kind as illustrated in (17).

The second subclass is overtly marked by CL 5 ba-. It productively combines with noun stems which use other noun class markers in their singular and plural forms to express ‘diminutive collective’ meaning i.e., to describe a group of small entities as a unit as exemplified in (18). The units expressed with CL 5 ba- maybe purposeful assemblages or congregations of small entities e.g., ba-ttaja ‘flock of sparrows’. For any assemblage to be expressed with CL 5 ba-, it has to be composed of small entities. These entities are not considered as individuals but are viewed as a unit or a ‘pile’ of small things. Note that CL 5 ba- can also combine with nouns of human denotation to express smallness in size. However, if the human referred to is an adult, the use of CL 5 ba- expresses a derogatory meaning as exemplified in (19) below. Collectives in class 5, compared to those in class 3 discussed above, are not conceived of a colony.

4.3 ‘Swarm’ collectives with class 7b fa-
Class 7b is a subclass of class 7, the singular class where globular and other round entities are assigned. CL 7b fa- is a collective marker for insects that live in swarms. It can be argued that the semantic motivation for using this noun class marker is the round shape of swarms of insects. Insects in this collective class, exemplified in (20) below, exhibit a similar behaviour in that they live and move together as a unit, but also prey and attack any threat together. The inclusion of the noun fa-ragir ‘funeral “swarm” dance’, which describes a dance characterised by the simultaneous forward and backward movement of women who perform
that dance, is most probably due to the similarity of the dance with the behaviour of insects that live in swarms.

(20)  
\begin{align*}
    e\text{-}yabut & \quad \text{‘ant’} \\
    y\text{-}aaj & \quad \text{‘bee’} \\
    e\text{-}ttiga & \quad \text{‘black carnivore ant’} \\
    e\text{-}yingilit & \quad \text{‘wasp’} \\
    é\text{-}bangur & \quad \text{‘locust’}
\end{align*}

\begin{align*}
    si\text{-}yabut & \quad \text{‘ants’} \\
    s\text{-}aaj & \quad \text{‘bees’} \\
    si\text{-}ttiga & \quad \text{‘black carnivore ants’} \\
    si\text{-}yingilit & \quad \text{‘wasps’} \\
    si\text{-}bangur & \quad \text{‘locusts’}
\end{align*}

\begin{align*}
    fa\text{-}yabut & \quad \text{‘swarm of ants’} \\
    f\text{-}aaj & \quad \text{‘swarm of bees’} \\
    fa\text{-}ttiga & \quad \text{‘swarm of black carnivore ants’} \\
    fa\text{-}yingilit & \quad \text{‘swarm of wasps’} \\
    fá\text{-}bangur & \quad \text{‘swarm of locusts’}
\end{align*}

CL 7b fa- cannot be used as a collective marker for nouns denoting insects that do not leave in swarms or with nouns denoting other types of entities e.g., birds, even if those that move in ‘swarms’.

In summary, Eegimaa collective expressions largely reflect the speakers mental categorisation of the environment in which they live. The assignment of entities into groups/units is largely dependent of characteristics such as their behaviour and size. Among all collective markers, CL 5b ba- is the most productive one since it can combine with almost all count nouns and is compatible with loanwords.

4.4 Distributive expression

Noun class prefix 4 su- mainly functions as the plural correspondent of CL 3 e- (see also 4.1 above). However, it is also used with a limited number of noun stems as a distributive marker (rather than a collective as argued in Sagna (2008: 265)). Recall from Corbett’s definition above that the function of distributives is to individuate entities of a group. As a distributive marker, CL 4 su/-si- is used in Eegimaa with count nouns (cf. (21)-(22)) but also non-count nouns (see (23) below) to describe entities of different kinds or origins. In example (23) distributivity is expressed by ‘pluralising’ non-count nouns. The distributive meaning for ‘meat’, for example, describes meat from different animals.

(21)  
\begin{align*}
    ga\text{-}mmano & \quad \text{‘rice grain/plant’} \\
    e\text{-}mmano & \quad \text{‘rice plantation (colony)’}
\end{align*}

\begin{align*}
    u\text{-}mmano & \quad \text{‘rice grains/plants’} \\
    si\text{-}mmano & \quad \text{‘varieties of rice’}
\end{align*}

(22)  
\begin{align*}
    a\text{-}joara & \quad \text{‘stanger’} \\
    si\text{-}jaora & \quad \text{‘stangers from different origins’}
\end{align*}

\begin{align*}
    e\text{-}jaora & \quad \text{‘strangers (as a group)’}
\end{align*}

(23)  
\begin{align*}
    e\text{-}llu & \quad \text{‘meat’} \\
    e\text{-}lob & \quad \text{‘speech’} \\
    e\text{-}jow & \quad \text{‘walking/outing’}
\end{align*}

\begin{align*}
    su\text{-}llu & \quad \text{‘meat from different animals’} \\
    su\text{-}lob & \quad \text{‘quarrels/fuss’} \\
    su\text{-}jow & \quad \text{‘multiple outings’}
\end{align*}
5 SUMMARY

From the discussion on collective and distributive expressions above, it is clear that even though collectivity and distributivity typically imply plurality (Corbett 2000: 119), all noun class prefixes used in the formation of collectives primarily express singular meaning with count nouns. An important remark made by Corbett in his typology of number is that collectives and distributives are not basic number values, because unlike basic number markers, they are not obligatory across languages. In addition, they co-occur with basic number markers in some languages, which means that they are categorised as different. Furthermore, Corbett argues that collectives and distributives ‘are formed from nouns low in the [animacy] hierarchy, and not with pronouns’. With Eegimaa, collective markers are noun class markers, which primarily mark basic (singular) number. No two noun class markers cooccur to express collective and singular and plural meaning separately. With respect to the animacy hierarchy, Eegimaa seems to be in line with reports that cross-linguistically, collectives do not occur with pronouns and that nouns that are used in collective expressions are mostly low in the hierarchy. Humans in ‘collective colonies’ of class 3 are higher in the hierarchy than the entities in other collectives, but are still ranked low compared to pronouns and kin terms.

In this paper, I have shown that Eegimaa has different categories of collectives and one distributive class which reflect different conceptual categories. Eegimaa forms units (collectives) to express the concepts of ‘colony’, ‘smallness’ (pile) and ‘swarm’. These semantic categories are motivated by culture-specific parameters of classification. The analysis proposed here is based on a documentation which combines both linguistic and ethnographic methods, to reveal the culture-bound motivations underlying the conceptual categorisation processes at work in the formation of Eegimaa collective and distributive expressions.
REFERENCES


Sagna, Serge. Accepted. Physical properties and culture-specific factors as principles of semantic categorisation in the Gújjolaay Eegimaa noun class system. *Cognitive Linguistics*.


