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SPATIAL CONSTRUCTIONS IN DAGBANLI

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Abstract

The paper discusses spatial constructions in Dagbanli, a Maba language spoken in the northern part of Ghana. It is premised on cognitive linguistic approach in which meaning is extended when grammaticalization accounts for meanings tied to bodily parts, time and location. The ethnographic approach is employed to solicit the data used for this paper. The paper aims to describe how space is marked in Dagbanli, how body part nouns are used in spatial construction and how to find out the semantics of the space marker in Dagbanli. These are achieved by describing positional posture verbs and locative verbs, which indicate adposition in the language.

Keywords: Dagbanli, Maba, Spatial, Adposition, figure, body-parts

1.0 Introduction

This paper aims at describing spatial constructions in Dagbanli, a Maba language spoken in the northern part of Ghana. Space is considered a component of the human conceptual structuring schematic systems (Talmy, 2000) since the human has greater ability to perceive thoughts than other organisms, which indicates the fundamental human concept. This human concept employs spatial reasoning and abstract thinking. A spatial language includes nouns and verbs which determine whether the discern is static or dynamic if the discern is parallel to the ground or displaced in space if it is static. The ideal aim of this paper is to respond to the issues of how Dagbanli mark spatial constructions, how body-part nouns in spatial formations are treated as separate syntactic category from nouns and advance the idea of semantics of space in Dagbanli.

Saanchi (2006) describes location of things from one point to another as relativistic and with regard to other objects, the placement of physical items is viewed as psychophysiological. The objects mention here are at a certain space position (state) in the human environment. Heine et al. (1991) note that different languages have different ways of communicating area, especially when it comes to location of object or location in general. For instance, European languages, such as English, do so by employing a small group of syntactic elements known as relationship words. Relational words are grammatical form/classification with accompanying qualities; they don't take inflectional fastens in most cases; cross-etymologically, they are closed class of words like

assistants, conjunctions, determiners and pronominals. As a result, in languages, relational terms are limited arrangement of words.

Despite the fact that it appears to be very difficult to distinguish relational words by any proper highlights, one syntactic component that appears to be unmistakable with all relational words in dialects is that they by and large go before an ostensible expression (NP) supplement. Whether a language has postpositions or relational terms has to do with the syntactic positions that its locative articulations take in regard to the supplement; that is, whether it comes before or after the supplement. Relational terms and postpositions are referred to as adposition. In most languages, they have locative abilities and can locate an item, generally referred to as figure, in relation to one or more articles. The normal significance of a locative is a spatial relationship according to a widely held belief in the study of spatial phrase structure. As has recently been mentioned, they are closed class of lexical objects in several languages, derived diachronically from things and action words (Payne, 1997; Ameka and Essegbey 2006). Ameka (2003) observes that certain dialects may be able to use both relational words and postpositions. Postpositions are locative expressions system which comprises words with heterosemic relationships to specific body parts and landmark terms. The nominal elements from which locative expressions may have evolved are segmentally and suprasegmentally related. They are only differentiated by their semantic, syntactic and morphological characteristics.

In the study of syntactic categories, one notable hypothesis for most Ghanaian languages is that they have postpositions instead of relational words. According to research, postpositions derived from things are the class of closed words that code spatial interactions in languages such as Ewe (Duthie, 1988), Dagaare (Saanchi, 2005; 2014), Ga (Dakubu, 1988), Awutu (Frajzyngier, 1974), Akan (Christaller, 1875) and Gurune (Atintono, 2012a; 2012b; 2013). As a result, the syntactic category of postpositions has been formed. Postpositions, which are objects that code social semantics in the same way that English relational words do, are found in a few languages, according to some linguist (Christaller, 1875; Boadi, 2010; Osam, et al. 2011). Osam et al. (2011) note that few of the morphemes employed by Akan to denote spatial punctuation are relator objects but not postpositions. The spatial connection between a pen and table for example, the pen is the figure and the table is the ground. As a rule, tables are greater than pens and it makes finding the pen conceivable. When there is no clear imbalance between the thing we need to find and the reference object, we force a sort of unevenness on it, thinking about the situation of the onlooker. For instance, in finding a house on a riverbank, one portrays it either on the right or left bank of the waterway relying upon the individual's development (Saanchi, 2006).

The basic meaning of posture verbs in English, such as sitting, standing, and reclining, is related with human postures before their semantic meanings of entity placement are addressed, according to Newman (2002; 2009). Newman (2002) specifies four cognitive domains that are critical for understanding English posture verbs: 'sit, stand and lie.' The four cognitive domains are "*spatial-temporal*, (ii) *force-dynamic*, (iii) *active zone* and (iv) *socio-cultural*". "The bodily position in posture is referred to as the Spatio-temporal domain. For example, the body can be in a seated position, a vertical or upright standing position, or a horizontal position when lying. The dynamic domain of force is concerned

with how entities balance force in a given posture" (Talmy 2000:409-422).

Humans are the only animals capable of grasping objects in their environment. The physical body of a human in relation to the environment is the primary source of data for this paper. Human bodies are designed in such a way that they can look forward but not backward, get closer to objects in front of them than those behind them, move forward but not backward, and live in a gravitic climate that forces the human to stay on his feet rather than on the head on a daily basis (Sweetser, 2007). We have observed that most Dagbanli speakers like other humans have greater ability to perceive thoughts, which is done by employing spatial reasoning and abstract thinking. Notice that people may employ the phrases "down" and "up" to denote happiness and health, which are both derived from human frame components and environmental indicators. This, however, calls for the systematic investigation of the interrelationship between language regions and cognition as the domain for spatial language. The principal objective of this paper is to show how space is marked in Dagbanli while the other objectives include determining how body part nouns are used in spatial construction and to find out the semantics of the space marker in Dagbanli.

2.0 Methodology

The ethnographic approach of data collection was employed to solicit for the data used for this paper from both primary and secondary sources. The primary data were solicited from the interaction between the researchers and the consultants through unstructured interviews in three villages Wayamba, Tali and Chrifoili in the Tolon district in the northern region. Thirty (30) consultants aged 35-86 comprising eighteen (18) males and twelve (12) females were selected from the three villages. The focus of the interactions was on locative construction in Dagbanli as the questions were used to trigger the consultants' responses on such constructions. The interviews were recorded with the permission of the consultants and later transcribed. The secondary data were collected from the works of Inusah (2015, 2016), Inusah & Issahaku (2019), Issah (2020) and Atintono (2012).

The framework for the paper is the Cognitive linguistics which is a relatively new branch of linguistics that has emerged as one of the most cutting-edge approaches to the study of language and cognition in today's interdisciplinary discipline. The technique focuses on the interactions between thoughts and language and social and physiological experiences (Evans and Green 2006). The model pays special attention to sound strategies for examining etymology information and a proper way to deal with dissecting semantics information. Note that in the study of etymological sounds, the cognitive semantics method attaches additional significance to the applied construction and the exemplified interactions.

3.0 Spatial Constructions in Dagbanli

The idea of spatial construction is investigated in Dagbanli for the fact that every language has its own technique of locating objects in space. This idea is accomplished in the language by employing some special language conceptions such specific placement of an object as well as whether it is located upward or below. Spatial concepts in Dagbanli are employed as locative nouns and adpositions (prepositions and postpositions). The adpositions can be either prepositions or postpositions and they come right after a

word as noted in Dagbanli by Olawsky (1999). Most terms in this category are referred to as postpositions in Dagbanli. The outer elements of the human body become terms that are utilized in spatial notions in various languages around the world and Dagbanli is not an exception as illustrated in the data below:

1. m puuni m-biera
my stomach my-paining
'My stomach is paining'
2. paya maa nye o puuni
woman the see her stomach
'The woman is menstruating'
3. adaka maa tam duu maa puuni
box the stand room the inside
'The box is inside the room'
4. bua maa be duu maa puuni
oat the is room the inside
'The goat is inside the room'
5. Naporo chan puuni
Naporo go farm
'Naporo went to the farm'
6. Adam zuyu bari pam
Adam head big very
'Adam's head is very big'
7. Adam feb Amina zuyu
Adam cane Amina head
'Adam caned Amina's head'
8. leemu maa pa teebuli maa zuyu
orange the place table the top
'The orange is on top of the table'
9. bia maa zi teebuli maa zuyu
child the sit table the
top
'The child is sitting on top of the table'
10. Abu tam tia maa zuyu
Abu stand tree the top
'Abu is standing on top of the tree'

From the data presented in (1-10), examples (1), (2), (5) and (6-10) show evidence of body-part terms used as nouns. In (1) and (6) both *puuni* 'stomach' and *zuyu* 'head' function as subject while in (2) and (7), they function as object showing evidence of their nominal forms. Examples (3-4) and (8-10) show different morphological realisations of the body-part terms *puuni* 'inside' and *zuyu* 'top' used as adverbs. Both *puuni* and *zuyu* in this case function as Adjunct attesting to the adverbial forms of the lexical terms. Examples in (2-5) and in (7-10) occur as postpositions while examples (1) and (5) occur at prepositions. However, their forms remain the same despite the differences in positions.

It is also worth mentioning that in cases where these nouns, *puuni* 'stomach' and *zuyu* 'head', are used to code spatial grammar (postpositions), there is also invariably a requirement for what has been termed posture verbs. Posture verbs are typically used to describe the position of an object (animate or inanimate) labelled as figure in relation to another entity known as ground (Talmy 2000; Dixon 1991). For instance, The NPs *adaka maa* 'the box', *leemu maa* 'the orange', as in (3) and (8) examples of figure. There are also complements that are related to a specific location (which constitute object NPs and locative morphemes; here a postposition) as in (2) and (7). It's worth noting that posture verbs are influenced by the figure's animacy. This explains why in (9), *zi* 'sit' is allowed but not such verbs as *pa* 'lie'. Atintono (2004) makes a similar observation for Gurene posture verbs and also accounted for this based on the assumption that sitting postures for animate and non-human NP references are viewed differently.

Again, similar constructions in Dagbanli are demonstrated in the data below where body-part terms occur as nouns and then also as postposition.

11. Napari nyaanja bari pam.
Napari back big very
'Napari's back is very big'
12. Latifu be loori maa nyaanja
Latifu is car the behind
'Latifu is behind the car'
13. Edith gbuni mali yum.
Edith buttock make sore
'Edith's buttock has a sore'
14. O be loori maa gbuni.
he is car the beside
'He is beside the car'

The words *nyaanja* 'back' and *gbuni* 'buttock' in examples (12) and (14) that are used as nominals in the preceding cases are likewise used as postpositions. Postpositions, on the other hand, appear to invariably come after locative verbs BE that describe the object's ground. The following data present some examples of nominal and postpositional body-part nouns and their meanings in Dagbanli:

15. Body-part/innovative term	Nominal meaning	Postpositional meaning
zuyu	head	on (top of)
puli (puuni)	stomach	in(side)
gbuni (gbunni)	buttock	beside, under, bottom
tooni	front	ahead of
luyili	side	beside
nuzaa	left-hand	left-hand side of
nudirigu	right-hand	right-hand side of
nyaanja	back	behind
tija	land, ground, inhabited place	down
zuyusaa	top	above
logni	throat	in (enclosed)
nini	face	front
noli	mouth	edge

The data in (15) contains list of Dagbanli adpositions (postpositions and prepositions) that are typical nouns and have other morphological realisations. However, the properties of these body-part parts that express spatial linkages in Dagbanli are the same as the noun counterpart. However, they differ from nouns in morphological and syntactic properties, leading to the claim that although being diachronically derived from nouns, these morphemes should be studied as separate grammatical class. *Puli* means stomach in Dagbanli but *puuni* has three (3) meanings: (1) an adposition, which refers to an ‘enclosed region’, (2) the ‘stomach’ as an internal organ when referring to a human being and (3) means ‘farm’.

4.0 Semantics and pragmatics of Spatial expressions in Dagbanli

This session of the paper discusses the semantics and pragmatics of spatial constructions in Dagbanli. The focus here is on some of the subclasses of positional verbs proposed by Atintono (2013).

4.1 verbs of body position or posture verbs

Body position or posture are verbs types which are used to describe the different body postures or positions of humans, animals and even location of objects such as bottles, sticks, balls, pots and many more with respect to the ground. With this, the body posture or position may also be horizontal, vertical, squatting or may even turn upside down. But in some cases, the postural meaning of verbs requires the figure to be on the ground. The picture series is used to establish the Dagbanli locatives in the following constructions.

16. bia maa do soŋ zuyu
 child the lying mat head
 ‘The child is lying on top of the mat’
17. paya maa zi soŋ maa zuyu
 Woman the siting mat the head
 ‘The woman is sitting on top of the mat’

18. doo maa za zuyusaa
 man the standing upward
 ‘The man is standing upward’
19. do ninkurugu maa do kuyu maa zuyu.
 man old the lying chair the head
 ‘The old man is lying on the chair’
20. doo maa zami zaŋ o maŋa tabili dikpuni.
 Man the standing lean he self attach wall
 ‘The man standing is leaning himself against the wall’
21. bia maa dab kuyu maa nyaanja
 child the squatting chair the back
 ‘The child is squatting behind the chair’

The data presented in (16-20) demonstrate posture verbs *do* ‘lie; *zi* ‘sit, *dab* ‘squat’ in Dagbanli within sentences; the verbs here are used to describe the location of humans and objects. For instance, example (16) describes how the child is lying on the mat while example (20) describes where the child squats behind the chair.

4.2 verbs of elevation

Verbs of elevation are referred to as adpositions (preposition and postposition), which are employed to indicate the location of entities (Levinson & Meira 2003). The most essential meaning of this category of verbs is that the items are situated on higher positions such as rooftops, mountain tops, tabletops, treetops, stumps and platforms which are among the elevated sites. A term might have many meanings that are related to each other in different ways (Murphy 2010; Cruse 2011). Meaning variation is the term for this. The most essential meaning of this category of

verbs is that they relate to objects that are located on higher ground. Consider the constructions below:

22. doo maa tam gooni maa zuyu
man the stand wall the top
'The man is on top of the wall'

23. Adam du zoli maa zuyu
Adam climb mountain the top
'Adam is on top of the mountain'

24. Napari tam tia maa zuyu
Napari stand tree the top
'Napari is on top of the tree'

The word *zuyu* 'head' glossed as 'top' in (21-23) is used to refer to both natural and manmade entities. *tia* 'tree' as in (23) and *zoli* 'mountain' as in (22) are examples of natural elevated entities, whereas *gooni* 'wall' as in (21) is an example of manufactured elevated thing.

4.3 attachment verbs

Attachment verbs are verbs that can be used to insert, penetrate, stick, or tie via an object to the earth. The object might be anything from a pistol to an arrow to a pin to a rope and the ground can be soft or hard. Most attachment verbs are dynamic verbs in semantics, meaning they are utilized by the speaker to express the object's attachment to the ground (Levinson & Wilkins, 2006). See the following data:

25. kpatinariga maa tab dikpuni
spider the attach wall
'The spider is on the wall'

26. kurigu maa tab dundoli maa
metal the attach door the
'The metal is attached to the door'

27. Abu talivisa maa tab dikpuni
Abu television the attach wall
'Abu's television is on the wall'

From the example in (24), you will realize that *kpatinariga* 'spider' is the "figure" and the "ground" is *dikpuni* 'wall'. For the example in (25), *kurigu* 'metal' is the "figure" and *dundol* 'door' is the "ground" and finally in (26), *talivisa* 'television' is the "figure" while *dikpuni* 'wall' is the "ground".

4.4 distribution verbs

These verb groups describe the arrangement of figure. The verbs might extend out to cover a portion or the full ground surface. To describe the actual space, an object is positioned in a spatial idea,

distribution verbs evolved from elevation verbs. Verbs of distribution are used with inanimate objects. Consider the following constructions:

28. chinchini maa pob diyi maa
cloth the covering mirror the
'The cloth is covering the mirror'

29. mōri maa limsi kom maa.
weeds the covering water the
'The weeds are covering the water'

From the examples, *chinchini* 'cloth' becomes the figure in example (27) and *diyi* 'mirror' is the "ground" and in (28), *mōri* 'weeds' is the figure and *kom* 'water' is the ground.

5.0 Conclusion

The study discussed the general notion of spatial expressions in Dagbanli and focussed on how space is marked in Dagbanli, how body part nouns are used in spatial construction and the semantics of the space marker in Dagbanli. It devoted more time to the semantic analysis of positional, posture and locative verbs in Dagbanli. Spatial constructions are described in Dagbanli showing evidence of locative nouns in adpositions occurring either as preposition or postposition. Data is provided to show body-part terms which occur as nouns and then also as postposition. The paper looked at the semantics of spatial constructions in Dagbanli focused on the subclasses of positional verbs in constructions; these include: verbs of body position or posture verbs, verbs of elevation that indicate adpositions, attachment verbs which are used to insert, penetrate, stick, or tie an object and distribution verbs which describe the arrangement of a figure. The paper suggests that body-part terms in Dagbanli are sources of spatial constructions in Dagbanli.

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