THE SEMANTICS AND GRAMMAR OF POSITIONAL VERBS IN GURENE: A TYPOLOGICAL PERSPECTIVE

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<td>BERN</td>
<td>Bernhard Positional Stimuli set</td>
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<td>CAUS</td>
<td>Video Stimuli set on Caused Positions</td>
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<td>CHVH</td>
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<td>LOC</td>
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<td>MPI</td>
<td>Max Planck Institute for Psycholinguistics</td>
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<td>NEG</td>
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<td>non-human</td>
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<td>noun phrase</td>
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<td>PSPV</td>
<td>Positional Series Picture Verbs</td>
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<td>time reference marker</td>
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<td>verb phrase</td>
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<td>Section</td>
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Symbols used in transcription and glossing

- morpheme break
.
separates categories encoded by a portmanteau morpheme
...
long pause
/
use to separate different or alternative expressions
/ / encloses phonemes
[
] encloses phonetic transcription
+
combines two separate words
( ) any comments, source of examples or optional elements
Abstract


The study documents and describes Gurenɛ positional verbs in detail focusing on a set of over thirty contrastive positional verbs using a documentary corpus of natural and stimuli-based elicited data. “Positional verbs” is used in this study as a cover term that refers to a class of verbs that semantically encode the static assumed body posture or position of animate entities (humans and animals) or the static location of inanimates (objects) in space. The study discusses the Gurenɛ data in the context of recent cross-linguistic studies on posture, positional and locative verbs (Newman 2002a; Levinson & Wilkins 2006a, Ameka & Levinson 2007a) which suggest that some languages employ verbs rather than adpositions to describe locations. It compares the Gurenɛ data to these typological studies to establish the similarities and the differences of the semantics of these verbs. Like other languages observed in these studies, the use of verbs in the Gurenɛ locative construction is obligatory and the verbs constitute the main linguistic means that the speakers use for locative descriptions.

The thesis further explores in part, the basic locative construction (BLC) typology of Levinson & Wilkins (2006a) and Ameka & Levinson (2007a). The BLC typology is concerned with the use of verbs in languages to express spatial locative information with the claim that languages can be classified into four main types according to the number and types of verbs used in their BLC; Type 0 (no verb), Type I (one locative verb or a copula), Type II (three to seven postural verbs), and Type III (seven to +100 positional verbs). In Gurenɛ over thirty verbs are identified that can be used in its BLC. As a result, Gurenɛ is classified as a Type III language. Like any other Type III language, as predicted by the BLC typology, the language uses its verbs to describe a wide range of precise semantic notions involving different locative relations between the Figure and the Ground such as body position, elevation, attachment, containment, distribution, and relative distance. The findings among others suggest that in a locative scene where the Ground is elevated more specific verbs of elevation with very precise meanings associated with the Figure’s properties which include stable base support, shape, and position are used. Additionally, the Ground elevation disregards the actual posture of the Figure. Thus, if a speaker observes a Figure on the ground (earth or floor level) the actual posture verb is used, but if the Figure is on an elevated Ground (e.g., a tabletop, a rooftop) the actual posture is disregarded. This “elevation” phenomenon has not been fully discussed in the cross-linguistic studies of the positional and locative verbs in the semantic literature. The Gurenɛ data make a contribution toward clarification of the range and type of distinctions to be accounted for in the semantic typology of the use of these verbs in locative descriptions.
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the folktale sessions in their communities for recordings. I am grateful to my two brothers Francis A. Atintono, Thomas Akayeti Akeliwira and my uncle William Adignongo Ayambiire for their support in diverse ways during the fieldwork. Emmanuel Ayire and Issaka were also very helpful in editing my documentation video recordings and I thank them for their kind support.

The Bongo Paramount Chief, Naba Lem-Yaarum-Bilia-Bã‘ari-Wobere “The Child Tasted Salt and Rides on Elephants”¹ and his elders deserve my special appreciation for their exceptional courtesy for granting us permission to the palace to observe and document installation events, traditional court trials, and personal interviews on chieftaincy in Bongo. Installation events are usually potential dispute situations but they made sure we were always protected with our equipment. I will never forget about his hospitality of offering us roasted chickens and drinks which was an exceptional gesture from a higher traditional leader.

To my host family, Mr Edward Agana and his family in Bolga, I am most grateful to them for their kindness, hospitality and the practical support that I enjoyed. Similarly, my landlady, Claire Aniteye, and her mother Auntie Elizabeth Aniteye have been exceptionally supportive and I wish to thank them for all the support to me and my family during our stay in Manchester.

I owe a great debt of gratitude to Prof Mary Esther Kropp Dakubu under whom I have benefited enormously from the time as a research assistant with her at the University of Ghana, Legon, on the Guren-English Dictionary Project during my graduate years (2002-2004). As my supervisor, and mentor she inspired in me my interest in linguistics in Guren and Gur linguistics. She sent me loads of articles and materials on Guren and Gur languages including the Map of the Upper East Region for this thesis. She also edited drafts of my published articles from the thesis and her feedback contributed greatly in my analysis. In fact, her influence is so pervasive that I cannot properly recount her contribution in detail.

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¹ Every chief immediately after his installation takes a skin name that is an appellation with philosophical meanings. He is addressed as naba ‘chief’ or by his skin name but never by his personal name. The meaning of the Bongo chief is that chieftaincy or leadership in general is sweet (comfortable) and a child who acquires it can have enormous power or authority.
leads to relevant literature on linguistics, semantics, African linguistics, helpful discussions and for reading my thesis draft in the final stages. Our trips to the pubs to watch the Premier League provided a perfect relief from stress, although a Man United loss could sometimes give me more headaches than relief and Arsenal defeat adds more stress to your day! I am immensely grateful for your support.

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and others. Mrs Adjei Francisca has been more supportive in many ways from our collaboration in writing research papers to other issues of career interests and especially her unfailing encouragement. I wish to say thank you and wish you success in your own PhD.

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Mrs Jenifer Abeere-inga and her husband Dr Emmanuel Abeere-inga for their support in many ways during my stay in Manchester I say Farafara ‘well done’.
CHAPTER 1. GENERAL OVERVIEW

1.1 Introduction

This first chapter presents the goals of the study, research questions, the locative construction, theoretical issues, a brief literature review on Gurenɛ linguistics, a sociolinguistic profile of the language, and the structure of the thesis.

The thesis explores the linguistic means of describing static spatial relations in Gurenɛ (ISO 639-3: gur), an under-described Gur (Niger-Congo) language spoken in and around Bolga, northern Ghana. It investigates in detail the grammar, semantics, and pragmatics of over thirty positional verbs that Gurenɛ speakers use to describe static locative relations. The study is inspired in part by current typological studies on posture, positional, and locative verbs (Newman 2002a; Levinson & Wilkins 2006a; Ameka & Levinson 2007a). In line with these studies, the study adopts a typological approach by relating the Gurenɛ data to these ongoing cross-linguistic studies (see Chapter 4). The aspectual properties of the positional verbs are also discussed in §3.3ff, in light of Talmey’s (1985; 2000b, 2007) cross-linguistic observation that there are three dominant lexicalization patterns of aspect-causative types: stative (being in a state), inchoative (entering into a state), and agentive (putting into a state).

Although positional verbs have been described in many languages (see Ameka & Levinson 2007a; Newman 2002a; Serra Borneto 1996: 459-505), their semantic properties have never been previously explored thoroughly in Gurenɛ and the Gur languages as far as the literature shows. A sketch of the positional verb phenomenon is my own previous work (Atintono 2004b, 2011b, 2012a, 2012b), and Brindle & Atintono (2012) as discussed in §1.5 below. Research in other Gur languages on this topic tends to focus on one aspect, the use of body-part terms as postpositions (see Saanchi’s 2006 discussion of Dagaare spatial grams). As shown in this study (§1.3 below) the coding of spatial information in Gurenɛ and perhaps the Gur languages in general is not restricted to postpositions alone but largely involves a combination of both the positional verbs and the postpositions. The spatial configurational space is much broader and the postpositions or spatial grams only cut up part of this space. The present study constitutes the first detailed account of the spatial locative
descriptions in a Gur language in light of current cross-linguistic studies on the linguistic construction of space.

1.2 Research questions

The study explores and addresses the following central research questions.

- What is the linguistic means by which Gur enɛ expresses static locative relations?
- What are the grammatical properties of the words used to express the locative relations?
- What is the basic locative construction (BLC) in Gur enɛ and which BLC type does Gur enɛ belong to?
- Which semantic or pragmatic factors determine the choice of one positional verb over the other in similar or different locative constructions?
- What are the spatial meaning relations that can be abstracted from the stimuli and natural texts positional verb data relevant for making valid generalizations to help classify the positional verbs into semantic subclasses for cross-linguistic comparison?
- To what extent does Gur enɛ positional data show parallels and differences with the typological generalizations about the semantics of posture, positional and locative verbs in Newman’s (2002a) posture typology and the MPI typology (Levinson & Wilkins 2006a and Ameka & Levinson 2007a)?

1.3 The locative construction in Gur enɛ

The term “positional verbs” is used in this study as a cover term that refers to a class of verbs that semantically code the static assumed body posture or position of animate entities (humans and animals) as shown in examples (1)-(2) below or the
static location of inanimate objects in space (see (3) below). The positional verbs of Guren cover a broad semantic range and can be grouped into six positional semantic subclasses identified in Guren; verbs of body position or posture, elevation verbs, attachment verbs, distribution verbs, general locative verb, and proximate or propinquity verbs (see Table 1 below). I am aware of the use of a number of alternative terms with similar or overlapping semantics in the semantic literature, which include ‘posture verbs’ or ‘verbs of posture’, ‘positionals’ or ‘verbs of body position’, and ‘verbs of spatial configuration’ (see Talmy 1985: 2000a:25; 2007:118; Levin 1993:255; Levin & Rappaport Hovav 1995:282; Serra Borneto 1996: 459-505; Kuteva 2001:41-45; Newman 2002a:vii; Hellwig 2003:10; Levinson & Wilkins 2006a:15-16; Grinevald 2006:37; Ameka & Levinson 2007a:847; Rothmayr 2009:147-156; Lemmens & Perrez 2010:315-325). Newman (2002a) uses posture verbs because the contributors focused on human posture while Ameka & Levinson (2007a) also use posture and positional verbs as two classes of locative verbs. My use of positional verbs is closer to the latter but represents both posture and positional verbs in Guren. The positional verbs in Guren often combine with postpositions to describe the location of a Figure in relation to a Ground in a spatial relation. The Figure designates the object that is located (Talmy 1985:60-61; 2000a: 311-315, 2007:70; Levinson 1992:11). Ground acts as the reference point or the place where the Figure is located (Talmy 2000a:312; 2000b:25). See the examples from (1)-(4) below for illustration of these terms.

Alternative terms that correspond to the Figure and the Ground in the semantic literature are Trajectory (TR) and Landmark (LM) (Langacker 1987, 1991, 2000; Svorou 1994; Zlatev 2007; Cruse 2011). I represent both the Figure and the Ground in upper case in this study to indicate their use in this very specific spatial context to differentiate them from the other uses of the words “figure” and “ground”.

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Most of the postpositions are body-part terms (e.g., *zuo* literally ‘head’ describes location ‘on top’, ‘above’, ‘upper surface’, ‘peak’, and *nuur*ɛ literally ‘mouth’ designates location at ‘entrance’, ‘edge’, ‘opening’). See §3.4.5 for a discussion of the postpositions. The focus in this study is on the positional verbs because they provide a rich field of spatial descriptions in Gurɛ grammar. They also constitute the main linguistic resources which Gurɛ speakers use for making statements about the position, location or configuration of both animate and inanimate entities located in space.

The examples below represent locative expressions in Gurɛ. They refer to statements that speakers provide as natural responses to questions demanding the location or whereabouts of people and objects or spontaneous statements that speakers make to draw the attention of the addressee to the location of entities in a discourse context with or without a question posed. Some of these expressions (see (1) and (3)) represent the basic locative construction (BLC) proposed by Levinson & Wilkins (2006a) and Ameka & Levinson (2007a) discussed in Chapter 4 (§4.2.2.1).

The BLC refers to the most natural or neutral response to the question ‘Where is an entity X?’ The elicited data involving the use of the various stimuli sets (see §2.3.2) represent this type of responses but the spontaneous natural data does not involve a question posed. The positional verbs in these examples and in the rest of the thesis will be set in boldface to facilitate easy reference.

(1) **Bia la zĩ la surɔ la puan.**
   child DEF sit.STAT FOC mat DEF inside
   ‘The child is sitting down in (on) the mat.’ (GUR 01)

(2) **Nii la ze’ la bu’ɔ la puan ɔbe-ra**
   cow.PL DEF stand.STAT FOC low.land DEF inside chew-IPFV
   ‘The cattle are standing in (i.e., on) the swampy field grazing.’ (SPST 70)

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*Body-part term refers to a special form class of nouns, which are names for human and animal body parts used to express spatial relations with reference to a physical part of an object (Levinson 1994:801).*
(3) Koleba la yag-i la taŋa la zuo
bottle DEF be on top stable-STAT rock DEF head
‘The bottle is on top (stable base support) of the rock.’ (PSPV 10)

(4) Kinkã bomene la gã la tiŋa.
stalks bundle DEF lie STAT rock land
‘The bundle of stalks is lying down on the ground.’ (GUR 37)

The positional verbs in the constructions in (1)-(4) express stative (STAT) locative relations. That is, to say, the verbs express the static location of the Figures. The Figure elements in these examples are represented by the nouns in the subject positions: bia ‘child’ in (1) and nii ‘cows’ in (2). These are animate Figures (human, animal) whose body positions are described by the posture predicates gã ‘be lying’, and ze’ ‘be standing’ respectively. In example (3), koleba ‘bottle’ is an inanimate Figure with its location described by yagi ‘be on top, with stable support’ because of the elevation of the Ground. As shown in §5.2.2, example (3) is where the Gurenɛ data becomes interesting to the cross-linguistic studies of the positional verbs, for the actual posture of the entity becomes irrelevant when the Ground is elevated (see §5.2.2). The location of the bundle of stalks, Kinkã in (4) is coded by the posture verb gã ‘be in a lying posture’. The Ground elements in these examples, are also expressed by suŋɔ ‘mat’ in (1), buɔ ‘lowland or valley’ in example (2), taŋa ‘rock’ in (3), and tiŋa ‘land’ that is ‘ground’ or ‘earth’ in (4). The elements that express the spatial relation between the Figure and the Ground to indicate the precise place of location of the Figure on the Ground are the postpositions, puaut ‘inside’, a grammaticalized reflex of the body-part term puurɛ ‘stomach’ in (1) and in (2) zuo ‘on top’, ‘above’ (literally ‘head’) is also a body-part term. Notice that in (4), tiŋa ‘ground’ or ‘floor’ literally ‘land’ or ‘earth’, is not a body-part term but a landscape term and it inherently conflates the Ground and the postpositional meaning.

An interesting culture-specific or a pragmatic meaning that is implicated in the meaning of the postposition puaut ‘inside’ in (1) is that in Gurenɛ, suŋɔ ‘mat’ is woven of long guinea grass stalks and can be rolled up in a bundle (similar to a carpet). Its length is about three to four metres long. People spread out part of the mat on the floor to lie on, and roll the other part to cover them when the weather is cold. The use of the mat in this way lets speakers perceive it as a containing Ground that contains people even when they are not using it as a cover. Usually, zuo is used when
someone is lying on a bed or a modern plastic mat, which cannot be rolled for use as a cover. The use of *puan* has become conventionalized in this context.

In Guren locative descriptions, it is perfectly possible to describe locations within view of the participants, of say a radius of 15m, by using deictic locative adverbials in a verbless clause as illustrated in (5). However, such expressions are usually accompanied by pointing to draw the hearer’s attention to the location and they are not the most common way of describing locations.

(5) Gọŋọ la  n bala bilam
book DEF FOC DEM there
‘that is the book over there.’ (SPST 666)

One other important element in the Guren locative construction is the particle *la* which occurs as a definite article after nouns but as a discourse focus particle in post verbal position as in examples (1)-(4) above. See §3.4.1 for a full list of the particles and a discussion of the particle *la* in §3.4.2.

Table 1 below presents the set of thirty-seven contrastive positional verbs that were obtained in the stimuli and the natural context data, which will be described in this study. The classification is based on the semantics to include verbs which describe the: (i) body position or posture of the Figure (ii) elevation of the Ground and the Figure (iii) attachment of the Figure to the Ground (iv) distribution of the Figure on Ground (v) containment of the Figure or general location, and (vi) relative distance between the Figure and the Ground (proximate). In the last column, animacy of Figure refers to the class of animate or inanimate entities that a positional verb selects or describes in the locative relation. Note that there are animacy constraints or selectional restrictions with respect to the application of some of the verbs in some semantic subclasses.
<table>
<thead>
<tr>
<th>Positional verbs</th>
<th>Verb</th>
<th>Meaning</th>
<th>Animacy of Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Body position/posture verbs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>ã̃</td>
<td>be in a lying posture</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>2.</td>
<td>ẑ</td>
<td>be in a sitting posture</td>
<td>animate (human)</td>
</tr>
<tr>
<td>3.</td>
<td>ze’</td>
<td>be in a standing posture</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>4.</td>
<td>kpa</td>
<td>be kneeling</td>
<td>animate</td>
</tr>
<tr>
<td>5.</td>
<td>ʃ̍</td>
<td>be leaning</td>
<td>inanimate</td>
</tr>
<tr>
<td>6.</td>
<td>dob-i</td>
<td>be in a squatting posture</td>
<td>animate</td>
</tr>
<tr>
<td>7.</td>
<td>del-i</td>
<td>be leaning, in a sitting posture</td>
<td>animate (human)</td>
</tr>
<tr>
<td>8.</td>
<td>laf-i</td>
<td>be leaning, in a standing posture</td>
<td>animate (human/animal)</td>
</tr>
<tr>
<td>9.</td>
<td>yig-i</td>
<td>be in a stooping posture</td>
<td>animate</td>
</tr>
<tr>
<td>10.</td>
<td>kpab-i/vug-i</td>
<td>be turned upside down</td>
<td>inanimate</td>
</tr>
<tr>
<td><strong>II. Verbs of elevation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>yag-i</td>
<td>be on top, with stable support</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>12.</td>
<td>pag-i</td>
<td>be on top, of flexible or flat objects, e.g., cloth, paper</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>13.</td>
<td>dɔg-i</td>
<td>be on top, with unstable base support or relation</td>
<td>inanimate</td>
</tr>
<tr>
<td>14.</td>
<td>yul-i</td>
<td>be hanging, dangling freely</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>15.</td>
<td>sug-i</td>
<td>be on top, of convex base container</td>
<td>inanimate</td>
</tr>
<tr>
<td>16.</td>
<td>sag-i</td>
<td>be placed in, of container-in-container</td>
<td>inanimate</td>
</tr>
<tr>
<td>17.</td>
<td>pug-i</td>
<td>be afloat, in liquid medium</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td><strong>III. Attachment verbs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adhesion</strong></td>
<td></td>
<td></td>
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<tr>
<td>18.</td>
<td>tab-i</td>
<td>be stuck, of mastic substance, e.g., gum</td>
<td>inanimate</td>
</tr>
<tr>
<td>19.</td>
<td>lab-i</td>
<td>be adhered or pasted, e.g., paper on wall</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>20.</td>
<td>gu’</td>
<td>be stuck, e.g., of insects or debris</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td><strong>Insertion</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>21.</td>
<td>fir-i</td>
<td>be stuck in, e.g., of thin objects</td>
<td>animate, inanimate</td>
</tr>
<tr>
<td>22.</td>
<td>fug-i</td>
<td>be stuck in, not firm, of thick objects</td>
<td>inanimate</td>
</tr>
<tr>
<td>23.</td>
<td>fig-i</td>
<td>be stuck in, of small pointed objects</td>
<td>inanimate</td>
</tr>
<tr>
<td>24.</td>
<td>ssg-i</td>
<td>be stuck in between, with force, e.g., objects</td>
<td>inanimate, animate</td>
</tr>
<tr>
<td>25.</td>
<td>ʃ̍</td>
<td>be inserted, tight fit</td>
<td>inanimate</td>
</tr>
<tr>
<td>26.</td>
<td>vure/lu’</td>
<td>be pierced, of soft /tough entity</td>
<td>animate, inanimate</td>
</tr>
</tbody>
</table>

Following Talmy’s (1985, 2000b, 2007) aspect-causative types distinctions; Table 1 includes only the stative (static location) verbs. For the information on the dynamic verbs (i.e., those describing an entity moving into a posture/location (inchoative) or put into a posture/location (agentive) see Table 19 in §3.3.2. The stative in Guren ɛ is expressed in two ways: one group of verbs e.g., verbs such as ã̃ ‘be in a lying posture’, ze’ ‘be in a standing posture’, and ẑ ‘be in a sitting posture’ and ʃ̍ ‘be in a leaning posture’ lexicalise the stative on the verb root and another group of verbs are marked with the stative suffix -i (STAT).
The motivation behind this semantic classification in Table 1 is that the verbs in a particular subclass have some spatial meaning in common. The spatial meaning relation between the Figure and the Ground should also be at an abstract level sufficient to capture the principal semantic distinctions between each semantic subclass, and be able to permit cross-linguistic comparison of the verbs (cf. Sinha & Thorseng 1995:261). For example, the verbs in subclass I characterise the body-position of the Figure while the members in class II are classified based on the fact that their meaning convey “elevated location”, that is, the location of the Figure on an elevated Ground. The meaning of each verb in the same subclass, however, shows lexical contrast in some properties of the Figure or the Ground. For example, yagi ‘be on top, with stable base support’ describes a Figure F with stable base support (e.g., a bowl on a tabletop) on a Ground G. In contrast, dogi ‘be on top, with unstable base support or relation’ is used to describe a Figure F with an unstable base support or in an unstable relation (e.g., a ball on a tabletop) on G. The difference between these two positional verbs crucially includes properties of the shape of the Figure and the nature of the support relation on the Ground (stable base vs. unstable base support of the Figure). See Chapter 5 for details of the semantics of the verbs.
This approach of classifying the meaning of the Gurénɛ positional verbs based on the spatial properties of the Figure and the Ground is in line with the typology of the positional verbs proposed by Levinson & Wilkins (2006a) and Ameka & Levinson (2007a).

1.4 Theoretical issues

The study adopts a semantic typological approach to provide typological insights on the linguistic description of static locative relations in Gurénɛ. In particular, the study draws on Newman’s (2002a) typological volume on posture verbs but is more aligned to Levinson & Wilkins (2006a), and Ameka & Levinson (2007a) typological studies on spatial locative descriptions. See Chapter 4 for the discussion of these typologies. The contributions in all these studies pay attention to the detailed semantic descriptions of the meanings of the positional verbs with a focus on cross-linguistic comparability. Cross-linguistic comparison is at the core of my study. I focus on drawing on the similarities and the differences in the use of the positional verbs with the languages studied in these cross-linguistic studies. The typological approach helps to identify which positional verb phenomena are considered as cross-linguistic and which ones are language specific traits.

1.5 Literature review on Gurénɛ linguistics and verb semantics

This section lays out a brief literature review of previous linguistic research in Gurénɛ in general with special attention on works that are specific to Gurénɛ verb semantics. One of the earliest known records on Gurénɛ or Farefari (a cover term for all the five dialects, see §1.6.1 below) is an anthropological work on the languages of northern Ghana published in the early 1930s which include a brief section on the customs and traditions of the speakers (see Rattray 1932:57-62). It, however, contained a grammatical sketch of the Gur languages in general noting in particular that most of the languages have seven noun classes and that the particle da marks the past tense and sa marks the future tense. Rapp (1966) also recorded a brief wordlist in Gurénɛ but with glosses and other grammatical information in German. This makes his work linguistically inaccessible to non-German speakers.
The works of the Schaefers in the 1970s on the phonology and clause structure based on the Zuruagu dialect of Farefari constitute one of the good first linguistic descriptions of the language (see Schaefer, Robert 1974, 1975; Schaefer, Nancy 1975). However, a closer look at these works shows that there is very little analysis on the verb and its grammar. Nonetheless, they provide some of the first descriptive sketches of the language that meet modern standards of linguistic analysis.

The contribution of the catholic missionaries in the 1970s is also worthy of note here. A notable piece of work is an unpublished grammar of Gurenɛ based on the Bolga dialect by a catholic priest, Ken Haskew (n.d.) who provides some basic treatment of the grammar with patchy analysis of the various word classes; nouns, verbs, adjectives, pronouns, and adverbs. Discussion on the verb is restricted to identifying different verb forms that mark the imperfective aspect.

From the 1990s onwards saw the works of Dakubu on various aspects of Gurenɛ Grammar. Notable among them is her grammar of Gurenɛ published in 1996, which contains linguistic descriptions of the phonetics, the phonology, and the syntax. In her recent work, Dakubu (2003a) include a brief section on the verb and its phrase structure where she observes that the verb consists of a simple verb stem which may be modified or unmodified by verbal particles and suffixes. The verb suffixes, she notes, may be derivational suffixes expressing semantic properties such as plurality or inflectional suffixes which mark the imperfective aspect. Her other works examine various aspects of the grammar of the verb that include verb particles, prosodic features such as tone, glottal stop and their interaction with the verb (see Dakubu 2000, 2006, 2007). Dakubu et al. (2007) bilingual Gurenɛ-English dictionary and the English-Gurenɛ Glossary (2007) remain the first and only comprehensive works on the lexicon of the language. The dictionary provides a good source for the interlinearization and parsing of the data for the present study. Her most recent publication, Dakubu (2009) bilingual French and Farefari basic dictionary with grammatical information targets French users.

To date, there have appeared some academic articles, undergraduate essays, and master theses discussing a range of topics in Gurenɛ linguistics. Notable among them are, Nsoh’s (1997) MA thesis on the Farefari noun and its structure, his 2002
article on Farefari noun classes, Atintono (2002, 2004a) Graduate diploma on Gurenc relative clauses and MPhil thesis on the Morpho-syntactic study of the Gurenc verb respectively. Other works are: Ababila (2006) MPhil thesis which investigates the sociolinguistic study of Gurenc proverbs, Adongo (2007) MPhil thesis on the spectrographic analysis of Gurenc short oral vowels and Nsoh (2010) recent article on Adjective types in Farefari. All these works present different degrees of coverage of aspects of the phonetics, phonology, morphology, syntax, and the oral literature of the language. Nsoh (2011) presented the first PhD thesis on the adjective in Farefari based on Lexical Functional Grammar. His work provides a detailed account of the adjective and the noun phrase that it modifies but with very limited information on the verb. He, however, treats the noun class system and its agreement system with the adjective in more detail.

More recently, Atintono (2004a, 2008, 2011a) building on the works of Dakubu (1996, 2003a) presents a comprehensive analysis of the verb and its phrase structure. The structure of the verb, derivational and inflectional suffixes, verbal particles and their grammatical functions are discussed in detail in these recent works particularly in Atintono (2011a). Further contributions on the grammar of the verb are to be found in Atintono (2005a, 2005b, 2006) articles on serial verb constructions and verbal suffixes respectively. The current work draws on some of these findings to provide an overview of the verb morphology (§3.2).

None of the works reviewed so far includes any discussion on the positional or locative verbs in the language. A sketch of the posture phenomenon is to be found in my own previous works (Atintono 2004b, 2011b, 2012a, 2012b), and Brindle & Atintono (2012). In Atintono (2004b), I present a brief analysis of the semantics of the three posture verbs gã ‘be in a lying posture’, zĩ ‘be in a sitting posture’, ze’ ‘be in a standing posture’ in Gurenc in light of Talmy’s (1985; 2000a; 2000b) typology of Motion events (i.e., the general category of MOTION includes motion and static location). The paper sketches the use of the posture verbs to describe human postures and the entities that can occur in the locative construction as Figure or Ground elements without a detailed discussion. Atintono (2011b) is a paper presented at the 42nd Annual Congress on African Linguistics (ACAL42). It
discusses the aspectual properties of the positional verbs pointing out relevant linguistic tests that can be used to determine the stative and the dynamic positional verbs in the language. Further, Atintono (2012a) examines the structure of the basic locative construction (BLC) and the positional verbs that can occur in it in light of Ameka & Levinson’s (2007a) BLC typology. Brindle & Atintono (2012) is also an article that compares topological relation markers in Gurenɛ and Chakali (a Gur language in Ghana).

Perhaps one work that presents quite a detailed discussion of the positional verbs is Atintono’s (2012b) article on the basic and extended uses of Gurenɛ posture verbs. It draws on cognitive linguistics concepts such as conceptualizations, domains, and image-schemas to discuss the semantics of the posture verbs. This work is significantly based on the present study but the discussion is restricted to only three posture verbs gã ‘be lying’, zĩ ‘be sitting’, and ze’‘be standing’ and how their postural meanings become irrelevant when the entities assume a lying, a sitting and a standing posture on an elevated ground. The paper is limited in its discussion of the other positional verbs included in this study. None of these works presents a comprehensive analysis of the positional verb phenomenon as the present study attempts to do.

1.6 Sociolinguistic Profile

1.6.1 The language name and dialect diversity

There appears to be some confusion in the linguistic literature over the language name. Ethnologue (see Lewis 2009) and some authors (e.g., Bendor-Samuel 1971, 1989; Naden 1988:13, 43) have used Farefari anglicised as Frafra and Gurenɛ (also recorded with different spellings as Grune, Gurune, Gurene, Gurenne) interchangeably but this is not appropriate. Farefari is the cover term used as a single name either to represent all the five dialects in the area or the people when referring to them as an ethnic group (cf. Nsoh 2011). The five dialects of Farefari are Gurenɛ, Talni, Boone, Nabt, and Nankani respectively. Thus, Farefari (Frafra) does not refer to a single language or dialect as it is often assumed.
As observed during my fieldwork, phonological differences between the dialects are reflected in intonation, and some lexical differences. For example, the numeral ‘one’ is ąkō in the Boone dialect while ąyimẹ in is the Bolga variant and in Nankani it is ąyila. All these dialects are closely related and there is a relatively high degree of mutual intelligibility among speakers. The speakers of the other four dialects of Farefari show differing levels of mutual intelligibility with Guren speakers. For instance, Talen and Nabt speakers in the southwest and east of Bolga show mutual intelligibility with Guren speakers but not as high as it is with the Nankani speakers in the west, and Boone speakers in the north of Bolga. In a similar way, Taln and Nabt speakers, who are linguistic neighbours, are mutually intelligible with each other.

The Guren dialect itself has a number of varieties spoken in some towns and villages which are recognizable and distinct in speech. Each variety is often associated with a particular village name. For example, Zagen is the variety spoken in Zorkor (the author’s home town, about 15km northwest of Bolga) and Zuruan is the variant spoken in Zuruagu, east of Bolga (about 7km). The data from my fieldwork for the present study is based on the Guren dialect as pertains to the varieties spoken in Bolga and surrounding villages, Bongo central and three Guren speaking villages (Namoo, Sapooro, Kansingo) in the Bongo district. The documentation corpus involving the palace genres were recorded only in Bongo. The Bolga and the Bongo dialects, therefore, contribute data to the study.

1.6.2 Location of speakers, linguistic relationships and population

The homeland of Guren speakers is Bolgatanga (Bolga) and the surrounding villages and towns. Bolga is located on latitude 10°52'N and longitude 0°48'W. It is the political administrative capital of the Upper East Region in northern Ghana. The immediate linguistic neighbours of Guren speakers are the Kasem speakers to the west, sharing a boundary with Nankani speakers (a dialect of Farefari), and to the south are its Mampruli neighbours. Further north of Bolga and after Bongo at the Burkina Faso border town of Yelewoŋ marks the northern boundary between speakers of similar varieties of Guren in Ghana and those across the border in Burkina Faso. To the east of Bolga are the Kusaal speakers. The Guren dialect is spoken in Bolga central and extends to about eight to ten kilometres radius in a
number of surrounding villages. They include Tanzui, Sokabiisi, Siirego, Sumbrongo, Yikene, and Zo’obiisi to the west while Zaare and Bukere are to the north-west. To the south and south-east are Dawiim, Kalebeo, Tindonsobelo, Tindonmolego and Winkongo communities. North of Bolga central is Soe and beyond Soe but before Bongo are the Yorogo communities. East of Bolga central is Kumbosego, which is historically part of Bolga but further east after Kumbosego are the Zuruagu communities of about 7km from Bolga who linguistically speak a slightly different dialect from the Bolga variety (see Dakubu 2006). The Zuruagu dialect, however, has received one of the earliest records of description among the other dialects owing to the activities of researchers working with the Ghana Institute of Linguistics, Literacy, and Bible Translation (GILLBT) in Tamale under the Summer Institute of Linguistics (SIL) (see Schaefer, Robert 1974, 1975; Schaefer, Nancy 1975).

Within Bolga central, close to the old central market, is the Atulebabiisi community (the royal family) who preserved close-knit homesteads of less than hundred family compounds. Non-discrete settler communities in the town surround them. All the villages in Bolga and its surrounding areas now fall under the present day Bolga Municipal Assembly with the exception of Winkongo and a few others.

The Taln and Nabt dialects are spoken in Tongo (south-east) and Nabdam, east of Bolga respectively while Booni is spoken in Bongo of about 15km north of Bolga. The Nankani (Ninkare) speakers are to be found west of Bolga after Sumbrongo and belong to the Navrongo East and West districts, about 30km away from Bolga (see Atintono 2011a:5). The present study is based on most of these communities in Bolga which include Atulabiisi, Bukere, Dawiim, Tanzui, Soe, Sumbrongo, Yorogo and some villages of outer Bongo namely Namoo, Beo, Kasingo, and Sapooro. The folktale data and oral genres were documented in all these communities.

With approximately 600,000 speakers according to the Ghana Statistical Service Census Report (2002) while Ethnologue suggests 820,000 (see Lewis 2009), Farefari is one of the important languages in the Gur linguistics area. There is a further estimated 25,100 speakers in some villages in the southern frontier of neighbouring Burkina Faso (Lewis 2009 in ethnologue). The number of speakers may be on the decrease as a result of the language endangerment issues discussed
below (§1.6.3). Figure 1 below is the regional map of the Upper East Region. The circle marks the Farefari speaking communities with the arrow indicating Bolgatanga (Bolga), the regional capital and the major town of Gurenɛ speakers.

![Map of the Upper East Region showing Farefari speaking communities in Bolga.](image)

Among the Oti-Volta subgroup of Gur languages, Gurenɛ is further classified under the Northwestern Gur languages in Ghana (see Bendor-Samuel 1971; Naden 1988:19; 1989:141-145). They include Safaliba, Dagaare, Birifor, and Wali. Figure 2 below shows the genetic relationships of Farefari with other Gur languages with respect to the Niger-Congo family. Notice that the Oti-Volta subgroup is the close

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This map was prepared by the Centre for Remote Sensing and Geographic Information Systems (CERSGIS) at the Geography Department, University of Ghana. Courtesy Prof Mary Esther Kropp Dakubu, Institute of African Studies, University of Ghana, Legon.
relatives of Farefari while its closest sister relatives are Moore (spoken in Burkina-Faso), Dagaare (Upper West Region) and Safaliba (Northern Region).

Figure 2: The genetic-linguistic relationships of Gurenɛ

1.6.3 Language threat, endangerment and documentation of Gurenɛ

One noticeable language endangerment feature in the speaker communities within Bolga central and the surrounding villages is the gradual loss of cultural and linguistic traditions. It was observed during fieldwork that several aspects of the expressive power of the language as well as indigenous knowledge systems (e.g., traditional science, moral education, governance) enshrined in the language are highly endangered. For example, traditional folktale and riddle sessions (solema), which used to be major verbal art forms before and in the 1970s, narrated in the evenings after dinner by elders and grandparents with children and adults sitting by the fireside listening to acquire oral language skills, moral and character training have now been replaced by television and video viewing. Other linguistic performances such as proverbs, praise songs, funeral dirges, and sung folktales are fast disappearing in the communities due to massive impact of modern life, motivated by a desire to adopt western values and commodities. Unfortunately, however, there are no records of some of these genres for the children to learn and only a few elderly people (less
than 5) have knowledge in them. Key factors that significantly account for this threat and endangerment situation include attitude-related behaviour, language use and contact phenomena (cf. Crystal 2000:20-21; Batibo 2005:64-65; Bodomo & Mora 2007; Bamgbose 2011). I discuss these factors briefly below.

Quite a number of speakers have adopted negative attitude towards speaking the language both in the homeland and outside. It is very common to find native speakers at meetings, local pubs, and social events such as funerals engaged in casual conversation in English. This attitude is common among some educated elite, the younger generations (e.g., students in high school, polytechnics, universities, etc.) and other people who went to school very briefly. As a consequence, some parents are indifferent in teaching their children to speak Gurenɛ preferring English instead. Partly as the recognition of the importance of education grows, the desire for English increases as it is the official language of instruction in school (cf. Bamgbose 2011:5; Connell 2009:134-135). Some parents (middle class) enthusiastically have a strong preference for the use of English and would do everything possible for their children to learn English exclusively in a private school at the expense of the Ghanaian language. This choice is motivated by the erroneous impression that learning Gurenɛ or any other Ghanaian language would stand in the way of the child’s mastery of English in school. Like in many other African countries, English is also associated with prestige, access to good jobs, political appointment, modernization and is therefore highly valued in these communities (see Batibo 2005:65; Atintono & Nsoh 2011). In this respect, Gurenɛ like other Ghanaian languages is associated with low economic value and social status. Some native speakers of Ghanaian languages still consider English as a trademark of modernity and elitism (cf. Gyasi 1997:77). This provides good grounds for the speakers’ negative attitude towards the use of the Ghanaian language in many domains.

Apart from English, other contact languages that also pose a threat in the linguistic area is Hausa (a Chadic language, Nigeria) and Akan, a dominant Ghanaian language both used as lingua francas in Ghana. Hausa is spoken among different sections of the speaker community in Bolga mainly at the market centre, among mixed immigrant communities in areas popularly known as zongos. The members of
these communities mostly come from other parts of Africa (e.g., Nigeria, Mali, and Senegal). A number of speakers in northern Ghana speak Hausa as a second language and some people in southern Ghana sometimes think that most people in the north can speak Hausa and associate the language with the northern part of the country. My personal observations indicate that there is a tendency for Gurenɛ speakers, especially those who are Muslims and traders in the markets to have strong preference for speaking Hausa mainly as a lingua franca. However, there is no known instance where native Gurenɛ speakers learn Hausa as their first language. Akan, is also used to some extent in Bolga at the market centre as a lingua franca for trading purposes and among some youth in the villages particularly those who have travelled to the southern sector. It is very common to find people who have never been to southern Ghana (e.g., Akan speaking areas) bearing Akan day-names such as Kofi, Kojo, Kwame, Ama, and Adjoa in the speaker communities. This poses a threat to Gurenɛ traditional names as more and more people already take up English names (usually in the Church or in the School) or Islamic names (when they convert to Islam).

These two languages together with English serve some communication purposes but are gradually posing a threat to Gurenɛ as well. For example, most speakers, especially the younger generation now find it difficult to speak fluently in Gurenɛ and resort extensively to code-mixing with Gurenɛ (Hausa-Akan-English). They are developing a third tongue. The level of endangerment of the language can be likened to Fishman’s (1991) Graded Intergenerational Disruption Scale (GIDS) level six, for the variety is used only at home, farm, market and at other local social events such as funerals and marriage ceremonies. There is intergenerational transmission of the language to children but they grow up confronted with the contact situation. English is acquired at school and most official public events are conducted in English. For example, the local political forum for consensus building and policy making is the

5A system of naming where a person is given a name based on the day of the week he/she is born.
District Assembly made up of elected representatives from the communities but at such places discussions are mostly conducted in English. National language policies, local politics and globalization have all helped to shape the preference for English in many domains of use over Gurenɛ. This has made matters worse for Gurenɛ and indeed for minority languages and their speakers in Ghana.

In terms of language documentation, not much is done although various institutions, the community and individuals have made some efforts in the description of the language since 1970s. Notable among them is the collection of folktales by a catholic priest, Father Armand Libel in the early 1970s on cassettes with few transcribed tales in a volume less than twenty pages available today. The cassettes are, however, unusable today because of poor storage and the effects of the tropical weather. The introduction of Gurenɛ at the tertiary level as a subject of study in the early 1990s has led to the publication of a unified orthography in 2001 based on the conventions of a number of writing systems which include the Church, the Ghana Institute of Linguistics, Literacy, and Bible Translation (GILLBT), the Non-Formal Education Division, and the Universities. Dakubu et al. (2007), “Gurenɛ-English Dictionary” and the “English-Gurenɛ Glossary” mentioned earlier in §1.5 constitutes one of the most recent tangible descriptive products.

Perhaps, the present author (Atintono) recent documentation of Gurenɛ oral genres between 2010 and 2011 as part of my PhD fieldwork (see §2.2), which includes both digital audio and video recordings of folktales, riddles, sung folktales, praised songs, ritual genres, burial genres, palace trial genres, and daily conversations on a number of cultural topics constitutes the most comprehensive and elaborate documentation of the language. All these materials have been archived with the Endangered Languages Archives (ELAR) at SOAS, London. A significant aspect of my documentation is that collaboration has also been established with the speaker community to revitalize the use of these folktales. To this end, a local community radio station now plays these tales on a weekly regular air time (of about 45 minutes) with the aim of rekindling peoples’ interest in them as a way of revitalizing them.
1.7 Scope and structure of the thesis

The structure of the thesis is as follows; Chapter 1 provides the general overview of the study, Chapter 2 discusses the methodology while Chapter 3 is a sketch grammar with a focus on the verb morphology, the aspectual system of the positional verbs, tense and other relevant aspects of the grammar associated with the verb in the locative construction. Chapter 4 presents previous cross-linguistic studies of the posture and positional verbs with a discussion on the basic locative construction typology and explores the relevance of the Gurenc data to this typology. Chapter 5 discusses the semantics and pragmatics of the positional verbs in more detail. This chapter constitutes one of the core chapters of the research. Chapter 6 concludes the thesis.

1.8 Abbreviations used to indicate source of the data

In this thesis, the conventions used to indicate source of the data in the examples cited from my own fieldwork are marked with an abbreviation in this order: type of data, consultant’s initials, reference number of the example in the database, and the date (only marked on recorded data). For example, ft_api_020_20100608 shows a folktale text (ft), contributed by Apia, example number 020 followed by the date on which the recording took place. Where the source of the data is not indicated, the examples are constructed by me as a native speaker and verified with other native speakers for their acceptability and semantic interpretation.

1.9 Summary

This chapter provides an overview of the thesis pointing out the goals of the study, research questions, the locative construction, and brief literature review of the language. Sociolinguistic issues such as the language name, genetic affiliation, location of speakers, and language endangerment issues have been discussed. The next chapter discusses the methodology.
CHAPTER 2. METHODOLOGY

2.1 Introduction

This chapter presents the various methods and techniques used in collecting the data used for this thesis. I will present the fieldwork setting, data collection methods, the tools used in collecting the data, and the data types obtained from the fieldwork. A quantitative overview of the data types (natural and stimuli) and their contributions is also provided. The data were collected through extensive fieldwork using language documentation methods. Primary data collection is central to documentation and involves the application of different field methods and techniques to collect a wide range of data on the linguistic behaviour of speakers in various natural contexts in the speaker community (Himmelmann 1998:162-195, 2006:1-7; Grenoble & Whaley 1998, 2006; Grenoble 2010:289-290; Woodbury 2003:39-48; Lüpke 2005:75-105; 2009:53; Austin 2006:87-100; Chelliah & de Reuse 2011:7; Schultze-Berndt 2012). Arguably, the use of more than one method provides a range of different and comprehensive data on the phenomenon (cf. Hellwig 2011:2). The different methods used in collecting the documentary corpus have the advantage of balancing the natural data (e.g., spontaneous speech, daily conversations, folktales, songs, etc.) and the controlled data (e.g., stimuli-based techniques, elicitations, etc.). This has contributed to the collection of large and diversified data types for the study of the spatial expressions and the grammar of the language in general.

2.2 Fieldwork setting

The data collected for the study is based on two field trips of eight months in total to the Gurenε speaking communities between 2010 and 2011 in Bolga, northern Ghana. The first major fieldwork of six months took place from February to July 2010 while the second follow-up field trip of two months was from May to June 2011. Most of the data collected during the fieldwork were recorded on audio and video and later transcribed. I employed extensive elicitation methods that involved the use of various
positional picture stimuli sets. They include five MPI\textsuperscript{6} stimuli sets for eliciting posture and positional verbs (§2.3.2.1), my own Gur Drawings and Photos (designed specifically to elicit cultural knowledge of talking about the location of objects in space (see §2.3.2.2)), the use of real objects and other tasks (e.g., the Locative Description Finding Task) that involves setting up a real world context for elicitation with native speakers (§2.3.2.3). The details of all the data types are discussed below.

2.3 Kinds of data

The different types of data collected during the fieldwork for this study can be classified into three broad types: natural, stimuli, and elicited data. The description of each type of data and its contribution to the study is the focus of the section that follows.

2.3.1 Natural data

Large amounts of natural texts were collected and recorded both on audio and video. They include folktales, daily conversations, narratives, procedural texts, songs, interviews, traditional palace genres, overheard spontaneous speech, observations and field notes. The natural corpus can be grouped further into observed communicative events and staged communicative events in the terminology of Himmelmann (1998:162-195, 2006:1-7). The type of natural data that fall into any of these types is discussed below.

2.3.1.1 Observed Communicative Events

The observed communicative events data were collected by me through observation of certain linguistic performances. They were collected in contexts where the speakers perform cultural or social events in natural settings as part of the community’s linguistic behaviour, and as a native speaker of Gurenɛ and a member

\textsuperscript{6} Max Planck Institute for Psycholinguistics (MPI), Nijmegen, Netherlands.
of the speech community my presence had no influence on these performances. These cultural events include chieftaincy installation events and traditional court trials recorded at a traditional court palace, funeral genres, and spontaneous speech in different social contexts. The genre collected at the traditional court constitutes a special type of data to the study. I will refer to it as Palace Genre (PGR). The observation of chieftaincy installation events and court trials at traditional palaces offered me the opportunity to document real-life discourse interactions that provide some insights into the cultural context meanings that the speakers associate with certain postures. One special cultural-specific aspect of the palace genre is that power relations between the chief and his subjects are demonstrated in their sitting postures (see discussion in §5.2.1.2). A significant contribution of this type of data is that the cultural specific meaning and pragmatic aspects of meaning in language can only be accessed through observation in real-life context (cf. Yankah 1995:6-7). The data are usually discourse oriented. That is, they involve several participants engaged in a linguistic exchange, e.g., the chief, contestants, complainants and accusers. For example, the contestants for chieftaincy as part of the contest are required to trace their individual family histories before the paramount chief to justify their participation. This exercise, usually, involves arguments among contestants as there are no written records of previous installation events. The participants, therefore, rely solely on what they have either witnessed or been told by their forefathers as evidence to support their right to participate in the contest. A wealth of data was collected based on these verbal interactions.

Another type of the observed data is spontaneous overheard speech, collected in a variety of communicative contexts. By spontaneity, I refer to speech that the speaker utters without much thought or mental preparation of the content of the message and its linguistic form, before delivery (Himmelmann 1998:178). For example, giving route direction to a place may not require planning compared to a formal speech at a traditional court palace. I spent considerable time (about six months) collecting spontaneous speech at informal conversations at homes, pubs, recording sessions, and verbal encounters on the street. The Spontaneous Speech Text (SPST) data provides natural context examples on how speakers naturally talk about locations without the use of linguistic experiments (cf. Pederson et al. 1998:560). Refer to
Table 3 and Table 4 below for the number of positional verb tokens obtained from this genre type.

One other observed data type is what I called Interactive Discourse Text (IDT). This type of data collection technique involves observing the common and most natural ways by which speakers describe the location of objects in real context settings or in their environment. More precisely, it documents natural language use in the spatial domain in actual interactive discourse settings. It involves recording the interactive discourse speech at the scene usually by writing down the expressions or where possible I recorded it on audio and later transcribed it. One such instance that I documented positional verb expressions involved visits to the market, sometimes with my consultants to observe how people describe items displayed for sale. This occurred in contexts where buyers pose questions to ask for the price of particular items from sellers (sometimes with an accompanying hand pointing at the location of the item) in a market scene. This interaction often led to a spontaneous response from the seller. The conversation may sometimes involve the use of a positional verb to describe the location of the items displayed as shown in the photos in Figure 3.

In the Gurenɛ community like in most other African communities, items displayed in shops, sheds or in the open at the market do not have price labels. The buyer has to ask for the price and subsequently bargain. This situation presents a wealth of natural discourse in which the buyer and the seller are engaged in a linguistic
exchange. The approach offered me the opportunity to observe how speakers make explicit descriptions of the location of objects in natural discourse settings (see Table 3 and Table 4 below for the contribution of this genre).

2.3.1.2 Staged Communicative Events

The staged communicative events include specific linguistic performances that were produced by contributors on my request. These kinds of data in the study include folktales and riddles narrated by experts in the community, traditional songs performed by women, and historical narratives. They also include informal interviews and conversations with elders on certain disappearing cultural practices such as naming ceremonies, marriage, funeral performances, burial rites and rituals. Other similar staged communicative events involve asking speakers to describe the procedure of weaving a traditional mat or preparing a local brew, describing settlements or prominent landmarks in the community to me or other consultants (cf. Hellwig 2006a: 340; Levinson et al. 2001 on similar communicative events).

The folktale genre data constitute one of the main data sources (see Table 3, Table 4 & Table 5 below). They consist of narratives and riddles. The narratives are long while the riddles involve a short query and a short response. The query and the response in most cases have no meaning but are used by the narrator for purposes of creating humour to entertain the audience. The folktales and riddles are verbal art forms performed by expert narrators in a group consisting of a minimum of two people (a narrator and a responder). Some groups have as many as ten to twenty-five members. The sessions took place mostly in the villages of the narrators and usually draw large curious audience. The contribution of the folktale genre to the study is unique. For example, the postural verb *zĩ* ‘be sitting’ is only used to describe human postures but in the folktale data the posture of animal characters are also described with *zĩ* (§5.2.1.2). Furthermore, it is only in the folktale genre that the general locative verb *boi* ‘exist’ or ‘be at’ discussed in §5.2.5 is used to describe the
location of entities that have no physical presence. Table 2 below presents a summary of the different types of genres, their codes in the data and the total number of hours of recording.

Table 2: Genre types, number of hours recorded and media type

<table>
<thead>
<tr>
<th>Genre type</th>
<th>Code</th>
<th>Number of hours</th>
<th>Media type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folktale and riddles genre</td>
<td>FT</td>
<td>21:18</td>
<td>audio/video</td>
</tr>
<tr>
<td>Sung folktale genre</td>
<td>SFT</td>
<td>7.2</td>
<td>audio/video</td>
</tr>
<tr>
<td>Conversation genre</td>
<td>CONV</td>
<td>04:11</td>
<td>audio</td>
</tr>
<tr>
<td>Narrative genre</td>
<td>NAR</td>
<td>03:45</td>
<td>audio</td>
</tr>
<tr>
<td>Ritual genre</td>
<td>RIT</td>
<td>02:30</td>
<td>audio</td>
</tr>
<tr>
<td>Palace genre</td>
<td>PGR</td>
<td>04:15</td>
<td>audio/video</td>
</tr>
<tr>
<td>Song genre</td>
<td>SG</td>
<td>04:30</td>
<td>audio/video</td>
</tr>
<tr>
<td>Interview genre</td>
<td>ITW</td>
<td>03:25</td>
<td>audio</td>
</tr>
<tr>
<td>Procedural genre</td>
<td>PTXT</td>
<td>00:30</td>
<td>audio</td>
</tr>
</tbody>
</table>

|               |      | 51:44:00        |

Given these many hours of recordings, I selected a representative sample of five hours that includes each genre type to transcribe fully and annotate using ELAN. The main advantage of using ELAN is that its time-aligned feature allows you to create, visualise, and make easy searches in the digital corpus to locate a particular data of interest (see Schultze-Berndt 2006; Lüpke 2009). The rest of the data were partially transcribed to extract a particular positional or grammatical expression of interest for the analysis.

The number of occurrences of each verb and its distribution per genre type is obtained through the use of the Toolbox software programme for the

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7 Most of the transcribed audio and video materials with multi-tier annotations, and translations used for the analysis have been archived at the Endangered Languages Archive (ELAR), SOAS.

8 ELAN is a linguistic Annotator tool originally designed by Birgit Hellwig at MPI (see Manual 2009). It is a free software tool online at http://www.lat-mpi.eu/tools/elan.
interlinearization of the transcribed and the elicited stimuli data. Toolbox is a
dictionary compilation programme which permits the setting up of multiple fields in a
dictionary format to include grammatical information such as phonetics, morphology,
semantics, syntax, statistical count of lexical entries, and encyclopaedic information
of the words or expressions. The various data types were first interlinearized using
the interlinearization feature on Toolbox which is linked to the existing Guren-English
dictionary (Dakubu et al. 2007) to pick up grammatical information for the
interlinear glossing of the text database. The sorting out of the positional verb data
and other grammatical information of interest (e.g., the focus particle la discussed in
§3.4.2) in the database is obtained through the use of the concordance feature on
Toolbox. This feature allows you to define a range set (e.g., words or expressions
occurring before and after the verb) to pick out each positional verb. The total
number of occurrences of each verb was also manually cross-checked by comparing
it with the interlinearized database in the dictionary. In Table 3, I present the total
number of occurrences of each verb per genre type based on the transcribed data.

Table 3: Number of occurrences of the positional verbs per genre type (natural data)

<table>
<thead>
<tr>
<th>Positional verb classes</th>
<th>SPST</th>
<th>IDT</th>
<th>FT</th>
<th>SFT</th>
<th>CONV</th>
<th>NAR</th>
<th>RIT</th>
<th>PGR</th>
<th>SG</th>
<th>ITW</th>
<th>PTXT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ɓag ‚be in a lying posture‘</td>
<td>86</td>
<td>101</td>
<td>135</td>
<td>16</td>
<td>15</td>
<td>10</td>
<td>1</td>
<td>5</td>
<td>20</td>
<td>8</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ɗi ‘be in sitting posture‘</td>
<td>31</td>
<td>29</td>
<td>51</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>ze‘be standing posture‘</td>
<td>97</td>
<td>81</td>
<td>110</td>
<td>11</td>
<td>10</td>
<td>48</td>
<td>2</td>
<td>1</td>
<td>31</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>kpa ‘be kneeling‘</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ɗl ‘be leaning, of objects‘</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>dɔbi ‘be in a squatting posture’</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>deli ‘be leaning, in a sitting posture‘</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>laali ‘be leaning, in a standing posture‘</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>yigi ‘be in a stooping posture‘</td>
<td>15</td>
<td>7</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>kpabi/vugi ‘be turned face down‘</td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>270</td>
<td>242</td>
<td>338</td>
<td>29</td>
<td>36</td>
<td>68</td>
<td>51</td>
<td>78</td>
<td>25</td>
<td>24</td>
<td>41</td>
<td>1202</td>
</tr>
</tbody>
</table>
### Verbs of elevation

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>yagi</td>
<td>‘be on top, with stable support’</td>
<td>30 21 57 5 4 8 5 3 2 6 10</td>
</tr>
<tr>
<td>pagi</td>
<td>‘be on top, of flexible or flat objects’</td>
<td>18 8 15 0 3 0 0 0 0 1 0</td>
</tr>
<tr>
<td>dogi</td>
<td>‘be on top, with unstable support’</td>
<td>12 3 20 0 4 0 2 1 0 0 2</td>
</tr>
<tr>
<td>yuli</td>
<td>‘be hanging, dangling freely’</td>
<td>15 21 6 0 2 1 0 3 0 2 1</td>
</tr>
<tr>
<td>sugi</td>
<td>‘be on top, of convex base container’</td>
<td>6 4 5 0 1 0 0 0 0 4</td>
</tr>
<tr>
<td>sagi</td>
<td>‘be placed in, of container-in-container’</td>
<td>5 3 13 0 2 0 0 0 0 5</td>
</tr>
<tr>
<td>pugi</td>
<td>‘be afloat, in liquid medium’</td>
<td>4 2 3 2 3 0 0 2 0 1 2</td>
</tr>
</tbody>
</table>

### Attachment verbs

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>tabi</td>
<td>‘be stuck, of mastic substance or self-adhesive’</td>
<td>3 0 4 0 1 2 0 0 0 0</td>
</tr>
<tr>
<td>labi</td>
<td>‘be adhered or pasted e.g., of paper’</td>
<td>7 3 5 1 0 0 0 0 0 2</td>
</tr>
<tr>
<td>gu'</td>
<td>‘be stuck, e.g., of insects or debris’</td>
<td>5 2 4 0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

#### Adhesion/grip-attachment

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>firi</td>
<td>‘be stuck, e.g., of thin objects’</td>
<td>5 7 17 0 0 2 2 0 0 0 33</td>
</tr>
<tr>
<td>fugi</td>
<td>‘be stuck in, not firm, of thick objects’</td>
<td>5 5 4 0 0 2 2 0 0 0 18</td>
</tr>
<tr>
<td>figi</td>
<td>‘be stuck, not firm e.g., of small objects’</td>
<td>6 3 2 0 0 0 1 0 0 0 12</td>
</tr>
<tr>
<td>segi</td>
<td>‘be stuck in between, e.g. of objects’</td>
<td>9 0 8 0 1 0 0 0 0 2</td>
</tr>
<tr>
<td>vure/lu</td>
<td>‘be pierced, of soft or tough objects’</td>
<td>2 3 3 0 3 2 1 1 0 0 15</td>
</tr>
<tr>
<td>ll</td>
<td>‘be inserted, tight fit’</td>
<td>2 4 3 0 0 0 0 0 0 0 12</td>
</tr>
</tbody>
</table>

#### Insertion-attachment

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>vile</td>
<td>‘be tied, not firm’</td>
<td>9 4 6 0 1 2 2 0 0 0 1</td>
</tr>
<tr>
<td>bobe</td>
<td>‘be tied, firm’</td>
<td>4 5 8 0 2 1 2 4 0 5 2</td>
</tr>
<tr>
<td>lu'</td>
<td>‘be tied, very firm’</td>
<td>5 4 8 0 2 2 2 0 0 0 2</td>
</tr>
</tbody>
</table>

### Rope-attachment

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>piri</td>
<td>‘be covered, fully e.g., of cloth covering tabletop’</td>
<td>4 4 6 0 3 2 4 0 0 0 4</td>
</tr>
<tr>
<td>yarege</td>
<td>‘be spread out, of mass-like or mat-like objects’</td>
<td>8 3 8 0 5 0 5 2 0 0 3</td>
</tr>
<tr>
<td>yirege</td>
<td>‘be scattered or dispersed of multiple objects’</td>
<td>5 2 4 2 0 0 0 0 0 0 13</td>
</tr>
<tr>
<td>tic</td>
<td>‘be spread out attached to a centre’</td>
<td>2 3 2 0 0 0 0 0 0 0 7</td>
</tr>
</tbody>
</table>

### Distribution verbs

<table>
<thead>
<tr>
<th>Verb</th>
<th>Description</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>pli</td>
<td>‘be covered, fully e.g., of cloth covering tabletop’</td>
<td>4 4 6 0 3 2 4 0 0 0 4</td>
</tr>
<tr>
<td>yarege</td>
<td>‘be spread out, of mass-like or mat-like objects’</td>
<td>8 3 8 0 5 0 5 2 0 0 3</td>
</tr>
<tr>
<td>yirege</td>
<td>‘be scattered or dispersed of multiple objects’</td>
<td>5 2 4 2 0 0 0 0 0 0 13</td>
</tr>
<tr>
<td>tic</td>
<td>‘be spread out attached to a centre’</td>
<td>2 3 2 0 0 0 0 0 0 0 7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Counts</th>
<th>90 62 119 7 19 9 7 9 2 10 24 358</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment verbs</td>
<td>Adhesion/grip-attachment</td>
</tr>
<tr>
<td>Insertion-attachment</td>
<td>Rope-attachment</td>
</tr>
<tr>
<td>Distribution verbs</td>
<td>a. Dispersion</td>
</tr>
<tr>
<td>Counts</td>
<td>62 40 72 1 10 13 12 5 0 7 10 232</td>
</tr>
<tr>
<td>a. Dispersion</td>
<td></td>
</tr>
<tr>
<td>Aggregation or collection</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>kugi ‘be in a heap, of</td>
<td>4</td>
</tr>
<tr>
<td>mass-like or multiple</td>
<td></td>
</tr>
<tr>
<td>objects e.g., of sand</td>
<td></td>
</tr>
<tr>
<td>sand, fruits’</td>
<td></td>
</tr>
<tr>
<td>kuurum ‘be coiled or</td>
<td>3</td>
</tr>
<tr>
<td>folded, of ropes,</td>
<td></td>
</tr>
<tr>
<td>snakes, clothes’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26</td>
</tr>
<tr>
<td>General locative verb</td>
<td></td>
</tr>
<tr>
<td>boi ‘be at’, ‘exist’</td>
<td>45</td>
</tr>
<tr>
<td>Proximate verbs</td>
<td></td>
</tr>
<tr>
<td>lɛm ‘be near, proximate’</td>
<td>7</td>
</tr>
<tr>
<td>du’ ‘be very near,</td>
<td>3</td>
</tr>
<tr>
<td>close to’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Overall total</td>
<td>503</td>
</tr>
</tbody>
</table>

In Table 3, the three cardinal posture verbs gã ‘be in a lying posture’ has 418 occurrences, zĩ ‘be in a sitting posture’ records 140 occurrences and ze’ ‘be in a standing posture’ has 451 occurrences. The total number of occurrences for gã or ze’ is almost twice the number for zĩ. The verb zĩ as noted in Atintono (2012b:19) and also discussed in §5.2.1.2 occurred rarely in the data. This is because the verb is used to describe only human postures while gã and ze’ can be used to describe the location of animals or objects in addition to human postures (see §5.2.1.1 & §5.2.1.3 for details). A similar trend is shown in the stimuli data in Table 7 below where zĩ again has the least frequency compared to gã and ze’. The rest of the verbs in the posture verb class have below 40 occurrences. Note that most genres register no occurrences for some of the posture verbs as Table 3 shows.

The verbs of elevation also vary in their distribution among the various genre types. The verb yagi ‘be on top, with stable support’ has the highest number of occurrences of 151 while yuli ‘be hanging, dangling freely’ has 51 occurrences with pagi ‘be on top, of flexible or flat objects’ having 45 occurrences and dogi ‘be on top, with unstable support’ has 44 occurrences. These four verbs tend to be used often by speakers in describing most elevated locative scenes than the other three verbs, sagi, sugi and pugi in this class. Observe that these last three verbs have the least frequencies of below 30 compared to the other four verbs.
The attachment verb class also record rare occurrences among the various genres. The highest number of occurrences is 33 for two verbs and the lowest occurrence is 10 in this class. The verbs of distribution class like the attachment verbs, also register 34 occurrences as the highest and 7 occurrences as the lowest. Explanation for this rare occurrences for the verbs in the attachment and distribution verb classes compared to the posture and elevation verbs, is that the description of objects in attachment or distribution locative relations is generally less common compared to posture or elevation. This accounts for most verbs in these two classes not coded by some of the genres in Table 3.

The general locative verb *boi* ‘be at’ also has a high number of occurrences (346 in total) with every genre coding it. Speakers tend to use it for the description of generic locations where none of the verbs in the other classes is applicable. It is also used to describe containment relations scenes (see §5.2.5 for discussion). The proximate verbs also recorded the least frequency in the genre data with 32 occurrences for *lem* ‘be near’ and 13 occurrences for *du* ‘be very near’. These figures are higher than their total number of occurrences of 11 in the stimuli sets data (see Table 12 below). There were very few locative scenes described with these two verbs and they are also often used in combination with verbs in the other positional verb classes as pointed out in the discussion of their semantics in §5.2.6.

Table 4 below provides a summary of the overall distribution of the verb classes per genre while Table 5 is a summary of the overall number of occurrences and percentage distribution per genre.
Table 4: Overall distribution of verb tokens in each genre per positional verb class

<table>
<thead>
<tr>
<th>Genre Code</th>
<th>Posture</th>
<th>Elevation</th>
<th>Attachment</th>
<th>Distribution</th>
<th>General Locative</th>
<th>Proximate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPST</td>
<td>270</td>
<td>90</td>
<td>62</td>
<td>26</td>
<td>45</td>
<td>10</td>
<td>503</td>
</tr>
<tr>
<td>IDT</td>
<td>242</td>
<td>62</td>
<td>40</td>
<td>17</td>
<td>36</td>
<td>5</td>
<td>402</td>
</tr>
<tr>
<td>FT</td>
<td>338</td>
<td>119</td>
<td>72</td>
<td>30</td>
<td>156</td>
<td>19</td>
<td>734</td>
</tr>
<tr>
<td>SFT</td>
<td>29</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>20</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td>CONV</td>
<td>36</td>
<td>19</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>NAR</td>
<td>68</td>
<td>9</td>
<td>13</td>
<td>2</td>
<td>39</td>
<td>6</td>
<td>137</td>
</tr>
<tr>
<td>RIT</td>
<td>51</td>
<td>7</td>
<td>12</td>
<td>10</td>
<td>14</td>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>PGR</td>
<td>78</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>9</td>
<td>1</td>
<td>104</td>
</tr>
<tr>
<td>SG</td>
<td>25</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>32</td>
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<td>ITW</td>
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<td>7</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>PTXT</td>
<td>41</td>
<td>24</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>86</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1202</td>
<td>358</td>
<td>232</td>
<td>107</td>
<td>346</td>
<td>45</td>
<td>2290</td>
</tr>
</tbody>
</table>

Observe that in Table 4 and Table 5, the Folktale Genre (FT) contributes the most number of verb tokens of 734 out of the overall total number of 2290 representing 32%. It is not surprising that the folktale genre recorded the highest number of positional verb expressions than any other genre because I spent more time recording and transcribing the folktale genre compared to the other genre types. Another important observation is that the folktale genre involved humans, supernatural beings, and animal characters who interact in natural discourse situations in folktale narrative scenes. The characters perform certain roles and activities which include the description of locations or the narration of certain events to other characters.

The Spontaneous Speech Data (SPST) is second with 503 occurrences (22%) while the Interactive Discourse Data (IDT) is third recording 402 occurrences (18%). I paid much attention to listening and recording locative expressions involving these two types of genres in various discourse settings. The Narrative Genre (NAR) and the Palace Genre (PGR) recorded 137(6%) and 104(4%) occurrences respectively. The total number of occurrences for each of these genres is: the Conversation Genre (CONV) is 87(4%), the Ritual Genre (RIT) is 97(4%), and the Procedural Genre Text (PTXT) is 86 representing 4%. Also the Interview Genre (ITW) has only 49(2%)
occurrences. The Song Genre (SG) has the rarest occurrence of the positional verbs with only 32(1%).

Table 5: Overall occurrences and percentage distribution of the positional verbs per genre

<table>
<thead>
<tr>
<th>Genre code</th>
<th>Number of occurrences of verbs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPST</td>
<td>503</td>
<td>22%</td>
</tr>
<tr>
<td>IDT</td>
<td>402</td>
<td>18%</td>
</tr>
<tr>
<td>FT</td>
<td>734</td>
<td>32%</td>
</tr>
<tr>
<td>SFT</td>
<td>59</td>
<td>3%</td>
</tr>
<tr>
<td>CONV</td>
<td>87</td>
<td>4%</td>
</tr>
<tr>
<td>NAR</td>
<td>137</td>
<td>6%</td>
</tr>
<tr>
<td>RIT</td>
<td>97</td>
<td>4%</td>
</tr>
<tr>
<td>PGR</td>
<td>104</td>
<td>4%</td>
</tr>
<tr>
<td>SG</td>
<td>32</td>
<td>1%</td>
</tr>
<tr>
<td>ITW</td>
<td>49</td>
<td>2%</td>
</tr>
<tr>
<td>PTXT</td>
<td>86</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2290</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The pie chart below represents the overall percentage distribution of the positional verb tokens per each genre type.

Graph 1: Overall percentage distribution of the positional verbs per genre

2.3.2 The stimuli data and the elicitation procedure

The stimuli-based techniques or experiments were used to collect data specific to posture and locations. They involved the use of various picture stimuli sets with the
purpose of motivating speakers to engage in observation and description of pictures or real objects, video clips, and the performance of similar events for the investigation of locative relations (see Levinson 1992:3-44; Lüpké 2005, 2009; Hellwig 2006a, 2010). In this study, stimuli-based techniques are employed as one of the core data collection tools for the investigation of the use of the positional verbs in locative descriptions. They include various picture stimuli sets designed by the Max Planck Institute for Psycholinguistics (MPI), Nijmegen, for the investigation of spatial relations, my own Gur drawings and photos, and another stimulus set, the Bernhard Pictures designed by an independent researcher (Bernhard Wälchli) for typological investigations.

The use of these stimuli pictures in this study follows the methodology used for the typological investigations of spatial language proposed by Levinson & Wilkins (2006b), and Ameka & Levinson (2007b). In line with these typological investigations, consultants were asked to observe one picture scene (usually a Figure(s) located on a Ground) in a stimulus set (a book or on a screen) at a time, for a while, before providing an answer to the question ‘where is x?’ In Gurenɛ, the equivalent of the question is zugolaboibalabɛ? Literally ‘the thing is at where?’ i.e., ‘where is the thing?’ Usually in the elicitation context where the Figure and the Ground are known, the Figure is mentioned first followed by the question as in (1) below. A detailed review of the where-question in Gurenɛ is in §4.3 where the MPI semantic typology is discussed. The consultant in most cases provides a non-elliptical statement to the where-question describing the location of the Figure and its place of location (Ground). This statement represents the construction type known in the MPI typology as the Basic Locative Construction (see §4.2.2.1 for details). There were rare instances observed where a consultant provides an enumerative or elliptical response to the where-question using only a positional verb. This usually happens when the consultant is either tired after a long session or paid little attention to the elicitation. Apart from answering the lead-question, the consultant is also free to talk about the picture scene with respect to the spatial relation between the Figure and the Ground.
Ten native speaker consultants (3 females and 7 males, see the full list of consultants in Table 16 of §2.3.6 below) observed and described the picture stimuli sets during the elicitation sessions. Each consultant described a stimulus set or sets of stimuli in an individual session before participating in a group session where variation in responses observed in the individual sessions were discussed to seek explanations for these variations (see §2.3.4 below for a discussion). It takes approximately two to four hours for a consultant to go through each stimulus set depending on the total number of picture scenes it contains. Intermittent breaks were provided during longer sessions to avoid the consultant being tired which could lead to paying less attention to the elicitation. I did find it helpful to have a consultant complete the description of a stimulus set per elicitation session than completing it at another time. This contributes to making a reasonable comparison with the other consultants’ descriptions. I wrote down all the consultants’ descriptions of the scenes on paper but a few sessions were recorded on audio. I did not record all the sessions because some consultants were observed not comfortable with the audio recording although they agreed to be recorded. They often tried to repeat unnecessarily to sound well in the recording.

The data obtained from the various stimuli sets show variation with respect to the number of occurrences and the distribution of the positional verbs (see Table 7 below). Consultants also show disagreements over the choice of one verb over another to describe some locative scenes in the stimuli sets as discussed below (§2.3.4). A detailed discussion of the variation in the description of the specific verbs and scenes concerned is given in Chapter 5 on the semantics and pragmatics of the positional verbs. I provide a brief description of the various stimuli sets in the next section followed by a quantitative overview.

2.3.2.1 The MPI stimuli sets

The MPI stimuli sets are designed by experts (see Levinson 1992, Levinson & Wilkins 2006a) as standard instruments for cross-linguistic elicitation of positional and locative verbs, adpositions, and locative expressions in languages. Each
stimulus set is designed according to its authors with the aim of eliciting information about some aspect of the linguistic construction of space in languages. The stimuli sets focus broadly on eliciting static and motion events. In this study, I restrict my discussion to the static events, that is, those stimuli sets concerned with eliciting information on the location of entities in space but not motion.

**Topological Relations Picture Series (TRPS)**

One of the MPI stimuli sets used for eliciting the data is the Topological Relations Picture Series (TRPS) developed by Bowerman & Pederson (1993). It has 71 line drawings depicting various topological relations with both animate and inanimate Figures located on different Grounds. The drawings represent a wide range of topological relation scenes, which has one object located with respect to another to depict the spatial relation between them. The located Figure is marked with yellow colour in the TRPS booklet but shown with an arrow in the electronic form as shown in Figure 4. This makes it easy for consultants to identify the object whose location is to be described with respect to the Ground.

![Figure 4: Two scenes from the Topological Relations Picture Series (TRPS)](image)

Most of the pictures depict western European objects such as a cup on tabletop (TRPS 1), apple in a plate (TRPS 3), phone on wall (TRPS 28), and the like. Other scenes do include objects which can be applied across cultures, e.g., scenes like a cat under a table (TRPS 31), fly on wall (TRPS 52), spider on wall (TRPS 52), and
ladder on wall (TRPS 58). During my elicitation with the speakers whenever an object in a picture scene is inappropriate in the culture, a local cultural object similar to the western one is substituted as suggested by the authors and the editors of the MPI stimuli sets. This is achieved by explaining to consultants to understand the context before finding a local equivalent. For example, an apple is an unfamiliar fruit that my consultants have never seen but after explanations, they readily offered local familiar fruit names (e.g., shea tree fruits or mangoes). This helped the consultant to understand the context and provide a description of the scene or decide whether or not the locative scene is appropriate. For example, consultants explained that in the culture, fruits are usually put in containers like calabashes but not in plates as it is the case with TRPS 3 scene with an apple in a bowl. Local folk theory assumes that only prepared meal can be served in a bowl.

Like other MPI stimuli sets, it contained more scenes with locations of inanimate objects than animates. For example, it includes no scenes depicting lying, standing or leaning postures of humans. It, however, has a scene for sitting posture (see Figure 4) and another for a squatting posture (TRPS 64). Other scenes with humans involved usually depict a Figure in adornment relation on body part of a person e.g., the wearing of clothing or ornament such as a ring on finger (TRPS 10), shoe on a woman’s foot (TRPS 21), and a bracelet on a woman’s neck (TRPS 51). All ten consultants describe such scenes using verb expressions in non-locative constructions to say that the person has put on a ring on his finger, a bracelet on her neck, or shoe on her foot. See these expressions in §4.5 in my discussion of the non-basic locative construction.

**Picture Series for Positional Verb (PSPV)**

Another MPI stimulus set is the Picture Series for Positional Verbs (PSPV) designed by Ameka et al. (1999). It contains 68 locative scenes in which nine different objects (stick, ribbon, cloth, rope, cassava, bottle, ball, and beans) are placed in relation to seven different Ground elements (table, tree, branch, tree stump, tree trunk, basket and rock). The orientation of the Figures involves both their canonical vs. non-canonical (typical vs. non-typical) positions. For example, PSPV 48 scene has a pot on its canonical base on a tree branch while PSPV 40 has the same pot lying on its
non-canonical side on the ground (see Figure 5). This variation of placing the objects on different Grounds and in varied orientations has the advantage for exploring different descriptions of the scenes by consultants.

![Figure 5: Two scenes from the Picture Series for the Positional Verbs (PSPV)](image)

The PSPV is designed purposely to explore the description of inanimate moveable objects. Thus, the scenes include no animate Figures. The application of this stimulus set was very useful in exploring a wide range of locations of objects. It, however, did not elicit the posture verb *zĩ* ‘be in a sitting posture’ since this verb is restricted to human posture as noted earlier.

**Containment Picture Series (CPS/CONT)**

The Containment Picture Series (CPS/CONT) constitutes one other set of the MPI stimuli sets. The original author of the CONT is Melissa Bowerman but later modified by Levinson & Meira (2001a). The CONT stimulus set has 41 picture scenes depicting different configurations of Figures in partial and complete containment relations. The stimulus set aims at exploring the notion of containment of a Figure in a Ground. It shows functional and geometric containment as well as containment in hollow space, matter, liquid and granular medium. I found it useful in the elicitation of containment relations than the other stimuli sets. Examples of these scenes include a stick in a bowl (CONT 35) illustrating full containment and a ladle in a bowl (CONT 37) showing partial containment as shown in Figure 6. It contains only scenes of objects and excluded containment scenes of humans or animals.
Support Picture Series (SUP)

The Support Picture Series (SUP) designed by Levinson & Meira (2001b) targets the elicitation of topological relations that involve contact, support, adhesion and attachment of different Figures. It has 47 locative scenes with all the Figure objects located on different elevated Grounds (e.g., a person on top of a tree, a swing hanging on a tree branch, a cup on tabletop, etc.). See Figure 7 for examples of some of the scenes from this stimulus set. It also includes identification of parts of a human face or decoration or marks on the face or adornment relations.
The SUP was very useful in eliciting data on the verbs of elevation subclass in Gurenɛ (see §5.2.2). Its only flaw, as my consultants pointed out during the elicitation, is that the cup used as Figure in scenes SUP 1 to SUP 7 located at different parts of the tabletop could have been substituted with other Figures like a bowl, jug, fruit, egg, tuber, or an object with irregular shape to show variation. For example, the Gurenɛ verb dagi ‘be on top, with unstable base support’ is used to describe the location of a round or irregular shaped Figure on an elevated Ground but it was not elicited because no scene included a Figure of the sort.

**Video stimulus set on Caused Positions (CAUS)**

The video stimulus set was used to collect data on caused and spontaneous events. Hellwig & Lüpke (2001) designed this stimulus set as a complementary tool to the static PSPV stimulus set discussed above. The CAUS targets the investigation of events that sought to test the speaker’s knowledge in caused and non-caused position changes by using video clips to present people putting objects into static positions or clips of spontaneous happenings (see Lüpke 2009:76). These motion scenes contributed a different perspective to the positional verb data in that in Gurenɛ speakers use a different positional verb form to describe static locations and another to describe dynamic locative events (those involving actions or movement). In Figure 8, the two scenes depict a non-caused position, a ball on tabletop (PSPV 21) and a caused position, a still photo of positional video clip 4 of someone putting balls on tabletop (CAUS 04). The corresponding expressions used to describe these two scenes are in (2) and (3) below.
In (2) the stative verb *dog-i* ‘be on top, with unstable base support’ expresses the static location of the ball but in (3) the verb *doga-le* ‘put on top, of an object with unstable base support’ describes the putting of the ball on top of the table. Note that the latter is used in an agentive construction. See §3.3.2.1 and §3.3.2.2 for further discussion of the stative and dynamic positional verbs.

All the MPI stimuli sets are available on their website (www.mpi.nl). The integration of scenes from these stimuli sets in the thesis is restricted to where it is absolutely necessary for the discussion. Otherwise, the rest of the stimuli scenes referred to in the main analysis are put in the Appendices of the thesis. This way, it is easy to compare similar locative scenes in the different stimuli sets which attracted the use of the same or different verbs. It also allows for cross-checking of the number of occurrences and distribution of the verbs in the same class or across classes.

### 2.3.2.2 Gur Drawings and Photos (GUR)

The GUR drawings and photos (see Appendix 1) include both my own created 74 locative scenes designed by an artist using coral drawings and 1 digital photo (GUR 49) taken from the community. The drawings and the photo depict locative scenes common and culturally appropriate in the speaker community (see Figure 9). They represent a wide range of scenes with the Figures located on different Grounds and in different orientations. The main objective of the Gur Drawings and Photos is to include scenes that are of typological interest and also address the problem of those MPI picture scenes identified by my consultants during the pilot stage of eliciting the data as culturally inappropriate. As much as possible, I tried to avoid reproducing locative scenes that overlap with the MPI stimuli sets, unless it is necessary to do so.
for comparison purposes. Most of the scenes in GUR show cultural bias toward the Gur linguistic area. It proves to be very useful in eliciting more specific data on posture and locations in the Gur culture than the other stimuli sets because most speakers readily identified the drawings and photo in the scenes.

Figure 9: Two scenes from the GUR Drawings (GUR)

These scenes are, however, quite applicable to the investigation of spatial relationships in West Africa in general as some of the scenes depict objects familiar in most parts of Africa. One limitation of the GUR stimulus set is that some scenes may not be applicable to western cultures as they include objects that are unfamiliar to these cultures.

### 2.3.2.3 Locative Description Finding Task (LDFT)

The Locative Description Finding Task (LDFT) is a natural context-based elicitation task. Consultants were asked to observe household items placed in different locations in a room, kitchen, the inner and outside yard of the compound, and provide short descriptive responses to the *where-question* posed requiring the location of the items. Some of these items were spontaneously placed while others were set up by me in a real world context in different locations and orientations. For example, in one task, I asked consultants to observe objects located in different positions in the room where I conduct the elicitation sessions and describe their locations. These items include furniture, bowls, mats, brooms, calabashes, and pots placed on the floor of
the room. This kind of elicitation offered me the opportunity to observe how people describe the actual or the natural location of objects. The LDFT was unique in providing a very rich, diversified and large amount of data on locations that the other stimuli sets excluded. See Table 13 below for the overall contribution of the number of verb tokens obtained from the LDFT.

2.3.2.4 Bernhard Picture Series (BERN)

The Bernhard Picture Series (BERN) has a total of 52 pairs of pictures for eliciting static locative information. This is not one of the MPI stimuli sets but an independent researcher (Dr Bernhard Wälchli) who designed it for collecting typological data on spatial language for his own personal research project. I contacted him and he happily sent it to me to be used for my investigation. The locative scenes in this stimulus set are arranged in pairs with objects located in different positions on the same Ground (see Figure 10). Notice that the difference in orientation of the identical Figures (books) and the variation of the Grounds (chair and floor) shows contrast between these two scenes. None of the scenes in BERN has an animate Figure or Ground.

![Figure 10: Two pairs of pictures from the Bernhard Pictures (BERN)](image)

Like the MPI stimuli sets, it also suffers from presenting some scenes that are biased towards western cultures. The greatest advantage of this stimulus set, however, is that it paid attention to the contrast of orientations (e.g., *standing* vs. *lying*) of the
same object in different locations (e.g., on vs. under). This allows for systematic testing for the contrast between the same object in different orientations located on different Grounds. For instance, the two scenes in Figure 10 were described with two different positional verbs, *yagi* ‘be located on top, of stable support’ (BERN 01) and *gā* ‘be lying’ (BERN 02), to differentiate between the different orientations of the books and their location on different Grounds. The Bernhard stimulus set also has slightly different locative scenes from the MPI stimuli sets.

**2.3.2.5 Summary of the stimuli sets**

A summary of all the stimuli sets used in the collection of the data is shown in Table 6 with the total number of scenes in each stimulus set and a corresponding bar chart in Graph 2 below. A total of 400 picture scenes were used to elicit the positional verb expressions.
Table 6: Summary of the stimuli sets with the number of picture scenes

<table>
<thead>
<tr>
<th>Stimuli sets</th>
<th>Code</th>
<th>Number of pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gur Drawings/Photos</td>
<td>GUR</td>
<td>75</td>
</tr>
<tr>
<td>Positional Verb Picture Series</td>
<td>PSPV</td>
<td>68</td>
</tr>
<tr>
<td>Topological Relations Picture Series</td>
<td>TRPS</td>
<td>71</td>
</tr>
<tr>
<td>Containment Picture Series</td>
<td>CONT</td>
<td>41</td>
</tr>
<tr>
<td>Support Picture Series</td>
<td>SUP</td>
<td>47</td>
</tr>
<tr>
<td>Caused Video Stimulus set</td>
<td>CAUS</td>
<td>46</td>
</tr>
<tr>
<td>Bernhard Picture Series</td>
<td>BERN</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>400</strong></td>
</tr>
</tbody>
</table>

Graph 2: Number of picture scenes per stimulus set

2.3.3 Quantitative overview of the stimuli sets data

This section provides a quantitative overview of the data obtained from the various stimuli sets. The overview is not intended to be an exhaustive statistical analysis of the data but the aim is to provide a quantified insight into the number of occurrences and distribution of each positional verb or verb class per stimulus set. This will contribute to our understanding of the contribution of each stimulus set used for the description of static locations. Ultimately, this quantitative overview will help to appreciate the need for the use of the diverse methodological techniques employed
in this study in addition to the use of the pictures to explore the maximum possibility of eliciting data on locative descriptions.

In the following sections, I provide tables showing the number of scenes described in each stimulus set using a particular verb. Although some response variations were noted in the description of some scenes during the elicitations (see §2.3.4 below), the number of occurrences of each verb with respect to each stimulus set represent instances that the consultants used a particular positional verb as their first response to describe a scene at the individual session or show agreement at the group discussion session. I present the overview in the order of the positional verb classes identified in Chapter 1 (Table 1 in §1.3), starting with the posture verbs. Table 7 below presents the distribution of the posture verbs elicited per stimulus set. Like the natural data discussed above, the three cardinal posture verbs gã ‘be lying’ has 52 occurrences, zĩ ‘be sitting’ records 20 occurrences and ze’ ‘be standing’ has 43 occurrences. The figures for each of these verbs are high compared to the rest of the verbs in this class. The sit verb zĩ has the least frequency among the three. As I have observed elsewhere (Atintono 2012b) and in my earlier discussion of the natural data in Table 4 above, the verb zĩ is restricted to the description of human posture but the other two can be used to express the location of any entity, animate or inanimate (cf. Lemmens & Perrez, forthcoming on Dutch). Among the stimuli sets, it is only the GUR, TRPS, and LDFT which have scenes eliciting this verb. The PSPV has no scenes for zĩ, but so do the SUP and the CONT picture series. Except the TRPS which has four scenes for dobì ‘be in a squatting posture’ and the LDFT with 2 scenes, the rest of the stimuli sets include no scenes. Notice that the two leaning verbs deli ‘be leaning, sitting’ and lali ‘be leaning, in a standing posture’ show up in only the GUR and the LDFT. Apart from the LDFT, all the other five stimuli sets include no scenes for yigi ‘be in a stooping posture’ and kpa ‘be kneeling’. See Appendix 2 for all the picture scenes that elicited these posture verbs.

---

9 The number in parentheses under each stimulus code in Table 7 represents the total number of scenes in a stimulus set.
Table 7: Number of scenes per stimulus set described using each posture verb

<table>
<thead>
<tr>
<th>Posture verbs</th>
<th>Stimuli sets</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GUR (75)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSPV (68)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRPS (71)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SUP (47)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAUS (46)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BERN (52)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LDFT (230)</td>
<td></td>
</tr>
<tr>
<td>Gà ‘be in a lying posture’</td>
<td>11</td>
<td>52</td>
</tr>
<tr>
<td>zì ‘be in a sitting posture’</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>ze ‘be in a standing posture’</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>Kpa ‘be kneeling’</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ì ‘be leaning, of objects’</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Dobi ‘be in a squatting posture’</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Dei ‘be leaning, in a sitting posture’</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Lali ‘be leaning, in a standing posture’</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Yigi ‘be in a stooping posture’</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Kpabi/Vugi ‘be turned face down’</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>168</td>
</tr>
</tbody>
</table>

Among the verbs of elevation class in Table 8 below, the verbs dogi ‘be on top, with unstable support or relation’, yagi ‘be on top, with stable support’, pagi ‘be on top, of flexible or flat objects’ and yuli ‘be hanging, dangling freely’ record high number of occurrences. These four verbs are used to describe Figures located on elevated Grounds than the other verbs in this class. Almost all the stimuli sets include a number of scenes for eliciting these verbs except the CONT which registered only one occurrence and the SUP which recorded no scenes. This is because the CONT targets containment as noted in my discussion in §2.3.2.1 above and, therefore, has the least elevated Grounds. The only scene recorded in Table 8 which was described as yagi is CONT 16 which has a bird partially hidden on a shady tree branch. See Appendix 3 for this scene and the rest of the elevated scenes.
<table>
<thead>
<tr>
<th>Verbs of elevation</th>
<th>Stimuli sets</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GUR (75)</td>
<td>PSPV (68)</td>
</tr>
<tr>
<td>yagi ‘be on top, with stable support’</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>pagi ‘be on top, of flexible or flat objects’</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>dogi ‘be on top, with unstable support or relation’</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>yuli ‘be hanging, dangling freely’</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>sugi ‘be on top, of convex base container’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>sagi ‘be placed in, of container-in-container’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>pugi ‘be on top, afloat’</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>32</td>
</tr>
</tbody>
</table>

Generally, the distribution of attachment verbs in all the stimuli sets is infrequent as shown in Table 9. Compared to the posture and the verbs of elevation in Table 7 and Table 8, the attachment verbs present rare occurrences. Note that the highest number of occurrences in this class is 16 for labi and the lowest occurrence is 3 for gu. Most of the stimuli sets have no scenes depicting attachment relations and this accounts for no occurrence for some of the verbs in Table 9.
Table 9: Number of scenes per stimulus set described using each attachment verb

<table>
<thead>
<tr>
<th>Verbs of attachments</th>
<th>GUR (75)</th>
<th>PSPV (68)</th>
<th>TRPS (71)</th>
<th>SUP (47)</th>
<th>CONT (41)</th>
<th>CAUS (46)</th>
<th>BERN (52)</th>
<th>LDFT (230)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adhesion/grip-attachment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>tabi</em> ‘be stuck, of mastic substance’</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td><em>labi</em> ‘be adhered or pasted’</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td><em>gu</em> ‘be stuck, e.g., of insects or debris’</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Insertion-attachment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>firi</em> ‘be stuck in, e.g., of thin objects’</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td><em>fugi</em> ‘be stuck in, not firm, e.g., of thick objects’</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><em>figi</em> ‘be stuck in, of small pointed objects’</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td><em>sɛgi</em> ‘be stuck in between, of objects’</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td><em>li</em> ‘be inserted, tight fit’</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><em>vure/lu</em> ‘be pierced, of soft or tough objects’</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><em>tũ</em> ‘be skewed’</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Rope-attachment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>vile</em> ‘be tied, not firm’</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td><em>bobe</em> ‘be tied, firm’</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td><em>lu</em> ‘be tied, very firm’</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>13</td>
<td>3</td>
<td>8</td>
<td>5</td>
<td>48</td>
<td>105</td>
</tr>
</tbody>
</table>

Like the verbs of attachment class, the distribution class also occur infrequently among the various stimuli sets as evidenced in Table 10. For example, apart from the LDFT which elicited the verbs *yirege* and *tis* the other stimuli sets did not. The verbs
Table 10: Number of scenes described per stimulus set using each distribution verb

<table>
<thead>
<tr>
<th>Verbs of distribution</th>
<th>Stimuli sets</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GUR (75)</td>
<td>PSPV (68)</td>
</tr>
<tr>
<td>Dispersion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pi‘be covered fully’</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>yaregc‘be spread out/spread’</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>yiregc‘be scattered or dispersed, of multiple objects’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>tic‘be spread out from attached to a centre’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggregation or collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kugi‘be heaped, of mass- like or multiple objects’</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>kuurum‘be coiled or folded, of flexible objects’</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

The general locative verb *boi* shows a difference in the number of its occurrences in the various stimuli sets. The CONT stimulus set has the highest number of 19 scenes described with *boi*. This is to be expected since this stimulus set is specifically designed to elicit containment relations. The LDFT also has a high number of 18 occurrences mainly because I set up many real scenes to test for various containment relations. Observe that it is only the CAUS stimulus set which includes no scenes for containment relations. Although there were scenes in this stimulus set
involving ‘putting into containment’ Gurenc uses a different verb *iŋɛ* ‘do’ for describing events of putting something into a container with the general locative verb *boi* restricted to expressing static containment locative relations.

Table 11: Number of scenes described per stimulus set using the general locative verb

<table>
<thead>
<tr>
<th>General locative verb</th>
<th>Stimuli sets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GUR (75)</td>
</tr>
<tr>
<td><em>boi</em> ‘exist, be at, be contained’</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 12 presents the distribution of the proximate verbs per stimulus set. They have the least frequency in the stimuli data with *lɛm* occurring only once in four stimuli sets and thrice in another. Seven of the stimuli sets did not even elicit the verb *du*’. The verbs are marginally used in the description of locations (see §5.2.6 for details).

Table 12: Number of scenes described per stimulus set using the proximate verbs

<table>
<thead>
<tr>
<th>Relative distance or Proximate verbs</th>
<th>Stimuli sets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GUR (75)</td>
</tr>
<tr>
<td><em>lɛm</em> ‘be near, proximate’</td>
<td>0</td>
</tr>
<tr>
<td><em>du</em> ‘be very near, close to’</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

I now present below a summary of the overall occurrences and distribution of the verb classes per stimulus set. Observe that in Table 13 there is a difference regarding the number of positional verbs elicited in each stimulus set. Some stimuli sets did not elicit the proximate verbs (see GUR, TRPS, CAUS) and the verbs of distribution class (SUP, CONT, CAUS). Also both the SUP and CONT elicited no posture verbs but the SUP includes a significant number of the elevation verbs while CONT has a high number of scenes that elicited the general locative verb than any other stimulus set. In general, the stimuli data show an overall high frequency (over 100) for the posture, elevation and attachment verbs than the other verb classes. Disregarding the fact that each stimulus set is designed to elicit information about
some specific aspect of the linguistic construction of space in languages, the conclusion to be drawn from this summary is that the posture, the elevation verbs and the general locative verb are used to describe locations than the other verbs. Recall that the natural data discussed earlier also show this trend.

Table 13: Overall distribution of the positional verb classes per stimulus set

<table>
<thead>
<tr>
<th>Stimuli code</th>
<th>Positional verb classes</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Posture</td>
<td>Elevation</td>
<td>Attachment</td>
<td>Distribution</td>
<td>General locative</td>
<td>Proximate</td>
</tr>
<tr>
<td>GUR</td>
<td>27</td>
<td>19</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>PSPV</td>
<td>12</td>
<td>32</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>TRPS</td>
<td>10</td>
<td>18</td>
<td>13</td>
<td>2</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>SUP</td>
<td>0</td>
<td>24</td>
<td>13</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>CONT</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>CAUS</td>
<td>5</td>
<td>29</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BERN</td>
<td>12</td>
<td>16</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>LDFT</td>
<td>102</td>
<td>35</td>
<td>48</td>
<td>20</td>
<td>18</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 14 presents the overall occurrences and percentage distribution of the verbs per each stimulus set followed by a graphical representation in Graph 2.

Table 14: Overall distribution and percentages of verbs per stimulus set

<table>
<thead>
<tr>
<th>Stimuli code</th>
<th>Number of occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUR</td>
<td>63</td>
<td>11%</td>
</tr>
<tr>
<td>PSPV</td>
<td>62</td>
<td>11%</td>
</tr>
<tr>
<td>TRPS</td>
<td>56</td>
<td>10%</td>
</tr>
<tr>
<td>SUP</td>
<td>43</td>
<td>8%</td>
</tr>
<tr>
<td>CONT</td>
<td>24</td>
<td>4%</td>
</tr>
<tr>
<td>CAUS</td>
<td>42</td>
<td>8%</td>
</tr>
<tr>
<td>BERN</td>
<td>39</td>
<td>7%</td>
</tr>
<tr>
<td>LDFT</td>
<td>230</td>
<td>41%</td>
</tr>
</tbody>
</table>

| 559         | 100%          |
Table 15 below presents the overall distribution of the verb classes obtained from all the stimuli sets. The uniqueness of the posture verbs and the verbs of elevation for describing static locations is shown by their relatively high number of 168 occurrences constituting 30% for posture while 174 (31.1%) is observed for verbs of elevation. Both combined to give over 60% of the total stimuli data with the rest of the verb classes taking less than 40%.

Table 15: Overall distribution of each verb class in the stimuli sets

<table>
<thead>
<tr>
<th>Verb class</th>
<th>Number of occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posture</td>
<td>168</td>
<td>30%</td>
</tr>
<tr>
<td>Elevation</td>
<td>174</td>
<td>31%</td>
</tr>
<tr>
<td>Attachment</td>
<td>105</td>
<td>19%</td>
</tr>
<tr>
<td>Distribution</td>
<td>28</td>
<td>5%</td>
</tr>
<tr>
<td>General locative</td>
<td>73</td>
<td>13%</td>
</tr>
<tr>
<td>Proximate</td>
<td>11</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>559</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The graph below shows a summary of the overall occurrences of the verb classes obtained in the stimuli sets.
Graph 4: Overall distribution of each verb class obtained in the stimuli sets

The total number of positional verb expressions collected from both the natural and stimuli data in the corpus amounted to over 5000 word-text. Given that not all the recorded data were transcribed these figures remain modest (cf. Atintono 2012b). Unlike many Indo-European languages, Gurenɛ does not have any organised written corpus that one can rely on for larger quantitative data such as the British National Corpus (BNC).

2.3.4 Variation in speakers’ responses

In the preceding tables, not all the scenes in the stimuli sets were described by my consultants using only one verb or without disagreements. Sometimes one and the same scene is described with two different verbs if the scene contains multiple Figures in different orientations or one part of the same Figure is on one Ground and another part extends to a different Ground. Figure 11 below presents an exhaustive list of these scenes noted in the stimuli sets during the elicitations. I restrict the details of the discussion of these response variations to the semantic discussion of the individual verbs in Chapter 5.
The first three scenes (PSPV 51, PSPV 11 & PSPV 25) in Figure 1 represent one type of response variation where a consultant uses two verbs in a serial verb construction to describe a scene. The verbs kugi ‘be in a heap’ and yaregɛ ‘be spread’ describe the configuration of the Figures as heaped or spread out but gã ‘be lying’ and pagi ‘be on top, flat’ also describe the location of the Figures in a lying or elevated location. Eight consultants out of ten used the two verbs in the order in which they are presented here and indicated that the second verb may be optional if one focuses on the configuration of the Figure alone. Two other consultants did not use the optional verbs in their description of these scenes but they did indicate that the optional verbs could be used in addition. In scene TRPS 54 with the rabbit in its
hutch, nine speakers used *boi* ‘be at’ or ‘exist’ but when they were asked further if *ze* ‘be standing’ could not be used they explained that because the rabbit is contained *ze* ‘be standing’ is not acceptable but one speaker first response was *ze* and with hesitation he said *boi* ‘be standing’ may be appropriate.

Similarly, speakers show variation in their description of the verb *ti* ‘be leaning, of objects’, whether or not it could be used to describe scene PSPV 13 which has a stick leaning on a basket with one end going over the edge of the basket. Since the basket is not high enough which is an important requirement for the use of the verb, consultants show disagreement about its use with six in favour and four against. See a detailed discussion in §5.2.1.8.

For the scenes involving the ampersand (&), both verbs were used by some consultants to describe the same scene, usually in a two-clause construction to say that one part of the Figure is in a certain orientation while another is in a different orientation. For example, scenes PSPV 16, PSPV 32, and PSPV 2 were all described using *pagi* ‘be on top, of flexible or flat objects’ and *gā* ‘be lying’ because one part of the Figure is on a different Ground and another part extends to another Ground. Seven speakers said that the most preferred verb is the first one if the interest is in the main Ground that the Figure is located on while less attention is paid to the second Ground. For scene PSPV 49 with part of the cloth on the tabletop and another part dangling, all the ten speakers used *pagi* ‘be on top, of flexible or flat objects’ and *yuli* ‘be hanging, dangling’ but they also point out that *pagi* could be preferred if we ignore the part of the cloth that hangs dangling.

Another type of response variation concerns speakers’ choice between two verbs regarding which one is most appropriate for the description of a particular scene. That is, one or more consultants show preference for one verb or the other depending on how they perceive the locative relation between the Figure and the Ground. This sometimes led to disagreements among the consultants. The scenes with the forward slash (/) between the verbs indicate consultants’ response variation for the acceptable or unacceptable use of the verbs to describe the scenes. For scenes GUR 09 and PSPV 48 with the verbs marked with asterisks all the consultants objected to the use of the posture verbs *ze* ‘be standing’ to describe the
man standing on top of the building and the bottles on their base on the tabletop. They neither accepted the use of zi ‘be sitting’ for the description of the person sitting on the rooftop nor the use of gā ‘be lying’ to describe the bottles on their side on the tabletop. They argued that these scenes have the Figures on elevated Grounds and require the use of the verbs of elevation which disregard the posture of the Figures. The use of the verbs of elevation which leads to disregarding of the postures is an important feature of Guren locative descriptions (see §5.2.2.8 for details). Furthermore, for the BERN 31 and PSPV 5 scenes, they use the general locative verb boi ‘be at’ to describe them. They explained that the Figures are contained in the Ground and the use of the verbs in parentheses is unacceptable. It is interesting to note that in scene BERN 31 the key is inserted into the keyhole and presents an attachment relation and one would have expected the use of one of the attachment verbs segi ‘be stuck in between’ or firi ‘be stuck in, of thin or long objects’ but this was not the case. It appears that the element of containment is of importance to the speaker than the attachment.

Another type of response variation concerns consultants’ preference for one verb or the other to describe a scene depending on how they perceive the locative relation between the Figure and the Ground. This sometimes led to disagreements among them. For example, for scene PSPV 33 while initially five consultants favour yagi ‘be on top, with stable support’ for they construe the rope to be touching the stem of the tree, five others argue for yuli ‘be hanging, dangling freely’ claiming that the rope appears to be suspended. During the group discussions eight favoured yagi while two others preferred yuli. Similar arguments were put forward by consultants in the description of scenes PSPV 44, PSPV 64, and BERN 34. They were in most cases divided over their choice or preference for the verbs used for describing these scenes. However, the first verb, in the pair tends to be the one that at least five out of the ten consultants will usually prefer in case of a disagreement. All scenes depict elevated locative relations.

2.3.5 Elicited data

The elicited data include the stimuli sets discussed in §2.3.2 above and direct elicitations on aspects of the Grammar. Here, I discuss the grammatical elicitations. I
avoided direct translation of sentences from English to Gurenɛ since this is potentially prone to be difficult in getting translation of meaning equivalents which can affect the accuracy of the semantic and grammatical analysis (see Schütze 1996; Matthewson 2004:377-378; Payne 2006:36; Hellwig 2010:802-806 on semantic data and translation problems). I created discourse contexts elicitation strategies that are in line with proposed typological works on grammatical elicitations (see Dahl’s 1985 tense-aspect questionnaire) and semantic fieldwork elicitation methods suggested by Matthewson (2004:393-398; Hellwig 2010).

Dahl’s questionnaire seeks to investigate tense-aspect from a cross-linguistic perspective by using discourse context information to create scenarios for speakers to provide responses that involve different aspectual notions. Matthewson’s work discusses the range of discourse context situations that are relevant for eliciting specific semantic and grammatical information with speakers. Its aim was to avoid direct elicitations using prepared sentences, which are plagued with translation problems of finding meaning equivalents between the metalanguage and the object language. I found both works quite useful and adopted these strategies to create discourse contexts for my elicitations but with some modifications to fit my purpose of investigating the stative and the dynamic uses of the positional verbs. These discourse contexts were created based on my native speaker intuitions about the language and the cultural setting. The discourse contexts in 1, 2 and 3 below serve to illustrate this. They were created to explore the different verb forms that a speaker uses to describe different types of sitting positions i.e., stative vs. dynamic.

**Context 1:** Assuming you saw the elders at the front yard of the compound of the house where the funeral is being performed and they are in a position with their buttocks on the ground or on the logs with their legs stretched or their feet on the ground, how would you describe their posture?

---

10 Metalanguage refers to the language used for the description or discussion of the object language. The latter is the language being investigated (Matthewson 2004).
Context 2: If you saw one of those elders about to assume the position you have just mentioned in context 1 or bending down slowly like the way the elderly man in the house next to ours always does before he gets his buttocks on the ground or chair, what is the appropriate expression for describing the event of being about to get into that position or getting his buttocks on the chair but not yet?

(5) A zi‘i-ti la tiña bii kuka la zuo 3SG sit-DYN.IPFV FOC land or chair FOC head
'He is getting into a sitting position on the ground or on the chair.'
(NMA_031_20100310)

Context 3: Suppose you have seen one of the elders got into that posture (that is his buttocks firmly on the chair) and you wish to tell your friend what he did how would you say this?

(6) Hu ta’am yet kima la zi‘i-re la tiña 3SG be able say elder DEF sit-DYN FOC land
'you can say that the elder sat down on the ground.'
(NMA_032_20100310)

Note that in all these three discourse contexts three different but related forms of the verb ‘sit’ were used to code the different events and states in the responses provided; zi‘ be in a sitting posture’ in (4) i.e. be in state of sitting while zi‘iti in (5) ‘getting into a sitting position’, and zi‘iire ‘to assume a sitting posture’ in (6) both describe the action of assuming the sitting posture (i.e., dynamic). See the details of these three aspectual types in §3.3.2.

One challenge, in this type of elicitation is the choice of the metalanguage to be used. See for example, Matthewson’s (2004:394-398) arguments in favour and against the use of the metalanguage or the object language (i.e., the language being described, in this case, Gurenɛ). Her position is that the use of either language potentially runs the risk of influencing the response of the speaker. This may be through the use of certain expressions in the discourse context that can give away the answer or the native speaker transferring his/her knowledge of the structure of the metalanguage (e.g., English) to influence the answer. These concerns are both
legitimate as I have had to negotiate these situations in my fieldwork elicitation sessions. Although Matthewson (2004:371, 394-398) eventually argues for the use of English (and also French, Spanish, Portuguese for the languages in the Americas) as the metalanguage, my personal experience make me favour the use of the object language if one is a native speaker or has acquired a good knowledge in the object language to be able to do so.

As a native speaker, I have had the advantage of creating the relevant discourse contexts in Gurenɛ but usually with care to ensure that I do not pose a leading question that can prejudice the response of the consultant. A lot can be achieved by using the object language to create the appropriate discourse context for elicitation. For example, I observed that my consultants who did not speak any other language apart from Gurenɛ were articulate in providing responses to the contextual questions without hesitation or making an attempt to translate from another language that they have acquired. In contrast, some of my consultants who were teachers and have acquired English as a second language were quick to point out that the ‘getting into position’ positional verb type is progressive and would justify their claim by saying that is how English does it. It is obvious that they try to have their own ideas about the structure of Gurenɛ based on their knowledge in English tense-aspect system. This could be misleading if I did not speak the language or explore further how the aspectual system in the language functions with the verbs (see §3.2.2.1).

2.3.6 Contributors

All the speakers who contributed data to the study are native speakers of the Bolga and the Bongo dialects of Farefari. The contributors include different age groups, gender, and show variation in their experience, and expertise in the culture or in particular genres (e.g., folktale genres, songs, etc.). As pointed out in the fieldwork literature (cf. Samarin 1967:20-40; Levinson 1992:39; Vaux & Cooper 1999:7-21; Dimmendaal 2001:58-66; Mithun 2001:48-51; Newman & Ratcliff 2001; Ladefoged 2003:12-16; Crowley 2007:85-92; Bowern 2008:130-135, Samarin 1967:23; Mithun 2001:50) native speakers vary in their interest and their talents. They, therefore, they cannot be good consultants for every aspect of the investigation of the grammar and the positional verb phenomenon. The older speakers were knowledgeable in the
local tradition, culture and rituals but were generally found to be far less good in describing the stimuli sets at the elicitation and the grammar sessions compared to the younger speakers. The balancing of the different types of speakers contributed in obtaining a good and diversified data.

A total of 60 consultants\textsuperscript{11} contributed data of which 35 are major consultants (Table 16) while 25 are minor consultants (Table 17). The major contributors are those whose speech is recorded or written down during their participation in the elicitation sessions, narration or responding to a folktale, daily conversation on cultural issues, ritual genres, songs, riddles, procedural texts, and interviews. The minor contributors provided support to the main consultants by being present at the performance of a genre type or helping with a minimal role such as providing chorus during a folktale narration session or an elder who is present at an interview session and offering to explain an issue. In the data, the major contributors’ names are recorded whenever a data source is attributed to the consultant. The speech of the minor consultants is not represented in the examples.

\textbf{Table 16: List of major consultants}

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Sex</th>
<th>Age in 2011</th>
<th>Town/Village</th>
<th>Dialect</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMA</td>
<td>Nmaa Azoolega</td>
<td>F</td>
<td>22</td>
<td>Bukere</td>
<td>Gurenc</td>
<td>elicitation</td>
</tr>
<tr>
<td>PAT</td>
<td>Patience Asorema Akureba</td>
<td>F</td>
<td>32</td>
<td>Sumbrongo</td>
<td>Gurenc</td>
<td>Elicitation</td>
</tr>
<tr>
<td>TER</td>
<td>Theresa Alegemia</td>
<td>F</td>
<td>35</td>
<td>Dawiim</td>
<td>Gurenc</td>
<td>elicitation</td>
</tr>
<tr>
<td>PHI</td>
<td>Philip A. Anangina</td>
<td>M</td>
<td>50</td>
<td>Soe</td>
<td>Gurenc</td>
<td>elicitation/documentation</td>
</tr>
<tr>
<td>ROB</td>
<td>Robert Adongo</td>
<td>M</td>
<td>32</td>
<td>Soe</td>
<td>Gurenc</td>
<td>elicitation/documentation</td>
</tr>
<tr>
<td>JAM</td>
<td>James Akolgo Atia-Yamga</td>
<td>M</td>
<td>36</td>
<td>Zaare</td>
<td>Gurenc</td>
<td>elicitation/documentation</td>
</tr>
<tr>
<td>ABK</td>
<td>Akake Patrick</td>
<td>M</td>
<td>62</td>
<td>Tanzui</td>
<td>Gurenc</td>
<td>elicitation/documentation/conv./narr.</td>
</tr>
<tr>
<td>NYB</td>
<td>Nyaaba David Akolgo</td>
<td>M</td>
<td>66</td>
<td>Tanzui</td>
<td>Gurenc</td>
<td>elicitation/documentation/conv./culture</td>
</tr>
<tr>
<td>ATD</td>
<td>Ataho Domenic</td>
<td>M</td>
<td>65</td>
<td>Tanzui</td>
<td>Gurenc</td>
<td>elicitation/documentation</td>
</tr>
</tbody>
</table>

\textsuperscript{11} The consultants happily gave their consent for their names to be recorded in the thesis.
<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Age</th>
<th>Location</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATG Atanga Aboiyoom</td>
<td>M</td>
<td>83</td>
<td>Tanzui Guren</td>
<td>documentation/narrative/culture</td>
</tr>
<tr>
<td>AYM Ayimbiire Alogete</td>
<td>M</td>
<td>44</td>
<td>Tanzui Guren</td>
<td>documentation/ritual</td>
</tr>
<tr>
<td>ASO Asore Ada-a</td>
<td>M</td>
<td>85</td>
<td>Soe</td>
<td>tradition/culture/narrative</td>
</tr>
<tr>
<td>ADP Adapoka Asumakai</td>
<td>F</td>
<td>55</td>
<td>Soe</td>
<td>procedural or descriptive text</td>
</tr>
<tr>
<td>PET Peter Akurugo Awine</td>
<td>M</td>
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Table 17: List of minor consultants

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</table>

The stimuli data and the natural corpus are supplemented by my native speaker intuition. My native knowledge in the language contributed significantly to my understanding of some of the complexity of the Gurene data. In particular, it helped me to identify performance errors from the recorded data, grammatical structures that are ill-formed or rare in the grammar and also being able to describe or interpret the transcribed data provided by my research assistant without difficulty. Native speaker

2.7 Summary

This chapter discussed the fieldwork methods and techniques used for the collection of the data used for the study. The data fall broadly into three types; natural, stimuli, and elicited data. The natural data include spontaneous speech, folktales, and discourse context data obtained through observations in the community. The stimuli data consist of the various MPI picture stimuli and my own Gur Drawings and Photos. A quantitative insight is provided with tables and graphs to indicate the various contributions of the data types, both the natural and the stimuli data. An insight is gained with respect to the the number and distribution of the positional verbs per each data type. The different methods and techniques used for the collection of the data provide an optimal mix of methodologies that leads to balancing of potential rewards and limitations rather than relying on the use of one particular method. The use of the natural, stimuli, and elicited data in the study contributed to presenting a broader picture of the description of the speakers’ intuitive knowledge of space. Overall, the combination of the various data types provided a broad set of data to explore fully the semantics of the positional verbs in Guren as shown in the subsequent chapters. The next chapter presents the sketch grammar and discusses the essential grammatical features necessary to understand the analysis.
CHAPTER 3. SKETCH GRAMMAR

3.1 Introduction

This chapter covers the essential grammatical features of Gurenɛ necessary for understanding the argumentation and the examples used in the thesis. It provides highlights on the typological features of the language. The phonology as a whole is not directly relevant for the topic under study but brief remarks on the orthography and the tone are provided. The ATR vowel harmony and the morphophonemics are relevant for the discussion of the verb morphology and are discussed in the relevant sections of the chapter. The noun and the adjective are also not considered for my focus in this thesis is on the semantics and grammar of the positional verbs. However, verb morphology (especially derivational and inflectional suffixes, aspect, tense and modality) is treated in more detail to provide the necessary background for the discussion of the grammar and semantics of the positional verbs in subsequent chapters. In particular, an important part of this chapter is a detailed discussion of the aspectual properties of the positional verbs in light of Talmy’s three-fold’s aspect-causative typology (§3.3-§3.3.2). The verb phrase, verb particles and postpositions are also discussed as they play an important role in the locative construction. The discussion of clauses is brief and restricted to only what is required to follow the analysis.

A summary of the typological features of Gurenɛ includes the following:

- Gurenɛ is a tone language exhibiting high and low tone contrast at both lexical and grammatical levels with complex downstep and downdrift patterns attested.

- A cross-height vowel harmony based on advance tongue root (ATR) feature determines the phonetic alternations of the shape of vowels in a word.

- The predominant word order of Gurenɛ in both main and subordinate clauses is subject-verb-object (SVO) (cf. Dakubu 2003a) but permits other alternations for discourse pragmatic reasons. Grammatical relations are determined by
constituent order. Gurenɛ is dependent marking but not head marking both at
the phrasal and clausal level.

- Adpositions: mainly postpositions are mostly made up of body-part terms.
- Morphology is predominantly isolating with agglutinating features.
- Noun class is marked by singular-plural suffixes triggering agreement between
the noun head and its modifiers e.g., adjectives, demonstratives, numerals.
  This is not discussed in this thesis.
- TAM: tense and modality are expressed periphrastically by pre- and post-
  verbal particles but aspect is morphologically marked by suffixes for the
  imperfective but the perfective is usually not marked.
- Serial verb constructions of different types are common.

Gurenɛ shares a number of these typological features with the other Gur languages
in the Oti-Volta subgroup. The discussion, therefore, draws attention to interesting
parallels and divergences from the Gurenɛ data with respect to the other Gur
languages throughout the chapter for comparative purposes. Some parts of the
analysis in this chapter benefit from my recent work on Gurenɛ verb morphology and
phrase structure (Atintono 2011a).

A note on the Gurenɛ orthography

I adopt the unified Gurenɛ orthography in writing most of the examples in this thesis.
The orthography was developed by the Gurenɛ Language Development Association
(GULDA) in 2001 as a standard to facilitate teaching and learning of Gurenɛ in
schools. Its aim was to have a fair representation of all the five dialects of Farefari
(see §1.6.1) but the script is skewed towards the Gurenɛ dialect. The orthography
uses twenty five (25) Roman alphabet letters :<a, b, d, e, ɛ, f, g, h, i, k, l, m, n, ɲ, o, ɔ,
p, r, s, t, u, v, w, y, z>. Only seven vowel letters from the nine vowels are used in
writing. These are [i ɛ u o a]. The vowel letter ‘i’ represents the +ATR vowel [i] and
the -ATR vowel [i] as in kike [kike] ‘break’ vs. kkɛ [kkɛ] ‘dig out’ while the letter ‘u’
represents the +ATR vowel [u] and the -ATR back vowel [ʋ] as in tuke [tuke] ‘drive’ vs. tukɛ [tukɛ] ‘take load off head’. The vowel harmony determines which of the two vowels is intended in a word. The palatal ɲ is written as <ny>. The apostrophe ( ’ ) is used to represent the glottal stop [ʔ]. Vowel nasalization is represented with the nasal tilde as in ‘ä’ and tone (see below) both contribute to the orthographic conventions but are represented minimally in the orthography only in a phonological context involving minimal pairs when it is necessary to show contrast. The double articulated sounds <gb, kp, ŋm, ŋw> are also used in the spelling system but are restricted to some dialects of Farefari (e.g., Nankani).

A brief remark on tone

Gurenɛ like most other African languages is a tone language. The variation of pitch in a tone language brings about meaning difference in words which are otherwise identical (Yip 2002:1, 4). There are two basic tones in Gurenɛ, the high tone marked with the acute accent [’] and the low tone indicated by the grave accent [‘]. Tone contrasts exist at both lexical and grammatical levels (cf. R. Schaefer 1974). At the lexical level, tone is contrastive on nouns (see examples (1)-(5)) but not verbs (see (6)) below. The difference in the high and low tone patterns of the pairs of words from (1) to (3) correspond to meaning differences.

(1)   vàlɛŋà  ‘waist band’
     vàlɛŋá  ‘spider’

(2)   sírà  ‘truth’
     sírá  ‘husband’

(3)   yàbəgà  ‘young initiated woman’
     yábəgá  ‘poisonous tree’

The sequence of low-high tone or high-low is attested as shown below.

(4)   yùùnɛ  ‘year’
     yúùnɛ  ‘song’

(5)   sòlèné  ‘folktale’
     kúʔùnò  ‘guinea fowl’
The tone of the verb in Gurenɛ at the lexical level displays no minimal contrast. This makes different authors propose slightly different tonal status for the verb. For example, while on one hand, Dakubu (2006: 16-27; 2007:52-62) suggests that the verb is toneless basing her argument on the lack of minimal pair contrast, Atintono (2004; 2011a) on the other hand, proposes an underlying low tone at the lexical level in both its derivational and inflectional forms (see (6)). I maintain this same position based on some new evidence which suggests that in a pair of identical words, a noun and a verb, the verb always has a low tone while the noun takes a high tone (see (7)). Furthermore, Abakah et al. (2010) in a recent comparative study of Akan, Dangme and Gurenɛ tone systems also suggest that Gurenɛ verbs have an underlying low tone.

(6)  pìlè  ‘cover’ (singular)
     pìlè-gè  ‘uncover’ (opposite of cover)
     pìlè-sè  ‘uncover (plural)
     pìlè-sè-ri  ‘be uncovering (plural)’

(7)  zóì  ‘flour’
     zòì  ‘climb’
     gólè  ‘kind of pumpkin fruit’
     gòlè  ‘tie a cow horns to its legs’

At the grammatical level, the tone of the verb may vary to become high or low depending on the tone of the words preceding it or after. The meaning difference that may occur is not dependent on the verb tone but is dependent on the tone of the surrounding words. Examples (8) and (9) show that the high and low tones contrast on the verbs in the negative imperative constructions comes from the words preceding or following the verb. The high tone on dá causes the verb zóì ‘run’ to have a high tone in (8) but the low tone on yà ‘you (PL)’ influences the low tone of the verb zòì in (9). The meaning difference depends on the tone of the other words but not the verb tone. Both examples are commands addressed to one person and many people respectively.

(8)  dá zóì!
     NEG run
     ‘don’t run’!
If the verb co-occurs with other discourse particles in a sentence, the tone of these particles may affect the tone of the verb. In (10) the tone of the ingressive particle wà is high marking past and this affects the verb obé ‘chew’ to have a high tone. Example (11) in contrast, wà has a low tone marking future and this influences the low tone of the verb obé to have a low tone.

(10) Ábáa wà obé Ásó’oŋá kómá báyi Leopard INGR.PST chew Rabbit children two ‘Mr Leopard did eat two of Mr Rabbit’s two children.’ (ft_azu_251_20100424)

(11) Ábáa wà obé Ásó’oŋá kómá báyi Leopard INGR.FUT chew Rabbit children two ‘Mr Leopard will eat two of Mr Rabbit’s two children.’ (ft_aku_252_20100424)

Dakubu (2006:16-17) observes that tone alternations of verbal particles and pronouns can affect the tone pattern of the verb at the grammatical level as shown in (12) and (13). The low tone on the third person singular pronoun preceding the verb in (12) influences the low tone on the verb tù ‘insult’. This leads to the past or perfective interpretation but the high tone on the same pronoun in (13) also affects the verb tone which brings about the imperative interpretation.

(12) À tù bà 3SG insult 3PL ‘s/he insulted them.’

(13) À tù bá! 3SG insult 3PL ‘s/he should insult them.’ (Dakubu 2006:16-17)

To some extent, it seems to me that the construction type as a statement or a command appears to play a role here in the interpretation of these two examples as past or the potential and this determines the tone pattern as low or high. The tonal phenomenon at the grammatical level is, therefore, not entirely straightforward to work out the tone patterns because of the influence of the phonological and
grammatical contexts. What is quite certain is that the tone contrast on the verb is influenced by other words at the grammatical level as shown in (8)-(13). More complex tone patterns such as downstep and downdrift have also been reported in Gurenɛ tone system (see R.Schaefer 1974:464; Dakubu 1996 for discussions).

Although, it seems to be the practice that in most African languages tone is often marked, in this study, tone will not be marked on the examples unless its marking is crucial to the argument being made to clarify meaning difference. The point is that tone has no influence on the positional verbs in the locative construction in this study.

### 3.2 Verbs and verb morphology

This section seeks to characterise the essential grammatical features of Gurenɛ verbs with the aim of giving a systematic account of the verb morphology and to relate it to the discussion of the aspectual properties of the positional verbs (§3.3). The section provides only a general morphological description of the verb without tying the analysis to any particular morphological theory.

Verbs semantically express events, actions, processes and states. In terms of argument structure, there are transitive, intransitive and ditransitive verbs in Gurenɛ as in illustrated here.

\[ \text{(14)} \quad \ldots \text{kiibega la nyu ko'om la ba'asɛ gee nyaa...} \\
\ldots \text{orphan DEF drink.TR water DEF finish and now...} \\
\ldots \text{the orphan drank all the water and now...’ (ft_adag_147_20100420)} \]

\[ \text{(15)} \quad \text{Ti ba selese wuu ba ka nyc ko'om} \\
\text{and 3PL wait.INTR all 3PL NEG see.INTR water} \\
\text{‘and they waited for long and did not get the water.’ (api_229_20100608)} \]

\[ \text{(16)} \quad \text{ba bo e a tampɔɔ ti a kiŋɛ} \\
\text{the give.DITR him his bag COMP he go} \\
\text{‘they should give him his bag so that he will go.’ (ft_adag_105_20100420)} \]

As discussed below, verbs take both derivational and inflectional suffixes. Aspect is marked by verbal suffixes but tense is expressed periphrastically by pre- and post-verbal particles (see §3.4.1 below). I discuss the verb morphology first to lay out the aspectual properties of the verbs and its relevance to the semantics of the positional verbs in the locative construction. The verb phrase is discussed in §3.4.
The morphology of the verb contributes to a better understanding of the meaning of the positional verbs in the locative construction. For example, the positional verb forms which express the static location of an entity or the putting of an entity into posture or position are associated with the verb morphology as discussed in §3.3.2. In terms of morphological typology, Gurenɛ words predominantly exhibit isolating and agglutinating features. That is, some words consist of a root or a stem with suffixes as shown in the discussion below. Cross-linguistic studies suggest that there are probably no languages that belong exclusively to one morphological type (see Whaley 1997:127-133; Aronoff 2005:170-172; Katamba & Stonham 2006:58-63). The defining criterion for the classification of a particular language into a morphological type as Whaley (1997) suggests is based on the dominant morphological strategies that the language uses. Most Gurenɛ words in a sentence occur as free morphemes or may have affixes with a clear boundary between the root and the affix (agglutinating). Verbs consist of roots or are modified with verb suffixes. Deverbal nouns can also be derived with suffixes but they are not discussed here. This section examines mainly the derivational and inflectional verb suffixes. Dakubu (2003a) was probably the first person to discuss these verbal suffixes in Gurenɛ but she did not treat them in detail. Atintono (2004a, 2006, 2011a) following Dakubu (2003a) also discussed these suffixes in more detail but with a limited discussion on their role in determining the aspectual properties of the positional verbs. The present discussion builds on these works to provide new insights into this phenomenon.

3.2.1 Derivational suffixes

Gurenɛ has four derivational suffixes, -GE, -seɛɛ, -m and -leɛɛ, which can be attached to a free or a bound root to derive new verb stems to express different kinds of grammatical meanings as discussed below. Thus, the derivational process derives a subclass of verbs within the verb class. The verb root is the morphological core or unit which cannot be further divided (cf. Aronoff 2005:2-3; Katamba & Stonham 2006:42; Aikhenvald 2007:38). Most of the verb roots that the suffixes combine with have lexical or grammatical meaning but in some roots the meaning is not always obvious unless a suffix is added to modify them. For example, the verb root pile ‘cover’ is a free root morpheme which takes the suffix -ge to derive the reversive form
pile-ge ‘uncover’ while pag- ‘on top, of a flat or flexible object’ is a stative bound root which can take the suffix -leɛ to derive the form pagə-leɛ ‘put a flat or flexible object on top’. In contrast, the bound root tag- is not associated with any specific meaning unless the suffix -geɛ or -seɛ is added to the root to derive takɛ ‘plaster walls’ and tagɛ-seɛ ‘give more than once’. More generally, derivational morphology in Gurɛ and other Gur languages (see Bodomo 1997:90-92) is not a well developed or elaborate phenomenon and is restricted to the derivation of a few verb stems. The reasons for this less productive derivational morphology are that there are many verbs with very specific meanings which can be used to describe events and states, and there are also many verb particles used for expressing all kinds of grammatical meanings which can compensate for the use of derivational morphology. Bodomo (1997) suggests verb serialisation accounts for the less productive verb morphology in Gur and some African languages in general.

The suffixes -GE, -seɛ, -m express meanings that include reversive, intensification or emphatic actions, singular and plural while the suffix -leɛ derives verb stems from stative positional verb roots to express moving or putting into a posture state or position. This latter suffix concerns us most in this study but the others are also discussed to present the general picture of the Gurɛ morphological system.

One important morphophonemic feature of Gurɛ verb suffixes is that the vowels in the suffixes have variant alternations conditioned by advanced tongue root (ATR) features. The alternation is between +ATR or -ATR vowel quality depending on the phonetic shape of the root or stem vowel. The ATR is an articulatory feature based on whether the tongue is pushed forward or backward in the production of vowels. The ATR vowel harmony rule in the language requires vowels of the same set, the +ATR set (i e u o) or the -ATR set (ɪ ɛ ʊ ɔ a) to co-occur in one word. Most Gur languages, for example, Dagbani (Dakubu 1997:81-88; Hudu 2010), Dagaare (Bodomo 1997:20-25), Buli (Akanlig-Pare 2002), Safaliba (P. Schaefer 2009), and Kasem (Awedoba 1993) and many other African languages (see Stewart 1967; Williamson 1989; Spencer 1996:29; Clements 2000; Aronoff 2005) are said to have this ATR phenomenon in their phonological systems. For example, in Gurɛ, the positional verb pugɛ-leɛ ‘put an object to float in liquid’ has +ATR vowel ‘u’ in the root.
and requires a +ATR vowel ‘e’ from the same set in the suffix while another verb 
do_\text{ge-}l^\text{e} ‘put on top, of an unstable object’ also contains -ATR vowel ‘o’ in the root and takes ‘e’ in the suffix from the same set. A point to note here, however, is that the vowel ‘a’ although classified as -ATR based on its articulatory features, is actually neutral to these distinctions in its distribution as it can occur with verbs or words that may have vowels belonging to either set. For example, the stative positional verb forms, 
pug-\text{a} ‘be located afloat’ and 
dog-\text{a} ‘be located on top, of an unstable object’ both have the stative vowel ‘a’ in the suffix when these verbs occur as a second verb in a serial verb construction.

The suffix: -\text{GE}

The suffix -\text{GE} is an underlying form which represents the allomorphic variants /-\text{gE}/, /-\text{ŋE}/ and /-\text{kE}/ which are predictable in certain phonological environments. I provide a quick review of some of these morphophonemic processes here to facilitate the discussion of the meanings of the suffix. The upper case letter used to represent the vowel in the suffix represents the alternation of the final vowel as a result of the ATR vowel harmony. The suffix -\text{GE} is realised as -\text{ge}/ɛ/ when added to a root ending with a final vowel (see (17) below) or a root which requires the addition of the schwa vowel /\text{ə}/ usually written as <e> (see (23) below) or any other vowel before suffixation. This phonological modification of the verb root often leads to the extension of the derived stem. The allomorphic variant -\text{ke}/ɛ/ is obtained when the consonant of the suffix -\text{GE} is /g/ and combines with a root that terminates with the voiced velar stop /g/. Atintono (2004a: 20-22, 2006: 66, 2011a) and Dakubu (2003a: 1-5) suggest a phonological process of assimilation where the consonant of the suffix -\text{GE} has an underlying -g plus -g of the root which yields the voiceless velar stop k. I adopt this line of explanation but add that it is a case of coalescing rather than assimilation. The resulting stem is usually made up of a root and a suffix fused together making it difficult to separate morpheme boundary between the two as the derived stems in the bottom three in (17) show. Finally, when -\text{GE} is suffixed to a verb root ending with a nasal consonant the derived verb stem has the consonant -\text{ŋ} (see (25) below). The suffix -\text{GE} has a general meaning of expressing singular action.
which applies to all verbs derived with the suffix independent of any other specific meaning that a variant suffix may have.

One specific function of the suffix -GE is that it attaches to a few verb roots and derives verb stems with the reversive (opposite) meaning to the root (Atintono 2011a:58-9). See examples (17) and (18). Observe that when the verb root is ending with a vowel, the variant suffix of -GE that is realised in the reversive forms is -geɛ. Otherwise, if the stem contains a bound root like the last two forms at the bottom of example (17) the combination of the root consonant g and the suffix consonant g coalesces or merges to become k in the derived stem. This gives the allomorphic variant suffix as -keɛ. The derived verb stem, in this case, is a tightly fused stem because of the phonological adjustment in the root. That is, there is no clear boundary between the root and the suffix.

(17) Root | Reversive stem
---|---
pile ‘to cover or to roof’ | pile-ge ‘uncover or rip off roof’
yule ‘hang’ | yule-ge ‘unhang’
lile ‘hide’ | lile-ge ‘come out from hiding’
libe ‘turn upside down’ | libe-ge ‘turn face up’
pag- ‘on top, of flat thing’ | pake ‘remove a flat thing from top’
dog- ‘on top, of unstable thing’ | dokɛ ‘remove unstable thing from top’

(18) …ti  ba  dikɛ kɛme-si  pile  sukuu  la  ti  ...CONJ  3PL  take  iron.sheet-CL4  cover  school  DEF  and  kusebe-katɛ  la  daa  wa’am  wâ  pile-ge  basɛ  wind-big  DEF  PST  come  INGR  cover-REV  leave  .
‘…and they took iron sheets to cover the school building (roof) and the big wind came to uncover it (rip it off).’ (Field notes 039_201003)

Apart from these derived revesive forms, most reversive meanings are expressed by other pairs of verbs which are unrelated in their form or lack identical verb roots. For example, laɛ ‘bury’ vs. gurege ‘exhume’, vole ‘swallow’ vs. uke ‘vomit’. These verbs are not discussed here.

In their discussion of the suffix -GE, Dakubu (2003a, 2006) and myself (Atintono 2004a, 2011a) suggest that the suffix -GE also derive verb stems that express the lexical aspectual meaning of the completion or end phase of an event. In other words, verbs with the suffix -GE express the meaning that the process or event is at the final phase or is completed. The findings in this study and based on new data...
available do not support this view. It seems to me that the completive interpretation that Dakubu and Atintono associated with the suffix -GE is actually the perfective interpretation which is not via the verb morphology. In Gurenc, both the derived verbs as well as the non-derived verbs, except stative positional verbs can receive the perfective (i.e., a situation viewed as a single whole) reading in a sentence when there is no past tense particle or imperfective aspect marked on the verb (see my discussion of the imperfective aspect in §3.2.2.1 and tense in §3.4.3 below). For example, both (19) and (20) receive the perfective interpretation despite the fact that in (19) the verb bobe ‘tie firm’ does not have the suffix -GE as bobe-ge ‘tie very firm’ in (20). Compare both (19) and (20) with (21) where the the verb bobe-ra ‘be tying’ is in the imperfective and the situation is viewed as ongoing.

(19) A dikɛ la mi’a bobe kinkã la s/he take FOC rope tie.firm stalks DEF ‘s/he took a rope and tied the stalks firm.’

(20) A dikɛ la mi’a bobe-ge kinkã la s/he take FOC rope tie.firm-EMPH stalks DEF ‘s/he took a rope and tied the stalks very firm.’

(21) A dikɛ la mi’a bobe-ra kinkã la s/he take FOC rope tie-IPFV stalks DEF ‘s/he took a rope and is tying the stalks.’

My proposal here is that the suffix -GE also expresses the meaning of intensifying or adding emphasis to the action performed or to be performed as the contrast between (19) and (20) show. See also the emphatic forms in (22). Recall that the surface form of the suffix -GE realised in this case is -ge. The verb roots in (22) have the non-emphatic meaning while the derived stems express the emphatic meaning. The derived forms are restricted to emphatic use while the roots are used only when the speaker does not intend to emphasize. The verbs in this group are different from the reversive forms in (17) in that the derived stems do not express the reverse of the action.

(22) Root | Emphatic stems
---|---
bobe ‘tie’ | bobe-ge ‘tie very firm’
lobe ‘throw’ | lobe-ge ‘throw with force’
yoʔe ‘open, e.g. door’ | yoʔo-ge ‘open wide’ e.g., door
veʔe ‘pull’ | veʔe-ge ‘pull very firmly’
There are other verbs observed in the data that obviously include verb stems, which end with the suffix -GE but they neither express the reversion nor the emphatic meaning (see (23)). The meaning of the bound roots of these verbs is not obvious either, unless the suffix is added to derive the stem. What is quite certain is that the derived verb stems express the general meaning of a single performance of the action. Example (24) is an utterance taken from a procedural text where a brewer explains the process of fermenting a local brew. Notice that the verb kabegɛ ‘fetch’ does not express emphasis but describes the single action of taking some of the drink to mix with another.

(23)  Root  |  Derived stem  
------|----------------
  kab-  |  kab-ɛ-gɛ  `fetch, e.g. water, in a single action’
  gol-  |  gol-ɛ-gɛ  `negotiate a curve in a single action’
  tag-  |  takɛ  `plaster walls in a single action’
  kig-  |  kikɛ  `dig out once’

(24)  tu  ni  kaba-ɛ-gɛ  la  da-sebo  n  kele  la
       1PL HAB  fetch-SG  FOC  drink-DEM  REL cry  FOC
       pa’asɛ  sebo  n  ka  kele  la  puan  ti  bu  kele
       add  DEM  FOC NEG  cry  FOC inside that it cry
`We always fetch the drink which is fermented and add it to that of the unfermented drink to ferment it.’ (dtx_adp_025_20100711)

The singular derived verb forms in (25) have a root and the suffix -GE but the derived verb stems do not express either the reversion or the emphatic forms discussed above. They, however, express a single action or performance as their corresponding derived plural forms show. See an illustration in a sentence in (26). The root of these verbs ends with a nasal consonant which is represented by the upper case nasal consonant ‘N’. When the suffix -GE is combined with the verb root, the derived stem has the allomorphic variant suffix -ŋɛɛ as shown in the singular form of the derived stem.

(25)  Root  |  Derived stem (SG)  |  Derived stem (PL)
------|---------------------|---------------------
  laN-  |  laŋɛ  ‘light a fire’  |  lame-se  ‘light many fires’
  peN-  |  peŋɛ  ‘borrow once’  |  pemɛ-se  ‘borrow more than once’
  loN-  |  loŋɛ  ‘cross once’  |  lome-se  ‘cross more than once’
The plural suffixes: \textit{-se/ɛ} and \textit{-m}

The suffix \textit{-se/ɛ} or \textit{-m} expresses plurality of the action or process denoted by a verb. I discuss first the suffix \textit{-se/ɛ} which is widely distributed. The addition of the plural suffix \textit{-se/ɛ} to a verb root expresses an increase in quantity or length of an action or process. That is, the derived verb describes an action which is performed more than once either to a single entity or many entities. The plural meaning of the suffix is restricted to events rather than states (cf. Booij 2005:211, 2007, 2012). The explanation is that actions or events can be iterated but not states. Note that the singular verb forms in (27) with the exception, of \textit{bobe} are derived stems with the underlying suffix \textit{-GE}, discussed in the preceding §.

\begin{table}
\begin{tabular}{|l|l|l|}
\hline
\textbf{Root} & \textbf{Singular stem (SG)} & \textbf{Plural stem (PL)} \\
\hline
loN- & loɲɛ ‘cross once’ & lomɛ-\textit{se} ‘cross more than once’ \\
\textit{dug} & \textit{duke} ‘take a pot off fire’ & \textit{duge-sec} ‘take many pots off fire’ \\
\textit{dig} & \textit{dike} ‘take once’ & \textit{dige-sec} ‘take more than once’ \\
\textit{bobe} & \textit{bobe} ‘tie firm, once’ & \textit{bobe-se} ‘tie firm, more than once’ \\
\hline
\end{tabular}
\end{table}

\begin{example}
Goo la pugela la daa loɲɛ la kayima gee lomɛ-\textit{se} goto pia gee kulega pae yire
\end{example}

\textbf{CONJ} cross-\textbf{PL} forests ten and river reach house

\begin{quote}
‘Mr Forest and the girl crossed one river and crossed ten forests before reaching home.’ (ft_aga_089_20100531)
\end{quote}

The verbs with the suffix \textit{-m} also express plurality of the performance of the action as illustrated in the singular and the plural pairs in (29). In (30), \textit{korege} expresses singular meaning of the earthpriest\textsuperscript{12} slaughtering one single entity while in (31) \textit{korum} has the meaning that the earth priest performed the action on more than one

\textsuperscript{12} \textit{Tindaana} ‘earthpriest’ is the spiritual leader of the Farefari community and owner of the land and performs various sacrifices to the gods as part of his spiritual role in the community.
chicken. The suffix -m appears to mark agreement on the verb whenever the object is singular or plural as (30) and (31) show. Thus, in (32) the ungrammaticality arises as a result of the use of korege to describe the slaughtering of more than one chicken. As explained earlier in my discussion of the suffix -GE a vowel is inserted in the root to separate consonant cluster before the suffixation of -m as the derived plural stems show here.

(29) The -m suffix forms (plural)

<table>
<thead>
<tr>
<th>Root</th>
<th>Singular stem</th>
<th>Plural stem (PL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>kor-</td>
<td>korege 'slaughter one thing'</td>
<td>korum ‘slaughter many’</td>
</tr>
<tr>
<td>lor-</td>
<td>lorage untie one thing or once’</td>
<td>lorum ‘untie many things’</td>
</tr>
<tr>
<td>gur-</td>
<td>gurage ‘exhume a grave’</td>
<td>gurum ‘exhume graves’</td>
</tr>
</tbody>
</table>

(30) Tin-daana la kore-gɛ la nua ayila land-owner DEF slaughter-SG FOC chicken.SG one ‘The earthpriest slaughtered one chicken.’ (i.e., on a single entity)

(31) Tin-daana la koru-m la nuu-si pia land-owner DEF slaughter-PL FOC chicken-PL ten ‘The earthpriest slaughtered ten chickens.’ (i.e., on many entities)

(32) *Tindaana la kore-gɛ la nuu-si pia land.owner DEF slaughter-SG FOC chicken-PL ten ‘The earthpriest slaughtered ten chickens.’ (i.e., on many entities)

There are other verbs ending with the suffix -m but they do not express plurality. For example, the configurated verb kuurum ‘be coiled or folded unevenly’ discussed under verbs of distribution in §5.2.4.6 is one such verb.

The suffix: -leɛ and its allomorphic variant -reɛ

The suffix -leɛ concerns us most in this study. The suffix -leɛ derives verb stems from stative positional verb roots to express moving into or putting an entity into a posture, position or location. The derived verb stems make a differentiation between action and static locations. The term dynamic\(^\text{13}\) situation or event is often used in the

\(^{13}\) The dynamic situation refers to verb forms that describe action or movement and in the positional verb literature the dynamic refers to a situation where an entity is getting into or put into a position which is in contrast with the static or stative (Comrie 1976:48-51; Newman 2002a; Newman &
semantic literature to refer to distinct verb forms used to express ‘action’ in contrast to a ‘state’ (see Comrie 1976:13, 48-49; Lyons 1977b; Newman 2002b; Vandelooise 2006:139). In this study, I will use the term ‘dynamic’ in this sense to refer to the positional verbs that describe getting into a posture state or putting into a posture state and gloss the suffix -leɛ as DYN (dynamic). Compare (33) where the addition of the suffix -leɛ to the stative positional verb roots derives verb stems which express putting an entity into a position. As noted earlier in the discussion of the suffix -GE above, when a verb root ends with a consonant in final position it requires the insertion of the schwa vowel /ə/ (see (33) below) or any other vowel to break consonant cluster before suffixation. This phonological process often leads to the extension of the derived stem.

(33)  
<table>
<thead>
<tr>
<th>Stative root</th>
<th>Derived dynamic stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>dog- ‘on top, unstable’</td>
<td>doge-le ‘put on top, unstable’</td>
</tr>
<tr>
<td>pag- ‘on top, flat’</td>
<td>page-le ‘put on top, flat’</td>
</tr>
<tr>
<td>pug- ‘on top, afloat’</td>
<td>puge-le ‘put to be afloat’</td>
</tr>
<tr>
<td>yag- ‘on top, stable’</td>
<td>yage-le ‘put on to be afloat’</td>
</tr>
<tr>
<td>zeʔ- ‘be standing’</td>
<td>zeʔe-le ‘stand’</td>
</tr>
<tr>
<td>tīʔ- ‘be leaning’</td>
<td>tīʔi-le ‘lean’</td>
</tr>
</tbody>
</table>

Contrary to Dakubu’s (2003a) and myself (Atintono 2004a, 2006) suggestion that the suffix -leɛ expresses the ‘inchoative’ which marks the beginning or inception of an event, based on new insights it is argued here that the suffix -leɛ changes stative positional verb roots into dynamic verb stems. The stem with the suffix -leɛ is actually neutral with respect to causative or inchoative reading in a sentence instead it is the construction type which determines the inchoative or causative meaning. For example, in (34), the verb zeʔ ‘be standing’ expresses the stative, of the man being in a standing posture state but observe that in both (35) and (36) the same derived dynamic verb stem zeʔe-le is used to express the man adopting a standing posture (i.e., the inchoative) and the putting of bia ‘child’ into the standing posture (agentive/causative) respectively. The crucial difference between (35) and (36) is that

Yamaguchi 2002). It subsumes Talmy’s (2000: 79; 2007:118), entering into a state (inchoative) and putting into a state (agentive) types.

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the direct object, *bia* ‘child’ in (36) triggers the causative reading; instead of the inchoative. Thus, the construction type is responsible for this contrast but not the verb *ze’ele* which only expresses the dynamic event. This aspectual feature of the Gurenɛ positional verb data becomes interesting to the aspect-causative typology proposed by Talmy (1985, 2000a, 2007). I explore in more detail the aspectual distinction between the different positional verb forms used to express the stative and the dynamic situation types in the locative construction in §3.3.1-§3.3.2 in light of this typology.

(34) Budaa la *ze’* la tiŋa
man DEF stand.STAT FOC ground
‘The man is standing on the ground.’ (i.e., stative, be in a standing posture)

(35) Budaa la *ze’e-le* la tiŋa
man DEF stand-DYN FOC ground
‘The man stood on the ground.’ (inchoative, adopt a standing posture)

(36) Budaa la *ze’e-le* la bia la tiŋa
man DEF stand-DYN FOC child DEF land
‘The man stood the child on the ground.’ (agentive, put to stand)

There is an allomorphic variant -reɛ of the dynamic suffix -leɛ which is attached to the stative verb roots of two posture verbs *zĩ* ‘be in a sitting posture’ and *gã* ‘be in a lying posture’ to derive their dynamic forms *zĩ-i-re* ‘sit’ and *gã’a-re* ‘lie’:

(37) A *zi̓-i-re* la kuka zuo
3SG sit-DYN FOC chair head
‘s/he sat down on the chair.’

(38) A *gã’a-re* la suŋŋa la puan
3SG lie-DYN FOC mat DEF inside
‘s/he lay down on the mat.’

Apart from the derived verb stems, a number of verb roots in Gurenɛ occur as monomorphemic verb stems and they vary in their form (see (39)). Although the form of some of these verbs have endings similar to the -leɛ suffix such as *kule* ‘go home’, and *vole* ‘swallow’ they are not suffixes as explained earlier, that the suffix -leɛ attaches only to stative positional verb roots. Examples (40) and (41) illustrate the use of these verbs in a sentence.
Monomorphemic verb roots

di ‘eat’
bo ‘give’
da’ ‘buy’
kĩ ‘pinch’
mi ‘know’
vo le ‘swallow’
kule ‘go home’

(39) saama la bo tu la ligeri
visitors DEF give 1PL FOC money
‘The visitors gave us money.’ (fieldnotes 201005)

(40) A kule la yire
3SG go.home FOC house
‘s/he has gone home.’

(41) A kule la yire
3SG go.home FOC house
‘s/he has gone home.’

Both the derived and the non-derived verb stems can also take the imperfective suffixes as discussed below.

3.2.2 Inflectional suffixes: -ri/-ra and -i/-a

3.2.2.1 Imperfective aspect: -ri/-ra

The suffixes -ri/-ra express the imperfective aspect which includes both the progressive and the habitual. Aspect in this case refers to the different ways of looking at the internal temporal organisation of a situation (Comrie 1976:3; Dowty 1979:52; Bybee 1985:142; Dahl 1985:24; Chung & Timberlake 1985:202; Smith 1997:14; Sasse 2002:203). That is, the situation is not viewed with reference to any specific time but focuses on the internal temporal structure. In discussing aspect in Gurenɛ, it is important to point out that the perfective aspect is not expressed with a verb suffix. The verbs seem to have an inherent meaning of the perfective aspect and this is further determined contextually in a sentence in that any verb which is not marked with the imperfective suffix or is not one of the stative posture verbs (zĩ ‘be sitting’, ze’ ‘be standing’, and gã ‘be lying’) receives a default perfective reading. Gurenɛ has no formal marking of the perfective via verb morphology. It is, therefore, unmarked unlike the imperfective which is marked with verb suffixes. The perfective verb expresses a situation which is viewed as a unified whole or complete and usually has a past tense interpretation in Gurenɛ (see §3.4.3 for a discussion on tense). Compare (42) and (43). While in (42) the throwing event is viewed as a single
whole with the verb *lobe* ‘throw’ having a perfective reading, example (43) presents the situation as being in progress and not complete with the imperfective verb *lobe-ri* ‘be throwing’. The imperfective aspect is quite similar to English continuous or progressive form of the verb (*-ing*).

(42) A *lobe* la kugere 3SG throw.PFV FOC stone
‘s/he threw a stone.’

(43) A *lobe-ri* la kugere 3SG throw-IPFV FOC stone
‘s/he is throwing a stone.’

The unmarked perfective verb appears to be a typological feature in the Gur verbal systems. See Bodomo’s (1997:90-91) on Dagaare unmarked perfective verb in (44) and contrast it with (45) where the imperfective is marked. Similarly, Olawsky (1999:27-28) observes that the perfective is unmarked in Dagbani but the imperfective is marked as shown in (46) and (47).

*Dagaare*

(44) O *ko* ma la gane he give.PFV me fact book
‘He gave me a book’
Bodomo (1997:103)

(45) n ɛ-ɛ la
I go-IPFV fact
‘I am going’
Bodomo (1997:82)

*Dagbani*

(46) n *di* nyuli
I eat.PFV yam
I ate yam'

(47) piɛɣu ŋo nyu-ri kom pam sheep DEM drink-IPFV water much
‘This sheep drinks a lot of water.’

In the cross-linguistic literature on aspect, there is variation of how languages represent the perfective and the imperfective in their aspectual systems. The Gur languages are unlike the Slavic languages (e.g., Russian), where both the perfective
and the imperfective are morphologically expressed on the verb (see Comrie 1976:21; Dahl 1985; Bertinetto 1994; Bickel & Nichols 2007; Gvozdanović 2012). Even in Russian, the morphological distinction between the perfective and the imperfective is irregular as the literature shows.

The imperfective suffixes -ri/-ra attach to verb roots or stems to express an ongoing situation, a happening in ‘progress’ (progressive) or situation(s) occurring over an extended period of time (habitual). The relationship between the imperfective suffixes and the derived verb stems is that the latter can still take on the imperfective suffixes. The meanings associated with the derived verb stems, plurality, dynamicity, and reversive will still be maintained. This is because the derived forms are mostly lexical while the inflected forms are more grammatical. For example, in (48) the verb page-ɛ ‘put on top, flat’ expresses a dynamic (agentive, i.e., putting into position) in the locative construction and has the perfective interpretation that the situation is a unified whole. However, in (49), when the imperfective suffix -ri is added to the dynamic suffix -ɛ (i.e., ɛ+ri) the result is the allomorphic variant -li as shown in the imperfective verb page-li. The construction still has a dynamic imperfective reading of a person progressively putting the book to be flat on the table. I will gloss the imperfective suffix on the positional verb stems as the dynamic imperfective (DYN.IPFV). Its use like the dynamic suffix -ɛ is restricted to the positional verb roots. Thus, we see that both the lexical and grammatical aspect readings are still maintained and align perfectly with derivational and inflectional morphology of the verb. In §3.3 below, I discuss the aspectual properties of the positional verbs.

(48) A page-ɛ goŋo la teebule la zuo
3SG be on top-DYN book DEF table DEF head
’s/he has put the book on top of the table.’

(49) A page-li la goŋo la teebule la zuo
3SG be on top-DYN.IPFV FOC book DEF table DEF DEF
’s/he is putting the book on top (flat) of the table.’

The imperfective suffixes -ri/-ra also express both the progressive and the habitual aspects on verb stems depending on the grammatical context and type of construction that they occur in. I discuss the details later in this section but see (50) where both verbs with the -ri and -ra suffixes have habitual interpretation of a person
who characteristically goes to the riverside and ties the stalks as a habit. Observe that the construction is a serial verb construction involving the use of two verbs compared (43) and (49) where the constructions involve only one verb.

(50) A sige-ri la kulega bobe-ra kinka 3SG go.down-IPFV FOC river tie-IPFV stalks
‘s/he has been going to the riverside to tie stalks.’ (habitual reading)

In this study, I will gloss both the habitual and the progressive aspects as imperfective, except in cases where it is necessary to illustrate a point that I provide separate glosses. The reason for this choice is that it is not always entirely clear to make a distinction between the two in Guren as the context plays a role. Thus, the imperfective subsumes both the progressive and the habitual aspects. In other words, the imperfective is the general meaning from which the individual meanings of the progressive and the habitual are predictable from the context. This is not new in the aspectual literature where the imperfective corresponds to both the progressive and the habitual in some languages (see Comrie 1976:25).

The suffixes -ri/-ra have the allomorphic variants -ti/-ta, -ni/-na, -li/-la. The different surface variants of the consonant -r- (-t-, -l-, -n-) in the suffix depends on the type of verb root or stem that is inflected. The suffixes -ti, -li and -ni are quite restricted in their distribution in verb stems compared to -ri.

Monosyllabic verb stems that require the extension of the stem before suffixification of the imperfective suffix take -ri as in (51) and (52).

(51) Root Imperfective stem
nyu ‘drink’ nyuu-ri ‘be drinking’
yɔ ‘pay’ yɔɔ-ri ‘be paying’
kʊ ‘kill’ kuu-ri ‘be killing’
wa’ ‘dance’ wa’a-ri ‘be dancing’

(52) Nii la nyuu-ri la ko’om kulega la puan cattle DEF drink-IPFV FOC water river DEF inside
‘The cattle are drinking water in the river.’ (i.e., at the present moment)

Derived trisyllabic verb stems, which do not end with the suffix -le take the suffix -ri as in (53). The verb deme-se-ri has the derivational plural suffix -se before the addition of the imperfective -ri.
The variant suffix -ti attaches only to a monosyllabic or a disyllabic verb root which requires no extension before suffixation, otherwise -ri must be used. The suffixation of -ti results in the deletion of the final sound or a syllable of the root as (54) shows. Trisyllabic verb stems do not permit the suffix -ti but takes -ri (see the last imperfective form in (54)). Example (55) is an illustration in a sentence.

(54) | Verb root | Imperfective         |
--- | --- | --- |
| di  | ‘eat’ | di-ti ‘be eating’ |
| zoi | ‘run’ | zo-ti ‘be running’ |
| kure | ‘to forge metal’ | ku-ti ‘be forging’ |
| torɛ | ‘to share’ | to-ti ‘be sharing’ |
| lorege | ‘untie’ | *lorese-ti/lorese-ri ‘be untying many things’ |

(55) Baa la zo-ti ti a nyokɛ la ku’unŋa la dog DEF run-IPFV COMP it catch FOC guinea.fowl DEF ‘The dog is running to catch the guinea fowl.’ (Fieldnotes 201004)

When a verb root or stem is ending in -leɛ the allormophic variant -li of the imperfective suffix -ri is realised as in (56) with (57) as an illustration in a sentence.

(56) | Verb root | Imperfective         |
--- | --- | --- |
| kule | ‘go home’ | kuli ‘be going home’ |
| vole | ‘swallow’ | voli ‘be swallowing’ |
| pile | ‘cover’ | pili ‘be covering’ |
| kele | ‘cry’ | keli ‘be crying’ |

(57) Bilia la ke-li ɛɛ-ra la dia baby DEF cry-IPFV want-IPFV FOC food ‘The baby is crying for food.’

Verb roots or stems ending with a nasal consonant take the imperfective suffix variant -ni as illustrated here.

(58) | Verb root | Imperfective         |
--- | --- | --- |
| mom | ‘stir’ | mo-ni ‘be stirring’ |
| zom | ‘climb’ | zo-ni ‘be climbing’ |
| belum | ‘plead’ | bele-ni ‘be pleading’ |
| yuum | ‘sing’ | yuu-ni ‘be singing’ |
The Progressive and the Habitual overlap

As noted earlier, the imperfective suffixes -ri/-ra, and their allomorphic variants -ti/-ta, -ni/-na, -li/-la are used to mark the progressive or the habitual or both on verb stems. I will now discuss why the distinction between the two aspectual categories expressed by the suffixes -ri/-ra may be vague in some contexts or may overlap as observed in the beginning of this section. Generally, the suffix -ri marks the progressive while the suffix -ra marks the habitual. However, as it is shown in the discussion below, the context and different constructions can lead to an overlap of the two functions.

The progressive aspect refers to a situation or an action viewed as ongoing at the moment of speech and has the potential to continue beyond speech time. The examples discussed here were elicited in context based on the tense-aspect questionnaire discussed in §2.3.5 on the methodology. In (61) kɔɔri ‘hoeing’ describes the labourers’ hoeing the chief’s farm as being in progress at speech time while in (63) dugeri also describes the event of the women preparing food which is in progress.

(60) Kaare-ba la boi naba yire ita la beni?
labourer-CL2 DEF be at chief house do.IPFV FOC what
‘What are labourers doing at the chief’s palace?’

(61) Kaare-ba la kɔɔ-ri la naba samanɛ
labourer-CL4 DEF hoe-IPFV FOC chief farm.land
‘The labourers are hoeing the chief’s farm (i.e, at the present moment).’

(62) Poge-si la i-ti la bem yire la puan?
woman-CL4 DEF do-IPFV FOC what house.CL5 DEF inside
‘What are the women doing in the house?’

(63) Poge-si la duge-ri la dia
woman-CL4 DEF cook-IPFV FOC food
‘The women are cooking food (at the present moment).’

The habitual aspect codes events or situations that occur over an extended period of time (Comrie 1976:27). The event might have been happening in the past and
continues to the present and may well exist for an indefinite period in the future. The
habitual form of the verb has the suffix -ra and usually but by no means always,
appears on the second verb in a serial verb construction as in (64) to express a
characteristic behaviour (in this case a person who often goes to drink beer at a
certain place). Note that the verb nyuuuri has the suffix -ri and this form is not
acceptable in a serial verb construction as (64) shows. Also, observe that the first
verb kini in (64) has the imperfective variant suffix -ni with the interpretation in this
context as the habitual comes but not progressive coming. The habitual and the
progressive overlap in this context and in a serial verb construction, the suffix -ra but
not -ri is accepted on the second verb.

(64)  A    ki-ni    la    tuma    yire    nyuu-ra/*nyuu-ri
       3SG    come-IPFV    FOC 1PL    house    drink-IPFV/*drink-IPFV
daam beer
‘s/he comes to our house to drink beer.’ (i.e., he regularly goes there)

If the habitual event used to happen in the past which no longer exists then the past
tense particle daa or the time reference marker yuum ‘years ago’ will precede the
verbs as shown here. This is quite similar to English ‘used to’ habitual expressions.

(65)  A    daa/yuum    ki-ni    la    tuma    yire
       3SG    PST/TRM    come-IPFV    FOC 1PL    house
nyuu-ra/*nyuu-ri
drink-IPFV/*.drink-IPFV
‘s/he used to come to our house to drink.’

There is a preverbal particle ni ‘HAB’ which also expresses the habitual aspect with
the meaning describing something that happens repeatedly over a time period. The
particle ni co-occurs with verbs with the suffix -ra but never occurs with verbs that
have the suffix -ri as shown in this example.

(66)  A    ni    nyuu-ra/*nyuu-ri    la    daam
       3SG    HAB    drink-IPFV/drink-IPFV    FOC 1PL    beer
‘s/he always drinks beer.’ (i.e., as a habit)

However, there are areas of overlap as both the progressive and the habitual suffixes
can be used to express the habitual in simple statements without adjuncts as
example (67) illustrates. However, when an adjunct or a complement is added the
suffix \textit{-ri} is acceptable with a habitual reading but the suffix \textit{-ra} is unacceptable as attested in (68). A point worthy of note here is that example (69) has a progressive reading though it is similar to (68) because of the presence of the focus particle \textit{la} (see §3.4.2 for discussion). What seems to matter is that there should be nothing after the verb for the habitual reading of the suffix \textit{-ra} (or its allomorphic variants) to be acceptable. However, in a serial verb construction (SVC) it is only the verb with the suffix \textit{-ra} that is acceptable in the second slot of the SVC as is the case with \textit{dita} in (70). The examples below are elicited in a discourse context where speakers talk about a patient who used not to eat at the onset of illness but now eats.

(67) Bā’ara la di-ti/di-ta
sick.person DEF eat-IPFV/eat-IPFV
‘The sick person eats.’ (i.e., has been eating for a certain period, habitually)

(68) Bā’ara la di-ti/*di-ta dia
sick.person DEF eat-IPFV/eat-IPFV food
‘The sick person eats food.’ (i.e., has been eating, has been eating for a certain period, habitually)

(69) Bā’ara la di-ti/*di-ta la dia
sick.person DEF eat-IPFV/eat-IPFV FOC food
‘The sick person is eating food.’ (i.e., at the present moment)

(70) Bā’ara la to’ose-ri dia di-ta/*di-ti
sick.person DEF collect-IPFV food eat-IPFV/eat-IPFV
‘The sick person collects food and eats.’ (i.e., as a habitual happening)

Verbs with the progressive and the habitual aspect suffixes can be used to express an ongoing event at speech time when they co-occur with the time reference marker (TRM) \textit{nananewa} ‘now’ and time adverbial phrase \textit{boi bini} ‘be there, right now’. However, the verb form with the suffix \textit{-ri} can co-occur with the former but not with the latter to express the progressive as shown in (71). Similarly, the verb with the suffix \textit{-ra} is acceptable with the time adverbial phrase \textit{boi bini} but not with \textit{nananewa} as in (72). In both (71) and (72), the speaker intends to be understood by the listener that s/he is drinking the water at the present moment, right now. It is not entirely clear to me why these verb forms show co-occurrence restrictions with the time reference marker \textit{nananewa} and the time adverbial phrase \textit{boi bini}. This requires further
research later as my present focus is not on ‘aspect’ in Gurene but providing a background for the discussion of aspectual properties of the positional verbs.

(71) Ma nyuu-ri/*nyuu-ra la ko’om nananewa
1SG drink-IPFV/drink-IPFV FOC water now
‘I am drinking water now (at this present moment)’

(72) Ma boi bini *nyuu-ri/*nyuu-ra la ko’om
1SG be at there *drink-IPFV/drink-IPFV FOC water
‘I am there drinking water (I am drinking water, right now).’

A further relevant point or constraint that needs to be explicitly mentioned here is that, prototypical stative verbs such as mi ‘know’ and nɔŋɛ ‘love’, which describe a state of affairs with unlimited duration are not compatible with the imperfective aspect suffixes -ri/-ra (both the progressive and the habitual) as shown in (74) and (76). The imperfective aspect is compatible with verbs that express actions or processes but not states. Semantically, the progressive aspect expresses ‘a happening in progress’ but states involve no happening (Comrie 1976:20; Lyons 1977b).

(73) Baa la mi a duma
dog DEF know its owner
‘The dog knows its owner.’

(74) *Baa la *mi-ti/*mi-ri/*mi-li a duma
dog DEF know.IPFV its owner
‘The dog is knowing its owner.’

(75) Pugela la nɔŋɛ a zaba la
girl DEF love 3SG boy.friend DEF
‘The girl loves her boyfriend.’

(76) *Pugela la *nɔŋɛ-ri/*nɔŋɛ-ni a zaba la
girl DEF love-IPFV 3SG boy.friend DEF
‘The girl is loving her boy friend.’

This non-compatibility of the imperfective suffixes with the true stative verbs becomes relevant for our discussion of the aspectual properties of the positional verbs later in the discussion of the stative and the dynamic verbs in §3.3.2.

The facts observed here about the imperfective suffixes, -ri/-ra with respect to the progressive and habitual aspects show that these two meanings can be vague in certain contexts, except when adjuncts or complements occur after the verb that help
to determine which aspectual meaning is intended by the speaker. Thus, a combination with certain kinds of adjuncts imposes on the aspectual form of the verb a particular reading. One other context is that in a serial verb construction, the suffix -ra is the choice on the second verb but not the suffix -ri. This observation is very relevant for serial locative verb constructions involving verbs of distribution and proximate verbs discussed in §5.2.4. The semantic property of the verb as stative or dynamic also imposes some restrictions. It is only the dynamic verbs that the imperfective suffixes can be attached to, but the true stative verbs do not permit them.

The characterization of the aspectual properties of the two imperfective suffixes -ri/-ra so far represents only the important highlights. A thorough description of the meaning of these suffixes will require further research to explore fully the various contexts for their use, of which the present study is constrained by time and its focus.

3.2.2.2 The stative suffix: -i/-a

In Gurenɛ, the inflectional suffixes -i/-a, unlike -ri/-ra attaches to only verb roots of the form CVC- to denote a state situation, i.e., the stative meaning of ‘be located’. In this study, I follow Comrie (1976), Lyons (1977b:483), Jackendoff (1983:170-174), Leech (1987:8-9), and Cruse (2004:286-287; 2011) who define a ‘state situation’ as an existing, unchanging, undifferentiated, continuous, homogeneous situation (e.g., a statue stands behind the market). A verb stem with the suffix -i or -a describes an animate entity or inanimate entity (object) in a locative state. Example (77) below illustrates the verb roots with their corresponding inflected stative forms while (78) is the stative use in a locative construction. Note that the same verb roots can also take the dynamic suffixes discussed earlier to derive the dynamic verb stems.

(77)  

<table>
<thead>
<tr>
<th>CVC-verb root</th>
<th>inflected stative stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>dog- ‘on top unstable’</td>
<td>dog-i ‘be on top, of unstable object’</td>
</tr>
<tr>
<td>pag- ‘on top flat’</td>
<td>pag-i ‘be on top, of flat or flexible object’</td>
</tr>
<tr>
<td>yag- ‘on top stable’</td>
<td>yag-i ‘be on top, of stable object’</td>
</tr>
<tr>
<td>pug- ‘on top float’</td>
<td>pug-i ‘be on top, afloat’</td>
</tr>
<tr>
<td>lal- ‘lean’</td>
<td>lal-i ‘be in a leaning posture’</td>
</tr>
</tbody>
</table>
The suffix -i is widely distributed but the suffix -a is restricted and occurs only on the second verb in a serial verb construction to express the stative. Observe that in example (79) the verb yaregɛ ‘spread’ precedes the stative verb in the serial verb construction. The stative form pag-a is acceptable but not pag-i because of the serial verb construction. This aspectual constraint concerning the choice between the suffix -a or -i in a serial verb construction corresponds to my earlier discussion of the imperfective suffixes -ri and -ra in the preceding section where the latter combines with verbs in the second slot of serial verb constructions but not the former.

Not all the positional verbs discussed in this study can take the stative suffix. Some verbs such as the three posture verbs gã ‘be lying’, ze’ ‘be standing’ and ṭĩ ‘be sitting’ do not take any suffix to express the stative because their meanings inherently express posture and location (see §3.3 below for details). The next section takes a look at the details of the aspectual properties of the positional verbs.

### 3.3 The aspectual properties of the positional verbs

This section discusses the aspectual properties of the positional verbs in light of the verb morphology discussed above. Gurenɛ has distinct positional verb forms that express the stative and the dynamic situations in the locative construction through verb morphology as noted in my discussion of the dynamic suffix -leɛ (§3.2.1). My aim is to distinguish as neatly as possible the stative and the dynamic aspectual meanings associated with the positional verbs. To do this, I will discuss the Gurenɛ data in terms of Talmy’s (1985, 2000b, 2007) typology of aspect-causative types and lexicalisation patterns and his subsequent classification of languages into two main
typological types of verb-framed languages (V-languages) and satellite-framed languages (S-languages). I will not discuss his Motion events typology (i.e., the general category of motion and location)\textsuperscript{14} which is not directly relevant for the discussion of the aspectual properties of the positional verbs. The Motion events typology, in most part, is concerned with translational motion in which the Figure is viewed as moving or moved from one place to another in space. My study focuses on positional verbs and my aim in this section is to discuss the aspectual properties of these verbs. I find Talmy’s aspect-causative types and lexicalization patterns typology very relevant for discussing the stative, inchoative and agentive distinctions of Guren positional verb aspect but not the Motion events typology.

Talmy’s typological approach although not shared by some scholars significantly remains a reference point for them to contest their agreements and disagreements in their discussion of the semantic and the aspectual properties of motion and location verbs in languages (see for example, Slobin & Hoiting 1994; Schaefer 1985, 1986, 1997; Ameka & Essegbey 2001; Lemmens 2005; Schaefer & Egbokhare 2005; Slobin 2004, 2006). The review that follows (§3.3.1), provides a background to Talmy’s cross-linguistic observation that there are three dominant lexicalization patterns of aspect-causative types (stative, inchoative, and agentive) and his subsequent classification of languages into verb-framed (V-languages) and satellite-framed (S-languages).

Talmy suggests that his aspect-causative types and lexicalisation typology can be used to explore the cross-linguistic similarities and differences that languages show in their aspectual systems involving the use of posture verb forms. Although this study aligns itself with the MPI typology (see Chapter 4) to discuss the semantics and pragmatics of the positional verbs, Talmy’s approach is adopted here mainly for the discussion of the aspectual properties of the positional verbs, which the MPI typology

\textsuperscript{14}Talmy (1985:60-61, 1991, 2000b:25, 2007:70-71) used the term “Motion events” to refer to what he calls a single larger system which consists of a situation containing motion and static location.
appears to ignore or pay less attention to. I present a sketch of Talmy’s typology in the next section before applying it to the discussion of the Gurenɛ data.

3.3.1 Talmy’s aspect-causative types typology and lexicalization patterns

Talmy (1985:85-120, 2000b:67, 2007:107) proposes that in addition to the typology of the Motion event (i.e., the general category of motion and location), “languages form a typology according to their characteristic way of expressing (change of) state.” That is, the cross-linguistic expressing of motion or location in languages incorporates semantic elements of aspect, causation, and their interaction which manifests in the lexicalisation patterns of verb roots. Thus, for both motion and location, the interaction of aspect and causation is expressed by different or the same verb roots and/or via the addition of other morphemes in languages. Here, I shall restrict my discussion to verbs of location which relate directly to what this study is about.

First, aspect according to Talmy (1985:77, 2000b:67, 2007:107) refers to the “pattern of distribution of action through time.” The term ‘action’ refers to static location or state, and motion or change of state. In other words, semantically, ‘action’ refers to a stative event which lacks action or a dynamic event involving action. Note that Talmy’s definition of aspect is by no means different from the definition presented in §3.2.2.1 above i.e., aspect denotes the internal temporal organization of the situation, except that he focuses on the actionality of the event (i.e., motion and location verbs).

In the domain of posture and location verbs, Talmy (2000b:78) suggests that cross-linguistically there are three main aspect-causative types of lexicalization patterns based on how a language uses its verb roots or its combination with other grammatical elements to express the interaction of aspect and causation. Naturally, it follows that we can have a typology of posture verbs according to the interaction of three aspect-causative types in languages based on the type of verb roots or their combination with other elements to express these properties in a locative construction. Thus, given that a verb describes location, the typology is based on whether or not the verb root or its combination with other morphemes or words express the aspectual properties of a static or a dynamic locative situation (see

(80) being in a state  (Stative)
entering into a state  (Inchoative)
putting into a state  (Agentive)

In light of Talmy’s aspect-causative typology, the ‘stative’ describes a Figure in a static position, non-causatively or if it is an animate it maintains itself in the position while the ‘inchoative’ describes a Figure that adopts a posture or assumes a position or location non-causatively or if it is an animate it moves its own body into the posture or position. The ‘agentive’ characterises a locative situation in which an agent puts another entity other than its own body into a posture or position (cf. Danziger 1995). Examples (81)-(83) below illustrate the three states in English. With the exception of the stative, which describes a static locative situation, the inchoative and agentive both express dynamic situations or events.

Using typological data, Talmy observes that different languages have different lexicalisation patterns for expressing the stative, the inchoative, and the agentive. While some languages may use the same posture verb root to express all these three types or have different verb forms for expressing each of them, other languages may use different verb forms to express various combinations such as the stative/inchoative or inchoative/agentive or they may use other grammatical elements in addition to the verb root. For example, Talmy suggests that English typically uses its posture verb roots such as *lie*, *sit*, *stand*, *lean*, *kneel*, *squat*, *crouch*, *bend*, *bow*, etc., to express the *stative* i.e., ‘being in a state’ but employs an extra grammatical element that he calls a *satellite* in addition to the verb to express the *inchoative* and the *agentive* aspect-causative types (see Talmy 1985:86, 2000b:79, 2007:118 2009:390). The satellite (usually abbreviated as Sat), he defines it as “…the grammatical category of any constituent other than a noun phrase or prepositional-phrase complement that is in a sister relation to the verb root.” (Talmy 1985:102-103, 1991:486, 2000b:101-102, 2007:138-139, 2009:390). According to Talmy, the satellite is subordinate to the verb root and includes a wide range of grammatical elements which may be a free or a bound affix such as English verb particles,
German separable and inseparable verb pre-fixes, Latin or Russian verb pre-fixes, Chinese verb complements, Lahu non-head, Caddo incorporated nouns, and Atsugewi polysynthetic affixes. The satellite in a construction is associated with the main verb and syntactically is a dependent to a head (Talmy 2009:390). For English, Talmy points out that the posture verb *lie* usually by itself refers to an entity being in a lying posture (stative) as in (81). To express the other two postures, the verb must be augmented by a satellite to get *lie down* as demonstrated in (82) for the inchoative (getting into a posture), and in (83) the agentive (putting into the lying posture). Observe that what is missing here is that English can actually use the progressive form *lying* to express the stative to mean being in a lying posture.

(81) She **lay** there all during the programme. (Stative)
(82) She **lay down** there when the programme began. (Inchoative)
(83) He **laid** her **down** there when the programme began. (Agentive)


As far as the aspectual and semantic literature shows, Talmy’s claim that the posture verbs by themselves are restricted to the ‘be in locative state’ may be disputed. For example, English *sit* can actually be used to refer to ‘be in a sitting posture’ which is a state or ‘to adopt or assume a sitting posture’ in which case it is dynamic (inchoative) (see Comrie 1976:20; Danziger 1995; Newman 2002a:4, 2009). This raises the question whether or not the construction type the posture verb participates in is not an issue here.

Based on further cross-linguistic data or analyses within his three aspect-causative types typology, Talmy observes that Japanese posture verbs are generally lexicalised in the *getting into state* type with the other two types derived from this root. For example, *tatu* is ‘to stand up’ but when the suffix -*te iru* ‘to be (in the state of) with past participle reading’ is added, the derived form is *tateru* ‘be in a standing posture.’ The form *tataseru* which is also a derived stem has the agentive meaning of “to put into a standing posture.”
Another language that is also shown in Talmy’s typology as lexicalising the *agentive* on the verb root, while the *inchoative* and the *stative* are derived from this root is Spanish. In Spanish, the verb root *acostar* is said to have an intrinsic agentive meaning ‘lay (someone) down’ but a reflexive morpheme is required to realise the inchoative *acostarse* ‘to lie down’. The form *acostado* ‘to be’ is used to express ‘to be in a lying posture’. The following Spanish examples serve to illustrate (see Talmy 2000b:80 for details).

(84) Acoste el niño
I-laid-down the child
‘I laid the child down.’

(85) Me acoste
myself I-laid-down
‘I lay down.’

(86) Estaba acostado
I-was laid-down
‘I lay (there).’
(Talmy 2000b:80)

On account of these typological findings of aspect-causative lexicalisation patterns, Talmy (1985:87, 2000b:80, 2007:120) provides the following schema in Table 18 to represent the three aspect-causative lexicalisation patterns for posture verb roots in English, Japanese and Spanish. Observe that the pattern of the verb derivations for the other two aspectual types across the languages is from the verb root with no morphological modification or a satellite.

<table>
<thead>
<tr>
<th>Table 18: A typology of lexicalization patterns for verbs of posture (V=verb root, SAT=satellite, PP=past participle inflection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>be in a posture</td>
</tr>
<tr>
<td>English</td>
</tr>
<tr>
<td>Japanese</td>
</tr>
<tr>
<td>Spanish</td>
</tr>
</tbody>
</table>

It is pointed out in Talmy’s work that apart from these three patterns where a verb root incorporates only one aspect-causative type, some languages use the same verb root to lexicalise two aspect types, inchoative and agentive while the third type *stative* requires some form of grammatical augmentation. For example, the pattern
observed in Arabic is that both the stative and the inchoative are expressed by the same verb root *nām-* ‘was lying’/‘lay down’ while *anam-* expresses the agentive of ‘putting into a state’. Furthermore, it has also been attested that some languages may use the same verb root to encode the inchoative ‘entering into a state’ and the agentive ‘putting into a state’. This latter lexicalisation pattern seems to be the case for Gurenɛ, but Gurenɛ is different, in that the same derived or non derived verb stem does not make the inchoative and agentive distinctions but rather they can be used in both the inchoative and the agentive constructions as I show in §3.3.2 below. Further, the availability of the dynamic imperfective form which can also be used in the the *inchoative* and the *agentive* constructions but not the *stative* presents an interesting pattern in Gurenɛ. These lexicalisation patterns of Gurenɛ appear not to be the familiar cases in Talmy’s aspect-causative cross-linguistic classifications of the world’s languages.

### 3.3.2 The aspect-causative types of Gurenɛ positional verbs

This section presents an analysis of Gurenɛ stative and dynamic positional verbs, pointing out how the language deviates from the lexicalization patterns proposed by Talmy’s (1985, 2000, 2007) three-way aspect-causative types typology in the overview in the preceding section. Table 19 presents a two-way distinction between stative positional verb forms on one hand, and dynamic positional verbs on the other (i.e., the dynamic and the dynamic imperfective). The verbs represent all the positional verbs investigated in this study. The order of the presentation of the verbs in Table 19 below follows the semantic classes presented in Table 1 of Chapter 1 (see §1.3).
<table>
<thead>
<tr>
<th>Stative</th>
<th>Dynamic</th>
<th>Dynamic Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Posture verbs</strong></td>
<td><strong>Dynamic</strong></td>
<td><strong>Dynamic Imperfective</strong></td>
</tr>
<tr>
<td>ṡa 'be in a lying posture'</td>
<td>ṡa-a-re 'lie'</td>
<td>ṡa-a-ti 'be getting in to a lying posture progressively'</td>
</tr>
<tr>
<td>ži 'be in a sitting posture'</td>
<td>ži-i-re 'sit'</td>
<td>ži-i-ti 'be getting into a sitting posture progressively'</td>
</tr>
<tr>
<td>ze 'be in a standing posture'</td>
<td>ze-e-le 'stand'</td>
<td>ze-e-ti 'be getting into standing posture progressively'</td>
</tr>
<tr>
<td>kpa 'be kneeling'</td>
<td>kpa 'kneel'</td>
<td>kpa-a-ti 'be kneeling down progressively'</td>
</tr>
<tr>
<td>ti 'be leaning, of objects'</td>
<td>ti-i-le 'lean'</td>
<td>ti-i-ti 'be putting into a leaning position progressively'</td>
</tr>
<tr>
<td>dob-i 'be in a squatting posture'</td>
<td>dob-e-le 'squat'</td>
<td>dob-e-ti 'be getting into a squatting posture'</td>
</tr>
<tr>
<td>del-i 'be leaning, in a sitting posture'</td>
<td>delu-m 'lean-sit'</td>
<td>del-e-ti 'be getting into a lean-sitting posture'</td>
</tr>
<tr>
<td>lal-i 'be leaning, in a standing posture'</td>
<td>lal-m 'lean-stand'</td>
<td>lal-e-ti 'be getting into a leaning posture'</td>
</tr>
<tr>
<td>yig-i 'be in a stooping posture'</td>
<td>yiga-le 'stoop'</td>
<td>yiga-ti 'be getting into a stooping posture'</td>
</tr>
<tr>
<td>vug-i/kpab-i 'be turned facing upside down'</td>
<td>vuga-le/kpaba-e-le 'turn face upsidedown'</td>
<td>vuga-e-ti 'be putting into turned upside down position'</td>
</tr>
<tr>
<td><strong>Verbs of elevation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yag-i 'be on top, with stable support'</td>
<td>yage-le 'put on top,stable'</td>
<td>yage-e-ti 'be putting to be on top, with stable support'</td>
</tr>
<tr>
<td>pag-i 'be on top,of flexible or flat objects'</td>
<td>page-le 'put on top,flat'</td>
<td>page-e-ti 'be putting to be on top, of flat or flexible objects'</td>
</tr>
<tr>
<td>dag-i 'be on top, with unstable support'</td>
<td>dag-e-le 'put on top, unstable'</td>
<td>dag-e-ti 'be putting to be on top, unstable'</td>
</tr>
<tr>
<td>yul-i 'be hanging, dangling freely'</td>
<td>yul-e 'hang'</td>
<td>yul-e-ti 'be putting to hang, dangling freely'</td>
</tr>
<tr>
<td>sug-i 'be on top,of convex base container'</td>
<td>suga-le 'put on top, of convex base container'</td>
<td>suga-e-ti 'be putting to be on top, of a convex base container'</td>
</tr>
<tr>
<td>sag-i 'be placed in, of container-in-container'</td>
<td>sage-le 'place container to sit in another container'</td>
<td>saga-e-ti 'be putting a container in another container to be on top'</td>
</tr>
<tr>
<td>pug-i 'be afloat, in liquid medium'</td>
<td>puga-le 'put afloat'</td>
<td>puga-e-ti 'be putting to be afloat'</td>
</tr>
<tr>
<td><strong>Attachment verbs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tab-i 'be stuck, of mastic substance'</td>
<td>tabe-le 'put to stuck, of mastic substance'</td>
<td>tabe-e-ti 'be putting to be stuck, of mastic substance'</td>
</tr>
<tr>
<td>lab-i 'be adhered or pasted, e.g., paper'</td>
<td>labe-le 'put to adhere or paste'</td>
<td>lab-e-ti 'be putting to adhere or paste'</td>
</tr>
<tr>
<td>gu 'be stuck, e.g., of insects or debris'</td>
<td>gu'u-le 'put to be stuck, e.g., of insects or debris'</td>
<td>gu'u-e-ti 'be getting stuck, e.g., of insects or debris'</td>
</tr>
<tr>
<td><strong>Insertion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fir-i 'be stuck in, e.g., of thin objects'</td>
<td>fir-e 'put to be stuck, e.g., of thin objects'</td>
<td>fi-ti 'be sticking, of thin objects'</td>
</tr>
<tr>
<td>fug-i 'be stuck in, not firm, of thick objects'</td>
<td>fuga-le 'put to be stuck in, not firm, of thick objects'</td>
<td>fuga-e-ti 'be sticking in, not firm, of thick objects'</td>
</tr>
<tr>
<td>fig-i 'be stuck in, of small pointed objects'</td>
<td>sige-le 'put to be stuck in, of small pointed objects'</td>
<td>sige-e-ti 'be putting to be stuck in, of small pointed objects'</td>
</tr>
<tr>
<td>scg-i 'be stuck in between, with force e.g., of objects'</td>
<td>scga-le 'put to be stuck in between, with force'</td>
<td>scga-e-ti 'be putting to be stuck in between, with force, e.g., of a ball stuck in between tree branches'</td>
</tr>
<tr>
<td>ti 'be inserted, tight fit'</td>
<td>ti-e 'insert, tight fit'</td>
<td>ti-e-ti 'be inserting, tight fit'</td>
</tr>
<tr>
<td>vure 'be pierced, of soft entity'</td>
<td>vure 'pierce,of soft entity'</td>
<td>vure-e-ti 'be piercing, of soft entity'</td>
</tr>
<tr>
<td>lu 'be pierced, of tough entity'</td>
<td>lu 'pierce, of tough entity'</td>
<td>lu-ti 'be piercing, of tough entity'</td>
</tr>
</tbody>
</table>
### 3.3.2.1 Stative (being in state)

In line with Talmy’s three aspect-causative types typology and lexicalization patterns, Guren positional verbs lexicalize the stative, inchoative and agentive in two different ways. On one hand, the stative is expressed on the verb root while on the other hand the dynamic (both inchoative and agentive) verbs are either morphologically derived from the stative verb root or the same verb form is used to express both the stative and the dynamic locative situations as shown in Table 19. First, I discuss the stative verbs in this section but the inchoative and agentive which both belong to the dynamic are discussed in the next section.

In Guren, positional verbs lexicalize the stative (being in a state) on the verb root or the verb marked with the stative suffix -i as shown in Table 19. Observe that the posture verbs ga ‘be in a lying posture’, zi ‘be in a sitting posture’, ze ‘be in a standing posture’ and ti ‘be leaning, of objects’ lexicalise the stative on the verb root.
The verbs inherently express the *being in a posture state or the static location* of entities. Note that their dynamic forms are derived with the suffix -le/ɛ or its variant -re/ɛ. Observe that some verbs also have the same verb root with both stative and dynamic interpretations. These verbs cut across all the positional verb classes except, the verbs of elevation class. For example, the posture verb *kpa* ‘be kneeling’ is stative while *kpa* ‘kneel’ is dynamic. Similarly, the attachment verb *bobe* ‘be tied, firm’ and *bobe* ‘tie, firm’, and the distribution verb *pĩ* ‘be covered, fully’ vs. *pĩ* ‘cover, fully’ express both the stative and the dynamic locative situations. Most of these verbs belong to the attachment, distribution and proximate verb classes as shown in Table 19. My suggestion is that these verbs are inherently dynamic but are also used to express the stative. The argument for this claim is the fact that both the posture verbs and verbs of elevation in Gurene have distinct verb forms for expressing the stative and the dynamic.

For those verbs that express the stative with the stative suffix -i they include all the verbs of elevation with a few others from the posture verbs (e.g., *dɔb-i* ‘be in a squatting posture’, *lal-i* ‘be leaning, standing’, *yig-i* ‘be in a stooping posture’), the attachment verbs (e.g., *tab-i* ‘be stuck, of mastic substance’, *lab-i* ‘be adhered or pasted, e.g., paper *fug-i* ‘be stuck, of thick objects), and one verb from the distribution verb class (e.g., *kug-i* ‘be in a heap, of mass-like or multiple objects’). These verbs are also used to describe the static location of entities. The examples below illustrate the use of the stative verbs in the locative construction to express “the being in a posture or location”.

(87) Bia la zi la suŋo la zuo
child DEF sit.STAT FOC mat DEF head
‘The child is sitting down on the mat.’ (i.e., stative, be in a sitting posture)

(88) Bia la gã la suŋo la puan
child DEF lie.STAT FOC mat DEF inside
‘The child is lying down on the mat.’ (i.e., stative, be in a lying posture)

(89) Budaa la ze’ la tiŋa
man DEF stand.STAT FOC ground
‘The man is standing on the ground.’ (i.e., stative, be in a standing posture)
In examples (87) to (91) these stative verbs describe the entities as being in a posture state such as gä ‘be in a lying posture’, zî ‘be in a sitting posture’, ze’ ‘be in a standing posture’ and yag-i ‘be on top, with stable support’. To express the dynamic, the *inchoative* and the *agentive*, requires the derived dynamic or non-derived dynamic verb forms in Table 19 as discussed below.

### 3.3.2.2 Inchoative/Agentive(Causative)

As pointed out in the discussion of the stative above, Gurenc uses verb morphology (using the suffix -le/ɛ or its variants -re/ɛ, see §3.2.1 above for details on verb derivations) to derive the dynamic verb forms from the stative verb root or it uses monomorphemic dynamic verb roots (see Table 19) but they are neutral to the inchoative and agentive distinctions. Instead, it is the construction type that the dynamic verbs participate in, which is crucial to determining these two aspectual notions. In other words, the opposition between static and dynamic is marked morphologically, but the distinction between the inchoative and the agentive is marked constructionally. Compare the following examples.

(92) Bia la zî’i-re la suŋɔ la zuo child DEF sit-DYN DEF mat DEF head
‘The child sat down on the mat.’ (*inchoative*, adopt a sitting posture)

(93) Ba zî’i-re bia la kuka la zuo 3PL sit-DYN child DEF chair DEF head
‘They sat the child down on the chair.’ (*agentive*, put to sit down)

(94) Bia la gā’a-rɛ la suŋɔ la puan child DEF lie-DYN FOC mat DEF inside
‘The child lay down on the mat.’ (*inchoative*, adopt a lying posture)

(95) A gā’a-rɛ bia la suŋɔ la puan 3SG lie-DYN child DEF mat DEF inside
‘S/he lay the child down on the mat.’ (*agentive*, put to lie down)
In examples (92), (94), (96), (98), and (100), the verbs are dynamic and occur in a construction to express the *inchoative* where the entities have entered or assumed a posture state or location by themselves. That is, where the entity is an animate it adopts the posture or position by itself but where it is an inanimate it is observed to be in the position spontaneously. Also, in (93), (95), (99) and (101) the same dynamic verb forms are used in the agentive construction (agentive), where one entity puts another entity other than its own into a posture state or location. Observe that the contrast between the *inchoative* and the *agentive* in these examples is not triggered by the morphology, as the same dynamic verb form is used to express both. Thus, the morphology is neutral to these distinctions but it is the *construction* type that determines the contrast. The *agentive* or *causative* construction has an external agent who puts the entity into a posture state but the *inchoative* construction does not include an external agent.

Further, in Gurenɛ, the dynamic imperfective (IPFV.DYN) verb forms in Table 19 can be used in both the *inchoative* and the *agentive* constructions but not the stative. The imperfective dynamic suffix *-ri* and its allomorphic variants (*-li, -ti, -ni*, see the...
discussion of these suffixes in §3.2.2.1 above) is attached to the dynamic verb stem but does not attach to the stative root. This is visible or transparent from the similarity between the root of the dynamic stem and that of the dynamic imperfective stem in Table 19. Besides this transparency of the similarity between the roots of the stems, one other piece of evidence in support of the claim that the IPFV.DYN suffix is attached to the dynamic stem but not the stative root is that in Gurenɛ, stative verbs such as mi ‘know’ and nɔŋɛ ‘love’ do not permit the imperfective (progressive) marking (see §3.2.2.1 for discussion). The progressive marking has been used in the semantic literature as a diagnostic to show that stative verbs cannot be expressed in the progressive but dynamic verbs can be used in the progressive especially in English. When states are expressed in the progressive the result is always ungrammatical. The aspectual literature suggests that prototypical (best example or instance) stative verbs like know and love do not occur in the progressive (Comrie 1976; Lyons 1977b; Dowty 1979; 1997:32-35). See examples (103) and (105) below. Dowty (1979) suggests that true stative verbs fail the progressive marking test because the progressive form of the verb indicates that the situation is ongoing. The progressive form, therefore, conflicts with the longer lasting and unchanging nature of stative verbs (cf. Murphy 2010:206; Kearns 2011:165). This explains why know and love which are assumed to be prototypical statives in many languages fail to pass the progressive marking test but ‘run’, which is a dynamic verb, does pass the test as in (107).

(102) Alice knows the answer.

(103) *Alice is knowing the answer.

(104) Tim loves his wife.

(105) *Tim is loving his wife.

(106) Tom ran

(107) Tom is running.

An observation worthy of note concerning the use of loving as Kroeger (2005:153) points out is that today, some English speakers may use the progressive form to express temporary states or the re-interpretation of the state as an event such as a
person behaving in a certain way as in (108). This use, however, tends not to be quite common or the normal use of the verb.

(108) George is loving the attention he is getting this week (Kroeger 2005:153)

Concerning the English posture verbs, Dowty (1979:173-74, 80) observes that sit, stand, and lie can be classified as both stative and dynamic since the verbs pass the progressive marking test like the dynamic verbs. Thus, when the posture verbs take the progressive, their stativity is understood to be more temporary. The following examples supports Dowty’s claim.

(109) The boy sits on the chair in the classroom.
(110) The boy is sitting on the chair in the classroom.
(111) The statue stands in front of the cathedral.
(112) The statue is standing in front of the cathedral.
(113) The boy lies on the bed in the inner room.
(114) The boy is lying on the bed in the inner room.

Dowty (1979:173) points out that the behaviour of these posture verbs is in contrast to the true stative verbs like know and love in English which do not permit the progressive use.

With regards to the Guren positional verbs, Dowty’s observation about the English posture verbs is not a problem as the DYN.IPFV suffix is added to the dynamic stem but does not attach to the stative. The imperfective dynamic verb stems in Guren like the dynamic verbs are also neutral to the inchoative and dynamic distinctions. But they participate in the inchoative and agentive constructions which is crucial in determining the contrast between these two aspectual states. An important point to note here concerning the DYN.IPFV stems which are inflected from the derived dynamic positional verb stems (e.g., zi’ire ‘sit’, ze’ele ‘stand’, gā’are ‘lie’, pagẹk ‘put to be on top, flat’ have their meaning slightly different from the normal interpretation of the imperfective aspect in Guren which usually denotes maintaining a certain duration of the event. Instead, the DYN.IPFV forms of these verbs describe an entity
moving progressively into a posture or position. For comparison purposes, I provide examples of the stative and the inchoative (DYN) in addition to the DYN.IPFV to show this contrast clear.

(115) A \textit{zi’i} la kuka la zuo  
3SG sit.STAT FOC chair DEF head  
‘s/he is sitting down on the chair.’ (\textit{Stative})

(116) A \textit{zi’i-re} la kuka la zuo  
3SG sit-DYN FOC chair DEF head  
‘s/he sat down on the chair.’ (\textit{Inchoative}, adopts a sitting posture)

(117) A \textit{zi’i-ti} la kuka la zuo  
3SG sit-DYN.IPFV FOC chair DEF head  
‘s/he is getting into a sitting position on the chair.’ (\textit{Inchoative}, adopting a sitting posture progressively)

(118) A \textit{zi’i-ti} la bia kuka la zuo  
3SG sit-DYN.IPFV FOC child chair DEF head  
‘s/he is sitting the child down on the chair.’ (\textit{Agentive}, progressively putting a child into a sitting posture)

(119) A \textit{gà} la samaata la zuo  
3SG lie.STAT FOC mat DEF head  
‘s/he is lying on the mat.’ (\textit{Stative})

(120) A \textit{gà’a-re} la samaata la zuo  
3SG lie-DYN FOC mat FOC head  
‘s/he lay down on the mat.’ (\textit{Inchoative}, adopts a lying posture)

(121) A \textit{gà’a-ti} la samaata la zuo  
3SG lie-DYN.IPFV FOC mat DEF head  
‘He is getting into a lying position on the mat.’ (\textit{Inchoative}, progressively adopting a lying posture)

(122) A \textit{gà’a-ti} la bia samaata la zuo  
3SG lie-DYN.IPFV FOC child mat DEF head  
‘s/he is putting the child into a lying posture on the mat.’ (\textit{Agentive}, progressively putting a child into a lying posture on the mat)

(123) Ni\textit{ña} la \textit{yag-i} la tia la zuo  
person DEF be on top.stable-STAT FOC tree DEF head  
‘The person is on top (stable support) of the tree.’ (\textit{Stative})

(124) N\textit{éra} la \textit{yaga-le} la tia la zuo  
person DEF put on top.stable-DYN FOC tree DEF head  
‘The person is on top (stable support) of the tree.’ (\textit{Inchoative}, adopts on top posture in a stable manner)
(125)  Nɛra la yage-li la tia la zuo
person DEF on top.stable-DYN.IPVF FOC tree DEF head
‘The person is getting in to a position on top of the tree (Inchoative, progressively adopting a be on top posture).’

(126)  A yage-li la bia tia la zuo
3SG on top.stable-DYN.IPVF FOC child tree DEF head
‘s/he is putting a child to be on of a tree (Agentive, progressively putting a child to be on top of a tree).

In examples (117), (121), and (125) the dynamic imperfective verbs occur in the inchoative construction to describe an entity in the process or transition of assuming a posture or position while in (118), (122), and (126), the same dynamic imperfective verb form is used in the agentive (causative) construction to describe an external agent progressively putting another entity into a posture state or position. Like the dynamic inchoative and agentive verb forms discussed earlier, we see that it is the construction type that makes a distinction between the IPFV.DYN inchoative and the IPFV.DYN agentive but not the verb form.

The DYN.IPVF forms of the non-derived dynamic verb stems in Table 19 in contrast to the DYN.IPVF forms of the derived dynamic verb stems, express the normal imperfective (progressive) meaning of an event in progress or ongoing in Gurenɛ. In example (127), the non-derived dynamic verb vile ‘tie’ is used in the inchoative construction but in (128) the imperfective vili ‘be tying’ is used and it does not express that the person is progressively tying the rope but that the event of tying is ongoing.

(127) Mi’a la vile la dogi’a la rope DEF tie not.firm FOC stump DEF
‘The rope is tied on to the stump.’

(128) A vili la mi’a dogi’a la inya
3SG tie.IPFV FOC rope stump DEF body
‘He is tying a rope round the stump.’

The availability of the DYN.IPVF verb forms in Gurenɛ provides a different aspect-causative lexicalization pattern which differs from Talmy’s three dominant lexicalization patterns of aspect-causative types observed in the languages in his typology. For instance, in English, it is possible to say that “he sits there” or “he is sitting there” to express the same meaning of being in a posture state. However, in
Gurenɛ the dynamic imperfective verb denotes an entity, on its own or being caused to be progressively getting into a posture state or position but the stative verb is used to express the stative while the dynamic verb can be used to describe the inchoative (getting in to a state) and agentive (putting in to a state).

Among the positional verbs in Table 19, it is only the general locative verb boi ‘be at’, ‘exist’ which lexicalises only in the stative with no corresponding dynamic form. This may not be surprising since the verb boi is generally used to predicate the general existence or location of an entity at a place. It is also used for expressing containment relations as discussed in §5.2.5.2. However, to express the dynamic (agentive) of placing an entity into containment a different verb iŋɛ ‘do’ is used.

The aspect-causative types and lexicalizations patterns of the Gurenɛ positional verbs discussed in the preceding paragraphs appear not to have been reported in the typological literature on posture and location verbs. Gurenɛ is unlike English, Japanese and Spanish, where Talmy (1985, 2000b, 2007) suggests that the inchoative/agentive distinction are derived through verb morphology or via satellites. A crucial difference observed between Gurenɛ aspect-causative types and lexicalization patterns and these other languages is that the inchoative (getting into a state) and agentive (causing to get into a state) are marked morphologically identical as the dynamic, as opposed to the stative (be in a state). The contrast between the inchoative and agentive, however, manifests in the construction type that the verb participates in but its form is neutral to the distinction of these two.

3.3.3 Verb-framed vs. Satellite-framed languages and the Gurenɛ data

In this section, we examine Talmy’s verb-framed vs. satellite-framed languages proposed based on his Motion events typology (which is not considered here for reasons explained in §3.3 above) and his three aspect-causative types typology in relation to the Gurenɛ data. Based on the particular grammatical strategy that a
language typically employs to encode the core schema of Motion (i.e., Path), Talmy (1991:486, 2000b:117-118, 2007:153-154, 2009:389-390) proposes a two-way typology of construction types. On one hand, if the core schema is characteristically expressed in the main verb root of the clause the languages will be said to have a framing verb and to be verb-framed languages (V-languages). Examples of verb-framed language families are Romance, Semitic, Japanese, Tamil, Polynesian, most Bantu languages, most Mayan languages, Nez Perce, and Caddo. On the other hand, if the languages typically lexicalise the core schema in a satellite they are said to have a framing satellite and will be satellite-framed languages (S-languages). Satellite-framed languages include most Indo-European languages (excluding Romance), Finno-Ugric, Chinese, Ojibwa, and Warlpiri.

Talmy (2000b:213-288) argues that where a language characteristically represents Path, it also usually represents certain other semantic categories, including aspect. With respect to aspect, Talmy (2000b:120) notes that most languages use satellites but they do not typically express action through time as defined earlier. However, the aspectual notions include an indication of manner, quantity, intention and other factors. English, according to Talmy, though does not present a typical aspect satellite case, it does has a few that occur in relation to the verb such as re-start, sit down, stand up, lie on, start over, walk away, check off, etc. Russian and Atsugewi are known to have elaborate systems of aspect satellites. V-languages typically express aspectual notions in the posture verb root and S-languages encode aspect via satellites.

Naturally, the alignment of the Motion event typology and the aspect-causative types typology follows that if a language expresses direction (Path) or location (including state) in the main verb root or expresses aspectual notion in the main verb root it is a

\[15\] According to Talmy (1985, 2000b), the 'Path' with capital P represents the path followed or the site occupied by the Figure relative to the Ground. Concerning the posture verbs, it refers to which grammatical elements are used to express location or his three aspect-causative types.
verb-framed language but if the language encodes the fact of motion or location or aspect via satellites then it is classified as a satellite-framed language.

In recent years, there has been some studies in a wide range of languages discussing Talmy’s two-way typology of verb-framed and satellite-framed to suggest that his classification though useful for typological analysis, it has some limitations as some languages do not appear to neatly fit either type. Most of these studies focus on translational motion except a few. See for example, Slobin & Hoiting (1994) on American signed language, Slobin (1996, 2004, 2006), Schaefer & Gaines (1997) on directional motion for African languages, Ameka & Essegbey (2001, 2006) on Ewe, Ibarretxe-Antuñano (2009) on Basque, and Adjei (2010) on Siyase. These studies point out that in some languages the notions of main verb and satellites which are crucial for differentiating the expressing of Path in Talmy’s typology is not always obvious in some languages. For example, although Schaefer & Gaines (1997:216) propose that all African languages are verb-framed, Ameka & Essegbey (2001) suggest that this is not the case for some especially Ewe and Akan (Kwa languages spoken in Ghana). According to Schaefer & Gaines (1997) African languages employ three syntactic strategies to express manner and directional motion which include coordination, clause level de-ranking, and verb serialization. While Ameka & Essegbey (2001) do agree that African languages express the core schema of motion in the verb they observe that there are variations in the overall strategies in these languages.

Taking Ewe and Akan as an example, they observe that for serialising languages like these two, it is important to establish the main verb status in a serial verb construction which requires that we use tense-aspect affixes as diagnostic. They argue that in serialising languages like Ewe and Akan both Manner and Path are expressed by verbs with equivalent main verb status of which none is subordinate to the other unlike Talmy’s satellite. Further, they observe that the fact that the Manner verb always precedes the Path verb in these languages also have some semantic and syntactic implications for Talmy’s typology. They conclude that since serialising languages share a number of the properties with S-languages, and V-languages to which they belong to, it is entirely difficult to place them as belonging to one category.
For example, the use of the second verb in serial verb construction to express Path is not a satellite but another main verb and this presents the problem as to whether or not they are verb-framed or satellite-framed languages or neither.

On account of these cross-linguistic variations observed in other languages, Slobin (2004, 2006) proposes a third type of lexicalisation pattern that he calls equipollently-framed, to cover all those languages that Talmy’s original classification fails to capture. This third type includes languages in which Manner and Path are coded by equivalent grammatical elements. Thus, Ewe and Akan as well as other African languages, and some of the world’s languages (e.g., Thai, Mandarin Chinese) with similar semantic properties are classified as equipollently-framed languages.

While Talmy’s (2009:389-401) reply to some of these criticisms of his typology attempts to broaden the scope of the definition of the status of the main verb root (with a more expanded set of criteria e.g., morphology, syntax, co-occurrence, class size, semantic behaviour) to restrict the indeterminate use of the equipollently-framing proposed by Slobin, he appears not to have denied the possibility of the existence of this third type. He, however, clarifies some issues by pointing out that his typology lays no claim to the presence versus the absence of the co-event (Manner or Cause) or its typical location with respect to the Path to which he is criticised. Similarly, he observes that the claim or argument that some languages did not assign main verb status to the Path or co-event element requiring the use of equipollent-framing can actually be interpreted as two separate events which are conflated and are actually constructed on his original basis for framing. Concerning serial verb construction type languages, he suggests that the two verbs constitute the main verb complex and therefore, represent different degrees of main verb status (see Talmy 2009:396-400). He does admit that Mandarin Chinese shows evidence of having serial verbs of equal status expressing both Manner and Path with none being dependent on the other. Indeed, he notes that the language manifests a genuine equipollently-framing type but points out that such languages might be fewer in the world and may not be as many as suggested. Nonetheless, the crucial point here is that he never disputed the existence of the third type.
One notable gap observed in the typological literature is that most of these discussions on verb-framed and satellite-framed languages tend to focus on translational or directed motion with the exception of Lemmens (2005) discussion of Dutch posture and location verbs in light of Talmy’s Motion events and his satellite-framed and verb-framed typologies from a cognitive typology perspective. Lemmens’s main concern was to explore how posture and location verbs align with Talmy’s typology. Schaefer & Egbokhare’s (2005) for example, also discuss the aspect-causative types and lexicalization patterns of Emai’s posture verbs (African language spoken in Nigeria) using Talmy’s three aspect-causative typology. The discussion of the Gurenɛ positional data is relevant here. Thus, this overview raises two important questions with respect to the Gurenɛ data discussed above.

In terms of Gurenɛ’s alignment with Talmy’s two-way typology of verb-framed and satellite-framed typology, the language shares properties with both Verb-framed and Satellite-framed languages. As a verb-framed language, it lexicalises aspect on the verb roots. For example, the stative posture verbs, ṣa ‘be in a lying posture’, ṣi ‘be in a sitting posture’, and ze’ ‘be in a standing posture’ are expressed on the verb root as discussed in the preceding sections. It also exhibits satellite-framed properties through the use of verb suffixes as is the case with the derived dynamic verbs which are used in the inchoative and agentive constructions respectively. Furthermore, Gurenɛ like other serialising languages especially African languages (see Ameka 2007; Ameka & Essegbey 2001; Schaefer & Egbokhare 2005) include the possibility of using two main verbs in a serial verb construction to express semantic aspectual notions such as the manner and location of the entity. For example, the distribution verbs (see §5.2.4) co-occur with the posture verbs to express the configuration of the Figure and posture or location.

This raises the question as to how Gurenɛ can be said to fit neatly in Talmy’s verb-framed and satellite-framed bipartite typology. This indeed, re-echoes earlier criticisms of Talmy’s classification by Slobin & Hoiting (1994), Slobin (1996, 2004, 2006), Ameka & Essegbey 2001; Ameka (2007:1079 on Likpe), Schaefer & Egbokhare 2005 who observed that some languages do not fit well into his typology and, therefore, call for the third type, equipollently-framed typology. Note that Talmy’s
own admission that some languages (e.g., Mandarin Chinese) do express the core schema of motion (Path) in two main verbs in a serial verb construction supports this position. The Gurenɛ data shows that it can belong to Verb-framed languages because it lexicalises the stative on the verb root but at the same time, the fact that the dynamic is derived via verb suffixes and the inhoative and agentive can only be determined in a particular construction type makes it difficult to classify the language as Satellite-framed. Based on this evidence, I suggest it may be classified as an equipollently-framed language.

3.4 The verb phrase

The verb is the head of the verb phrase (VP) in Gurenɛ. The verb can occur alone (see (129)) or may optionally take modifiers such as verb particles adjuncts, and complements as shown in (130)-(133). The verb particles express various grammatical and discourse functions in relation to the verb as shown in Table 20 below. The examples below exemplify the VPs, shown in boldface. Example (130) has one preverb aspectual particle ko’ɔm ‘just’ and a postverb emphatic particle ‘yaa’. The use of the particle ko’ɔm ‘just’ as I have discussed in my previous works (see Atintono 2005b, 2006; 2011a) conveys the meaning that the event is carried out with ease or no complications. In (131) a past tense particle daa, and an aspectual ko’ɔm particle precedes the verb and a focus particle la occurs after the verb. Example (132) has four preverbal particles, time reference marker, habitual, conditional, purpose, and a postverb focus particle. Notice that (133) has three preverbal particles, that include a future marker, and an object yaarum ‘salt’ to the transitive verb inɛ ‘do’.

(129) kule ‘go home’

(130) Ko’ɔm tabe-ra yaa ASP chase-IPFV EMPH ‘Just chasing (i.e. running after it).’ (ft_azu_699_20100424)
Azanku’unɛ daa ko’om di la poqe-si piweĩ
PN PST ASP eat FOC woman-CL4 ninety
la siweĩ poka n ka boi kɔbega
LINK nine woman-CL3 FOC NEG exist hundred
‘Azanku’unɛ just married (lit. eat) ninety-nine wives, one woman less
than hundred.’ (ft_ada_759_20100420)

Ba yuum ni san ta nyc ti tiŋa
3PL TRM HAB COND PURP see COMP land
ani suŋa ba ni zabe mɛ deecom to’e.
COP nice 3PL HAB fight FOC CONJ collect
‘In the past if they see that a particular land is good they will always
fight and collect it (i.e. land).’ (pgr_013_20100507)

Fu me na le ta iŋɛ yaarum la zo’e
2SG also FUT again PURP do salt DEF be many
ganɔ fu kan nyanɔ di
be pass 2SG NEG.FUT be.able eat
‘If you also again put too much salt in the food you will not be able to
eat it.’ (pgr_020_20100507)

The positional verb expressions include some of these verb phrases with verb
particles. The expressions mostly take a locative postpositional phrase to express the
Ground element. The schematic structure of the verb phrase is summarised as
follows:

VP structure: (Preverbal modifiers) Head (postverbal modifiers).

3.4.1 Particles

Particles are reported to be common grammatical items in Gur languages (see
They constitute a closed class of independent words. They are short uninflected
forms, usually of one or two syllables with a wide range of grammatical functions
(e.g., tense, aspect, modality, negation, coordination, definite articles) or discourse
functions (e.g., focus, emphasis, and intensifier). Table 20 presents the list of
common Guracci particles, their functions and position in the VP or NP.
## Table 20: Particles and their grammatical functions

<table>
<thead>
<tr>
<th>Particle/semantics</th>
<th>Function(s)</th>
<th>Post NP</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>determiner/focus</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>la</td>
<td>definite article</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>NP linker</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>predicate focus</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>gender neutral pronoun</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>demonstrative</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>subject focus marker</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td><strong>me</strong></td>
<td>clause final focus</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td><strong>yaa</strong></td>
<td>emphatic</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Polarity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ka</td>
<td>negative, non-occurrence</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>(did not)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kan</td>
<td>negative, future (will not)</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>da</td>
<td>negative, prohibition (don't, shouldn't)</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>dagi</td>
<td>negative, non-property (isn’t)</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td><strong>Tense /Time Reference Markers (TRM)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>daa</td>
<td>past tense</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>ni</td>
<td>relative past tense or past perfect</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>daarc</td>
<td>two days ago (TRM)</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>zaam</td>
<td>yesterday (TRM)</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>zina</td>
<td>today (TRM)</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>beere</td>
<td>tomorrow (TRM)</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>daareduma</td>
<td>in two days’ time (TRM)</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>kuremi</td>
<td>long ago (TRM)</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>yuum</td>
<td>many years ago, remote or distant past (TRM)</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>wan/wà</td>
<td>future</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td><strong>Aspectual/Modality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>le</td>
<td>again, repetitive</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>maan/malegum</td>
<td>never, again</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>ni</td>
<td>habitual (modality)</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>na</td>
<td>directional</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>sirum</td>
<td>actually (modality)</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>na’am</td>
<td>may be (modality)</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>zi’im</td>
<td>might have (modality)</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>
These particles can be distinguished from the major word classes of nouns, verbs, adjectives, and adverbs on a number of grammatical properties. First, they do not inflect for number as nouns, adjectives, and verbs do in Gurenɛ. Secondly, the members of this class belong to a closed class unlike nouns and verbs, which belong to an open set. They never occur as heads of phrases as nouns or verbs do.

### 3.4.2 The particle *la* and its functions

The particle *la* is common in Gurenɛ and shows up frequently in the positional verb expressions. The functions of the particle *la* identified in Table 20 shall be examined with respect to its syntactic positions and discourse functions. The particle *la*, in Gurenɛ and in other Gur languages occurs in different syntactic positions to express different grammatical functions (see Bodomo 1997; Olawsky 1999:29; Dakubu 1991; 2000; Issah 2007). The phonological shape of the particle is the same in all the positions where it occurs and there is no difference of its tone patterns. Any variation of its tone may be due to the tones of other elements preceding it or occurring after it in the phonological environment but not as a result of its grammatical function (cf. Dakubu 2007). In the locative construction, the functions of *la* are restricted to the definite article and focus marking. It is important to discuss its other functions to help identify its relevant position in the locative construction.

The particle *la* often occurs after nouns in the clause to express definiteness as in (134). In this case, the referent may have been previously mentioned in the discourse and is identifiable by both the speaker and the hearer in the discourse. Bare nouns mark indefiniteness.
One other function of *la* is as an NP linker that links two NPs of equal status together as in (135) and (136). The linker has scope over the two NPs that it links together but does not extend to include the third NP in the phrase. However, if there is a definite article occurring after the linker, the definite article will have scope over all the NPs preceding it. See for example the third particle *la* in (135). The number of NPs to be linked can be indefinite. However, pragmatic or discourse constraints may impose some restrictions.

(135) Abaa *la* Abua *la* Apesego *la* n iŋɛ bala  
Dog LINK Goat LINK Sheep DEF FOC do this  
‘The Dog and the Goat and the Sheep did like this (i.e, behaved like this).’ (ft_azu_957_20100424)

(136) Adayu *la* Asɔŋ *la* n boi  
Rat LINK Rabbit FOC exist  
‘Rat and Rabbit exist.’ (ft_isa_201_20100704)

The coordination of phrases or clauses such as in (137) and (138) uses different particles *gee/dee*\(^{16}\) ‘and’, ‘but’, and *bii* ‘or’. The particle *la* is unacceptable when used as a conjunction to join clauses as example (139) shows.

(137) Kum n nan malegum *ze’e-le* *dee* malegum *gĩ’a-rc*  
corpse still again stand-DYN CONJ again lie-DYN  
‘The corpse again stood up and lay down again.’ (ft_api_779_20100608)

(138) A di mui *gee* obe nɛnɔ  
3SG eat rice CONJ chew meat  
‘He ate rice and meat.’

(139) *A di mui *la* obe nɛnɔ  
3SG eat rice LINK chew meat  
‘He ate rice and meat.’

\(^{16}\) *gee* is used in Bolga dialect while *dee* is used in Bongo, Nankani and other Gurenε speaking communities outside Bolga
Interrogative constructions that involved disjunction require the use of *bii* especially in the posture expressions as (140) shows. In addition, when speakers narrate a sequence of events the particle *ti* ‘and’ is used at the beginning of the clause as a transition conjunction between clauses as shown in (141). The particle *ti* also occurs as a complementizer in certain constructions when it follows a verb. Cross-linguistic evidence suggests different languages especially African languages use different words or particles for NP conjunctions and clause or event conjunctions (see Welmers 1973:305-6; Haspelmath 2007:20-21). The Gurɛ data supports this observation in the literature.

(140) Boole la ze’ mɛ bii a gâ mɛ?
ball DEF stand.STAT FOC CONJ 3PL lie.STAT FOC
‘Is the ball standing or is it lying?’

(141) ti webaa dogɛ a koma gâ’a-re bim
CONJ leopard give.birth 3SG children lie-DYN there
‘and a leopard gave birth and lay its children there.’
(ft_azu_1011_20100424)

When the particle *la* occurs at the beginning of the clause before a verb it expresses the gender neutral third person singular ‘it’.

(142) Ba yeti ɛ! La de la sira
3PL saying yes! CONJ COP FOC true
‘They said yes! It is true.’ (ft_isa_255_20100704)

The occurrence of *la* as a demonstrative particle is usually after the third person pronoun as shown here.

(143) Eŋa la di dia la
3PL DEM eat food DEF
‘That one ate the food.’

The particle *la* also occurs after a verb in a sentence to express what has been termed predicate focus in Gur linguistics (see Bodomo 1997; Dakubu 2005). That is, the semantic and pragmatic meaning express emphatic assertion to the verb and its predicate. In the locative construction, it is this focus meaning of the particle *la* that concerns us most. The particle *la* marks focus and conveys emphatic meaning on the verb and the postpositional phrase that follows it. That is, the absence of the particle in the locative construction renders the expression not having an emphatic meaning.
Compare examples (145) and (146). Although both can be used as responses to the question posed in (144), the most natural response is (145) in which the speaker makes an emphatic assertion of the location of the bucket in the room with the use of the particle /la/ after the verb. Apart from the fact that example (146) may be interpreted to mean an unsolicited statement that a speaker provides without a question posed, crucially it does not include focus information as a kind of emphasis as (145) does.

(144) Bọgetẹ la ɓoi la be? bucket DEF be at FOC where ‘where is the bucket?’

(145) Bọgetẹ la ze’ la ɓọ’ọ la tiŋa bucket DEF stand.STAT FOC room DEF land ‘The bucket is standing on the floor of the room.’ (emphatic)

(146) Bọgetẹ la ze’ ɓọ’ọ la tiŋa bucket DEF stand.STAT room DEF land ‘The bucket is standing on the floor of the room.’ (non-emphatic)

In almost all the examples from the elicited stimuli data, speakers use the focus particle /la/ in their descriptions of the locative scenes. A plausible pragmatic explanation for the presence of the particle /la/ in the elicitation context is because the speaker is always asked a question about the location of an entity x and he/she may want to present to the addressee, the most important information by asserting that the entity x, usually the Figure is located in a certain position or configuration with respect to the Ground. Since the most important element in the Guren locative construction is the positional verb which describes the location or orientation of the Figure the focus particle naturally follows the verb to express focus information. It has pragmatic scope over the verb as well as the postpositional phrase containing the Ground element.

It was also observed that, most of the natural discourse texts data such as the folktale texts and the spontaneous utterances also include the particle /la/ in the locative construction where the speaker is often not asked a question. The reason for this is that, in the natural discourse context the speaker may also want to draw the attention of the listener to the most salient information in the expression, in this case,
the location of an entity even when a question is not posed. The use of the focus particle *la* in Gurenɛ locative constructions, therefore, appears to confirm what the literature on focus constructions suggest that focus information is a pragmatic choice that the speaker makes with respect to the piece of information that s/he wants to present to the addressee as the most salient, prominent and also as a kind of emphasis (see Halliday 1967:202ff; Dik 1978:19; Lambrecht 1994:206ff; Aboh et al. 2007). Focus information in Gurenɛ locative constructions is, therefore, viewed as a pragmatic means or assertion that a speaker uses the particle *la* to mark the most salient information in the construction. This focus phenomenon is quite common in other African languages (see Ameka 1992; Aboh et al. 2007; Schwarz & Fiedler 2007; Paul Schaefer 2009) but what is interesting about the focus particle *la* in Gurenɛ locative constructions is that its use is almost unavoidable in these expressions. It is, therefore, both the grammar and pragmatics that determines the assignment of focus in the locative constructions.

Furthermore, in Gurenɛ if the question seeks an answer about *what* of the location but not *where* of the location, Gurenɛ speakers will use the subject focus particle *n* and the predicate focus particle *la* will be left out as in (148). In this example, the speaker shifts the focus on to the bucket.

(147) Beni  n  ze’  bo’ɔ  la  tiŋa?
   what  FOC  stand.STAT  room  DEF land
   ‘What is standing on the floor of the room.?’

(148) Bogetɛ  n  ze’  bo’ɔ  la  tiŋa
       bucket  FOC  stand.STAT  room  DEF land
       ‘The bucket is standing on the floor of the room.’

In relative clause constructions where the positional verb expression serves as a modifying clause the particle *la* occurs in clause final position to mark focus on the verb. In this context, the positional verb phrase is an embedded clause and semantically serves as a restrictive clause to delimit the potential referent of the mat (see Comrie 1981:131; Atintono 2002, 2003 on Gurenɛ; Saah 2010 on Akan). The particle *n* is a subject relativizer in this context. Observe that in examples (149) and (150) the relativizer occurs following a demonstrative compared to (148) where it follows a noun.
3.4.3 Tense

Similar to other Gur languages, for example, Mampruli (Naden 1988), Dagaare (Bodomo 1997; Dakubu 2005), Dagbani (Olawsky 1999), Gureν marks aspect mostly by verb suffixes as discussed earlier (§3.2.2.1) and to some extent by verb particles. Tense and modality in Gureν are not marked by any specific inflectional forms of the verb. Instead, verb particles are used in periphrastic constructions to express different specific times that the event occurred. Aspect is far more important to the grammar of the verb than tense and modality.

Tense relates the time of the event referred to in the sentence or utterance to the time of speech, the reference point of the time of speech is taken to be the present moment (Comrie 1976:2; Timberlake 2007:304-314). Tense, therefore, typically refers to the present, past, and future. Tense distinction in Gureν is not as important as aspect. Indeed, there are reports in other Gur languages to suggest that tense is less important in these languages (see Olawsky 1999 for Dagbani; Bodomo 1997 for Dagaare). Tense in Gureν is not marked on the verb as aspect is marked by verbal suffixes. There are two verb particles that are used to express slightly different past tense notions. These are the preverbal particle daa ‘past’ and the postverbal particle ni ‘relative tense or past perfect’. The particle daa ‘past’ usually expresses past tense on events that occurred for at least more than a day ago or it may be used to express an event that occurred sometime ago. In example (151), daa is used to express a past event which occurred within a week. The context of this example is that one of our folktale narrators reported to us about his colleague who fell sick after participating in a previous narration session before our next visit which took place about six days ago.
Similarly, the particle *daa* as used in (152) below expresses a past tense event which occurred sometime ago. The expression is taken from an interview text with a chief who states his age in relation to the time of his installation day (about four years ago at the time of our interview, May 2010).

(152) Ma daa ko’om di na’am la bobega daare
1SG PST ASP eat chieftaincy DEF installation day
ma daa ta-ri la yuum-pinaasi la awei
1SG PST have-IPFV FOC year-forty LINK nine
‘When I was installed chief, on that day I was forty nine years (49 years).’ (pgr _005_20100507)

Bodomo (1997:85) observes that similar particles *da* in Dagaare and *daa* in Dagbani are used to express the past tense on events that occurred in the past. He suggests that in the Mabia (his term for Gur) languages unlike Indo-European languages, the past tense particles do not only express tense but they express time depth. That is, they express how far or near, the event occurred in the past with respect to speech time.

The tense particle *ni* in Gurene is usually used to express relative tense when it occurs postverbally and often in a dependent clause to express the relation of an event which happened in the past simultaneously with another main event. As in (153), the particle *ni* occurs in the dependent clause which is syntactically subordinate to the main clause. The *ni* indicates that the arrival of the people occurred in the past but was simultaneous with our eating. The particle *ni* can also be used to express the past tense in the main clause as in (154). This latter usage appears to have some pragmatic meaning to suggest that the speaker did witness or was present when the event happened.
In Gurenɛ as in other Gur languages (see Dakubu 1996; Olawsky 1999; Saanchi 2006) and Kwa languages (see Ameka & Dakubu 2008a), the expressing of tense in the clause is not obligatory. The tense particles can be left out and the sentence will still receive a past tense interpretation through the pragmatic context. In other words, whether or not the speaker must indicate past tense in Gurenɛ depends on the context. For example, in (155) there is no past tense particle but the sentence has a past tense interpretation. The verb in this context usually receives a perfective reading but not imperfective. The perfective in Gurenɛ shows a strong tendency to past tense reference. That is, the clause with the perfective views the situation as a whole without internal temporal structure or subdivisions. Tense is, therefore, indicated when the speaker is interested in the time of occurrence of the event.

(155) Ma pогa kiŋɛ la Bolga da’a gee koma basɛ leave
1SG wife go FOC Bolga market CONJ children
‘My wife went to Bolga market and left the children.’ (fieldnotes 202_20100415)

Future events are expressed by the particles wan ‘FUT’ or the variant wà ‘FUT ingressive’. The future is concerned with the impending actualisation or potentiality of the event. In (156), the clause expresses the potential realisation of the child’s going to school. The temporal adverb beere ‘tomorrow’ is optional and is compatible with the future tense as shown here. The future tense particle unlike the past particles is obligatorily expressed in the clause if the speaker intends the future.

(156) Biа la wan/wà kiŋɛ sукuu (beere) child DEF FUT go school tomorrow
‘The child will go to school (tomorrow).’

Similar to what is found to be cross-linguistically common (Comrie 1976; Dahl 1985:120-127; Timberlake & Chung 1985:203-213; Timberlake 2007), the Gurenɛ
tense system exhibits an absolute type (i.e., speech moment serves as the locus of
tense) and only rarely used as relative tense (i.e., event temporal reference is
dependent on context).

Apart from the tense particles, a number of time or temporal adverbial particles\(^\text{17}\) are
also used to express different degrees of the time that an event happened or will
happen. They include *zina ‘today’, zaam ‘yesterday’, daare ‘two days ago’, beere
‘tomorrow’ yuum ‘many years ago’, (see Table 20 for a full list). These particles are
not tense particles. In the literature of Gur linguistics some people refer to them as
time depth markers as in Bodomo’s (1997) discussion of Dagaare particles. Olawsky
(1999:34-35) also uses a similar term to refer to Dagbani particles. I propose to call
them time reference markers (TRM) in Gurenɛ for the particles function to locate an
event in time by making reference to the specific time or the actual time that the
event takes place. These time reference markers are used by speakers when they
intend to be precise about the time of occurrence of an event. Compare (157) and
(158) where the reference time is far remote (many years ago) the speaker (chief)
used yuum to talk about the wisdom of his elders due to their many years of
experience in chieftaincy matters.

\[(157)\] Bama 3PL  nyum 1SG  yelesi’a DEF  see  TRM  la,  case.DEF ma  see  kan 1SG  NEG.FUT
nyɛ ‘Those cases that they (his elders) have seen in the past (many years
ago) I (chief) will not see.’ (tw_104_20100507)

\[(158)\] Adaboya PN  nabote-ba chief.lover-CL2 la  see  wa’am DEF  come  FOC TRM  zaam  CONJ
TRM  dee  come  zina  again  ‘The contestants for Adaboya chieftaincy came yesterday and came
today again.’ (pgr_020_20100415)

\[^{17}\text{It is not entirely clear if these particles can be considered as tense markers and this is the more reason why I call them time reference markers.}\]
The TRM particles can co-occur with aspectual markers (both particles and inflectional forms) in a sentence. The time reference marker, a habitual particle and the imperfective suffix can simultaneously express aspectual notions on the same verb in the same clause.

(159) ba yuum ni da’a-ra la nɔɔ-si kina
1PL TRM HAB buy-IPFV FOC chicken-CL4 go-IPFV
Kumaasi kɔɔsɛ-ra
Kumasi sell-IPFV
‘they (forefathers) used to (many years ago) buy chickens and travel to Kumasi to sell.’ (conv_nyb_88_20100316)

3.4.4 Modality

The particles ya’am ‘must have’, na’am ‘may be’, ko’ɔm ‘just’, kan ‘NEG.FUT’, and wan ‘FUT’ listed in Table 20 above, as aspectuals, negation, and future markers also have meanings associated with modality. Their basic meanings can be said to be modality and only secondarily used for the other functions. The semantics of the particles generally modify the verb to reflect the speaker’s attitude to or judgement of the likelihood of a proposition to be factual or non-factual. The different kinds of meaning that the particles express include possibility, necessity, permission, obligation, volition and prediction. My discussion here will be very brief. The examples in (160) and (161) express what may be considered epistemic modality. In example (160) the presence of the modal particle na’am suggests the epistemic possibility of the proposition being true because of the presence of the people at the palace while in (161) the drunkard’s singing suggests the possibility that he has consumed alcohol which is signalled by the modality marker ya’am.

(160) Sosega n na’am bona naba yire ti
conversation FOC MOD exist chief house COMP
nɛɛba lagesɛ-ra
people gather-IPFV
‘May be there is a case at the chief’s palace that is why people are gathering.’ (conv 127_20100611)

(161) Dabugera la ya’am nyu la daam ti
drunk DEF MOD drink FOC beer COMP
a yuu-na
3SG sing-IPFV
‘The drunkard must have drunk beer that is why he is singing.’
(conv_45_20100529)

As in other languages, the question as to whether the ‘future tense’ can be used as an epistemic modal marker or not is also the case with Gurenɛ. Like in English, Gurenɛ also uses its future particle wan to express epistemic modality about the possible occurrence of an event as illustrated below. However, its primary function is the expression of future.

(162) Tu wan sing da’a zina
1PL FUT go market today
‘We will go to the market today.’ (i.e., we intend to go to the market)

(163) Wuntɛŋa la n pas zi’an la leɛba la wan
sun DEF FOC reach place DEF trader DEF MOD
bo-na la da’a koose-ra
be.at-IPFV FOC market sell-IPFV
‘Because the sun is high up the trader will be in the market selling.’

In (162) the speaker suggests their intention or possibility of going to the market and in (163) the speaker thinks that there is the possibility of the trader being in the market because the sun is high up. This suggests that the trader is usually at the market earlier than that time.

3.4.5 Postpositions

Postpositions in Gurenɛ belong to a relatively closed-class of words. They express a spatial relation between the entity located and its place of location in the locative construction. Twenty out of the twenty-three postpositions are body-part terms with three from other sources (e.g., environmental term, abstract spatial notion) as shown in Table 21 below. Body-part terms in Gurenɛ like other languages (see Levinson 1994:801), are derived from names for human and animal body parts and constitute a form class of nouns. In Gurenɛ, the postpositions have singular and plural suffixes according to the particular noun class or gender that they belong to as in these examples.

(164) Ligeri la pag-i la ku-ka la zuo
money DEF be on top.flat-STAT FOC chair-CL3 DEF head.CL7
‘The money is on top (flat) of the chair.’ (LDFT 25)
The use of the body-part terms as postpositions to express points of reference for the spatial orientation of objects in Gurenɛ can be said to be grammaticalized. That is, the primary reference of these terms designates names for human body-parts but they are recruited as grammatical terms for spatial reference which may confirm typological studies on body-part terms that they are grammaticalized (Heine et al. 1991:152-153; Svorou 1994, on body-part terms and spatial relations). Table 21 presents the list of postpositions in Gurenɛ.

**Table 21: List of body-part terms and other terms used as postpositions**

<table>
<thead>
<tr>
<th>Postpositions</th>
<th>Body part/others</th>
<th>Locative meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>zuo</td>
<td>head</td>
<td>on top, upper surface</td>
</tr>
<tr>
<td>nuurɛ</td>
<td>mouth</td>
<td>edge, entrance</td>
</tr>
<tr>
<td>noqbanɛ</td>
<td>lip</td>
<td>edge, brim</td>
</tr>
<tr>
<td>poore/dapoorɛ/pooren</td>
<td>back</td>
<td>behind, the rear, at the back</td>
</tr>
<tr>
<td>nɛnɛ</td>
<td>face</td>
<td>in front of, front</td>
</tr>
<tr>
<td>sia</td>
<td>waist</td>
<td>mid-section, foot or ground level, foundation level</td>
</tr>
<tr>
<td>fisiga</td>
<td>buttocks, anus</td>
<td>at the rear, bottom, under</td>
</tr>
<tr>
<td>ina/inya</td>
<td>body</td>
<td>on the body, on the trunk</td>
</tr>
<tr>
<td>puurɛ/puuren</td>
<td>stomach/belly</td>
<td>inside, interior</td>
</tr>
<tr>
<td>sakiko</td>
<td>side of the waist</td>
<td>beside, on the side of</td>
</tr>
<tr>
<td>lugereɛ</td>
<td>flank, side of stomach</td>
<td>at the side of, beside</td>
</tr>
<tr>
<td>lero/lene</td>
<td>lower jaw</td>
<td>under, beneath</td>
</tr>
<tr>
<td>pulum</td>
<td>lower abdomen</td>
<td>below, under, below</td>
</tr>
<tr>
<td>zuo</td>
<td>right arm</td>
<td>right side</td>
</tr>
<tr>
<td>gobega</td>
<td>left hand</td>
<td>left side</td>
</tr>
<tr>
<td>boko</td>
<td>shoulder</td>
<td>on the shoulder level</td>
</tr>
<tr>
<td>kunkore/yugela</td>
<td>neck/throat</td>
<td>neck level</td>
</tr>
<tr>
<td>kà`arɛ</td>
<td>occiput</td>
<td>top rear</td>
</tr>
<tr>
<td>puurɛ (puan)</td>
<td>stomach</td>
<td>inside, interior, enclosed in</td>
</tr>
<tr>
<td>tira</td>
<td>earth or land</td>
<td>bottom, under, underneath, ground level, floor level, below</td>
</tr>
<tr>
<td>saazuo</td>
<td>space</td>
<td>above head level, suspended in air</td>
</tr>
<tr>
<td>tinasuka</td>
<td>compound word (literally 'land + middle)</td>
<td>on/in the middle of, at the centre of</td>
</tr>
<tr>
<td>-ŋ</td>
<td>locative suffix</td>
<td>locative suffix added to a body part term to mean ‘inside’</td>
</tr>
</tbody>
</table>
The postposition *tiŋ* ‘earth’ or ‘land’ is different from the other postpositions. When the postposition *tiŋ* is used as the Ground intransitive it does not take a complement in the locative construction (see discussion in §4.4.1 example (25)). Also there is a co-occurrence restriction in that no postpositional phrase can include more than one postposition. Thus, each postposition occurs in one phrase per locative construction. Almost all the postpositions listed here appear in the examples used in this thesis.

As Heine et al. (1991:152), point out, body-part terms are used as postpositions because they offer physical reference points of human orientation and therefore evoke associations relevant for the expression of spatial concepts such as ‘face’ for the front, ‘head’ for location above or on top, and ‘stomach’ for location inside. For instance, the correspondence between the body-part terms and the postpositions in the following Gurenɛ examples evoke these associations. The body-part term *zuo* ‘head’, in (164) expresses location ‘on top’, or ‘upper surface region’ of the chair which has no literal, physical or actual resemblance or link with the human or animal head. However, this is based on the association of the ‘head’ being at the top of the human body and the upper surface of the chair. On the other hand, *nuurɛ* ‘mouth’ in (166) evokes the functional relation of the entrance or opening of the room which can be compared to a human mouth that can open and close rather than any concrete association. Thus its grammaticalized usage also includes the edge of water bodies such as streams, rivers, dams, edge or brim of objects like baskets, bowls, calabashes, cans, entrance to buildings, etc.

(166) Tagera la gā la bo’ɔ la nuurɛ footwear.PL DEF lie.STAT FOC room DEF mouth
‘The footwear is lying at the entrance of the room.’ (LDFT 60)

(167) Soge-dusega la tī la dangoone inya/iŋa rubbish-wiper DEF lean.STAT FOC wall body
‘The mop is leaning on the body of the wall.’ (BERN 11)

The postposition *inya/iŋa* ‘body’ in (167) depicts the planer surface of the wall as a correspondence to the human body.
3.5 Clause types

Various types of clauses occur in Gurenɛ. As pointed out in the introduction of this chapter my treatment of clauses will be very brief to provide only a sketch of the main types of clauses used in the thesis. These are the declarative, interrogative and imperative. I discuss their syntactic structure or formation and functions in the language.

3.5.1 Declarative

Most of the examples discussed in this chapter up to now have been statements expressed in the declarative. The most common clause in Gurenɛ is the declarative clause. Its formation involves a subject preceding the verb and its complements or adjuncts. Speakers use declaratives primarily to make statements to convey all kinds of information in a discourse. In the locative construction, the declarative clause is used to assert the location of the Figure (subject) which precedes the positional verb followed by the locative postpositional phrase as shown below.

(168) Baŋa la dog-i la bagere la zuo ring DEF be on top.unstable-STAT FOC shrine DEF head

‘The ring is on top (unstable relation) of the shrine.’ (itw_nyb_177_201004)

3.5.2 Interrogative

Another type of clause is the interrogative. It is formed using question words such as beni or bem ‘what’, ‘why’, njwani ‘why’, ‘how much’, be ‘where’, ale ‘how much’, and ani ‘who’/‘whom’/‘whose’. The question word generally appears last in the interrogative structure. Questions are used to seek information. The type of question used to elicit the data on the stimuli mostly involved the type in this example.

(169) Boole la boi la be?

ball DEF exist FOC where

‘Where is the ball?’

The yes-no interrogatives are formed using declarative statements marked with the particle ya which occurs in the final position of the statement as attested in (170). The response in Gurenɛ to such questions is usually ɛɛ ‘yes’ or aayi ‘No’. Dakubu (2003b) can be consulted for details.
3.5.3 Imperative

Imperative clauses in Gurenè come in three types based on their syntax. The common type is expressed by bare verb stems without overt grammatical subject as in (171) and (172). Although the subjects are not marked overtly, they are understood to be present. They may also include no grammatical objects. Their primary functions correspond to commands, instructions, addressed to persons to act in a certain way.

(171) zoi ‘run!’
(172) di dia la
    eat food FOC
    ‘Eat the food!’

The imperative can also be expressed using a second or a third person pronoun together with the verb as shown here.

(173) ya kule!
    you go.home
    ‘you go home!’

The third type of imperative has the structure of a causative verb followed by a complementizer preceding a third person plural pronoun. It is often used to address a second person requiring him/her to cause a third party to take a certain action.

(174) basɛ ti ba kiŋɛ
    let COMP 3PL go
    ‘let them go!’

3.5.4 Verbless clauses

Verbless clauses or non-verbal clauses do not contain a verb in the clause as the examples below show. They, however, include a demonstrative word. The verbless clauses are used by a speaker to direct the attention of the listener to something in the discourse context. This type of clause is quite restricted in the language compared to the declarative type.
(175) ma-m ma n bala
1SG.POSS-EMPH mother FOC DEM
‘That is my mother.’

(176) kuure la n ŋwana kalam
hoe DEF FOC DEM here
‘The hoe is here.’

(177) naba yire la n bala bilam
chief house DEF FOC DEM there
‘That is the chief’s house there.’

3.5.5 Serial verb constructions

Some of the positional verb expressions involved serial verb constructions. Serial verb constructions (SVC) are a common feature in Gurenc. SVC is a phenomenon in which two or more verbs or verb phrases occur in a sequence to express a single event or multiple events (Sebba1987; Aikhenvald 2006: 1-6; Ameka 2006:128-129). Some of the typological properties of SVCs shared by Gurenc as Atintono (2005a:55-71) observes include, (i) no overt coordination, (ii) tense, modality, aspect markers and polarity are shared by verbs in an SVC, and (iii) subject sharing in a clause but objects may be shared or not. As illustrated in (178) all the five verbs share the same subject ba ‘they’ and four of the verbs (to’e, nyu, bugu, ṝeera) share the object daam ‘beer’ but the last verb tuura ‘insulting’ has its own object nereba ‘people’. The sequence of all the five verbs involves no coordination marker. The only past tense marker daa has scope over the whole construction. Negation is also marked once before the first verb but it has scope over all the verbs in the whole SVC (see (177)). As is typologically common (see Aikhenvald & Dixon 2006, Hellwig 2003), Gurenc SVCs semantically code a sequence of sub-events that are closely linked together. In (178) below, the collection and drinking of the beer trigger the other sub-events of the people getting drunk and going about insulting people. These events are conceptualised by speakers as conventions and are logically connected such that the reverse order is not logically permissible. Atintono (2005a) observes that there may be no restriction on the number of verbs in the SVC but practical or pragmatic considerations may impose a limit.
…they collected beer, drank it and became intoxicated and they are going about insulting people.’ (conv 78)

‘Mr Hornbill and Mr Cock did not follow each other home again.’

The positional verb expressions in Gurenɛ involved serial verb constructions. A unique property of the positional serial verb constructions is that they restrict the number of verbs to two as shown below. The first verb in the SVC usually describes the configuration of the Figure (see (180)) or it may be a take verb occurring in the first slot as in (181) which describes an agent causing the Figure to be in a certain position. The second verb describes the actual position of the Figure.

‘The peanuts are heaped lying on the floor.’ (SPST 507)

‘s/he took a stick and leaned it on the tree stem.’ (CAUS 13)

The verbs of distribution subclass discussed in §5.2.4 typically occurs in a serial verb locative construction.

3.6 Summary

This chapter discussed the essentials of the grammar relevant to follow the Gurenɛ examples in the thesis with a focus on the: verb morphology (derivational and inflectional suffixes), aspectual properties of the positional verbs in light of Talmy’s (1985, 2000b, 2007) three aspect-causative types and lexicalisation patterns, verb phrase, tense and aspect. Gurenɛ positional verbs lexicalize these three aspect-causative types in two different ways. The stative is express on verb roots and the language uses verb morphology to derive the two dynamic forms (inchoative and
agentive) from the stative root but these two forms are neutral to the inchoative and agentive distinctions. Instead, it is the construction type that they participate in which is crucial to determining these aspectual notions.

A list of verb particles and their grammatical functions is also provided with a discussion on the focus particle *la*. The last part of the chapter is a brief discussion on clause types including serial verb constructions. The next chapter discusses the semantic typology of the positional verbs and the Gurenɛ data.
CHAPTER 4. PREVIOUS TYPOLOGICAL STUDIES ON POSITIONAL VERBS AND THE GURENɛ DATA

4.1 Introduction

This chapter presents a review of previous cross-linguistic studies on posture, positional and locative verbs to provide a background to the present study which draws parallels and differences with these works. Relevant for our purpose will be Newman’s (2002a) typological volume on posture verbs on the one hand, and two overlapping typological studies of the MPI research tradition on spatial descriptions on the other (see Levinson & Wilkins 2006a; Ameka & Levinson 2007a). This survey includes a brief background of the interest in the study of the spatial locative descriptions (§4.2), a summary of Newman’s (2002a) typological volume (§4.2.1), and the MPI cross-linguistic studies (§4.2.2). Section 4.2.2.1 discusses the basic locative construction (BLC) followed by its predictions while §4.2.2.2 presents the BLC hierarchy of six locative situation types. §4.3 focuses on the Gurenɛ where-question used to elicit the basic locative construction as mentioned in my discussion of the stimuli data (§2.3.2) and §4.4 discusses the Gurenɛ BLC. The typological membership of Gurenɛ and its relevance is in §4.4.1 and §4.4.2 provides a discussion of the reduced basic locative construction in Gurenɛ. The non-basic locative construction is discussed in §4.5. Parts of this chapter have been published in the Proceedings of the 6th World Congress of African Linguistics (see Atintono 2012a)18.

4.2 Typological interest in spatial descriptions research

The cross-linguistic study of spatial descriptions, locative predicates or relations has been the subject of many recent studies particularly in cognitive semantics and linguistics (Talmy 1985, 2000a, 2000b, 2007; Lakoff 1987; Serra Borneto 1996; Newman 2002a volume; Zlatev 2007), language and cognition studies (Miller & Johnson-Laird 1976; Jackendoff 1983:161; Herskovits 1986:127-155; Levinson 1992, 2001; Brown 1994; Svorou 1994; Sinha & Thorseng 1995; Levinson 1994, 2003, 2006; Levinson & Wilkins 2006a; Ameka & Levinson 2007a), semantics (Frawley 1992:250-275), mind and language studies (Bryant 1997:239-264). I do not attempt to provide a critical or exhaustive review of all these studies but attempt to discuss those works that have a direct influence on this study.

One of the important research interests in spatial language studies (see Levinson 2001, 2003; Levinson & Wilkins 2006a:1) is the desire to explore the strategies that languages use to encode space or spatial information linguistically and the search for universals in this area. This has led studies on spatial descriptions to investigate the possible underlying cultural, semantic and pragmatic factors influencing the expression of spatial relations in languages. Most descriptive grammars of languages in the past do of course provide information about locative expressions but the spatial information is usually thought to be restricted to adpositions. These adpositions have been taken for granted to be the predominant means by which most languages express spatial information as the descriptive studies suggest (cf. Levinson & Meira 2003; Smits 2007). However, as the recent typological studies point out, there are differences with respect to the linguistic forms that speakers of different languages use to describe the location of entities (e.g., positional verbs, adpositions). This motivates another typological interest in these studies aims at exploring what the consequences are of these differences for linguistic universals in this area (see Levinson 1992, 2003; Levinson & Wilkins 2006a:1; Hickman & Robert 2006; Evans & Levinson 2009). The next sections provide a review of the cross-linguistic studies on posture and positional verbs in the light of these two observations.
4.2.1 Newman’s (2002a) typology on posture verbs

Newman’s (2002a) typological volume is a collection of articles (about a dozen languages) that explores the linguistic properties of the human posture verbs, *sit*, *stand* and *lie*. The volume differs fundamentally in its approach and descriptions from the MPI research traditions, but there are points of overlap between the two in terms of the semantic descriptions of the verbs. The typological sample of languages in the volume is quite representative and includes European (English, Dutch), Asian (e.g., Korean, Japanese), Central Australian (Pitjantjiatjara/Yankunytjatjara, Arrernte), and languages of the Pacific region as well as from North and South America (Chipewyan, from Canada; Trumai, a Brazilian isolate). The sample also includes one African language, Mbay (a Central-Sudanic language of the Nilo-Saharan family). The contributors did not use a common data elicitation tool like the MPI research group (e.g., the positional stimuli sets discussed in §2.3.2.1) to collect their data but relied extensively on individual language databases for their analyses. Although the volume focuses on human posture verbs, some of the contributions discuss other uses of the verbs to include the description of the posture of non-humans (animals) and the location of objects (see Lemmens 2002:103-139 on Dutch posture verbs; Guirardello-Damian 2002 on Trumai).

In his cross-linguistic overview of the volume, using English as a starting point, Newman (2002b:2-24, see also Newman 2009) suggests that the central meanings associated with posture verbs are the actual sitting, standing and lying postures of humans before their semantic extension to locative uses with other entities. The general trend of the semantic analysis of the posture verbs in the volume is concerned with cognitive linguistics ideas and the use of the human posture verbs. In line with this goal, Newman (2002b: 2-3) identifies four cognitive domains that are relevant for the interpretation of the three posture verbs in English (*sit*, *stand*, *lie*): (i) spatio-temporal domain (ii) the force-dynamic domain (iii) the active zone domain, and (iv) the socio-cultural domain. The *spatio-temporal domain* refers to the body position associated with each posture, for example, the compact body position of a person sitting, the vertical or upright position of a person in standing position, and the horizontal position for a lying posture. The *Force dynamic domain* characterises the
manner in which entities exercise or balance force to be in a particular posture (see also Talmy 2000a:409-422). Drawing on Langacker (1991:189-201), Newman uses the term *active zone* to refer to the specific area or subpart of an entity that participates directly in a spatial relation. For posture verbs, there is typically one part of the body that is more engaged than another (e.g., the legs and the feet for standing, side of the body for a lying posture and buttocks for sitting). The *socio-cultural domain* relates to the worldview of the speakers with respect to how the speakers provide social valuations to the various postures based on some cultural specific factors. For example, sitting and lying postures are generally perceived as comfortable positions for rest and other activities that do not require physical movement such as in a meeting or sleeping (see Song 2002). I only refer to some of these concepts when it is necessary to make a point in my discussion but I do not apply these domains in my discussion of the Gurenɛ data. See Atintono (2012b) for a fuller discussion of the three human posture verbs in Gurenɛ and their locative extensions discussed within the cognitive linguistics approach.

A crucial typological finding suggested in the contributions in the volume is that postural verbs describe semantic properties of entities such as shape, verticality, and horizontality (see Newman 2002b). As shown in my discussion of the semantics of the Gurenɛ positional verbs in Chapter 5, these properties, though useful for the characterization of the verbs of body position, do not sufficiently capture the semantic properties and distinctions in the postural system. As discussed in §5.2.2, locative relations that involve elevation of the Ground and the Figure disregard the actual posture of the entities. Further, the canonical orientation of the Figure on the Ground is also important in Gurenɛ locative descriptions and determines the use of the verbs. For example, both *ze’* ‘be standing’ and *kpa* ‘be kneeling’ describe a person resting on feet and knees respectively with the body projected in an upright position but speakers do not describe the kneeling position as standing. The property of verticality becomes irrelevant here because of the lack of the canonical base support on feet.

Nevertheless, the discussion of the semantics of the Gurenɛ positional verbs in Chapter 5 compares the Gurenɛ data with some of the languages investigated in this volume. For example, Song’s (2002) discussion of the semantics of Korean posture
verbs in relation to the ‘height’ of humans and animals is compared with my discussion of Gurenɛ verbs of elevation in §5.2.2. Further, Lemmens’s (2002) contribution on the uses of Dutch posture verbs also provide interesting areas for comparison with the Gurenɛ data (see a discussion in §5.2.1).

4.2.2 The MPI semantic typology on spatial locative descriptions: Levinson & Wilkins (2006a) and Ameka & Levinson (2007a)

The Language and Cognition Group at the Max Planck Institute for Psycholinguistics (MPI), Nijmegen, Netherlands has over the years conducted cross-linguistic studies on a wide range of languages to investigate the expression of spatial relations in natural languages with the aim of establishing a semantic typology. Levinson’s (1992, 1994, 2000, 2001, 2003) work initiated a rich and highly influential cross-linguistic body of research in the semantic description of expressions referring to topological relations in languages at the MPI. Also influential in the method and the typology in the MPI research tradition has been the work of Bowerman & Pederson (1993), Ameka et al. (1999), Levinson & Meira (2001a), and see also Sinha & Thorseng (1995 on spatial language acquisition and development). Others such as Brown (1994) have explored spatial or topological relations in individual languages (e.g., Tzeltal topological relations) from a cross-linguistic perspective. Of particular interest in the MPI semantic typology, which will be the focus of my review, are two typological volumes which are a collection of articles written by Levinson and his research group on spatial descriptions (see Levinson & Wilkins 2006a; Ameka & Levinson 2007a). I provide a brief background to each volume before a discussion of their typological generalisations or predictions.

The first volume is Levinson & Wilkins (2006a) published as Grammars of Space: An exploration in Cognitive Diversity. The contributors to the volume discuss topological relations and motion events in a diverse set of languages. The typological sample include European (Dutch), Australian (Jaminjung, Arrernte), Papuan (Yéli Dyne, Kilivila), Asian (Japanese), and Mayan languages (Tzeltal, Yukatek). Like Newman’s (2002a) volume, it includes one African language, Ewe, a Kwa language spoken in Ghana. The contributors provide sketch grammatical information for their languages followed by a semantic discussion of topological relations at the beginning of each
chapter in the volume. The remainder of each chapter is devoted to the discussion of motion events and frames of reference.

The second volume, Ameka & Levinson (2007a) is a collection of articles on posture, positional and locative predicates, which appeared in a special issue of Linguistics (45) and continued the same line of the MPI research tradition as in Levinson & Wilkins (2006a). However, the contributions in this volume focused only on the typology and semantics of the positional and locative verbs with a more expanded language sample to include two African languages. The sample includes European (Dutch, German), Mayan (Tzeltal & Yukatek), South Caucasian (Laz), Papuan (Tidore, a Western outlier; Lavukaleve, an isolate), Brazilian (Trumai, an isolate; Tiriyo, Cariban/Taranoan), Austronesian (Saliba), Chukotko-Kamchatkan (Chukchi), and two African languages (Likpe, a Ghana-Togo-Mountain language; Goemai, a West Chadic language of Central Nigeria). The language sample in this volume overlaps with Newman’s (2002a) typological sample. They include Dutch and Trumai but as I show in the discussion below, the methodological approach in this work is essentially different from Newman’s volume.

A unique feature of the two MPI works, unlike the contributions in Newman’s (2002a) typological study, is that the contributors adopt the same methodological approach in their investigations. They draw on the same set of standardized elicitation stimuli, situational data and procedures as discussed in §2.3.2. Levinson & Wilkins (2006c:512) and Ameka & Levinson (2007a:860) observe that the common approach taken in their research makes accurate cross-linguistic semantic comparisons of their results relatively easy.

These two cross-linguistic studies made two important typological predictions and identified tendencies concerning spatial locative descriptions in languages. First, is the classification of the languages in their sample into four main typological types based on the number and types of verbs that these languages use in what they called the basic locative construction (BLC, hence forth). See the BLC classification of languages in Table 22 below. The second generalization/tendency is a corollary (i.e., follows from) to the BLC that there is a hierarchy of six locative situation types for which the BLC is more likely in languages or the languages may use other
constructions deviating from it (BLC). Figure 13 below presents this hierarchy of situation types. Levinson & Wilkins (2006a) were the first to make these predictions and Ameka & Levinson (2007a) provide a refinement of these generalisations. I examine each of these typological generalisations in turn beginning with the basic locative construction.

4.2.2.1 The basic locative construction (BLC)

The basic locative construction is said to be the most typical, most preferred, canonical (normal), non-elliptical and unmarked construction that a speaker of a language provides in response to the question *Where is x?* (Levinson & Wilkins 2006a:9, 15-16; Ameka & Levinson 2007a: 852). The *where-question* according to Levinson & Wilkins (2006a:15) is the functional frame, which can be used to elicit a response that is comparable in languages. The response to the question describes the location of an entity *x* (the Figure) with respect to another entity *y* (the Ground). The BLC is the default answer to a *where-search* question.

The elicitation setting of the BLC response requires the researcher to use the MPI common research methodology, which involves the use of picture stimuli sets as discussed in §2.3.2.1. The investigator shows a picture with two objects (one of which is designated as the Figure and the other as the Ground) to the speaker to observe and provide the answer to the *where-question*. The investigator may also use two real objects (a Figure and a Ground) arranged in a locative relation requiring the speaker to observe and offer an answer in response to the question. As Levinson & Wilkins (2006b:9) point out, the procedure is not intended to be a mechanical elicitation and the investigator has the freedom to choose objects to set up similar configurations as seen in the stimuli sets to suit the local cultural context. See, for example, my own GUR stimulus set in Appendix 1. It is further suggested that a range of answers or responses provided by the speaker should be collected, taking into account the order in which the responses were provided and which are the most preferred or most natural.

The typological findings from the BLC suggest similarities and differences with respect to the type of linguistic strategies that languages employ to describe spatial
relations (see Levinson & Meira 2003; Levinson & Wilkins 2006a; Ameka & Levinson 2007a). These studies show that the locative information in many languages is not restricted to only adpositions as previous studies on Indo-European languages tend to suggest (e.g., Jackendoff 1983:161-174). For example, Herskovits (1986: 127-155) basing her study on English prepositions (e.g., in, on, at, under) suggests that topological relations in languages are expressed by adpositions. In contrast, the MPI typological studies show that the spatial information is distributed among several word classes. They include various form classes such as posture or positional verbs, nominal predicates, case inflections, and adpositions depending on the language. In fact, the MPI studies strongly suggest that most languages use a set of contrastive posture, positional or locative verbs to express spatial relations in the BLC than the other strategies. The typological pattern observed is that languages may use no verb, one verb, three to seven verbs, employ a set of seven or more positional verbs in the BLC. Table 22 is an adaptation from Ameka & Levinson (2007a: 863-864) which shows the BLC typology of languages according to the number and types of verbs used in their BLC. The classification of the languages into typological types has different semantic generalisations as discussed below. First, I illustrate two different strategies that English and Gurene employ in the BLC before discussing these predictions.

Table 22: The typology based on the number of verbs in the BLC

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of verbs in the BLC</th>
<th>Example of languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 0</td>
<td>No verb</td>
<td>Saliba, Papua New Guinea</td>
</tr>
<tr>
<td>Type I</td>
<td>Single locative verb (or suppletion under grammatical conditioning)</td>
<td></td>
</tr>
<tr>
<td>Ia</td>
<td>Copula verb (i.e., dummy verbs used in many other constructions)</td>
<td>English, Tamil, Tiriyó, Chukchi</td>
</tr>
<tr>
<td>Ib</td>
<td>Locative (+ Existential) verb</td>
<td>Japanese, Ewe, Yucatec, Lavukaleve</td>
</tr>
<tr>
<td>Type II</td>
<td>Postural or positional (a small contrastive set of locative verbs (3-7 verbs)).</td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>Postural verbs</td>
<td>Arrernte, Dutch, Goemai</td>
</tr>
<tr>
<td>IIB</td>
<td>Ground space indicating verbs</td>
<td>Tidore</td>
</tr>
<tr>
<td>Type III</td>
<td>Positional, dispositional or Multiverb type (a large set of dispositional verbs, 9-100)</td>
<td>Tzeltal, Zapotec, German, Laz, Likpe (Sckpzie)</td>
</tr>
</tbody>
</table>

To illustrate the different strategies that English and Gurene use in the coding of the locative information in the BLC, consider the cup on the table in Figure 12. It is
obvious that English speakers’ preference is for the expression in example (1) below which uses the copula *to be* with the preposition *on* instead of the posture verb *standing* with *on* in (2) in response to the question, *where is the cup?*. Levinson & Wilkins (2006b:15) argue that the choice of example (2) as an answer to a *Where-question* in this locative situation is odd and that (1) seems more natural to English speakers and thus qualifies as the BLC. The verb *to be* in English as in (1) serves only to mark tense, mood and aspect in spatial descriptions (Lyons 1968:388; Ameka & Levinson 2007b:851). The spatial information that codes the location of the cup is expressed in the preposition *on* which has information about the nature of the support relation, i.e., support from below, but which does not say anything about the shape of the cup compared to the Guren examples in (4) and (5) below.

![Figure 12: A scene from the Topological Relations Picture Series (TRPS)](image)

This is the basis for classifying English as Type 1a in the BLC typology in Table 22 above. Notice that example (1) has the structure, NP (noun phrase, which is the Figure) BE PP (prepositional phrase, expressing Ground).

*English*

(1) The cup is on the table.

(2) The cup is standing on the table.
In contrast to English, Gurenɛ speakers use two locative constructions with positional verbs as in (4) and (5) which specify the configuration of the Figure with respect to the Ground. The most preferred normal answer to question (3) is example (5) as seven out of ten speakers used it as their first response. The three other speakers who used the response in (4) did point out that they did not pay attention to the saucer in Figure 12 and explained that if they did, example (5) will be more appropriate if the Grounds (saucer and table) were clearer to them. Thus, both (4) and (5) are considered BLCs in Gurenɛ but example (5) is more preferred in this scene due to the presence of the saucer. The verbs provide precise semantic information to include the placement of the cup in the bowl using the verb *sagi* (see §5.2.2.6 for discussion). The verb *yaga* is a variant of *yagi* (see §5.2.2.1) in a serial verb construction (i.e., when a verb precedes it). It also conflates the meaning of stable support and elevation.

As can be seen in these examples, in Gurenɛ the spatial information is distributed between specific positional verbs and postpositions as compared to English. The point to emphasize here is that none of the specific descriptions of the location of the Figure encoded in the positional verbs aligns neatly to the English preposition *on* as shown in examples (4) and (5). Ameka & Levinson (2007b:849) report that many languages show these differences with English by having a set of contrastive locative verbs that can describe the Figure and Ground in a more precise detail.
The BLC typological predictions

The theoretical implication and predictions of the cross-linguistic studies of the BLC as Ameka & Levinson (2007a:854) observe, is that all languages have human posture verbs such as *sit*, *stand*, *lie*, *squat*, etc. but not all of these verbs have their extension to locative uses (e.g., squat, kneel). However, some of the posture verbs are found to be the diachronic sources of copula verbs for many of the Type I languages (Table 22), as is the case with many European languages. The studies also proposed that posture verbs constitute the main locative verbs in Type II languages while Type III with large set of positional verbs may include posture verbs. It has been suggested in these studies (see Ameka & Levinson 2007a) that two reasons account for the use of posture verbs as locative verbs. First is to indicate where the entity can be found and secondly to point out what it looks like so that the inquirer can identify it. A summary of the predictions of each of the BLC types based on Ameka and Levinson (2007a:855-860) is presented below.

**Type 0: No verb**

One of the BLC typological predictions about the languages in this type is that they have the verbless strategy as the most frequent means for expressing locative statements but it is not the exclusive means in these languages. However, where a language has a verb in a construction that competes with the verbless one the latter is often preferred in the description of stereotypical situations on pragmatic grounds (Ameka & Levinson 2007:855 citing Levinson 2000a, 2000b). Further, Ameka & Levinson (2007:855) observe that “Languages which favour unmarked Ground nominals (no case or adpositions), will not permit verb deletion (otherwise no marker of location will be left)”. Thus, it is further pointed out that, languages which do not permit locative verb deletion, will in certain stereotypical circumstances allow contraction of the Ground phrase, e.g., adpositions/locative-case deletion.

The example below illustrates a verbless locative construction from Saliba spoken in Papua New Guinea.
Type I: Single locative verb

The BLC predictions about languages with a single locative verb include: (a) languages that employ this strategy may belong to the minority in the world. (b) the function of the single locative verbs often extends their function as support verbs for nominal and adjectival predication. (c) the single locative verbs and copulas are often derived diachronically from posture verbs. (d) the single locative verbs “may often be under pressure from extended uses of human postural, with postural, positionals invading the hierarchy of Figure objects in locative constructions” (Ameka & Levinson 2007:856). The grammaticalized development path of the verbs may be like: animates>free objects on surfaces>contained objects>attached objects.

A language that uses the copula strategy is English (subtype Ia) as discussed in example (1) above. Others are Tamil, Chukchi, and Tiriyo. Consider the Tiriyo example taken from Dunn et al. (2007:878).

Tiriyo

(7) Eni-pisi (nai) apei juuwe
container-DIM 3.COP table on.top.of
‘The cup is on top of the table.’

The subtype, Type Ib, also uses a locative verb (+Existential). Languages characterised with this type are Japanese, Ewe, Yucatek and Lavukaleve. Example (8) is an illustration from Ewe.

Ewe

(8) Kọpu-a le kplo-a dzi
Cup-DEF be located table-DEF table
‘The cup is on the table.’
Type II: Postural or Positional verbs (3-7)

This type of languages have a small set of postural or contrastive positional verbs which are typically human posture verbs *sit, stand, lie* and may include the verb ‘hang’ used to describe a limited range of semantic notions. A more general verb or an existential verb can also be used if none of the specific positional verbs is relevant. The presence of the set of contrastive positional verbs may have or may not have any relation to any special features of the language. The abstract geometric properties of the Figure partly or largely determine the use of the verbs. For example, objects may require canonical orientation (its normal position), vertical for a standing position, horizontal for a lying position, and objects may ‘sit’ if they have no major axis or have a wide base oriented in a canonical position, and an object may be described as hanging if it has no support from below. The verbs constitute a minor form class and possess a *sortal* character by means of which they classify nominal concepts based on their semantics. What is classified is not the noun or referent but the ‘nominal concept’ such as single or multiple entities may influence the choice of verbs.

According to the typology, the verbs in this class typically have two uses, a *presuppositional* and an *assertional* use. The *presuppositional* use is “given by the default collocation of the nominal concept and positional, either by convention, or in the case of physical objects by their canonical position” of the Figure according to its typical orientation of axes (Ameka & Levinson 2007:859). In the *presuppositional* use, the verb can still be used to describe the existence of a Figure in relation to a Ground even when the Figure’s current position is not in its typical orientation. For example, if a language usually uses ‘stand’ to describe a bottle on its base on a

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19 The use of the terms *presuppositional* and *assertional* in the BLC typology deviates slightly from the technical use of these terms in semantics or pragmatic literature. As Ameka & Levinson (2007:859) define them, the *presuppositional* use is given by a default collocation of nominal concept and positional, either by convention, or in the case of physical objects by their canonical position according to stereotypical orientation of the axes while the *assertional* use usually involves a choice of some positional verb other than the default usage. My use of the terms in this study follows from this application.
Ground, the ‘stand verb’ can still be used even when the bottle is in a lying position in a different scene. This will be the presuppositional use of the verb. As Ameka and Levinson (2007a:859) point out, the test for this default collocation is the use of negative constructions. That is, if you want to deny that the bottle is not on the Ground the ‘stand verb’ is still used to say ‘The bottle is standing on the Ground’ then in this case the ‘stand’ applies to bottles by default.

The assertional use of the positional verb describes the actual current transient position of the Figure to assert that the bottle is actually in a lying position on the Ground but not on its canonical base. In the presuppositional use, the default use of the canonical meaning would have still been possible in this case. Thus, the presuppositional use asserts the location and presupposes orientation while the assertional use asserts orientation, and presupposes location as Ameka & Levinson (2007a) observe in their summary. For example, in one of their stimuli scenes (PSPV 46) where four bottles are lying and three clearly standing on a table it is suggested that languages that use the verbs presuppositionally will describe all the bottles as standing in answer to the where-question (e.g., Goemai does this) irrespective of the four in a lying position.

A number of languages in the BLC typology in Table 22 above exhibit the presuppositional and assertional use. Goemai in particular as Hellwig (2007:894) observes has five verbs and patterns with this postural type but in addition also shares similarity with Type III languages discussed below. The examples below are illustrations from the postural type languages.

IIa: Postural verbs (e.g., Dutch, Arrente, Goemai)

Goemai

(9) Gwi t’ong k’a tebul
calabash sit (SG) head table
‘The calabash sits on top of the table.’ (TRPS 1)
(Hellwig 2007:895)

(10) Kwalba goe-t’ong k’a muk zak a haam-yim
bottle NOMZ-sit head(SG) 3SG.POSS also FOC water/color-leaf
‘The bottle that sits on its top is also of green colour.’ (Hellwig 2007:904)
In these Goemai examples, (9) represents the *assertional* use of the postural sit verb *t’ong* to describe the calabash in its actual current canonical base position but example (10) is the *presuppositional* use where the bottle is currently not on its normal base position but in an upside-down position and is still described as sitting by default.

The Tidore (Papuan language, Indonesia) example in (11) illustrates type IIb in this typological class.

**IIb: Ground space indicating verbs**

*Tidore*

(11) Piga ma-gumuru *isa* ka-re hono plate 3NH.POS-side landwards PRED-PROX bowl

‘To the side of the plate landwards here, there is a bowl.’

(Van Staden 2007:967)

Notice that in this Tidore example, the verb *isa* ‘landwards’ is not a postural type but it expresses a ground space to indicate where the Figure (plate) can be found. Tidore has seven ground space locational verbs which can occur in its BLC and a further twenty dispositional verbs for describing configuration.

**Type III: Multiverb/positional or dispositional verbs**

There are a number of predictions made about the languages in this positional type: (a) Characteristically, the languages have a large set of positional verbs (about 7-100 or more) and the semantics of the verbs are very detailed and language specific. The verbs describe entities that are likely to have properties which include: objects in canonical or non-canonical position (vertical vs. non-vertical, e.g., for containers), how rigid or flexible the objects are, volumetric and axial properties of objects such as one dimensional, two dimensional or three dimensional, solids versus containers, single vs. multiple or mass Figures. (b) The verbs in this type unlike Type II are used assertionally but not presuppositionally to indicate that the Figure property currently has the position described. The verbal element in the locative construction cannot be omitted and is obligatorily required (c) There is a general verb or an existential locative verb available to be used if none of the more specific verbs is relevant. (d)
Some of the positional or dispositional verbs are more frequent and may have a special status with a sortal or mensural difference in classifiers. (e) Certain factors in the linguistic system motivate the use of the positional verbs. They include ‘Mass’ type semantics for nouns referring to undifferentiating substances that are not mass-like (water, sand or mobile entities like animals that can be separated, for example, a dispositional verb can include properties of an entity such as a banana to indicate whether the fruit, stem or leaf is intended). (f) Another prediction suggested is that the languages lack a large set of contrastive adpositions or local case and this result in the verb taking up the semantic burden of the topological spatial information.

The languages that fall under Type III in the typology include Tzeltal, Zapotec, German, and Likpe. The examples below illustrate Likpe and Tzeltal. Observe that while Likpe has a positional verb *faka* ‘hang’ and a locative *li* in (12), Tzeltal uses a posture verb *waxal* in (13) indicating the posture and vertical position of the pot and a vacuous prepositional *ta*.

**Likpe (Kwa, Ghana)**

(12) O-kanie faka li ɔ-punu ə-me eto
CM-lamp hang LOC CM-table AGR-DET POSS
‘The lamp is hanging above the table.’
(Ameka 2007:1073).

**Tzelal (a Mayan language)**

(13) wax-al ta lum p’in
stand.vertically-DIS(B.3) PREP ground pot
‘A pot is vertically standing on ground.’
(Bohnemeyer & Brown 2007:1111)

Among the languages in Type III, Tzeltal is well known for its rich specific positional verb roots for describing all kinds of locations and configurations of objects (see for example, Brown 1994, 2006; Levinson 1992, 1994; Levinson & Haviland 1994; Grinevald 2006; Bohnemeyer & Brown 2007). Tzeltal is said to be a prototype with a large set of multiverb or positional and dispositional verbs that can make semantic discriminations of shape, posture, and position, which are radically different from the other postural systems in the typology (Ameka & Levinson 2007a:850, 856).
As it will become evident in the course of the discussion, Gurenɛ positional verb data exhibits characteristic features of Type III with more than thirty positional verbs. It is similar to Tzeltal but has fewer verbs with interesting semantics that Tzeltal lacks (see §5.2.2.8).

4.2.2.2 The BLC hierarchy

The basic locative construction (BLC) hierarchy as shown in Levinson & Wilkins (2006a) and Ameka & Levinson (2007a:853) proposed that there is a cross-linguistically valid implicational hierarchy of six locative relations as shown in Figure 13 below. The arrow on the left, starting from bottom up shows the most likelihood of objects to be coded with the BLC and the one to the right depicts the less likelihood of the BLC encoding from top to bottom. It is suggested that if a language can use its basic locative construction for a specific level of the hierarchy, it will be able to use the same construction for all levels below it. The lowest level is level VI which is the level of the basic locative function. This is the level at which posture and positional verbs in most languages can easily be used to describe moveable inanimate Figures in the BLC. The higher levels on the BLC hierarchy are IV, II and I, which depict various attachment scenes while level III depict Figures that are considered as damaged Grounds (e.g., a crack on a cup). Level V is also a high level and it depicts adornment relations.
Gurenɛ speakers can use the various semantic subclasses of the positional verbs in Chapter 1 (Table 1) to describe almost all these six locative situation types. However, some subclasses pick out one level and cannot apply to the levels below it as suggested by this implicational hierarchy. See Chapter 5 for details.

Taking into account these typological predictions and generalizations, I examine below the Gurenɛ basic locative construction to identify its typological features and membership.

4.3 The interrogative used to elicit the BLC in Gurenɛ

Before discussing the basic locative construction in Gurenɛ, it is helpful to look at the nature of the *where-search question* itself. Among the question particles discussed in §3.5.2, the most neutral interrogative that is used to pose the *where-search question* to elicit the BLC has the interrogative marker *bɛ* ‘where’ and the general locative verb *boi* ‘be at’, ‘exist’. The question is also obligatorily marked with the focus particle *la* which occurs after the verb. The Figure usually occurs first in the statement followed by the general locative verb *boi* while the question particle occurs last as in (14).

(14)  sɔɔ  la  boi  la  bɛ?
     broom  DEF  be at  FOC  where
     ‘Where is the broom (lit. the broom exist where?)’
An alternative strategy of posing the same question is to use any one of the positional verbs in the question statement. However, such a strategy does not make the question neutral and can lead the respondent to provide a reply using the positional verb already in the question statement. In (16) below the question is posed in respect of the scene in Figure 14. Notice that the *where-search question* contains the positional verb *pagi* ‘be on top, of flat or flexible objects’. Posing such a leading question leaves the speaker with no option but to repeat the positional verb in the question in the answer as in (17). Such questions were avoided in the construction of the *where-search question* during the elicitation of the data using the stimuli sets.

(Figure 14: Example of a picture scene from PSPV)

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other languages can be comparable or should be posed since both the *where* and the *what* questions in Gurenɛ elicit almost similar responses.

(18) Beni n dog-i teebule la zuo what FOC be on top.unstable-STAT table DEF head
    ‘What is it on top of the table?’

(19) Gɛl-a n dog-i teebule la zuo egg-CL6 FOC be on top.unstable-STAT table DEF head
    ‘The eggs are on top (unstable) of the table. i.e., it is the eggs and no other entities are on the table.’ (GUR 71)

For the purposes of this study and also the fact that the BLC is concerned with the *where-search question* the question type in (14) above is used in the elicitations involving the picture stimuli sets. The responses obtained using this question represents the basic locative construction in Gurenɛ as discussed in §4.2.2.1 and in §4.4 below.

### 4.4 The basic locative construction (BLC) in Gurenɛ

In line with the definition of the basic locative construction in §4.2.2.1, the BLC in Gurenɛ is the most preferred, spontaneous, and unmarked answer that a speaker will offer to the question ‘Where is an entity X?’ (cf. Atintono 2012a:333). Examples (20)-(22) were elicited using the BLC question discussed in §4.3 and these expressions constitute the basic locative constructions. They consist of a noun phrase (NP) in the subject position representing the Figure, a positional verb indicating the position of the Figure followed by a focus particle, a postpositional phrase (PP) containing the NP expressing the Ground object and a postposition, which marks the precise locative relation between the Figure and the Ground. The schema below presents the structure of the basic locative construction. The order of the Figure and the Ground cannot be reversed in the construction. It will result in an ill-formed and semantically unacceptable expression.
The positional verbs in the BLC vary according to the spatial relationship between the Figure and the Ground. The verbs are used assertionally as predicted by the BLC typology of Type III languages discussed above. That is, the verbs describe the current actual canonical position of the Figures on the Ground. The verb gã ‘be in a lying position’ is a posture verb which describe baa ‘dog’ in (20) as being in a lying posture at the entrance of the doghouse and in (21) ze’ ‘be standing’ (also a posture verb) describes dukɔ ‘pot’ as located on its canonical base in an upright position on ground (earth). The example in (22) is where Guren is interesting to the typology, for the use of dogi and other verbs belonging to the semantic subclass of verbs of elevation describe the location of persons, objects, and other entities located on elevated Grounds. When speakers use these verbs in this context the actual posture of standing, sitting or lying becomes irrelevant and the speaker shifts his or her focus to the elevation of the Ground, properties of the Figure such as shape, stable or unstable base support or the locative relation between the Figure and the Ground. The details of this phenomenon are discussed in §5.2.2.

The postpositions form simple postpositional phrases with the Ground NP in the BLC. The postpositions are very important elements in this construction. They specify the exact spatial relation between the Figure and the Ground. Any one of the postpositions discussed in §3.4.5 can be used depending on the spatial relation between the Figure and the Ground. The postposition nuurɛ ‘entrance’ literally ‘mouth’ in (20) is a body part term that specifies that the dog is located at the entrance of a doghouse in scene TRPS 71. Nuurɛ refers to the entrance of a room or
house, edge of containers and water bodies where the Figure is located. If the Figure is located on the upper surface of a Ground (e.g. a tabletop) the posposition zuo ‘on top or above’ literally ‘head’ is used as in (22). Contrary to the prediction that Type III languages have limited adpositions (see (e) in (iv) above), Guren has over twenty postpositions that can make many fine distinctions as shown in Chapter 3 (§3.4.5).

One other notable feature in the Guren BLC is the presence of the focus particle la. It occurs frequently after the positional verb to mark focus on the verb and the postpositional phrase. A detailed discussion of the particle was given in §3.4.1.

4.4.1 The reduced BLC

The elements in the basic locative construction, that is, the Figure, the positional verb, the Ground and the postpositional element are obligatory. This confirms the predictions of the BLC about Type III languages that the verbal element is obligatory in these languages noted above. However, the BLC may be reduced under certain conditions. For example, in a locative context where the Ground is perceived by speakers to be inherently locative such as tiŋa ‘earth or floor’ the postpositional element that express the precise place of location has to be omitted as in (23) because the beans are on the floor. It is semantically infelicitous for the speaker to include the postposition zuo as (24) shows.

(23) Tɛa la yezego (gã) la tiŋa.
Beans DEF be spread lie.STAT FOC land
‘The beans are spread and lying on the ground.’ (PVPS 011)

(24) #Tɛa la yezego (gã) la tiŋa zuo.
Beans DEF be spread lie.STAT FOC land (head)
‘The beans are spread and lying on the ground top.’ (PVPS 011)

In some context tiŋa may co-occur with another Ground element and it will be interpreted as a postposition but not as a Ground (see (25)). The two contexts can be distinguished syntactically. The reduced BLC has tiŋa as a Ground element following the focus particle la (see (23)) but the postposition, tiŋa always occurs following the Ground element as exemplified in (25). In this example, kuka ‘chair’ is the Ground but tiŋa is a postposition ‘under’.
The BLC may also be reduced when a clause final focus particle \( m \varepsilon \) occurs. In Gurenë syntax, the focus particle \( m \varepsilon \) usually functions as final clause focus particle that marks the end of the clause. The speaker uses it to assert his or her knowledge of something as a fact. When the particle occurs at the end of the clause it is usually unacceptable to have any other nominal or postpositional element following it. The example in (26) describes a bulb hanging on ceiling with the final focus particle \( m \varepsilon \) marking the end of the clause and it is not acceptable to have the ground element present. The positional verb \( yuli \) ‘be hanging, dangling freely’ presupposes that the Ground entity must be located above and the speaker in describing such a scene may focus on the hanging relation and leaves out the Ground implicit.

\[
(26) \text{Bugum la } yul-i \text{ m} \varepsilon \text{ *siilum zuo}
\]

‘The fire (i.e., bulb) is hanging on the ceiling.’ (TRPS 13)

The omission of the Ground element leaves the place of location unspecified in the locative relation but there is a pragmatic assumption that both participants have knowledge about the place of location. Bohnemeyer & Brown (2007:1120) suggest that in such a situation where the Ground element is omitted it presents a non-specific “landing site” for the locative relation. As predicted about the Type III languages (see (b)) discussed above the positional verb cannot be omitted in the Gurenë BLC as illustrated in (27).

\[
(27) \text{*G} \text{ôn} \text{o la } \emptyset \text{ kuka la t} \text{i} \text{ña}
\]

‘The book under the chair.’

4.4.2 Typology of Gurenë locative predication and its relevance

All the semantic classes of Gurenë positional verbs identified in Table 1 of Chapter 1 can occur in the BLC. They include the verbs of body position, elevation, attachment, distribution, the existential verb, and the proximate verbs. The language, therefore, belongs to Type III languages of the BLC typology and can be classified as a Multiverb language like Tzeltal, Likpe, Laz and German. Examples (20) and (21)
above illustrate the verbs of body position (posture). (22) and (26) are verbs of
elevation and (23) uses a distribution verb in the BLC. The general locative verb is
illustrated in (28) while (29) shows the use of a proximate verb. Observe that in (29),
the posture verb preceding the proximate verb in the locative construction is optional.
It is just the case that Gurenɛ speakers frequently use a posture or another positional
verb to describe the location but it is perfectly fine to use the proximate verb alone.

(28) Gɛla la boi la laa la puan
eggs DEF be at FOC bowl DEF inside
‘The eggs are in the bowl.’ (CONT 15)

(29) Yire la (ze’) lɛm la da’a la
house DEF stand.STAT be near FOC market DEF
‘The house is (standing) near the market.’

As predicted by the BLC typology of Type III languages in (b) Gurenɛ positional verbs
are used assertionally to describe the current location of the Figure and the positional
verbs can be used to make detailed semantic descriptions of locative relations.

Gurenɛ also shows similarities as well as differences with three other African
languages classified in the Typology as Type II and Type III languages. For instance,
Gurenɛ uses positional verbs in serial verb constructions just as Goemai does (see
Hellwig 2003), likewise Likpe (Ameka 2007). A first difference turns up in the number
of verbs used in their BLCs. While Gurenɛ uses more than thirty verbs in its BLC
these other African languages have less. Goemai, as Hellwig (2003:10; 2007:893-916)
points out, has five set of contrastive verbs (four postural and one general verb)
and belongs to postural Type II languages with Type III features. In addition, Goemai
also has a number of dispositional verbs. It uses its verbs both assertionally and
presuppositionally as Hellwig (2003; 2007) suggests. Ameka & Essegbey (2006:370-
372) and Essegbey (2005) in their discussion of Ewe (Kwa, Ghana) note that the
language has only one locative verb in its BLC and a member of Type I languages
(see example (8) above). Ewe also uses postpositions in its BLC just as Gurenɛ
does. Although Ewe has prepositions, they are not used in its BLC but Gurenɛ does
not have prepositions. Likpe (a Ghana-Togo-Mountain language) has fifteen
positional verbs in its BLC and belongs to Type III languages (see Ameka 2007).
Gurenɛ data also shows similarities as well as differences with Likpe in the
description of certain locative scenes as shown in my discussion of the positional verbs in Chapter 5. Essegbey (2007) reports that Nyagbo, a typological and genetic relative of Likpe, also employs only four positional verbs in its BLC and belongs to postural Type II languages.

The Gurere data is of interest to this typology for our understanding of the multiverb languages for it has more positional verbs than any of these African languages discussed in the BLC typology, but also far fewer than Tzeltal. However, the positional verbs display a rich semantic network of meaning to describe posture, position or location precisely as shown in the detailed discussion of the semantics of the verbs in Chapter 5. Its unique feature is the use of verbs of elevation which describe location on elevated Grounds and thereby disregard the actual posture of lying, sitting or standing. This phenomenon has not been discussed in this typology (see §5.2.2 for details).

4.5 Non-basic locative constructions

Some constructions deviate from the basic locative construction and this section examines this briefly. These are non-locative constructions that speakers use to describe some scenes. Gurere speakers describe the adornment scenes in the stimuli sets using verbs in non-locative constructions to code simply the adornment of the object by a person. Such scenes do not express any locative relation between the Figure and the Ground. In the BLC typology, such scenes are found in other languages to be described by speakers using non-BLC expressions (see Levinson & Ameka 2007a). They include scenes like a ring on finger (TRPS 10), a shoe on foot (TRPS 21), a bangle on hand (GUR 50) and anklet on ankle (GUR 59). As illustrated in example (30)-(34) the verbs piri ‘wear, of hand’ or ‘arm’, ‘leg’ and ye ‘wear, of neck’ or ‘whole body’ in the constructions do not say anything about the position of the Figure except to predicate the part of the person that it is adorned (e.g., leg, hand, neck, etc.). The Ground phrase in these examples is also optional as indicated in brackets. Recall that the basic locative construction obligatorily requires the Ground phrase to express the place of location. Cross-linguistically (see Levinson & Wilkins 2006b) adornment scenes use non-BLC or variations of the BLC. The scenes
depicting adornment belong to locative situation type V on the BLC hierarchy discussed in §4.2.2.2 and are difficult to access by most languages.

(30) A pi-ri la nutua (a nu’o puan)
3SG wear-IPFV FOC finger.ring (3SG hand inside)
‘s/he has a finger ring on (on the finger).’ (TRPS 10)

(31) A pi-ri la tagetɛ
3SG wear-IPFV FOC footwear
‘s/he has put on footwear.’ (TRPS 21)

(32) A pi-ri la baŋa (a nu’o puan)
3SG wear-IPFV FOC bangle (3SG hand inside)
‘He has a bangle on (on his hand).’ (GUR 50)

(33) A pi-ri la nabaŋa (a na’arɛ puan)
3SG wear-IPFV FOC leg.bangle (3SG leg inside)
‘He has a bangle on (on his leg).’ (GUR 59)

(34) Poka la ye la somi’i-si a nyugela puan
woman DEF wear FOC bead-CL4 3SG neck inside
‘The woman has put on beads (on her neck).’ (TRPS 51)

Other objects in stereotypical locations such as a cigarette in mouth (TRPS 39) and negative space e.g., a crack on a cup (TRPS 26) are described with constructions deviating from the BLC. Example (35) describes a TRPS scene with a cigarette in a person’s mouth as he is holding it in his mouth or he is smoking it. Negative space such as a crack on cup, is described as a property of the Figure. A possessive construction strategy is used in (36) involving the verb tari ‘possessing’ to express that the Ground (cup), owns a crack (Figure). The exact part where the crack exists is left implicit.

(35) Budaa la gĩ/nyuu-ri la sigaare a nuurɛ puan
man DEF hold/smoke-IPFV FOC cigarette 3SG mouth inside
‘The man is keeping/smoking cigarette in his mouth.’ (TRPS 39)

(36) Kɔpi la ta-ri la muleŋa
cup DEF has-IPFV FOC crack
‘The cup has a crack.’ (TRPS 26)

When speakers are pressed further to find out if they will never use a positional verb to describe any of these scenes, they reluctantly suggest the use of the general
locative verb *boi* (see §5.2.5), but point out that such constructions are not the normal or most preferred way of describing adornment and negative spaces. They are generally less preferred. However, it seems to me that the part of the body that is adorned and the nature of the object affect the way in which the speakers may choose a verb that can be used in the BLC or in a non-BLC (cf. Ameka & Essegbey 2006:376 on Ewe). For example, an earring on ear dangling freely (TRPS 69) attracted the use of the positional verb *yuli* 'be hanging, dangling freely' as in (37).

(37) Tubekayulega la *yul-i* la tuberɛ zuo earring DEF be hanging.dangle-STAT FOC ear head

‘The earring is hanging on the ear.’ (TRPS 69).

(38) 3SG *yule* la tubekayulega hang FOC earring

‘She has an earring on her ear.’ (TRPS 69)

The example in (37) is a BLC with the verb *yuli* used in an inchoative construction with the interpretation that the earring is hanging on the ear. Although, the earring is also in an adornment relation to the ear, the verb of elevation *yuli* is used here. The alternative in (38) is involves a dynamic verb *yule* used in an agentive construction which is used by speakers to mean that the person has actively put the earring on her ear.

### 4.6 Summary

The chapter discussed previous cross-linguistic studies of posture verbs and spatial locative descriptions and the relevance of the Gurenc data. It provides a review of two main typological studies, the Newman’s (2002a) typological study on posture verbs on one hand, and the MPI typology on spatial descriptions (Levinson & Wilkins 2006a; Ameka & Levinson 2007a) on the other. The Newman’s typological volume explores the semantics of three human posture verbs, sitting, lying, standing, in more detail from a cognitive linguistics perspective. The MPI research tradition focused on using a common methodology to establish a semantic typology of the positional verbs based on the basic locative construction (BLC), which is the response to the question ‘where is x?’ Four types of languages are classified based on the number and type of verbs used in the BLC: Type 0 (verbless), Type I (one verb), Type II (3-7
verbs), and Type III (7-100 verbs). The BLC hierarchy of locative situations is also discussed. The BLC in Gurenɛ is a stative construction in which the spatial information is encoded in a set of about thirty positional verbs. The components of the BLC in Gurenɛ include the Figure, the positional verbs followed by the focus particle, the postpositional phrase containing the Ground to designate the place of location of the Figure, and the postpositional element marking the precise place of location. Based on the evidence of over thirty verbs that can occur in Gurenɛ’s BLC, the language is classified as a Type III language similar to Likpe, German, Laz and Tzeltal. The semantics and pragmatics of the positional verbs are discussed in more detail in the next chapter.
CHAPTER 5. THE SEMANTICS AND PRAGMATICS OF THE POSITIONAL VERBS

5.1 Introduction

This chapter now discusses the semantics and pragmatics of the positional verbs in more detail. In Chapter 4 (§4.2.2), Gurenɛ was classified as a Type III language based on the basic locative construction (BLC) typology of Levinson & Wilkins (2006a) and Ameka & Levinson (2007a). The verbs of a Type III language can be used assertionally but not presuppositionally as pointed out in Chapter 4. Like any other Type III language, Gurenɛ uses a large set of positional verbs (more than thirty, see Table 1 of Chapter 1) to describe a wide range of semantic notions. The chapter also pays attention to the relevant semantic and pragmatic factors that influence the choice of one verb over the other in the locative construction. All the three aspect-causative types, the stative, and the dynamic (inchoative and agentive) positional verbs discussed in §3.3.2 occur in the locative constructions. However, the stative verb forms, and the dynamic positional verbs which are used in the inchoative constructions concern us most in this chapter. The dynamic verb forms used in the agentive construction are very few. The latter construction is infrequently used by the speakers to describe dynamic locative relations and is usually restricted to a context where the speaker perceives the location of the Figure as caused by an agent. I also provide a definition of the locative relation between the Figure and the Ground expressed by each positional verb at the end of the semantic discussion of the verb. Part of this chapter has also been published before in CogniTextes20 (see Atintono 2012b) and the present discussion draws on this work.

The overall goal in this chapter, therefore, is to present and discuss some facts about the Gurenɛ positional verb data pointing out similarities and deviations from the

20CogniTextes is an online peer reviewed journal published in France with Prof Maarten Lemmens as Editor-in-Chief. My article titled “Basic and extended locative uses of posture verbs in Gurenɛ” appeared in CogniTextes vol.7: http://cognitextes.revues.org/501
cross-linguistic studies discussed in Chapter 4. The chapter also discusses the semantic component of “elevation” which is considered more important in Guren locative descriptions than in other languages in the typological literature on posture and positional verbs.

In order to carry out the analysis in a principled way, the discussion in this chapter follows the order of the six semantic subclasses of the positional verbs put forward in Table 1 of Chapter 1. These are (i) verbs of body position or posture verbs (ii) verbs of elevation (iii) attachment verbs (iv) distribution verbs (v) general locative verb, and (vi) proximate or relative distance verbs.

5.2 Semantic and pragmatic analysis

The next section discusses each semantic subclass of verbs in more detail. I begin the discussion of each subclass by providing a general semantic characterization or overview of the class and then proceed to discuss the meaning of each verb in detail. The use of the positional verbs to describe human postures is discussed first followed by their application to animal postures and the location of objects.

5.2.1 Body position/posture verbs

Verbs in this subclass describe the different body postures or positions of humans, animals and the location of objects (e.g., sticks, bottles, balls, pots) with respect to a Ground (earth). The body posture, position, or orientation may be horizontal, vertical, inclined, tilted, squatting, stooping, or turned upside down. Unlike other languages in the typological literature, the actual postural meanings of the verbs in most cases require the Figure to be on the earth or the floor. Otherwise if the Figure is in a lying, a standing, a sitting, or a leaning position on an elevated Ground (e.g., a rooftop, on a tree branch, a tabletop) Guren speakers’ choice will be one of the verbs of elevation (see §5.2.2 below). Thus, the actual posture will be disregarded in this context. The only exception is that for humans there are additional canonical elevated Grounds (e.g., beds, plastered roofs) that allow for the application of one of the posture verbs gã ‘be lying’ as opposed to an elevation verb. Table 23 provides a
summary of the verbs in this subclass. For all the stimuli scenes that speakers use these verbs to describe refer to Appendix 2.

Table 23: List of body position or posture verbs

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Animacy of Figure</th>
<th>Body Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>gâ</td>
<td>be in a lying posture</td>
<td>animate, inanimate</td>
<td>horizontal</td>
</tr>
<tr>
<td>zī</td>
<td>be in a sitting posture</td>
<td>animate</td>
<td>vertical</td>
</tr>
<tr>
<td>ze’</td>
<td>be in a standing posture</td>
<td>animate, inanimate</td>
<td>vertical</td>
</tr>
<tr>
<td>kpa</td>
<td>be kneeling</td>
<td>animate</td>
<td>vertical</td>
</tr>
<tr>
<td>tī</td>
<td>be leaning, of objects</td>
<td>inanimate</td>
<td>tilted, leaning</td>
</tr>
<tr>
<td>deli</td>
<td>be leaning, in a sitting posture</td>
<td>animate (human)</td>
<td>inclined, leaning</td>
</tr>
<tr>
<td>lali</td>
<td>be leaning, in a standing posture</td>
<td>animate (animate/animal)</td>
<td>tilted, leaning</td>
</tr>
<tr>
<td>dobi</td>
<td>be in squatting posture</td>
<td>animate</td>
<td>vertical, crouching</td>
</tr>
<tr>
<td>yigi</td>
<td>be in a stooping posture</td>
<td>animate</td>
<td>vertical, crouching</td>
</tr>
<tr>
<td>kpabi/vugi</td>
<td>‘be turned upside down’</td>
<td>inanimate</td>
<td>vertical</td>
</tr>
</tbody>
</table>

This semantic subclass of verbs can occur in the basic locative construction (BLC). The verbs can be applied at level VI of the BLC hierarchy of locative situations of Levinson & Wilkins (2006a) and Ameka & Levinson (2007a) presented in §4.2.2.2. This is the most basic level of the BLC hierarchy that posture verbs in most languages can be used to describe entities in the BLC as the typology suggest.

The locative scenes in Figure 15 below depict human postures that consultants describe in the stimuli picking out six of the verbs listed in Table 23. None of the over 400 picture scenes in all the stimuli sets used for the collection of the data include a scene for the stooping and the kneeling postures. However, in the natural corpus there are a number of expressions involving the use of the verbs yigi ‘be in a stooping posture’ (§5.2.1.5) and kpa ‘be kneeling’ (§5.2.1.8).
The descriptions of the six different postures of the locative scenes by consultants in Figure 15 above depict the physical body position of people. Thus, in (1) gã ‘be lying’ describes the child’s horizontal body position (GUR 05) which is in contact with the mat while example (2) zĩ describes the woman’s sitting posture (it depicts the sitting posture that is typical for women in the culture). For a typical sitting posture for men, see TRPS 38 in Figure 16 below. Example (3) on the other hand, ze’ ‘be standing’ focuses on the vertical orientation of the man on his feet on the ground while example (4) describes the sitting and leaning posture of the man. The standing and leaning posture of the man (GUR 19) is described with example (5) and in (6) consultants describe the posture of the boy in scene TRPS 64 as squatting.

(1) Bia la gã la suŋɔ la puan (gise-ra).
    child DEF lie.STAT FOC mat DEF inside (sleep-IPFV)
    ‘The child is lying down on the mat (sleeping).’ (GUR 05)

(2) Poka la zĩ la suŋɔ la puan
    woman DEF sit.STAT FOC mat DEF inside
    ‘The woman is sitting down on the mat.’ (GUR 10)

(3) Budaa la ze’ la tiŋa.
    man DEF stand.STAT FOC land
    ‘The man is standing on the ground.’ (GUR 48)
The verbs are also used to describe the location of non-human entities (both animate and inanimate). The next section examines closely the semantics of each verb.

5.2.1.1  *gã* ‘be in a lying posture’

**Humans**

The verb *gã* ‘be lying’ describes a person whose whole body or part of the body is in a horizontal position and aligned with a horizontal Ground such as the scene of the child lying on a mat in Figure 15 above (GUR 05). The lying posture may refer to a person lying on one side of the body, lying face up or face down with limbs stretched or bent. However, the latter two postures may attract the use of two manner adverbials, *aliko* ‘on one’s stomach with face down’ (see (7)), and *azampuyela* ‘on one’s back with face up’ (see (8)) to indicate the precise body position of the person in the lying posture. In this type of construction, the Ground element is usually omitted as well as the postposition that marks the precise place of location of the Figure. It is not ungrammatical to have the Ground or the postpositional element present but speakers’ preference is to omit them in the locative construction. What is of interest to the speaker in these two contexts is the manner of the lying posture.

(7) *Bia  la  gã  la  aliko*  
child DEF lie.STAT FOC prostrate
‘The child is lying face down.’

(8) *Bia  la  gã  la  azampuyela*  
child DEF lie.STAT FOC on.back
‘The child is lying down face up.’
The verb is also used to describe someone lying on a bed. The response in (10) is taken from my dataset of spontaneous speech. The utterance was provided by a woman in response to my consultant’s question (see (9)) about the whereabouts of her (my consultant’s) child who was playing in a yard with other children while we were having elicitation sessions. The child had gone to lie on the bed without our knowledge.

(9) N bia la boi la be?  
1POSS child DEF be at FOC where  
‘Where is my child?’

(10) A gā la gorego la zuo  
3PL lie.STAT FOC bed DEF head  
‘He is lying down on the bed.’ (SPST 67)

The verb gā has another sense ‘sleeping’, metonymically associated with lying. For instance, (11) and (12) may appear to be vague with the interpretation that the child is either sleeping or only lying down if the adjunct gisa ‘be sleeping’ is not included. However, if the speaker intends the ‘sleep’ sense of gā, the verb gisa-ra ‘be sleeping’ will usually be added and the latter will occur as a second verb in a serial verb construction as in examples (12) and (13). The sleeping sense of gā is restricted to canonical Grounds for lying (e.g., beds, mats) and often at certain times of the day such as in the night.

(11) Bia la gā la gorego zuo  
child DEF lie.STAT FOC bed head  
‘The child is lying down on the bed.’

(12) Bia la gā (gisa-ra) mc  
child DEF lie.STAT be sleep-IPFV FOC  
‘The child is lying down sleeping.’

(13) Bia la gā la gorego zuo gisa-ra  
child DEF lie.STAT FOC bed head sleep-IPFV  
‘The child is lying on the bed sleeping.’

**Animals**

The verb gā ‘be in a lying posture’ is also used to describe the lying postures of animals as the following examples show. It can be used to describe the lying
postures of animals like cats, dogs, cows, etc. when they are lying curled on one side of their body on the ground (earth).

(14) Baa la pue gā la bo’o la nuurɛ
dog DEF be crossed lie.STAT FOC room DEF mouth
‘The dog is lying across the entrance of the room.’ (LDFT 43)

(15) iio la gā la muɔ la puan
monitor.lizard DEF lie.STAT FOC bush DEF inside
ti kɔma nyɛ e
COMP children see it
‘The monitor lizard is lying in the thatch and the children saw it.’
(SPST 137)

In example (14), my consultants described the posture of a dog that went to lie down at the entrance of our room after we had driven it out because it was interrupting our elicitation session. In (15) children saw a monitor lizard lying under bundles of thatch near the place where we usually gather for our folktale narration sessions and someone reported this to us. Notice that in both examples the posture of these animals is construed as oriented horizontally. The elongation of their bodies is also an important component that contributes to defining their lying posture. An important component of characterizing animals as lying in Gurenc, therefore, is the alignment of the Figure’s body on the ground (earth). When birds also rest their bodies on the ground, like chickens roosting, they are described with gā. Insects in Gurenc are also described as lying although they are supported on their legs. Speakers perceive the legs of ants not to be high enough to project them vertically in a standing posture compared to other animals (see discussion of ze’ in §5.2.1.3 below).

(16) Bogereŋa la gā la tiŋa
black.ant DEF lie.STAT FOC land
‘The black ant is lying on the ground.’

Objects

Objects that can attract coding with gā ‘be lying’ include elongated objects such as sticks, stalks, pens, books, mats, tubers (e.g., yams, cassava), bottles, mirrors, and brooms, which assume a lying position on a ground (earth). The verb gā is also used to describe the location of flexible or non-rigid objects such as clothes, ropes, paper, and all kinds of similar objects on Ground (earth). Consider the following examples
taken from real contexts, spontaneous speech, and the stimuli data to describe objects in lying positions.

(17) Fuol a gã la bo’ò la tiña
    broom DEF lie.STAT FOC room DEF land
    ‘The cloth is lying on the floor of the room.’ (LDFT 251)

(18) Sunɔ la gã la bo’ò la puan
    mat DEF lie.STAT FOC room DEF inside
    ‘The mat is lying in the room.’ (LDFT 07)

(19) Daam doo-ro la gã la deo la sia
    beer wood-CL8 DEF lie.STAT FOC room DEF waist
    ‘The beer’s firewood is lying at the foot (lit. waist) of the building.
     (SPST 06).

(20) Bisega la gã la tiña
    mirror DEF lie.STAT FOC land
    ‘The mirror is lying on the ground.’ (BERN 38)

(21) Kinkã bomene la gã la tiña
    stalks bundle DEF lie.STAT FOC land
    ‘The bundle of stalks is lying on the ground.’ (GUR 38)

As can be seen in all these examples, the objects described as lying have an elongated shape located horizontally on the Ground. It would appear that the crucial determining semantic factor is that the shape of the Figure must be elongated. However, it is interesting to note that speakers also use gã to describe the location of a ball(s) which lack any differentiation in terms of vertical or horizontal shape on the ground (earth), as the following examples attest.

(22) Boole la gã la tiña
    ball DEF lie.STAT FOC land
    ‘The ball is lying on the ground.’ (PSPV 07)

(23) Bool-a la gã la tiña.
    ball-CL6 DEF lie.STAT FOC land
    ‘The balls are lying on the ground.’ (PSPV 39)

Other objects located on the ground (earth) that receive gã coding include objects with round or irregular symmetrical shapes such as eggs, fruits, lumps, crumbs, keys, stones, and seeds, and circular flat-shaped objects such as CDs shown in the examples below.
Although a ball and these other objects do not have an elongated shape, the use of gā ‘be lying’ to describe these scenes is consistent with the prediction in the positional typological literature that objects lacking salient dimensions and a canonical base to support them in a vertical or standing position select the ‘lying verb’ in most languages (Ameka & Levinson 2007a) and see also Serra Borneto (1996:464) on German and Lemmens (2002:120-122) on Dutch.

In the Gurene positional verb data, the horizontal position of the Figure is only an important property for the lying postures of humans and animals but not all objects as shown in examples (24)-(27).

Interestingly, Ameka (2007) also points out that in Likpe (a Ghana-Togo-Mountain language spoken in Ghana) inanimate Figures such as pens, sticks, tubers, bottles, that have an elongated shape and are clearly in a horizontal position on a surface (e.g., table, floor) are often not described as lying but are categorised as in a ‘be.on’ relation. According to Ameka, the contexts in which the lying verb can be applied to objects in Likpe (Sekpélé) are restricted. For example, when there are multiple objects in different orientations and Likpe speakers intend to show contrast in the positions of the multiple Figures (e.g., three bottles standing and four bottles lying on a table) the lying verb is used in this context. See Likpe example below.
The important semantic property that accounts for the non application of the lying verb to objects in Likpe as Ameka (2007) observes is animacy. In Gurenɛ, however, animacy is not an issue as far as the use of gâ ‘be lying’ is concerned. Rather it has to do with whether or not the object has a canonical part to support it on its base upright or lacks a salient dimension (e.g., if it is a round object like a ball). The Gurenɛ’s case is similar to German where Kutscher and Schultze-Berndt (2007:999) observe that objects lacking salient dimensions are also described as lying. Gurenɛ and Likpe behave very differently, as objects can take the ‘lie’ verb in Gurenɛ but are highly restricted to contrastive locative context in Likpe. These similarities and differences between the two languages as well as German is to be expected as predicted by the BLC typology about Type III languages discussed earlier in Chapter 4 that the semantics of the verbs are detailed and language specific.

One other interesting observation about Gurenɛ use of gâ as a default assignment to describe objects on the ground (earth) is that gâ is also used to describe holes dug in the ground. Consider the spontaneous utterance uttered by a consultant to describe potholes on a road. It is hard to understand how a hole can be lying on the ground. However, it seems that speakers consider holes as objects on the earth’s surface like other moveable objects.

In the positional verb literature, it is also argued (see for example, Lemmens 2002:122 on Dutch), that the relative size of a Figure (e.g., a large inflated ball on pitch) may determine whether or not speakers will describe such Figures as standing or not. For Dutch speakers, as Lemmens suggests such Figures could still be described as standing. The size of a Figure does not matter to Gurenɛ speakers once the Figure lacks a canonical base support or a salient dimension it would be described as gâ. Indeed, a huge rock of about seven metres high was described as
gā notwithstanding its height. In sum, for Gurenɛ speakers, the notion of verticality is less important to the notion of a base support (cf. Atintono 2012b).

Speakers also use gā ‘be lying’ to describe the location of some natural phenomena including water bodies (e.g., rivers, dams, streams), farmlands, geographical features, roads, or footpaths. These are permanently located entities. The following utterances were spontaneously collected in context. In (30) one of my folktale narrators described the location of his farmland to his colleague who enquired about this. The description of the dam in (31) was in answer to an inquiry about the location of the Vea dam (not far from Bolga). The context in (32) is that we lost our way while travelling to one of the villages to record folktales and we asked for directions and received the utterance in response.

(30) Mam va’am la gā la kulega la nuurɛ 1SG farm.land DEF lie.STAT FOC river DEF mouth ‘My farmland is lying by the edge of the river’ (SPST 28)

(31) Vea mogeɛ la gā la Gu’ur sukuu la poore-n Vea dam DEF lie.STAT FOC PN school DEF back-LOC ‘The Vea dam is lying at the back (behind) of the Gu’ur school.’ (SPST 08)

(32) Pale la gā la bala paa-ra Luŋɔ road DEF lie.STAT FOC DEM reach-IPFV Luŋɔ ‘The road lies (extends) as far as Luŋɔ.’ (SPST 72).

In examples (30) and (31), the motivation for the use of gā is in line with what Serra Borneto (1996) calls geotopographical location. The term ‘geotopographical location’ refers to the conceptualization of a plane as lying. Permanently located landmarks such as water bodies (e.g., lakes, dams, rivers, ponds, etc.) tend to be described as lying in some languages, for example, Trumai (see Guirardello-Damian 2002, 2007) and Mbay (Keegan 2002:340). Thus, va’am ‘farmland’ and moğere ‘dam’ in Gurenɛ are perceived as lying on the surface of the earth as a result of their horizontal expansion. Pale ‘road’ in (32), is also construed as elongated and thus horizontally extended and hence the motivation for using gā ‘be lying’. In Dutch, Lemmens and Perrez (2010) observe a similar usage with this type of Figures and even suggest in
their findings that French learners of Dutch often have difficulty in understanding this extended usage. Based on this kind of conceptualizations, an elongated mountain is in Guren described as gā ‘be lying’ (cf. also Lemmens on Dutch liggen), but a conical hill which is not extended horizontally is usually coded with ze ‘be standing’.

(33) Zo-woko la n gā gee zo-kinkilega mountain-long DEF FOC lie.STAT but mountain-round la ze’ mɛ DEF stand.STAT FOC ‘The long mountain (horizontally extended) is lying but the round mountain (conical) is standing.’ (LDFT 175)

Other geographic entities that are described as lying because of horizontal expansion include uninhabited spaces, forests, and earth. However, trees and grasses that grow in the forest are described as ze ‘be standing’; these are considered to be vertically projected on their base by the speakers.

Definition 1: The locative relation of gā ‘be in lying posture’

For any F and G, where F is Figure and G is Ground, F and G are in a gā ‘be lying’ relation if:

(i) F is animate (human or animal), F is horizontally oriented on G, and G is at floor or earth level unless G is a canonical elevated place for lying (e.g., bed) and F is human, or

(ii) F is inanimate with salient dimensions horizontally oriented or F has no salient dimension and G is earth or floor level.

5.2.1.2 zi‘be in a sitting posture’

The posture verb zi describes the sitting posture of humans located on their buttocks with support from below. This is the only verb restricted to the description of human posture.

21 In the rest of the locative relation summaries in the thesis, ‘F’ and ‘G’ will be used throughout to represent the Figure and the Ground respectively.
postures and is not used to describe the posture of animals (except animal characters in folktales) or the location of objects. Typical sitting postures described by speakers are those represented in Figure 16 below taken from the GUR stimulus set (see GUR 01, GUR 06, GUR 07) and one scene from the topological relations picture series (TRPS 38).

![Figure 16: Sitting posture scenes](image)

Sitting postures in Gurenɛ require that the person’s buttocks are supported on the Ground with legs stretched out (like the woman in GUR 07) or legs bent like the postures of the two children and the man in Figure 16.

An interesting cultural-specific meaning associated with the canonical sitting posture with legs bent like the man’s sitting posture (TRPS 38) or that of the children (GUR 01, GUR 06) in certain social settings or contexts in Gurenɛ is that it indicates respect or deference for authority. For instance, contestants for a chieftaincy title or complainants and defendants who appear before their traditional chief assume this sitting posture to demonstrate politeness and respect in their body gesture before him. The photo in Figure 17 shows a real contextualised example of contestants for a chieftaincy title at one of the palaces in the Gurenɛ speaking community (Bongo).
As I observed during the fieldwork, failure to assume such a posture before the chief is considered a serious offence and disrespect for authority. The sitting posture also marks the power relations inferable from the social context. The implication of this interpretation is that it does not pertain to the meaning of zi ‘be sitting’ independently without certain contextual assumptions including culture-specific background assumptions against which the interpretation can be assessed appropriately. These are, however, not built into the linguistic structure of the sentences that give rise to them (cf. Levinson 1983:167). For instance, if one encounters the sentence in (34) without this background information one would assume only the canonical sitting posture meaning of the contestants without taking into account the politeness behaviour between the speaker and the addressee implicit.

(34) Nabote-ba la zi la tiäa dee chief.lover-CL2 DEF sit.STAT FOC land CONJ sose-ra na’äm sosega la converse-IPFV chieftaincy conversation DEF ‘The contestants for the chieftaincy are sitting on the ground while having their conversation on chieftaincy matters.’ (IDT 177).

The cultural-specific interpretation of the canonical sitting posture of the contestants in Gurenɛ in this context is that it demonstrates high and low status distinctions
between the authority holding power and the ordinary subjects with no power. This aspect of the meaning in Gurenɛ offers some insights into the cultural-specific interpretation of the sitting posture in the cultural context. It contributes to our understanding of the cultural-specific interpretations associated with the actual body postures which are not lexicalised on the verbs from a cross-linguistic perspective. Not much is said about these cultural-specific body postures in the literature. Perhaps, an exception is a brief comment made by Newman (2002b:20-21 quoting Swadesh 1966:322) that Chitimacha (Amerindian) uses three different grammaticalized morphemes (ci(h) ‘standing’, pe(h) ‘lying’, and hi(h) ‘neutral with respect to posture’) to indicate different kinds of social meanings that may show respect, disrespect, affirmation or insult. Although not much is known about the Chitimacha postural system, however, based on Newman’s remark it seems to me Chitimacha may also use body posture to indicate these honorific meanings. Gurenɛ unlike Chitimacha does this through the body posture alone without any honorific marker lexicalised on the posture verb. Thus, in Gurenɛ, sitting with the body tilted or remaining in a standing posture before an authority when you should be seated constitutes an insult or protest which is not conveyed by the posture verb meaning but inferable from the cultural context. But in Chitimacha as Newman points out, if the lying auxiliary occurs in a sentence it ascribes the notions of insult, sarcasm, disparagement, joking, abuse and defiance while the standing auxiliary shows respect. The sitting posture used as a mark of respect for the higher authority in Gurenɛ culture is in contrast with western tradition of standing up when someone of higher rank enters a room, for example, in a court situation where participants are required to rise up when the judge enters.

In contrast to the subjects, the sitting posture of the authority (chief, sitting at the top leaning and arrowed) as shown in Figure 18 below is not the same as his subjects. Note that the chief’s sitting posture is different from the rest of the people and his posture conveys his authority. Certain contextual factors give rise to this inference, which include where he sits, what he sits on, his body posture and the social context. He never sits on the bare ground or floor like his subjects does but on a cow skin (a symbol of his authority) with traditional leather pillows filled with cotton put by his side for support to make him comfortable. The chief has personal space with no
restrictions to his sitting posture and he can sit in a leaning posture as shown below. Example (35) describes his sitting posture as sitting and leaning, which is considered a more comfortable and relax posture.

(35) Naba la zĩ del-a la dangoone la chief DEF sit-STAT lean.sit-STAT FOC wall DEF ‘The chief is sitting and leaning on the wall.’ (IDT 205)

Ordinary persons who are key participants in a trial or in a contest at the palace in the Gurenč culture are required to sit with legs bent. Observe the contestants sitting posture in Figure 13 and that of the complainant and the accused in Figure 18 (from left the two people sitting on the bare ground, arrowed blue and black).

![Sitting posture image]

**Power relations between authority, a traditional chief in Bongo (top, arrowed) and ordinary persons (from left (arrowed) are the complainant and the accused ) enacted by sitting postures among Gurenč speakers at a traditional court trial. Researcher (Samuel Atintono (right, arrowed) on language documentation fieldwork 2010.**

**Figure 18: Sitting postures depicting power relations between a chief and his subjects**

The accused and the complainant persons must be seated on the bare ground with legs bent and remain in this sitting posture as long as the trial lasts. In fact, this particular trial (on a land dispute, Figure 18) as we witnessed lasted for over one and half hours. Both the complainant and the accused remained seated in this posture.
until the trial was over. If for some health reasons any of them cannot sit with his legs bent then he is required to seek permission to ask a family member to represent him.

From my knowledge as a native speaker and as I observed during the fieldwork it is interesting to include these cultural-specific asides associated with the sitting posture besides discussing the semantics of zi. There are, of course, other cultural-specific interpretations associated with the other posture verbs but none caught my attention compared to the sitting posture.

In Gurenɛ, sitting on a chair, a log or any other object also attracts the use of zi (see (36) and (37)) but only when the feet are supported on the ground (floor or earth). Furthermore, sitting with legs crossed is expressed with the verb zi, in a serial verb construction with the verb pirc ‘be crossed’ as in example (38) provided one of the legs is in contact with the ground. The verb pirc describes a cross-wise position and regularly collocates with the sit verb. It can be used on its own but in a restricted context e.g., when a stick is put across to rest on two opposite walls at the entrance of a compound to prevent animals from going out as in (39).

\[
(36) \quad \text{Pọka} \text{ la } \text{zi la kuka la zuo.} \\
\text{woman DEF sit.STAT FOC chair DEF head} \\
\text{‘The woman is sitting down on the chair.’ (LDFT 52)}
\]

\[
(37) \quad \text{Pọka} \text{ la } \text{zi la dogi'la la zuo} \\
\text{woman DEF sit.STAT FOC log DEF head} \\
\text{‘The woman is sitting down on the log.’ (LDFT 105)}
\]

\[
(38) \quad \text{Yidaana} \text{ la } \text{zi pirc la a na'ar} \\
\text{house.owner DEF sit.STAT be crossed FOC 3SG leg} \\
\text{kuka la zuo. chair DEF head} \\
\text{‘The landlord sat down on the chair with his leg crossed.’ (IDT 255)}
\]

\[
(39) \quad \text{Yampite'na} \text{ la pirc la yan'a la nuur} \\
\text{gate.stick DEF be crossed FOC gate DEF mouth CONJ} \\
\text{ti naaf la eke zuo} \\
\text{COMP cow DEF jump pass} \\
\text{‘The gate stick is placed cross-wise on the entrance and the cow jumped over it.’ (SPST 337)}
\]

If a person is seated with feet or legs suspended or not in contact with the Ground (earth) or floor, for example, sitting on a high chair or stool behind tills at shops the
speaker will usually not use ẓi. Instead, an elevated verb yagi ‘be on top, with base or stable support’ is used (see §5.2.2.1).

The important semantic factor concerning the use of ẓi ‘be sitting’ is that the person’s feet are not suspended from the Ground (earth) or floor level. This shows that Gurenɛ ẓi unlike its equivalent in other languages (see for example, Lemmens 2002 on Dutch) has an orientation commitment (i.e., pays attention to a particular body positioning) to the posture of humans. Lemmens (2002:105) points out that the absence of orientational commitment with the Dutch posture verb ‘zitten ‘sit’ triggers its use to describe different body positions that include sitting on the buttocks, a chair, resting on the knees or on hands and knees. Gurenɛ is different from this and will use different specific positional verbs to describe all these varied body positions. For instance, squatting on knees will attract kpa ‘kneel’ (§5.2.1.9) and on hands and knees will be predicated with yigi ‘kneel stooping’ discussed in §5.2.1.5.

The positioning of the body in a manner that does not present the body in a leaning posture while in a sitting posture is also crucial for Gurenɛ speakers. This requirement is similar in German (Eva Schultze-Berndt, personal communication) and in Goemai (Hellwig 2007:900). Thus, if the person is in a tilted or inclined posture like the scene with a man sitting and leaning on his back (GUR 21), a different posture verb deli ‘lean sitting’ (§5.2.1.6) will be used.

The verb ẓi is among the few posture verbs in Gurenɛ that is restricted to the description of human postures as noted earlier in the discussion of the occurrences of the verbs in both the natural and the stimuli data in Chapter 2. It is neither used to describe the posture of animals nor the description of the location of inanimate entities. For example, animals like dogs and cats which rest on their hindlegs and on their rear are not described with ẓi. Instead, their postures are described with dobi ‘be squatting’ (see §5.2.1.4 below). However, in the folktale data, animal characters such as rabbits, monkeys, leopards, lions, and hyenas are described as sitting when the narrator personifies them with human attributes. Example (40) below describes Mr Rabbit (a main character in Gurenɛ folktales) in one of the tales in my documentation corpus as sitting with his family in the front yard of his compound when Leopard arrived to question him about a theft case in his (Mr Leopard’s) home.
Similarly, example (41) is also from a folktale genre. The context of this example is that the cunning rabbit’s friend Rat, died and Rabbit deceived the people of the village that he and Rat were initiated in a cult and it requires that if one of them dies first, the other should bury the dead friend alone in a grave. He convinced the people that there were some rituals to be performed to cleanse the soul of Rat for a peaceful rest. Instead of burying his friend, Rabbit was sitting in the grave eating Rat and the people waited for a long time until they sent Fly to find out and he discovered the truth. Notice that \( z\)’a in (41) is a variant of \( z\) when preceded by a verbal particle or verb.

Examples (40) and (41) are permissible because the animals in the folktale genre are personified and therefore are perceived as behaving like humans and can assume the sitting posture in the folktale discourse. This usage in Gurenɛ is also quite different from what is found in other languages where the *sit* verb can often be used to describe the postures of animals and objects in ordinary discourse or speech. For example, Lemmens (2002:107) points out that in Dutch, when speakers perceive the postures of animals to be sufficiently similar to that of humans they are described with the verb, *zitten* ‘sit’. Thus, in Dutch, when cats, dogs, cows, rest on their rear or behind have their hindlegs bent and buttocks touching the ground they are described as sitting. Similarly, Ameka (2007:1086) reports that in Likpe, *si* ‘sit’ can be used to
describe the postures of cats and dogs resting on their behinds. Kutscher and Gens (2007:1046) in their discussion of Laz positional verbs also observe that animals in such postures can be described as sitting. Trumai, like the other languages in the positional typological literature, but different from Gurenc, as Guirardello-Damian (2002:160-161) reports, uses its verb *aha’tsi* ‘sit’ to describe both human postures and animals. However in Trumai the verb can be used to describe animals with four legs but not those with two legs. As noted above such postures of animals are described as *dəbi* ‘be squatting’ in Gurenc. Speakers do not consider this posture of animals as sitting and will argue that animals do not sit but squat (see §5.2.1.4 below).

It is also observed in the positional verb literature that some languages like Trumai (Guirardello-Damian 2007:936), Dutch (Lemmens 2002:103-104), and Tzeltal (Brown 1994:776) use the sit verb to describe the location of water in a three-dimensional container (e.g., water in a bottle) where the container is understood as the Ground. In these languages, if the container with the water is perceived as the Figure and is described as ‘sitting’ so does the liquid in it which assumes the shape of the container. In Gurenc, if liquid (e.g., water, drink) is considered as the Figure in a bottle (bottle as a Ground) *boi* ‘be at’, ‘exist’ will be used. However, if the bottle together with the water is taken to be the Figure then *ze* ‘be standing’ will be used based on its shape and where the bottle is located (on earth in this case). As in (42) the utterance was provided by a pub attendant to draw the attention of a young man to beer that he bought. The beer obviously refers to the liquid in the bottle but she did not need to add that the beer in the bottles is standing since the context was quite clear to both participants.

(42) Hu daam la n bala ze’ tina la
2SG drink DEF FOC DEM stand.STAT land DEF
‘That is your drink standing on the floor.’ (SPST 203)

In this example, there is a metonymic transfer of the shape of the bottle to the liquid to suggest that the liquid is standing. Otherwise, in the stimuli locative descriptions liquid in a bottle or container attracts the containment verb *boi* ‘be at’, ‘exist’ (see §5.2.5). Similarly, if the liquid is in a flexible clear polythene bag, commonly used in the community for selling ice water, consultants will use *gã* ‘be lying’ when it is placed
on the Ground. Thus, the Gurenɛ speaker perceives the water as standing or lying depending on the rigidity and the shape of the container.

In some African languages discussed in the positional verb literature, the equivalent of the sit verb can be used to describe objects in a stable base position. For example, Hellwig (2003:172; 2007:900) in her discussion of Goemai posture verbs notes that all types of containers such as calabashes, pots, plates, bottles and other objects such as television sets, radios can be described with t’ong ‘sit’ provided they can maintain a stable position by their own means. The Goemai’s case is quite similar to Mbay (a Central Sudanic language spoken in Chad), where Keegan (2002:339) points out that objects which are perceived as having a base are described as sitting with the use of the posture verb ndi ‘to sit’. They include objects like mortars, cups, tables, baskets and pots located on their base and it does not matter if the objects are supported standing on the Ground like pestles leaning on walls or poles stuck to the Ground. Gurenɛ appears to differ in this respect from these other African languages restricting its sit verb zĩ to only human postures.

**Definition 2: The locative relation of zĩ ‘be in a sitting posture’**

For any F and G, F is in a zĩ ‘be sitting’ relation with G, if and only if F is human with buttocks on G, and F feet is in contact with the floor or the earth.

**5.2.1.3 ze’ ‘be in a standing posture’**

**Humans**

The verb ze’ ‘be standing’ describes the posture of humans vertically projected from their feet (cf. Lemmens & Perrez 2010:318-319, who make similar observations for Dutch staan). The standing posture of humans requires the person to be able to exercise some force for maintaining the standing posture. For an illustration, see GUR 48 in Appendix 2(2C) for all picture scenes that depict this posture and can be described as ze’. Examples (43) and (44) show that in Gurenɛ, for a person to be described as ze’ ‘be in a standing posture’ the location of the person has to be on earth or at the floor level. Note that (44) is not acceptable because the man is located on the platform.
In the natural discourse texts my consultants described people observed in standing postures on top of elevated Grounds such as hills or mountains (see (45)), vehicles such as pick-ups, with *yagi* ‘be on top, with base support’ but not with *ze’* ‘be standing’ (see discussion in §5.2.2.1 for details on *yagi*). The utterance in example (45) describes a group of Christians at a prayer retreat standing at the top of the Bongo hills in the community.

As can be seen in examples (44), (46), and (48) *ze’* is not acceptable in these contexts. All ten consultants point out that the only context in which *ze’* ‘be standing’ may be accepted is when one is interested in making a distinction between some people standing, and others sitting as in (47). The use of *ze’* in this restricted context suggests a pragmatic motivation. That is, *ze’* is used only when there is an interest for the speaker to make a distinction between the different postures. In order for the construction used to make this contrast to be acceptable, it should not also include the postpositional phrase with the Ground element as is the case with (47). Note that (48) is not acceptable because the Ground phrase is present. The natural spontaneous response that people use, whether the people are sitting or are standing on an elevated ground, *yagi* is always used. The use of *ze’* in this elevated context is actually disregarded with the preference for *yagi* but *ze’* is only used when one probes further. Example (46) describes people standing up on an open truck used for conveying people and goods in the speaker community (Bolga, my fieldwork site) which is common on market days.
although consultants did not deny the upright or vertical position of the people in these examples which is crucial for the use of the verb ze ‘be standing’ for humans, the elevation of the ground on which they are resting appears to demote the idea of their actual standing postures on these elevated grounds. although ‘height’ has been reported in some studies in the posture typology, the gurene data shows some difference from these studies. for example, song (2002:365-366) reports that a crucial factor underlying the use of the korean verb se ‘stand’ to describe other animals or inanimate entities relates to their relative height in comparison to that of humans. in other words, the vertical length of any entity that is comparable to a human height or higher can access se but if this is lower, the verb can no longer be used. the following examples are taken from song (2002:365) to illustrate this phenomenon.

(49) ku mal-i makwukan-aph-ey se-iss-ta
the horse-nom stable-front-loc stand-is-ind
‘the horse is standing in front of the stable.’

(50) *ku kay-ka mwun-yeph-ey se-iss-ta
the dog-nom door-side-loc stand-is-ind
‘the dog is standing by the door.’
It is inferable from Song’s data and his discussion that the phenomenon has nothing to do with location at a certain height, as is the case with Gurenɛ. That is ‘elevation’ is a different concept here from ‘height’.

One other important feature about the Gurenɛ data concerns the canonical orientation of the Figure for ze’ to be applicable. For example, if the person is not standing on his feet but is supported on his hands (i.e., in pike position) or head with his body projected upright he is not described as standing. Instead, he would be described as located inversely (opposite) or turned face-down with the expression in (51) below. The same applies to animals. Lemmens (2002) points out that for Dutch such a non-canonical standing posture is typically described with staan ‘stand’ (with added modifier, meaning ‘on its head’). Apparently, the issue of verticality still plays a role in Dutch in non-canonical orientation but not in Gurenɛ.

(51) A dikɛ la a zuo tulege kpa tiŋa 3SG take FOC his head turn.over be fixed land ‘He turned his head over and put it on the Ground.’

**Animals**

For animals too, both four-legged and two-legged animals that are capable of maintaining an upright position while on their feet are described as ze’ ‘be in a standing posture’. Thus, animals such as cows, goats, birds that have legs and can stand are described as standing.

(52) Ni-i la ze’ la bu’ɔ la puan cow-CL10 DEF stand.STAT FOC valley DEF inside obe-ra chew-IPFV ‘The cattle are standing in the valley grazing.’ (SPST 69)

(53) Dayene la ze’ la tiŋa di-ta ki dove DEF stand.STAT FOC land eat-IPFV millet ‘The dove is standing on the ground eating grains.’ (SPST 70)

In example (52), speakers described a herd of cattle grazing in a valley as standing. All kinds of birds (domestic and wild, small and large) are also described as standing once they have legs, as illustrated in (53). Gurenɛ contrasts with Dutch where Lemmens (2002:107) suggests that with smaller birds and small animals’ zitten (‘sit’)

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is used whether they are on their feet or not. Thus, in Dutch, as Lemmens points out, their overall shape like a crouched posture of a human is of importance here. Gurenc speakers focused on the legs of these animals which project them vertically. Even smaller animals like mice, rats, black moles, are all characterized as ze’ ‘be standing’. However, animals like hedgehogs whose legs are not quite visible are described as lying because speakers explain that they do not consider them as having legs.

**Objects**

The use of ze’ ‘be in standing in a posture’ to describe objects requires some properties of the objects that can permit at least one of its part to project it upright. The object may have a base, a leg or any other non-canonical part (e.g., one side of a book) that can support it to be in an upright position (Atintono 2012a, 2012b). The ability of the Figure to maintain a stable upright position is an important requirement for the use of ze’. Examples of objects that were characterised with ze’ includes pieces of furniture such as tables, chairs, sofas, beds, and books (e.g., a book put to stand on its side). All these can be described as ze’ ‘be in a standing posture’. Similarly, buildings, trees, cars, bikes, bowls, cups and pots are all described as standing in Gurenc as shown in the examples below.

(54) Sukuu la ze’ la boka nuure-n
    School DEF stand.STAT FOC stream mouth-LOC
    ‘The school building is standing by the edge of the stream.’ (SPST 71)

(55) Teebule la ze’ la bo’o la puan
    table DEF stand.STAT room DEF inside
    ‘The table is standing in the room.’ (LDFT 01)

(56) Tu’a la ze’ la yire la dapoore
    Baobab.tree DEF stand.STAT house DEF back
    ‘The baobab tree is standing at the back of the house.’ (SPST 46)

(57) Firigi la ze’ la bo’o la puan
    refrigerator DEF stand.STAT room DEF inside
    ‘The fridge is standing in the room.’ (LDFT 11)

In these examples, the located objects have a canonical base to support them in an upright position. This does not preclude objects without a base support which may
have any of their sides that can support them upright such as a book placed on its short side to stand.

Canonical orientation of Figures with a base or stand to be located on its base or stand appears to be a crucial requirement for it to be coded as standing in Gurenɛ. For example, a bucket on its base was described with ze’ as in (58) but when it was turned upside down consultants offered the verb vugi or kpabi22 ‘be turned upside down’ as in (59) as the appropriate answer. All container-like objects (e.g., pots, cups, bottles, gourds, bowls, calabashes, or hollow objects (e.g., canoes, drums) are not described as standing when they are not on their base but vugi ‘be turned upside down’ (see §5.2.1.10 for details). However, if the objects are lying on the side, they are described with gã ‘be in a lying posture’ discussed under objects in §5.2.1.1 above.

(58) Bogetɛ la ze’ la boɔ la tiŋa
bucket DEF stand.STAT FOC room DEF land
‘The bucket is standing on the floor of the room.’ (LDFT 28)

(59) Bogetɛ la vug-i/kpab-i la boɔ la tiŋa
bucket DEF turned upside down-STAT FOC room
la tiŋa DEF land
‘The bucket is turned upside down on the floor of the room.’ (LDFT 29)

Definition 3: The locative relation of ze ‘be in a standing posture’

For any F and G, F and G are in a ze’ relation if:

(i) F is animate (human or animal), F is located on its feet on G, and F is vertically projected or

(ii) F is an object and F has a leg or a stand to support it on G, and F is projecting upright.

22 The vugi form is used in other variants of Farefari (Nankan i, Booni) while kpabi is common in the Bolga variety.
5.2.1.4  *dɔbi* ‘be in a squatting posture’

**Humans**

The squatting posture of humans like the boy behind the chair (TRPS 64) in Appendix 2(2D) is described with *dɔbi* ‘be in a squatting posture’ as in (60). This is the only scene in the stimuli sets that consultants describe humans as squatting using this verb. The bending of the legs with the crouching of the body to rest on the legs is sufficient for the use of the verb to describe this posture. Sometimes the body can actually be upright but it is important for the legs to be bent.

(60) Budibela la *dɔb-i* la kuka la poorum
boy DEF be squatting-STAT FOC chair DEF back
‘The boy is squatting behind the chair.’ (TRPS 64)

For human postures, it is important that the buttocks do not touch the ground firmly to present the person as if he is in a sitting posture. If this happens then speakers will describe the posture as sitting and will use *zĩ* ‘be in a sitting posture’ discussed in §5.2.1.2. In his discussion of the equivalent of the squatting verb in Likpe, Ameka (2007:1094) notes that the verb can be used with inanimates such as a pot turned upside down (e.g., PSPV 29). Gurene speakers do not use *dɔbi* to describe inanimates.

**Animals**

When animals rest on their behinds with hindlegs bent and buttocks touching the ground (earth) they are described with *dɔbi* ‘be in a squatting posture’. The stimuli scenes that speakers pick out as squatting postures of animals include a cat under the table (TRPS 31), a cat on mat (TRPS 40), a dog in a squatting position by its house (TRPS 06), and another dog squatting in a bowl (TRPS 47). See Appendix 2(2D) for these scenes. The expressions used by consultants to describe these scenes are:

(61) Baa la *dɔb-i* lem la deo la sia.
dog DEF be squatting-STAT be near FOC room DEF waist
‘The dog is squatting near the waist (foot) of the building.’ (TRPS)
Notice that whereas in the description of human postures as dobi the buttocks of the person are not supposed to be in contact with the Ground but that of animals there is no restriction. The explanation here is that the sit verb zi as pointed out in §5.2.1.2 is not compatible with animals so the distinction is neutralized, as it were. Smaller animals such as rats, mouse, and frogs when resting on their hindlegs are also described as dobi.

**Definition 4: The locative relation of dobi ‘be in a squatting posture’**

For any F and G, F is in a dobi ‘be in a squatting posture’ relation with G, if F is human or an animal with legs bend and its body in a crouching posture on its legs, and F feet are on G.

**5.2.1.5 yigi ‘be in a stooping posture’**

The verb yigi ‘be in a stooping posture’ characterizes the stooping posture of humans such as a person who bends his body downward with legs in an upright position and feet on the Ground or in a kneeling position. In the speaker community, stooping postures commonly observed were postures assumed by farmers while hoeing on farms as in (64). This example was spontaneously uttered by one of my documentation team members when we came across a group of farmers working on a farm. The verb yigi is not used to describe animal postures or the location of objects. In the folktale genre, a narrator used the expression in (65) to describe the posture of a ghost in a folktale. The ghost stooped on a road while a child who was sent to inform her about the death of her (ghost) daughter, went past her without seeing her. The ghost took offense and cast a spell on the child and he fell down and was mumbling. In the culture, people talk of ghosts as supernatural beings that have the power to cast spells on people when you offend them and usually not everyone can see them unless you have a spiritual eye.
The farmers are in a stooping posture while hoeing on the farm.

‘The ghost was stooping near the foot path and the child came to pass without seeing her and she touched him and he fell down on the ground mumbling.’

Unlike Dutch (see Lemmens 2001; 2002) where a person who is on all fours, (knees and hands on ground) can be described as sitting, Guren speakers describe this posture as a stooping posture as well. Like zi, discussed in §5.2.1.2 above the verb yigi is not extended to the description of the posture of animals or the location of objects.

Definition 5: The locative relation of yigi ‘be in a stooping posture’

For any F and G, F is in yigi ‘be in a stooping posture’ relation, if F is human with legs in upright position and feet resting on G and F body is in a bending posture.

5.2.1.6 deli ‘be leaning, in a sitting posture’

The localization of a sitting and leaning posture of humans is expressed by the verb deli ‘be leaning, in a sitting posture’. It is used to describe only human postures. The semantics of deli describes a sitting posture but excludes vertical positioning of the body. Instead, it describes a person sitting with buttocks on a Ground (e.g., earth, sofas, or a reclining chair) with his back leaning backwards on a support (GUR 21). The corresponding expression that speakers used for describing this posture is given in (66). It is necessary for the person’s back to be leaning against a reclining support like a lazy chair or lean against a vertical Ground (e.g., tree trunk, wall) for the verb to apply.
(66) Budaa la del-i la kuge-dëleña la man DEF be leaning.sitting-STAT FOC chair-tilt DEF
‘The man is leaning against the reclining chair.’ (GUR 21)

However, sometimes when speakers are pressed further to find out whether or not they would never use the sitting verb zĩ to describe such postures they offer a serial verb construction to say that the person is sitting and leaning as (67) shows.

(67) Budaa la zĩ del-a la man DEF sit.STAT be leaning.sitting-STAT FOC kuge-dëleña la chair-tilt DEF
‘The man is sitting and leaning against the reclining chair.’ (GUR 21)

If the person is standing and leaning against a support, deli cannot be used instead lali ‘lean standing’ will be used as discussed below. Gurenë uses different verbs to make specific semantic distinctions among different body positions of the leaning postures of humans.

**Definition 6: The locative relation of deli ‘be leaning, in a sitting posture’**

For any F and G, F deli G, if F is human with buttocks on G, and F is leaning backwards with a support on G.

**5.2.1.7 lali ‘be leaning, in a standing posture’**

**Humans**

Unlike deli, the verb lali, describes a person in a standing position on a horizontal Ground (e.g., floor or earth) with the body leaning against a vertical Ground (e.g., tree trunk, wall). Thus, the Figure is always in contact with two Grounds, which are orthogonal to each other (cf. Kutscher & Schultze-Berndt 2007:1005 on German lehnen ‘lean’). It is not used when the person is in contact with only one Ground as is the case with deli ‘be leaning, sitting’ discussed in the preceding section. The only scene that picks out this leaning posture is the scene with a man leaning on a wall (GUR 19) of which consultants used the expression below to describe.
If a person uses his forehead to lean against a vertical Ground (e.g., wall) but not his back or shoulder(s) or the back of his head while remaining in this posture consultants points out that lali cannot be used. Instead, such a posture is described using kpa ‘be put on’ as in the example below.

(69) Budaa la dikɛ la a zuo kpa la man DEF take FOC 3SG head be placed on FOC dangoone la wall DEF

‘The man took his head and placed it against the wall.’

The requirement of lali is that any part of the person can be used to lean against the Ground except the forehead. This appears to be something unusual from a western perspective. In Gurenɛ, as observed during the fieldwork, most people put their foreheads in such leaning positions usually when they hear of sad news or experience something bad. It is not apparently clear to me whether or not this is the reason why people use a different verb kpa instead of lali. It is worth pointing out that this kpa ‘be placed on’ is a homophone of kpa ‘be kneeling’ discussed in §5.2.1.9.

**Animals**

The verb lali ‘be leaning, standing’ is used by consultants to describe locative situations where bigger animals like cows, goats, sheep, and horses can stand on their feet with the trunk of their bodies leaning on a vertical Ground. Like humans, animal leaning posture also requires contact with two surfaces, a horizontal and a vertical Ground. Its semantics requires that the animal has its feet in contact with a horizontal Ground (earth or floor) and its body leaning against a vertical Ground (e.g., wall, tree). There were no stimuli representing an animal leaning posture. However, the following natural data were recorded in interactive discourse.
Definition 7: The locative relation of *lali* ‘be leaning, in a standing posture’

For any F and G, F is in a *lali* ‘be leaning, standing’ relation with G, if F is an imate (humans, animals) with feet on G₁, which is horizontal and part of F body is leaning on G₂ which is vertical.

5.2.1.8 *tĩ* ‘be leaning, of objects’

The verb *tĩ* ‘be leaning, orthogonal of objects’ is restricted to the predication of the leaning of objects. It is not used to describe leaning postures of humans or animals like *deli* ‘be leaning, sitting’ (§5.2.1.6) or *lali* ‘be leaning, standing’ (§5.2.1.7). The verb *tĩ* describes a locative relation in which a two-dimensional object is supported at two points in a leaning position on two different Grounds (vertical and horizontal).

The various leaning scenes in the stimuli associated with *tĩ* (see Appendix 2(2E)) include stalks on wall (IDT 17), fork-stick ladder on barn (GUR 49), mat(s) on wall (GUR 24, GUR 36), a mirror leaning on wall (BERN 37), a bike on tree (GUR 13), a cassava stick on tree trunk (PSPV 01), cassavas on stump (PSPV 65), a stick on stump (PSPV 31), and a western type of ladder on wall (TRPS 58). The following expressions were used by speakers to describe some of these scenes.

(72) Kinka la tĩ la baarɛ la iŋa 
stalks DEF lean.STAT FOC barn DEF body 
‘The stalks are leaning against the barn.’ (IDT 17)

(73) Dorego la tĩ la bāarɛ la sia/lugerɛ 
ladder DEF lean.STAT FOC barn DEF waist/flank 
‘The ladder is leaning against the mid-section (lit. waist) of the barn or flank.’ (GUR 49, TRPS 58)
In all the scenes described with *tĩ* the Figure must be an inanimate otherwise *deli* ‘be leaning, sitting’, or *lali* ‘be leaning, standing’ will be used. Gurenɛ has specific leaning verbs that can make more fine-grained semantic discriminations among different leaning postures of which animacy is a crucial semantic feature than in other languages. An important semantic feature of this verb, which is also consistent with other languages (see Ameka 2007:1093 on Likpe; Kutscher & Schultze-Berndt 2007:1005 on German positionals) is that the Figure has to be solid and rigid (e.g., ladder on barn, stalks on wall, etc.). If the Figure is not solid but flexible, say a rope, or a cloth it is not possible to use *tĩ*, unless if the cloth is folded to be rigid enough to be put in a leaning position. However, with ropes, it is not possible even when a rope is tied taut from the floor to a vertical Ground (e.g., wall, pole) with an angle between the two Grounds in an orthogonal relation such locative relations are not described with *tĩ*. In addition, if the Figure is in contact with a single Ground but supported at two different places such as an open umbrella that touches the Ground with its handle and with one of its spokes, such a locative relation is described as *gã* ‘be lying’ (see §5.2.1.1) but not leaning as in (79). The inability to apply *tĩ* in this latter context is reported to be the case with its equivalents in other languages in the positional typology (cf. Kutscher & Genç 2007:1045 discussion on Laz positionals;
Kutscher & Schultze-Berndt 2007 on German positionals). Thus, having contact with two surfaces is important for the use of the lean verbs.

\[(79)\] Ma’asuntia la gã la tĩŋa
shade.tree DEF lie.STAT FOC land
‘The umbrella is lying on the floor.’ (LDFT 102)

It appears one of the important semantic requirements for the use of tĩ in Gurenɛ is that the vertical Ground must necessarily be higher than the point at which the Figure makes contact with the Ground as noted in the speakers’ response variations in §2.3.4. For example, consultants show disagreements with the use of tĩ to describe the scene in Figure 19 below in which a stick makes contact with the upper edge of the basket and goes over it (PSPV 13).

![PSPV 13](image)

**Figure 19: A leaning scene consultants show disagreements**

As noted in §2.3.4 under consultants’ response variation this was one of the scenes that attracted different responses. While six consultants agreed that tĩ could be used because the stick is in a leaning position another four disagreed explaining that the basket was not high enough and defended their position by comparing this scene to prototypical locative scenes like a ladder leaning against barn (GUR 49) or on buildings (TRPS 58). After a long discussion they agreed that tĩ could be used but it is not a prototypical scene. When asked whether or not the other two leaning verbs, lali ‘be leaning, standing’ and deli ‘be leaning, sitting’ could be used they said none was eligible citing animacy as a reason. Ameka (2007:1094) observes a similar situation in Likpe where the point of contact of the Figure on the vertical Ground is required to be higher for the predication of the equivalent of the leaning verb.
Further, Figures that are located in containers in leaning positions are not described with tĩ but with the general locative and containment verb boi ‘be at’, ‘exist’ discussed below in §5.2.5. All ten consultants described objects that are clearly in leaning positions in containers (see Appendix 6) such as a spoon in a cup (BERN 18), a ladle in a bowl (CONT 37), a bottle in a leaning position in a basket (PSPV 22) and another bottle in a different basket turned upside down in a leaning position (PSPV 67), a stick leaning in a bowl (CONT 35), and cassavas leaning in a basket (PSPV 05) as boi. Some of the constructions used by consultants to describe these scenes are the following.

(80) Desunkɔ la boi la kɔpi la puan
     spoon DEF be at FOC cup DEF inside
     ‘The spoon is in the cup.’ (BERN 18)

(81) Tanduŋa la boi la toore la puan
     pestle DEF be at FOC mortar DEF inside
     ‘The pestle is in the mortar.’ (CONT 37)

(82) Koleba la boi la gbin ka la puan
     bottle DEF be at FOC basket DEF inside
     ‘The bottle is in the basket.’ (PSPV 22, PSPV 67)

Consultants used boi ‘be at’, ‘exist’ as their preferred response to describe the multiple locative scene of cassavas in different positions with some leaning and others standing (see PSPV 05 in Appendix 6) as described in (83) below. However, when probed further as to how they could distinguish the cassavas located in different positions they offered example (84) using tĩ and gã ‘be in a lying posture’ respectively. Thus, it is only in a multiple locative scene that speakers may use tĩ to show contrast for the identification of Figures in different orientations. Apart from this context which is triggered by the pragmatic interest of making a contrast, the preference is for speakers to use boi once the Figures are in a container irrespective of their orientations. However, when the Figure is leaning on the container outside, speakers readily accept that tĩ can be used.

(83) Banki la boi la gbinka la puan
     cassava DEF be at FOC basket DEF inside
     ‘The cassava is in the basket.’ (PSPV 05)
‘Five cassavas are leaning on the basket and two are lying in the basket.’

(PSPV 05)

When speakers are aware that the object is caused to be in the leaning position the dynamic form of the verb *ti’ile* ‘put to lean’ is used as illustrated here with the two expressions elicited from the CAUS stimulus set:

(85) A dikɛ la banki ti’i-le tia la tiŋa
3SG take FOC cassava lean-DYN tree DEF land
‘He took a cassava and leaned it on the tree under.’ (CAUS 23)

(86) A dikɛ la dɔregɔ ti’i-le tia la tìle
3SG take FOC ladder lean-DYN tree DEF stem
‘She took a ladder and leaned it on the tree stem.’ (CAUS 24)

**Definition 8: The locative relation of *ti* ‘be leaning, of objects’**

For any F and G, F is in a *ti* ‘be leaning’ relation, if F is a solid or a rigid object and F is leaning on G₁, a horizontal Ground and G₂, a vertical ground with an angle between G₁ and G₂, and F is in an orthogonal relation.

5.2.1.9  *kpa* ‘be kneeling’

The posture verb *kpa* ‘be kneeling’ describes the posture of a person resting on knees while his or her body is projected in an upright position. The verb is restricted to only human postures. It is not used to describe a person on all fours.

(87) Bia la kpa la duma
child DEF be kneeling FOC knees
‘The child is on his knees.’

Although the kneeling posture is similar to standing, the speakers do not use *ze* ‘be in a standing posture’ discussed in §5.2.1.3 to describe a *kpa* posture. The explanation is that *ze* posture requires the person to be resting on his feet and not knees.
Definition 9: The locative relation of *kpa* ‘be kneeling’

For any F and G, F is in a *kpa* ‘be kneeling’ relation with G, if F is human with knees on G, and F body is in an upright position.

5.2.1.10 *kpabi/vugi* ‘be turned upside down’

The verb *kpabi* ‘be turned upside down’ is a Bolga variant and *vugi* is used in two other dialects of Farefari (Nankani and Boone). Bolga speakers restrict *kpabi* to describe three-dimensional containers turned upside down while speakers of the other dialects use *vugi* for similar location of containers and also for the putting of a hat on one’s head. Bolga speakers also use *vugi* but to describe the wearing of hats as discussed below. Examples of containers from the stimuli sets described with *kpabi/vugi* include a cup turned upside down (BERN 19), a pot turned upside down on tree stump (PSPV 12), and another pot turned upside down on a tree branch (PSPV 29). See Appendix 2(2F) for all the scenes. Below are some of the expressions speakers used to describe these scenes.

(88)  Kɔpi la vug-i la tiŋa
cup DEF be turned.upside.down-STAT FOC land
‘The cup is turned upside down on the floor.’ (BERN 19)

(89)  Duko la kpab-i la dogi’a la zuo
pot DEF be turned.upside.down-STAT FOC stump DEF head
‘The pot is turned upside down on the stump.’ (PSPV 12)

(90)  Duko la kpab-i la tia la zuo
pot DEF be turned.upside.down-STAT FOC tree DEF head
‘The pot is turned upside down on the tree branch.’ (PSPV 29)

Other containers commonly described by the speakers with *kpabi* when they are turned upside down are baskets, calabashes, buckets, bowls, and wide-mouthed gourds as illustrated below.

(91)  Pi’o la kpab-i la tiŋa
basket DEF be turned.upside.down-STAT FOC land
‘The basket is turned upside down on the ground’. (LDFT 101)
(92) Bogete la kpabi la tiŋa bucket DEF be turned.upsidedown-STAT DEF land
The bucket is turned upside down on the ground.' (LDFT 107)

(93) Kumpi'o la kpabi la tiŋa gourd.wide-mouth DEF be turned.upsidedown-STAT FOC land
The wide-mouthed gourd is turned upside down on the ground.'
(LDFT 99)

The use of *vugi* but not *kpabi* by speakers to describe a person with a hat on his or her head has the interpretation that the person has a hat on his head as an adornment. Unlike English, *vugi* does not apply to the wearing of clothing, rings, and footwear. Different verbs are used for the wearing of clothing, and rings. Two scenes in the stimuli sets that were described using *vugi* are a western type of hat on a person's head (TRPS 05) and a traditional Guren straw hat on a person's head (GUR 72). The example in (94) was used by speakers to describe both scenes. In these two contexts, the construction has the interpretation that the man maintains a hat on his head. This construction does not describe a locative relation like the preceding examples instead it describes an adornment relation. These constructions are similar to the non-basic locative constructions discussed in §4.5. Observe that in (95) when the hat is placed on the ground (earth) in the same position as worn on the head, the ‘be turned upside down’ meaning is obtained just as any of the containers discussed above.

(94) Budaa la vugi la zuvaka/sapibere man DEF wear-STAT FOC hat/hat.straw
‘The man has a hat/straw hat on.’ (GUR 72, TRPS 05)

(95) Zuvaka la vugi la tiŋa hat DEF be turned.upsidedown-STAT FOC land
‘The hat is turned upside down on the ground.’

If the interpretation or perception is that the hat is located spontaneously on the person’s head but no one has actively put it on his or her head as is the case with example (96), it is not acceptable. Observe that while (94) has the agentive interpretation that *budaa* ‘man’ has probably actively put the hat on his head, that of (96) has the interpretation that the hat is on the person’s head spontaneously. Consultants, however, explained that it is appropriate to use *vugi* to say that a hat is located on a dead person’s head with the construction in (97) or on an inanimate
thing like a scarecrow. This suggests that animacy is a crucial factor regarding the choice of a particular construction type when vugi is to be used in describing adornment relation of wearing a hat.

(96) *Sapibere n vug-i budaa la zuo hat FOC wear-STAT man DEF head

‘It is a hat which is worn on the man’s head.’

(97) Zuvaka n vug-i kum la zuo hat FOC wear-STAT corpse DEF head

‘The hat is worn on the corpse head (i.e., a hat is on the corpse head).’

The verb vugi is the only verb that can be used with its actual meaning still preserved when the location is on an elevated Ground such as the pot turned upside down on a tree stump (PSPV 12) and another turned upside down on a tree branch (PSPV 29). Recall that in Gurenɛ when a Figure is located on its base on an elevated Ground, one of the verbs of elevation is applied. A crucial pragmatic explanation for this deviation is that the non-canonical location of the Figure (be turned upside down) appears to be more salient to the speaker than elevation in this context.

**Definition 10: The locative relation kpabi/vugi ‘be turned upside down’**

For any F and G, F is in a kpabi/vugi ‘be turned upside down’ relation with G, if F is a container in a non-canonical orientation turned upside down on G, and G is not part of a human body where adornment relation applies.

**5.2.2 Verbs of elevation**

Verbs of elevation characterise Figures located on elevated Grounds (refer to Appendix 3 for all elevated locative scenes). These scenes are what other languages will typically use adpositions (i.e., prepositions and postpositions) to describe, for example, English prepositions on, on top and at which are used to describe topological relations (see Levinson & Meira 2003:485-486). The crucial meaning component of the verbs in this class is the location of the Figure on an elevated Ground. It is quite difficult to estimate precisely the degree of the elevation of the Ground but prototypical (best examples) elevated Grounds include mountaintops, rooftops, treetops, and other fairly elevated Grounds like tabletops, stumps, and
platforms. More generally, as long as there is elevation enough to project the Figure above the floor level, any of the verbs in this class will be the preferred choice to most of the body position verbs discussed in §5.2.1 or any other verb from the other subclasses except in containment relations (§5.2.5.2) and the non-canonical turned upside down relations which also disregard elevation.

The choice of any of the verbs from this class by a speaker to describe an elevated location is in turn dependent on the semantic properties of the Figure. This includes whether or not the Figure has a stable or unstable base support or is in an unstable relation to the Ground. It also depends on the shape, flexible or rigid nature of the Figure’s body, and the nature of the spatial relation (e.g., Figure on upper surface of Ground or hook support). The semantics of the verbs thus inherently convey the meaning of elevation as shown in Table 24.

Table 24: List of verbs of elevation

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Animacy of Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>yagi</td>
<td>be on top, of stable support'</td>
<td>animates, inanimates</td>
</tr>
<tr>
<td>pagi</td>
<td>be on top, of flexible or flat objects</td>
<td>animates, inanimates</td>
</tr>
<tr>
<td>dogi</td>
<td>be on top, of unstable base support or relation</td>
<td>inanimates</td>
</tr>
<tr>
<td>yuli</td>
<td>be hanging, dangling freely</td>
<td>animates, inanimates</td>
</tr>
<tr>
<td>sugi</td>
<td>be on top, of convex base container</td>
<td>inanimate</td>
</tr>
<tr>
<td>sagi</td>
<td>be placed in, of container-in-container</td>
<td>inanimates</td>
</tr>
<tr>
<td>pugi</td>
<td>be afloat, in liquid medium</td>
<td>animates, inanimates</td>
</tr>
</tbody>
</table>

A unique aspectual property of this class of verbs is that they lexicalise the stative with the stative suffix -i discussed in §3.3.2.

One other important semantic characteristic associated with this verb class that needs re-emphasizing is that their use to describe Figures on elevated Grounds disregards the actual postures of the Figures. In this section, I will examine the elevation property into details focusing on the precise meanings of each verb. Attention will also be paid to the semantic and pragmatic factors that can lead to selectional restrictions of one verb over the other. The pragmatic contexts under which, standing, lying, and sitting postures will be neutralized or disregarded in an elevated locative context are also discussed. A summary of the elevation
phenomenon and comparison with other languages in the positional verb literature is presented at the end of this section (see §5.2.2.8) to show the similarities and differences.

In terms of the BLC typology discussed in Chapter 4, all the verbs in this class may be said to describe locative situations at level VI of the BLC hierarchy. However, in Gurene, the locative situations that these verbs are used to describe are elevated and the hierarchy did not specifically have any specific level for elevated locations.

5.2.2.1 yagi ‘be on top, with stable support’

The positional verb yagi has one general sense that applies to a Figure located on an elevated Ground with stable support. The meaning conveyed by the verb is that the Figure is elevated off the Ground, with stable support and this support can be support from below or above (e.g., with hook support). These are not two separate senses but rather semantically one general sense, ‘stable support’ over both uses. In the semantic literature, a word can have different interpretations which are related to each other in different ways and this is often considered as meaning variation (Murphy 2010:83-84; Cruse 2004:104-105, 2011:100-103). Thus, if the meaning of a word is general enough that it can be used to refer to a variety of different things or contexts it is said to be vague. For example, the word child has a general sense which may refer to a boy or a girl and is vague when the speaker does not make specific the sex of the child. One other case of meaning variation is that one word may have two different unrelated meanings and in semantics this is a case of lexical ambiguity. In practice, these two meanings may lead to the word being considered as two words in a language which only happen to be identical in pronunciation (homophones) and spelling (homographs). For example, bank referring to a type of financial institution and bank referring to a side of a river.

With respect to these two phenomena (vagueness and ambiguity), the meaning of yagi can be said to be vague as to whether or not the support is below or above the Figure. Its meaning is thus semantically vague but not ambiguous with respect to the type of elevation triggered by the type of elevated Ground. I will use two ambiguity tests - contrast and definition proposed in the semantic literature (see Murphy
2010:84-85; Cruse 2004:105-106, 2011:100-106) to show that the meaning of *yagi* is vague but not ambiguous. The contrast test is used to determine whether or not a word has one general sense that is unclear as a result of its use in different contexts (vague) or the word has two different senses (ambiguity) and requires contexts to make these two meanings clear. Using this test, if *yagi* is vague then in some contexts it may refer to elevated location of a Figure on top with support from below and in other contexts refers to elevation with support from above. If this was not the case and *yagi* had two elevated-specific senses instead of the general sense then it would make sense to say (98) to mean (99). Note that example (98) is semantically ill-formed because the meanings of *yagi* do not contrast and are, therefore, not two distinct meanings but a case of vagueness.

(98) #Kania la ayima *yag-i* dee ti lanter DEF one be on top.stable-STAT CONJ COMP ayima la *yag-i* another DEF be on top.stable-STAT

‘One of the lamps is on top (stable support) and the other one is on top.’ (stable support)

(99) Kania la ayima *yag-i* la poole la lamp DEF one be on top.stable-STAT FOC pole DEF zuo dee ti ayima la *yag-i* head CONJ COMP one DEF be on top.stable-STAT la kuka la zuo FOC table DEF head

‘One of the lamps is on top (stable support from above) on the pole and another one is on top of the table (stable support from below).’

This test shows that *yagi* has one general meaning in which elevation applies to both cases of a Figure with stable support on the Ground from below or from above.

The second ambiguity test is the “definition test”. The test is applied to a word to determine whether or not a single definition can be used to cover the two contexts that the meaning of the word refers to. If a single definition can be used, then this is a case of vagueness and not ambiguity (see Murphy 2010:85). By the definition test, the use of the single definition ‘stable support’ that covers both of the cases of *yagi* with support from below and support from above is an indication that *yagi* does not have two senses and is vague but not ambiguous.
Humans

Speakers use *yagi* ‘be on top, with stable support’ to describe the standing, and sitting postures of persons located on elevated Grounds like rooftops, walls, vehicles, platforms, embankments, tabletop, treetops, mountains or hills. In the stimuli sets, scenes with human Figures located in sitting or standing postures on elevated Grounds were described as *yagi* (see Appendix 3(3A)). They include a child sitting straddling a bike carrier (GUR 02), a child, a man sitting straddling a tree branch (GUR 03, SUP 29), a woman sitting on a wall (GUR 12), a woman sitting on top of a flat-roofed floor (GUR 09), a man sitting straddling a wall (SUP 31), and two children on a donkey back in a straddling posture (GUR 11), a man sitting on a tree branch (SUP 30) and another sitting on a wall (SUP 32). Standing postures of people on elevated Grounds include the scenes with a child, and a man standing on tree branches (GUR 04, SUP 28), a man in a standing posture on a plastered roof (GUR 09), and a man standing on rooftop (TRPS 34). Consider some of the expressions below used to describe some of these scenes.

(100) Bia la *yag-i/*ze’ la tia la child DEF be on top.stable-STAT/stand.STAT FOC tree DEF yile la zuo branch DEF head ‘The child is on top of (stable support)/(standing on) the tree branch.’ (GUR 04)

(101) Budaa la *yag-i/*ze’ la dangoone man DEF be on top.stable-STAT/stand.STAT FOC wall la zuo DEF head ‘The man is on top of (stable support)/(standing on) the wall.’ (SUP 31).

(102) Bia la *yag-i/*zi la keekee child DEF be on top.stable-STAT/sit.STAT FOC bicycle kariya la zuo carrier DEF head ‘The child is on top of (stable support)/(sitting on) the bike carrier.’ (GUR 02).
The shepherds are on top of (stable support)/(sitting on) the donkey. (GUR 11)

The woman is on top of (stable support)/(sitting on) the edge of the wall. (GUR 12)

The man is on top of (stable support)/(standing on) the plastered roof. (GUR 09)

The man is on top of (stable support)/(standing on) the tree. (SUP 28, 29, 30, 31, 32).

The man is on top of (stable support)/(standing on) the wall. (SUP 31, 32)

The person is on top (stable support)/(standing on) the room (roof). (TRPS 34)

Note that the use of *yagi* is indifferent as to whether or not the scenes involved are artificially elevated Grounds such as walls, bikes (GUR 09, SUP 31, SUP 32, TRPS 34) or naturally elevated Grounds like trees (GUR 04, SUP 28, SUP 29, SUP 30). The use of *zi ‘be sitting’* is not acceptable as shown in examples (102), (103), (104), (106), and (107) when people are in sitting postures on elevated Grounds with their feet suspended. Instead, *yagi* is used as the default or the natural description of these scenes. The use of *yagi* disregards the actual posture of sitting in this context.
(see §5.2.1.2 for a discussion on zi). As pointed out in §5.2.1.2, the use of zi requires the person’s feet to be on the earth or at the floor level but these scenes have the people suspended. It is also semantically unacceptable to use ze’ ‘be standing’ as observed in §5.2.1.3 to describe the standing postures of the Figures in scenes GUR 09, GUR 04, SUP 28, TRPS 34 as illustrated in examples (100), (101), (105), and (108). However, when speakers are prompted to make a distinction in a context where someone is standing and another sitting they may use zi ‘be sitting’ or ze’ ‘be standing’ but with some semantics and syntactic restrictions on the locative construction. For example, in (109) consultants use yagi as the preferred verb to describe the people in Figure 20 below. When they were asked as to whether or not they will never use zi ‘be in a sitting posture’ and ze’ ‘be in a standing posture’ to describe the scene they offered (110). Speakers’ use of the actual posture verbs in this context serves to contrast or identify referents in different positions.

Figure 20: A scene depicting a sitting and standing postures on elevated Ground

(109) Budaa la po\-ka la yagi
    
    drummer.PL LINK woman DEF be on top.stable-STAT
    
    la goosego zuo
    
    FOC plastered.roof head
    
    ‘The man and the woman are on top of (stable support) the plastered roof.’ (GUR 09).

(110) Budaa la ze’ la saazu\-o de\-e ti
    
    man DEF stand.STAT FOC upright CONJ COMP
    
    po\-ka la me zi’a ti\-na
    
    woman DEF also sit.STAT land
    
    ‘The man is standing upright and the woman is also sitting on the floor.’ (GUR 09).
The speakers, however, point out that the use of the posture verbs to show contrast in this context is only acceptable when the elevated Ground, *go*seg*ọ* ‘plastered roof’ is left out as is the case with (110). But when the Ground is present this is not acceptable as (111) shows.

(111) *Budaa la ze’ la go*seg*ọ* zuo dee man DEF stand.STAT FOC plastered.roof head and ti poka la me zi’a go*seg*ọ* la zuo COMP woman DEF also sit.STAT flat.roof DEF head ‘The man is standing on top of the plastered roof and the woman is also sitting on top of the plastered roof.’ (GUR 09).

It seems to me that if the Ground is omitted and the speakers focus on the position only, they pretend the Ground is at ground level (earth) and this may suggest their use of the postposition *ti*ŋa ‘earth’ as in (112). Note that in this example the Ground phrase is present and is acceptable, although the postposition is usually left out when the locative construction is reduced (see §4.4.1). This example as some speakers noted may be semantically infelicitous because *ti*ŋa ‘earth’ is inherently locative but it is perfect compared to (111).

(112) *Budaa la ze’ la ti*ŋa (zuo) dee poka man DEF stand.STAT FOC land head CONJ woman la me zi la ti*ŋa (zuo) DEF also sit.STAT FOC land head ‘The man is standing on the ground (earth) and the woman is standing on the ground.’

When humans sit on the backs of animals which are stationary, *yagi* is usually used as is the case with two shepherds sitting on a donkey’s back in GUR 11. But when a person sits on an animal’s back with the intention of using the animal as a means of transport, *bā* ‘be riding’ is used. The example in (113) describes a scene with a traditional chief riding on a horse.

(113) *Naba la bā la yeefo chief DEF ride.STAT FOC horse ‘The chief is carried on the horse back (i.e., riding).’ (GUR 29)
Animals and plants

When animals such as goats, and sheep climb to stand or lie on rocks, stumps or low-lying tree trunks or birds are standing on the backs of animals such as cattle egrets observed commonly standing on the backs of cattle while the latter are grazing on the field *yagi* is used. Consider the spontaneous utterance offered to describe goats on top of rocks in (114), and (115) describes a cattle egret standing on the back of a cow. It is not acceptable to use ze’ ‘be standing’ as (116) shows.

(114) Buu-si la *yag-i* la taŋa la zuo gbi-ta head disturb-IPFV
‘The goats are on top of (stable support) rock disturbing.’(SPST 273).

(115) ...bisɛ ya pɛtɛŋa la n *yag-i*
...look 3PL cattle.egret DEF FOC be on top.stable-STAT
...naafu zuo cow head
‘...look at a cattle egret on top of (stable support) the cow.’(SPST 308)

(116) ...*bisɛ ya pɛtɛŋa la n ze’ naafu zuo*
...look 3PL cattle.egret DEF FOC stand.STAT cow head
‘...look at the cattle egret which is standing on the cow.’

Some of the stimuli scenes that speakers describe as *yagi* are those with birds perching on trees such as a guinea fowl and a bird on a tree branch (GUR 10), a hawk on tree branch (CONT 16), and an eagle on a tree branch (SUP 26). See Appendix 3(3A) for these scenes. If the birds were to be on the ground (earth) ze’ ‘be standing’ will be the choice.

(117) Silega n *yag-i* tia la zuo hawk FOC be on top.stable-STAT tree DEF head
‘It is a hawk which is on top (stable support) of the tree.’ (CONT 16)

(118) Ku’uŋɔ la niŋa la *yag-i* la zuo guinea.fowl DEF bird DEF be.on top.stable-STAT tree DEF head
‘The guinea fowl and the bird are on top (stable support) of the tree.’ (GUR 10)
One context in which the use of *yagi* appears to be disregarded is when the elevated Ground is containment. Consider the example below offered to describe some birds on a tree branch and others in their nests.

(120) Nii-si la sisesi *yag-i* la tia la zuo gee tì sisesi la boi la DEF head but COMP some DEF exist FOC ba tuge-r ɔ puan 3SG nest-CL8 inside

‘Some of the birds are on top (stable base support) of the tree branches but some are in their nests.’ (IDT 275).

Although the birds’ nests are high up on the tree the containment of the Figure overrides that of the elevation in this context. The implication of this choice among Guren speakers is that containment relation disregards elevation and the latter also disregards posture.

Plants or trees located on natural elevated grounds such as a tree on the side of a mountain (TRPS 17) and another tree on the peak of a mountain (TRPS 65) are both described with *yagi*:

(121) Tia la *yag-i* la zuore la tree DEF be on top.stable-STAT FOC mountain DEF sakpiko/zuo flank/head

‘The tree is on top (stable support) of or on the side of the mountain.’ (TRPS 17, TRPS 65)

**Objects**

Objects can be described with *yagi* either when they are located with stable base support or in a stable relation or when the support is from above with a hook (refer to Appendix 3(3A) for all scenes). For those Figures described as located on top with stable base support, the important semantic property is that the Figure has a stable base support on the elevated Ground. Some examples include, a bottle on its base on a rock and another on tabletop (PSPV 10, PSPV 37), a bowl on tabletop located
at different parts (SUP 01, SUP 02, SUP 05), and a bowl on top of a block located on a tabletop (SUP 03). Other scenes that were characterised as having stable base support include a cup in a plate on tabletop (TRPS 01), a book resting vertically on its breadth on a shelf (TRPS 08), a book on its breadth upright on a chair (BERN 02), and a pot placed on a tree branch resting on its canonical base (PSPV 48).

(122) Kọpọ la yagi la teebule la kinkọleŋa
cup DEF be on top.stable-STAT FOC table DEF aside
‘The cup is on top (stable base support) of the table at the edge.’
(SUP 01)

(123) Kọpọ la yagi la teebule la nogban

cup DEF be on top.stable-STAT FOC table DEF lip
‘The cup is on top (stable base support) of the table at the edge.’
(SUP 05)

(124) Gọŋọ la yagi la kuka la zuo.
book DEF be.on.top.stable-STAT FOC chair DEF head
‘The book is standing on top (stable base support) of the chair.’
(TRPS 08)

If the object lacks a stable base to support it, then it must be placed in a manner that the elevated Ground can support it in a stable relation. Scenes that were characterised with this type of locative relations include a long beam supported on two fork-sticks (GUR 60) and a pair of scissors put to be in a stable straddle relation to a door handle (BERN 04).

(125) Migesega la yagi la kuleŋa la
scissors DEF be on top.stable-STAT FOC door DEF
kurego la zuo
metal DEF head
‘The scissors is on top (stable support from above) of the door handle.’
(BERN 04)

(126) Nyuuŋa la yagi la zĩa
beam DEF be.on.top.stable-STAT FOC fork.stick.PL
la zuo
DEF head
‘The beam is on top of (stable base support) the fork-sticks.’ (GUR 60)

Consultants show some disagreements with the scene with a cloth on a tree branch (PSPV 64). While six used yagi ‘be on top, with stable support’ because it is placed in a stable relation on the tree branch, four other consultants prefer pagi ‘be on top, of
flat or flexible objects’ arguing that the cloth is flat and such objects attract *pagi* (see §5.2.2.2).

Stable support (from above, e.g., hook support) on vertical Grounds that were described with *yagi* includes a picture hanging on a pole (SUP 40, SUP 41), smocks hanging on poles in a shed (GUR 32), a mirror on wall (TRPS 44), and a coat on a hook (TRPS 09).

(127) Foote la *yag-i* la poole la zuo picture DEF be on top.stable-STAT FOC pole DEF head
‘The picture is on top (stable support from above) of the pole.’
(SUP 40, SUP 41)

(128) Dansige-si la *yag-i* la paka la puan smock-CL4 DEF be on top.stable-STAT FOC shed DEF inside
‘The smocks are on top (stable support from above) in the shed.’
(GUR 32)

(129) Bisega la *yag-i* la dangoone la zuo mirror DEF be on top.stable-STAT FOC wall DEF head
‘The mirror is on top (stable support from above) of the wall.’
(TRPS 44)

(130) Koote la *yag-i* la dangoone la inya. coat DEF be on top.stable-STAT FOC wall DEF body
‘The coat is on top (stable support from above) of the wall’s body.’
(TRPS 09)

Other objects that speakers describe in natural contexts as *yagi* are traditional bags woven of fibre ropes with handles, objects with loops, drums with leather straps put on shoulders or on hooks or on nails driven into vertical Grounds such as walls and poles.

It is important to point out the semantic distinction between the use of *yagi* to describe locative relations involving hanging with stable base support and that of *yuli* ‘be hanging, dangling freely’ (see §5.2.2.4 below). Whereas *yagi* mostly describes objects in a hanging position touching or with support by the side of the elevated Ground that of *yuli* only applies to scenes where the object is hanged dangling or suspended with no support by its side by the Ground such as a bat hanging downwards on a tree branch or the scenes in Appendix 3(3D) with a swing hanging on tree branch (SUP 24, SUP 25) and a bulb hanging on a ceiling (TRPS 13, TRPS...
63). Note that clothing on a drying line although are hanged dangling speakers described such scenes using *yagi* since they are supported firmly with pegs.

**Definition 11: The locative relation of *yagi* ‘be on top, with stable support’**

For any F and G, F is in a *yagi* relation with G, if:

(i) G is an elevated Ground and

(ii) F is animate (human or animal), and F has feet supported from below on G, and F is stable or

(iii) F is inanimate (objects), and F has a base to support it in a stable relation to G or F is supported from above.

5.2.2.2 *pagi* ‘be on top, of flexible or flat objects’

The verb *pagi* is used to describe a flat or flexible Figure on an elevated Ground, for example, a book on tabletop. The verb *pagi* is used generally to describe inanimates but marginally used to describe animates. Thus, its application with humans and animals is less prototypical and infrequent based on how the speaker perceives the configuration of the human or animal Figure on an elevated Ground. In the stimuli data, the only instance of its usage is the support picture scene below (SUP 27) with a leopard lying on a tree branch.

![Figure 21: The only animate scene described as *pagi*](image)
In (131) because speakers construed the leopard as having a flexible body permitting it to orient on its stomach on the branch in a manner perceived to be flat, they apply pagi. In this context, perspective is an important construal influencing their choice of verb. While in Gurenɛ it is semantically unacceptable to use gā ‘be in a lying posture' in this context as shown in (132), in Likpe in contrast, as Ameka (2007:1090) observes, the posture verb si ‘be lying’ can still be used to localize similar scenes of a leopard lying on a tree branch. Consultants indicate that yagi may be used if one saw the leopard from a distance without being certain about its actual body posture. When human beings lie on elevated Grounds that are not made purposefully for lying such as on a tree branch, walls, or on roofs of buses they are described as pagi but not with gā because they are considered as inappropriate canonical lying places.

Objects that are characterised with pagi include a cloth spread on tabletop (PSPV 14), another cloth neatly folded on a tabletop (PSPV 04) as well as another one on a tree stump (PSPV 34), and another on a basket (PSPV 24). Other scenes are a cloth on wall (GUR 23), a piece of cloth on a rock (PSPV 32), an open book turned upside down on table (BERN 30), and a computer mouse on desktop (BERN 13). Below are some examples. They can be found in Appendix 3(3B).

(133) Fuo la pag-i la kuka la zuo cloth DEF be on top.flat-STAT FOC table DEF head ‘The cloth is on top (flat or flexible) of the table.’ (PSPV 04)

(134) Fuo la pag-i la lalega zuo cloth DEF be on top.flat-STAT FOC fence.wall head ‘The cloth is on top (flat) of the fence wall.’ (GUR 23)

Other objects include mud on a tabletop (SUP 10, SUP 11) or any blob-like substance such as porridge with a distinguishably flat surface lying on an elevated Ground can be described with pagi as shown in (135) and (136).
Generally, objects such as animal skins, CDs, mouse pads, laptops (closed but not an open one which attracts \textit{yagi}), paper or sheet-like items like leaves, notes of currency when placed to lie flat on an elevated Ground are all described as \textit{pagi}. In addition, \textit{pagi} marginally applies to flexible objects arranged in a configuration with a distinct flat shape. Such scenes include a rope folded and spread lying across the mouth of a basket (PSPV 19), multiple spread configuration of a rope on a stump (PSPV 54), a hose coiled on stump (TRPS 23), and a bundle of stalks arranged and spread to rest on hanging ropes supported by four fork-sticks (GUR 41).

\textbf{Definition 12: The locative relation of \textit{pagi} ‘be on top, of flat or flexible objects’}

For any F and G, F is in a \textit{pagi} relation with G, if:

(i) G is an elevated Ground and

(ii) F is animate positioned in a flat manner on G, or

(iii) F is an inanimate (object) with a flat shape or is flexible.

\subsection*{5.2.2.3 \textit{dagi} ‘be on top, with unstable support or relation’}

The verb \textit{dagi} ‘be on top, with unstable base support or relation’ describes objects of circular cross-section, like gourds, lump of earth, stones, balls, fruits, eggs, bulbs, which cannot be in a stable locative relation to an elevated Ground. All these objects are seen as not being stably supported and are asymmetrical in that no part is designed for a balanced support. Typical scenes from the stimuli sets include a ball
or balls on tabletop (PSPV 21, PSPV 08, PSPV 18), a ball on rocks (PSPV 50),
oranges in a row on tabletop (BERN 49) and some in a pile of four on tabletop
(BERN 50), and eggs on tabletop (GUR 71). Refer to Appendix 3(3C) for these
scenes. The examples below are some of the expressions used to describe these
scenes.

(139) Leemu banaasi la ɗog-i la kuka orange NUM DEF be on top.unstable-STAT FOC chair
la zuo DEF head
‘The four oranges are on top of (unstable support) the table.’
(BERN 49)

(140) Boola la ɗog-i la teebule zuo ball.PL DEF be on top.unstable-STAT FOC table head
‘The balls are on top (unstable support) of the table.’ (PSPV 08)

Other elongated entities such as tubers, sticks, pens, logs, drums, buckets, bottles,
bundles of stalks when they are located on their side on an elevated Ground they are
described with ɗogi because of the unstable locative relation they contract with the
Ground. For example, the scenes in Appendix 3(3C) with bottles on their side on a
 tabletop (PSPV 52), a bottle on rock top (PSPV 26), a tuber of cassava on stump
(PSPV 23), three tubers of cassavas on stump (PSPV 47), stick on rock (PSPV 35),
stick placed across a basket mouth (PSPV 43), and a stick on stump (PSPV 61) were
all described by speakers as ɗogi because they are placed in an unstable locative
relation on the Ground.

(141) Banki la ɗog-i la tigbi’ire la zuo cassava DEF be on top.unstable-STAT FOC stump DEF head
‘The cassava is on top (unstable support) of the stump.’ (PSPV 23)

(142) Tua la ɗog-i la taŋa la zuo Bottle DEF be on top.unstable-STAT FOC rock DEF head
‘The bottle is on top (unstable support) of the rock’. (PSPV 26)

(143) Dibega la ɗog-i la taŋa la zuo stick DEF be on top.unstable-STAT FOC rock DEF head
‘The stick is on top (unstable support) of the rock.’ (PSPV 35)
However, for those objects with stable base support when they are located on their base, for example, a bucket, a bottle, or a pot *yagi* ‘be on top, with stable base support’ discussed in §5.2.2.1 will be the preferred choice.

In a multiple locative scene like PSPV 46 with four bottles clearly lying on their side while three are standing upright on their base on tabletop consultants offered two verbs in a two-clause expression as shown below.

\[(144)\] Kole-ba banaasi la *dogi* la bottle-CL2 four DEF be on top.unstable-STAT FOC teebule la zuo gee ti kole-ba table DEF head CONJ COMP bottle-CL2 bata *yag-a* table la zuo three be on top.stable-STAT teebule DEF head

‘Four of the bottles are on top (unstable support) of the table but three are on top of (stable base support) the table.’ (PSPV 46)

In this multiple scene consultants objected to the suggestion that *ze* ‘be standing’ and *gã* ‘be lying’ could be used to distinguish the different orientations of the bottles. They declared that *ze* and *gã* are unacceptable even when the Ground is left out as it was the case with humans located on an elevated Ground discussed above. This appears to suggest that speakers can make adequate distinction using “stable” vs. “unstable” with objects in this context but not with humans.

**Definition 13: The locative relation of *dogi* ‘be on top, with unstable support or relation’**

For any F and G, F is in a *dogi* relation with G, if:

(i) G is an elevated Ground, and

(ii) F is an inanimate (object) with a circular cross-section or asymmetrical located in an unstable relation with G.

**5.2.2.4 *yuli* ‘be hanging, dangling freely’**

Figures that are hanging and dangling freely with point support from an elevated vertical or horizontal Ground but without support from below are described by speakers as *yuli*. In contrast, to *yagi* discussed in §5.2.2.2, which describes objects
with stable support, *yuli* is restricted to only Figures that hang dangling freely. I will show this in a moment. The use of *yuli* ‘be hanging, dangling freely’ can be applied to both animates and inanimates. However, like in German (see Schultz-Berndt & Kutscher 2007:1002) its use with humans describes non-prototypical body positions or postures. In the interactive discourse data (see (145)), a consultant describes a man hanging (suspended) holding on to a mango tree branch with one hand, without support from below while his other hand holds a stick and he swings his body from one side to another to pluck the mangoes by hitting them.

(145) Nɛra la yul-i la mɔnkɔ wile zuo
person DEF be hanging, dangle-STAT FOC mango branch head
go’o-sa montɔ la pluck-IPFV mangoes DEF
‘The person is hanging and dangling freely on the mango tree branch plucking the mangoes.’ (IDT 236)

Other natural contexts in which human beings can be said to be *yuli* ‘be hanging, dangling freely’ involves passengers hanging with their hands holding onto the side (body) of overloaded market trucks that come from the villages to the market centres as illustrated below.

(146) Zina n de Bolga da’a la ti nɛreba
today FOC COP Bolga market DEF that people
yul-i loore zuo ki-na ti hang, dangle-STAT lorry head come. IPFV that
ba di da’a
3PL eat market
‘It is because today is Bolga market that people are hanging on to the lorry coming to spend the market.’ (IDT 158)

Consultants point out that *yuli* also has a negative cultural meaning that describes people who commit suicide by tying ropes with a noose to tree branches or beams on roofs to their necks to hang themselves. This is similar to a *hang man* in western cultures. None of the stimuli sets include a scene with human beings in hanging positions. The use of the verb is also indifferent to the orientation of the human body position irrespective of whether or not the person is hanging with legs downwards or face downwards. Recall that in §5.2.1.3 above if a human was supported on his/her head or hands on earth with the body upright a different verb is required.
The hanging positions of certain birds like bats on trees or insects like bees on beehives are commonly described as *yuli* by speakers. Bats characteristically hang downwards on trees and beehives hang drooping.

(147) Zinzuno la yul-i la tia la zuo bat.PL DEF be hanging.dangle-STAT FOC tree DEF head ‘The bats are hanging dangling freely on the tree.’ (LDFT 233)

(148) Sim la yul-i la tia la zuo bee.PL DEF be hanging.dangle-STAT FOC tree DEF head ‘The bees (beehive) is hanging (suspended) on the tree.’ (LDFT 195)

The typical uses of *yuli* apply to objects in hanging position, dangling downwards with a string or a loop attached to an elevated Ground like a tree branch. In the stimuli corpus prototypical scenes include a ring attached to a string hanging on a tree branch (SUP 23), a swing attached at both ends to a tree branch (SUP 24), one other swing attached at one end to a tree branch (SUP 25), a bulb hanging on a ceiling downwards (TRPS 63), light (bulb) hanging over a table (TRPS 13), a computer mouse hanging on the side of a computer desk (BERN 14), and a bag that hangs dangling on a stick in a barn (GUR 46). Refer to Appendix 3(3D) for all these scenes. Other similar scenes include real scenes of a bulb hanging in a room (LDFT 13), and a fan hanging on the ceiling (LDTF 12). Some examples are as follows.

(149) Kurego la yul-i la tia la yile zuo iron DEF be hanging.dangle-STAT FOC tree branch head ‘The ring (swing) is hanging and dangling on the tree branch.’ (SUP 23)

(150) K̄oma de’engo zug o la yul-i la tia la zuo children play thing DEF be hanging.dangle-STAT FOC tree DEF head ‘The children’s play thing (swing) is hanging on the tree.’ (SUP 24, 25)

(151) Bugum la yul-i la bo’o la zuo fire DEF be hanging.dangle-STAT FOC room DEF head ‘The fire (bulb) is hanging dangling up on the ceilings of room. (LDFT 13)

(152) Faani la yul-i la bo’o la saazuo fan DEF be hanging.dangle-STAT FOC room DEF above ‘The fan is hanged dangling up on the roof of the room.’ (LDFT 12)
In addition, adornment relation of an earring on ear (TRPS 69) is described with *yuli*. If the earring were put on the earlobe not hanging downwards the verb *lu* ‘be pierced’ will be used instead (see §5.2.3.3.3). Attachment relations of fruits hanging on trees downwards such as an apple on a tree branch (TRPS 27), and baobab fruits on a baobab tree (GUR 61) were both described as *yuli*. But some speakers suggested *yagi* could also be appropriate in this case.

(153) Apuli la yul-i la tia wile zuo apple DEF be hanging.dangle-STAT FOC tree branch head
‘The apple is hanging and dangling freely on the tree’s branch.’ (TRPS 27)

(154) To’o-ro la yul-i la tu’a la zuo baobab.fruit-CL8 DEF be hanging.dangle-STAT FOC baobab.tree DEF head
‘The baobab fruits are hanging, dangling freely on the baobab tree.’ (GUR 61)

The crucial meaning component of *yuli* is that the Figure hangs freely on the elevated Ground facing downwards and without its body aligned or touching any part of the vertical Ground. For example, the scenes in Appendix 3(3A) involving a coat on hook (TRPS 09), a photo hanging on pole (SUP 41), millet cobs and okra fruits on wall (IDT 35), were all characterized with *yagi* discussed in §5.2.2.1 above. Although in all these scenes the Figures appear to be hanging downwards, speakers perceive the nature of their hanging to be supported on the side by the Ground but not dangling freely. In this case, *yuli* is not the choice but *yagi*. For this reason, consultants were initially divided in their description of the scenes below with five using *yagi* and another five choosing *yuli*. 

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Figure 22: Scenes described as *yagi* and *yuli*

However, during the group discussion eight accepted that *yagi* is appropriate arguing that they expected the photo or the rope to be clearly dangling like the other scenes in Appendix 3(3D) classified as *yuli*. The two other consultants also point out that they perceive the Figure to be dangling hence their choice. Thus, as long as the Figure is not construed as having its body in contact with the Ground but with point suspension then *yuli* is used. Unlike German, where the equivalent positional verb *hängen* ‘hang’ is not restricted to hanging relations to a single point or objects hanging but can be influenced by the absence of support from below (see Kutscher & Schultze-Berndt 2007:1004) Gurenɛ *yuli* is restricted to point suspension and dangling of the Figure. For example, according to Kutscher and Schultze-Berndt, in German, a Figure like a ball stuck between branches (PSPV 43) may be described as *liegen* ‘lie’, *stecken* ‘be in tight fit, be stuck’ or *klemmen* ‘be stuck’ but some consultants also chose *hängen* ‘hang’. In Gurenɛ, such a scene is described as *yagi* and *yuli* is not used.

The division of labour between *yagi* and *yuli* in Gurenɛ show similarity with Likpe’s *faka* used to describe hanging relations with point suspension and *yoma* which applies to hanging of Figures with support on some part or side by the Ground (see Ameka 2007:1091-1092). However, whereas Likpe’s *faka* permits the attachment of hooks on walls (TRPS 50) Gurenɛ *yuli* does not apply for the fact that they are...
attached but not hanging and dangling. Further, Gurenɛ yuli also shows similarity with Goemai lang ‘hang/move’ to some extent where Hellwig (2003:116-124) observes that lang typical attachment meaning describes inanimate Figures that are suspended and can move by dangling or swinging. The difference however, between Gurenɛ yuli and Goemai lang is that the latter extends to include attachments such as handle on door (TRPS 61), straps on purse (TRPS 66), and ring on finger (TRPS 10) as Hellwig (2003:118) suggests in her discussion. Gurenɛ speakers will use one of the attachments verbs discussed in §5.2.3 below to describe these attachment scenes but not yuli since they are not dangling.

Celestial bodies like sky, cloud, stars, sun, and the moon are usually described as yuli when speakers conceptualize them as being suspended in mid-air without any point of contact as this example shows.

(155) Sagbanɛ la yul-i la zoore la saazuo
sky DEF be hanging.dangle-STAT FOC mountain DEF above
‘The sky is hanging over and above the hill.’ (TRPS 36)

**Definition 14: The locative relation of yuli ‘be hanging, dangling freely’**

For any F and G, F is in a yuli relation with G, if:

(i) G is elevated and
(ii) F hangs dangling or freely on G, and
(iii) G is vertical or horizontal or
(iv) F is a celestial body and the semantic component of dangling is irrelevant.

**5.2.2.5 sugi ‘be on top, of container with convex base’**

Any convex base-type container which is placed to sit on top of another container like a pot, sugi is used as in these examples.

(156) Liŋa la sug-i la duko la nuurɛ
lid DEF be on top.convex-STAT FOC pot DEF mouth
‘The lid (of a clay pot) is on top of the pot’s mouth.’ (SPST 305)
'take the soup pot on the mouth of the tz (a local meal) pot and put it on the floor and take the food.' (SPST 455).

The use of the verb is restricted to convex container-type placed to sit on the mouth of other containers with wide-open mouths. If the base of the Figure container is not enveloped by the Ground container that it rests on then yagi (§5.2.2.1) or pagi (§5.2.2.2) will apply. The verb is not used to describe a cork on a bottle. Tight fit relations are not described using sugi but see the discussion of ‘insert, tight fit’ in §5.2.3.2.5. The meaning of sugi inherently includes the convex base shape of the Figure. The verb describes a culturally salient configuration, as I have not noticed a similar locative description in the positional verb literature. Its application to containers includes clay pots or lids, and calabashes placed to sit on the mouths of other wide-mouth containers.

**Definition 15: The locative relation of sugi ‘be on top, of container with convex base’**

For any F and G, F is in a sugi relation with G, if:

(i) G is elevated and
(ii) G is a container with a wide-open mouth and
(iii) F a container with a convex base that sits on G.

**5.2.2.6 sagi ‘be placed in, of container-in-container’**

The meaning of sagi is similar to sugi. However, sagi typically describes a container-in-container kind of relationship. That is, one container (open-mouthed), the Figure, is placed to sit in another bigger or wider container (Ground) typically with contents beneath the Figure container, to provide some form of elevation. For example, speakers describe a calabash placed sitting in a basket half-filled with grains (see (158)) and another calabash sitting on water half-filled in a basin in example (159). These containers are usually those of a hemispheric shape such as a plate, a basket, cans, and hollow-gourd containers (see Brown 1994:774-775 on similar semantics of...
Tzeltal dispositionals). It does not matter whether or not the Figure container is filled with some content or it is empty, it will still be described with *sagi* but it is usually expected that the Ground will have some content beneath the Figure to sit on. That is, a kind of elevation.

(158) Wanɛ la sag-i la pi’ɔ la puan calabash DEF be placed in-STAT FOC basket DEF inside ‘The calabash is placed sitting on top in the basket.’ (LDFT 299)

(159) Wanɛ la sag-i la ko’om la puan calabash DEF be placed in-STAT FOC water DEF inside ‘The calabash is placed on the surface of the water.’ (LDFT 300)

The verb is also marginally used to describe containers placed in another container with a good portion of its base or body enveloped in the Ground container like the scenes below. The BERN 48 scene in Figure 23 below attracted disagreements among consultants as to whether *sugi* should be used or *sagi*. Six consultants were in favour of *sagi* pointing out that a good portion of the sieve is inside the cup but four others also argued that the cup has a convex base and can be used with *sugi*.

Figure 23: Container-in-container scenes

(160) Pi’ɔ la sag-i la ku tadaana puan basket DEF be placed in-STAT FOC 3SG colleague inside ‘The basket is placed in the other basket.’ (BERN 43)

(161) Ze’esega la sag-i/sug-i kɔpi sieve DEF be placed in-STAT/be on top.convex-STAT cup la zuo DEF head ‘The sieve is placed in/on the cup.’ (BERN 48)
(162) Kumpi’o la sag-i la wanɛ la n gourd DEF be placed in-STAT FOC calabash DEF FOC boi pi’ɔ la puan be.at basket DEF inside
‘The half-gourd container is placed in the calabash in the basket.’
(IDT 16).

(163) Kumpi’o la wanɛ la boi la pi’ɔ la puan gourd LINK calabash DEF be at FOC basket DEF inside
‘The gourd container and the calabash exist (contained) in the basket.’
(IDT 16)

To some extent, the interactive scene with the hollow-gourd and the calabash (IDT 16) is similar to a containment relation. As a result, three speakers observed on the field used the general locative verb boi ‘be at’, ‘exist’, ‘be at’ (see §5.2.5 below) as their first verb to describe the location of the half-gourd and the calabash in the basket as in (163) while four others used sagi spontaneously in (162). It seems to me that when speakers focus on the calabash as Ground and the gourd as the Figure sagi is readily used but when the shift of focus is on both the gourd and calabash as Figures and the basket as Ground, the general locative verb boi ‘exist’, ‘be at’ (see §5.2.5 below) is favoured.

One important observation is that, the typical use of sagi is restricted to instances of container-in-container relations with the Figure container sitting on some content beneath it. A further semantic requirement for the use of sagi is that the Figure container should be placed to rest on its base but not in an upturned manner. If the container is turned upside down then vugi ‘be turned upside down’ (see §5.2.1.10) will be used. Thus, the selectional restriction appears to be that sagi describes the location of a specific kind of oriented container-shaped Figure.

**Definition 16: The locative relation of sagi ‘be placed in, of container-in-container’**

For any F and G, F sagi G, if F is a container sitting in G with some content as an elevation supporting F from below, and G is a container with a wide-open mouth.
5.2.2.7  *pugi* ‘be afloat, in liquid’

The positional verb *pugi* ‘be afloat’ is used by speakers to describe both animates and inanimates afloat with support by liquid medium such as water, oil, or alcohol. Its typical use applies to a person, animal or object whose whole body is floating on the surface of the liquid or a good portion of the entity’s body is immersed in the liquid with part visible. If the Figure is completely immersed but not settled at the bottom, a different verb *muse* ‘immerse’, is used to describe the locative relations. Examples of floating scenes include ‘a bee sitting on the surface of water’ (GUR 28), a piece of wood floating on water (GUR 51), a crocodile with almost its whole body immersed in water except its head (GUR 52), and an egg almost completely immersed in water (BERN 16) except its tip. The locative expressions that were used by speakers are stated below.

(164) Gele la  pug-i la ko’om la puan
egg DEF be afloat-STAT FOC water DEF inside
‘The egg is afloat on the water.’ (BERN 16)

(165) Sifo la  pug-i la ko’om la puan
bee DEF be afloat-STAT FOC water DEF inside
‘The bee is afloat on water.’ (GUR 28)

(166) Dɔɔ la  pug-i la ko’om la puan
wood DEF be afloat-STAT FOC water DEF inside
‘The wood is afloat on the water.’ (GUR 51)

(167) Ëbegå la  pug-i la ko’om la puan
crocodile DEF be afloat-STAT FOC water DEF inside
‘The crocodile is afloat on the water.’ (GUR 52)

In all these examples, the liquid medium acts as the Ground providing support to the Figure. The verb *pugi* is classified as a verb of elevation because the entities are seen as elevated on the surface of the water but not resting at the bottom, base, or floor of the water body. If the Figure is completely immersed and not resting at the base or bottom of the container or the water body (e.g., river, stream, or dam) the speaker will either use *boi* ‘exist’, ‘be at’ to predicate that the Figure exists in or *gã* ‘be lying’. The choice of either of these verbs will depend on whether or not the speaker perceives the containment of the Figure to be completely or partially immersed in the liquid medium. For example, if on one hand, s/he perceives the
riverbed or the bottom of the river as the Ground that the Figure is located on the choice will be $g\ddot{a}$ but if on the other hand, s/he perceives the liquid medium as the Ground in which the Figure is completely contained then $boi$ will be used to show that the Figure is immersed. Suppose the Figure is an animal, like the crocodile in scene (GUR 52, see Appendix 3(3E)) and is in a standing position in a shallow pond, containing little water that does not allow it to be afloat on the surface of the water, consultants will describe such a position with $ze$ ‘be standing’ since it is not afloat. Like other verbs of elevation which disregards the actual postures of the Figures on elevated Grounds, the variation of the position of an object or an animal in a standing or a lying posture while floating on liquid is irrelevant and $pugi$ will still be used.

Guirardello-Damian (2002:167-170; 2007:936) observes a similar situation with the use of the Trumai’s positional verb $pila$, which is used to predicate locations in liquid disregarding the variations of the position or shape of the Figure (see also Kutscher & Schultze-Berndt 2007:1014 on the equivalent verb in German). The difference between Trumai and Gurenɛ is that whereas $pugi$ is restricted to the location of entities in only liquid medium Trumai extends its verb to describe the location of the liquid medium itself in rivers and lakes. Gurenɛ uses $g\ddot{a}$ instead to describe the location of water bodies themselves as discussed in §5.2.1.1. Also $pugi$ describes only stative non-moving entities otherwise; $bum$ ‘swim’ becomes eligible.

**Definition 17: The locative relation of $pugi$ ‘be afloat, in liquid’**

For any F and G, $F \ pugi \ G$, if F is afloat on G, and G is a liquid medium providing support to F.

5.2.2.8 **Gurenɛ verbs of elevation in a cross-linguistic perspective**

The semantics of the verbs of elevation discussed in the preceding sections appears to have greater importance in Gurenɛ than is the case with other languages observed in the cross-linguistic study of the posture and positional verbs so far. In this section, I attempt to highlight this elevation phenomenon by comparing the Gurenɛ data with other languages in the positional verb typology where elevation has either been mentioned explicitly or left implicit. The starting point is to compare Gurenɛ to the Mayan languages (Tzeltal in particular) before other languages. What is of particular
interest here is the cross-linguistic comparison of Gurenc, a Type III language with Tzeltal, another Type III language based on the BLC typology to point out that in Gurenc the verbs of elevation also have as part of their lexical meaning the feature of elevation of the Figure and the Ground of which Tzeltal appears not to have.

This comparison is particularly relevant because according to Ameka & Levinson (2007a:854) Tzeltal is the prototype of the languages investigated in the BLC typology. Tzeltal is also reported to have several dispositional roots that can be used to make very specific semantic distinctions of the location of entities by focusing on the Figure’s properties such as size, shape, configuration, position and other spatial properties (see Brown 1994:743-790, 2006:246-249; Bohnemeyer & Brown 2007:1106-07). Grinevald (2006:42-3) made similar observations about the semantics of the Tzeltal positional roots conflating information about the Figure which include shape, texture, size, disposition while leaving the spatial relation between the Figure and Ground implicit. Gurenc, positional verbs in contrast, encode shape, and position of the Figure but not texture, and size. A further motivating factor for this comparison is that Gurenc verbs of elevation describe locative scenes that are comparable to elevated scenes that Tzeltal also uses its dispositional roots to describe. Although one of the predictions in the BLC typology of Ameka & Levinson (2007a) is that languages in Type III have a large set of positional verbs and the semantics of the verbs are very detailed and language specific (see §4.2.2.1 (a)), this comparison is for purposes of demonstrating the similarities and differences between these two languages. The objective is also to highlight my claim that elevation plays a more important role in Gurenc locative descriptions than in Tzeltal or in the other languages discussed in the typology.

Consider the kinds of semantic discriminations Tzeltal makes using dispositionals in the locative description of both animate and inanimate Figures located on top of a table and the Gurenc equivalents in Table 25 below. The Tzeltal dispositional forms are more than what is considered here but these are the forms showing similar
scenes of locative relations with Gurenɛ relevant for the comparison. For details, see Brown (2006:249)

Table 25: Comparison of Tzeltal and Gurenɛ locative descriptions of elevated scenes

<table>
<thead>
<tr>
<th>Locative scene</th>
<th>Tzeltal Dispositionals</th>
<th>Gurenɛ Positional verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>bowl on tabletop</td>
<td><em>pachal</em> 'be located’, of wide mouthed bowl-shaped container canonically sitting/standing’</td>
<td><em>yagi</em> 'be on top, with stable support’</td>
</tr>
<tr>
<td>blob of dough on tabletop</td>
<td><em>pakal</em> 'be located’, of blob with distinguishable flat surface lying’</td>
<td><em>pagi</em> 'be on top, of flat or flexible objects’</td>
</tr>
<tr>
<td>bag upright on tabletop</td>
<td><em>chepel</em> 'be located’, sitting of things full (bulging) bag supported underneath’</td>
<td><em>yagi</em> 'be on top, with stable support’</td>
</tr>
<tr>
<td>bean seeds on tabletop</td>
<td><em>cholol</em> 'be located’, of multiple objects arranged in a row’</td>
<td><em>dbgi</em> 'be on top, of unstable support or relation’</td>
</tr>
<tr>
<td>bottle upright on tabletop</td>
<td><em>waxal</em> 'be located’, of tall oblong-shaped container or solid object standing’</td>
<td><em>yagi</em> 'be on top, with stable support’</td>
</tr>
<tr>
<td>frying pan resting on tabletop</td>
<td><em>lechel</em> 'be located’, of wide flat object lying flat’</td>
<td><em>yagi</em> 'be on top, with stable support’</td>
</tr>
<tr>
<td>cat on tabletop</td>
<td><em>mochol</em> 'be located’, of animate lying curled up on its side’</td>
<td><em>pagi</em> 'be on top, of flat or flexible objects’</td>
</tr>
<tr>
<td>toy man on tabletop</td>
<td><em>tek’el</em> 'be located’, of vertically standing on hind legs of animals or any long/thin object vertically erect supported underneath’</td>
<td><em>yagi</em> 'be on top, with stable support’</td>
</tr>
</tbody>
</table>

As can be observed from Table 25, Tzeltal makes fine-grained semantic distinctions to discriminate the location of the Figures in all the eight scenes using eight different positional verb roots that show greater preference in specifying the shape, size, position of the Figure and its configurations. For example, *pachal* describes the location and configuration of a wide-mouthed bowl-shaped container canonically sitting (standing) on top of the table. This property of Tzeltal dispositional roots of conflating the semantic properties of the Figure is observed in the positional verb typology to be a unique feature of the Mayan languages in general and particularly Tzeltal. As Brown (1994; 2006), Brown & Bohnemeyer (2007) observe, the bulk of the meanings of Tzeltal positional roots are Figure-centred. Gurenɛ in contrast, uses

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only three verbs from the class of verbs of elevation to make semantic distinctions with respect to the Figure properties that include shape, location with a stable or unstable based support with respect to the Ground. Thus, Tzeltal dispositional verb roots appear to say nothing about the elevation of the location but in Gurenɛ all three verbs convey elevated location as part of their meanings. There appears to be a division of labour between Tzeltal positional roots and stative adjectives as Brown (2006:246-47) suggests that information about the location of the Figure in relation to the Ground is usually carried out by stative adjectives. For example, in the TRPS 34 scene which has a man standing on a rooftop, Tzeltal uses the dispositional stative adjective *kajal* ‘mounted on’ but the Gurenɛ equivalent is *yagi* ‘be on top, with base support of the Figure’.

Also from the comparison in Table 25 and a close look at Brown’s (2006:249) discussion of Tzeltal dispositionals used for describing body positions, the dispositionals can still apply to describe Figures on elevated Grounds without disregarding the actual posture of these Figures but Gurenɛ verbs of elevation do disregard the actual posture (see discussion in §5.2.2.1 under humans above). Tzeltal also has a semantically vacuous preposition *ta* which is not part of the meaning of the dispositionals as Brown (2006:241) suggests. Gurenɛ does not use any preposition but uses postpositions. The main point to note in this comparison is that elevation does not appear to make any difference in the description of elevated scenes in Mayan (Tzeltal) as is the case in Gurenɛ.

In Newman’s (2002a) volume on posture verbs (see a review in §4.2.1), although elevation has been reported in some languages, like Korean make reference to height but this mainly concerned the Figure but not the Ground (see details in §5.2.1.3 discussed under humans above).

Another language in the posture verb literature where a brief comment is made about the phenomenon of elevation of the Ground is Trumai (a Brazilian isolate). Guirardello-Damian (2002:164-167, 2007:937-938) observes that in Trumai, the semantics of the posture verb *tsula* ‘lie’ overlaps with another posture verb *chumuchu* ‘lie’ but *tsula* is applied to Figures located on Grounds above floor level with *chumuchu* designated for location at floor level. She explains that a shirt on the floor
will attract the use of *chumuchu* but *tsula* is grammatically not acceptable in this context. Instead, a shirt on a tabletop *tsula* can be used. Given these patterns of usage, one may assume that there is a clear division of labour between the two verbs. However, Guirardello-Damian (2002:166) points out that, it is when the Figure is inanimate that the difference between the two verbs becomes more marked, less so when the Figure is animate. In the latter case, the choice between either verb becomes a matter of pragmatics depending on whether or not the speaker wants to focus on the lying posture itself or the Figure’s location above the floor level. A clear case of elevation where *tsula* is used but *chumuchu* is denied, as Guirardello-Damian shows in her discussion is when human beings or animals are lying in a hammock. Although the use of *tsula*, appears to be similar to one of the Gurenɛ verbs of elevation, *pagi* ‘be on top, of flat or flexible objects’ (§5.2.2.2) used for describing Figures located flat on elevated Grounds there are differences in many respects. First, *tsula* refers to the elevation of the Ground but with no information about the Figure’s property; but Gurenɛ verbs of elevation do provide such information. A further point that suggests Trumai’s *tsula* is not exclusively used for location above floor level in Guirardello-Damian’s discussion is that *tsula* can in fact be applied to describe a sock on a foot, because it (foot) is both horizontal and vertical. It is, therefore, hard to point to any feature of elevation in this case since the foot may be assumed to be at the floor level. Further, in Trumai, examples of scenes with a ball or a stick lying on a tabletop, and a glass on its side on a bench are all described with *chumuchu* but not *tsula* (see Guirardello-Damian 2002:162), suggesting that speakers use these verbs freely. In all these instances, the posture is not disregarded, as is the case with Gurenɛ. There is one major difference between Gurenɛ and Trumai’s positional verb system in that Trumai has one such verb of elevation but Gurenɛ has a whole lot more, suggesting that ‘elevation’ is of much greater importance in the latter than in the former.

Similarly, Kutscher and Genɛ (2006:1034) report that in Laz, a preverb particle *ce*- with the meaning equivalent ‘on’ combines with a verbal root to describe locative scenes with Figures located above floor level such as tabletop or balcony as the Laz examples below show.
In these Laz examples, Kutscher and Genç point out that the preverb particle ce-marks the location of the bottle on the upper surface of the table while the two different verb roots, -dg- ‘stand’ and -zu- describe the different orientation of the bottle as ‘standing’ and ‘lying’ on the table. They further observe that the preverb ce-may also be used to describe ‘downwards’ relation depending on how pronounced the gradient is between the Figure and the Ground. Although elevation appears to be implied in the use of the particle ce- as the Laz data show it does not suggest that its use disregards the actual posture of the Figure. This is inferable from the Laz literal translation of the positional verb roots which still has ‘standing’ and ‘lying’ describing the position of the bottle. The Gurenɛ verbs of elevation are distinct from the Laz case in both form and meaning. They are finite verbs but not verbal particles and their meanings do include the properties of the Figure as well as the elevation of which the Laz particle is silent.

5.2.3 Attachment verbs

The semantics of the attachment verbs pay careful attention to the different types of attachments of the Figure to the Ground (refer to Appendix 4 for all the stimuli scenes). The position of the Figure is usually irrelevant rather the nature of its attachment to the reference object is of interest to the speaker. It is assumed here that the various attachment relationships between the Figure and Ground convey contact and location. That is, to say, if an entity F is attached to another entity G, it conveys F is located at G (cf. Jackendoff 1990:112-113). More importantly, Gurenɛ unlike English, all the verbs in this class are used by speakers in answer to the where-search question to describe the location of entities that are in an attachment relation. There are no other ways to describe such attachment relations than to use the verb. Almost all the verbs in this semantic class are dynamic verbs (§3.3.2) but are used to describe the attachment relations in the inchoative construction more
than the agentive. An explanation for this may be that attachment unlike posture or elevation is not typically locational.

Based on the form and firmness of the attachment that holds between the Figure and the Ground the verbs can further be subgrouped to include ‘stuck on’, ‘tied on to’, adhesive attachment, grip attachment, and piercing attachment. Gurene has specific verbs that describe these different kinds of attachments that are usually subsumed under the English prepositional relations of *on* or *through*. The variation in the choice of one attachment verb over the other thus seems to depend on how the speaker perceives the firmness of the attachment, as I show in the discussion. Some of the attachment scenes are perceived as a result of some action by some agent as consultants sometimes offer alternative expressions to suggest that the Figure is in that relation because of some deliberate action by a human. Typologically, dynamicity has been observed in the positional verb literature to be a characteristic feature of this class of verbs (see Levinson & Wilkins 2006c:518). The attachment verbs can pick out level I and II of the BLC hierarchy discussed in §4.2.2.2 to describe Figures stuck to the Ground. Table 26 presents the list of the attachment verbs.

**Table 26: List of attachment verbs and forms of attachment**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Animacy of Figure</th>
<th>Nature of Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>tabi</td>
<td>be stuck, of mastic substance e.g., gum</td>
<td>animate</td>
<td>adhesive</td>
</tr>
<tr>
<td>labi</td>
<td>be adhered or pasted e.g., paper</td>
<td>animate, inanimate</td>
<td>adhesive or grip</td>
</tr>
<tr>
<td>gu’</td>
<td>be stuck, e.g., of insects or debris</td>
<td>animate, inanimate</td>
<td>grip or self-adhesive</td>
</tr>
<tr>
<td>firi</td>
<td>be stuck, usually of thin or long entities e.g., poles</td>
<td>animate, inanimate</td>
<td>insertion</td>
</tr>
<tr>
<td>fugi</td>
<td>be stuck in, not firm, of thick objects</td>
<td>inanimate</td>
<td>insertion</td>
</tr>
<tr>
<td>figi</td>
<td>be stuck, of small pointed objects</td>
<td>inanimate</td>
<td>insertion</td>
</tr>
<tr>
<td>segi</td>
<td>be stuck in between, of objects</td>
<td>inanimate</td>
<td>insertion</td>
</tr>
<tr>
<td>lfi</td>
<td>be inserted, tight fit</td>
<td>inanimate</td>
<td>insertion</td>
</tr>
<tr>
<td>vile</td>
<td>be tied, not firm</td>
<td>animate, inanimate</td>
<td>rope</td>
</tr>
<tr>
<td>bobe</td>
<td>be tied, firm</td>
<td>animate, inanimate</td>
<td>rope</td>
</tr>
<tr>
<td>lu</td>
<td>be tied, very firm</td>
<td>inanimate</td>
<td>rope</td>
</tr>
<tr>
<td>vure/lu’</td>
<td>be pierced, softly/tough</td>
<td>animate, inanimate</td>
<td>pierce</td>
</tr>
</tbody>
</table>
5.2.3.1 Adhesion or grip-attachment verbs

The verbs in this subgroup describe the state of the attachment between the Figure and the Ground by means of adhesive or grip attachment. For instance, adhesive attachment like gum stuck firmly on table or a grip attachment requiring the Figure to have self-adhesive or gripping properties like a lizard on wall. In many cases, the Ground is a vertical one where the Figure is attached. Notice that the Grounds that the Figure is attached to are mostly elevated but the elevation is unspecified or irrelevant here. What takes precedence is the attachment. Unlike the verbs of elevation discussed above the attachment verbs can still be used even when the attachment is on earth or floor. Three verbs have been identified and discussed below.

5.2.3.1.1 tabi ‘be stuck, of mastic substance’

The verb tabi ‘be stuck, of mastic substance’ prototypically describes the firm adhesive attachment of a Figure to a Ground by means of a sticky substance such as gum or glue. The verb describes Figures attached firmly to a Ground such that the Figure cannot be separated easily. In the stimuli data tabi is used to describe scenes such as chewing gum stuck under table (TRPS 53), bowl stuck firmly on glue on tabletop (SUP 09), band-aid stuck on table (SUP 08), and gum stuck on pot in a locative description finding task (see (170)). See the first four scenes in Appendix 4(4A). In all these scenes, it is important that the attachment relation is very sticky, mastic or firm. If not labi ‘be adhered or pasted’ is favoured (see §5.2.3.1.2 below). This form of attachment is similar to attachment relations discussed in some languages in the positional verb typology, for example, Kutscher and Genç (2007:1055-6) discussion of Laz positional verb and Ameka on Likpe (2007:1096-98).

(170) Si'o la tab-i la duko la gum DEF be stuck-STAT FOC pot DEF ‘The gum is stuck on the pot.’ (LDFT 81)

(171) Si'o la tab-i la teebule la leno. gum DEF be stuck-STAT FOC table DEF jaw ‘The gum is stuck under the table.’ (TRPS 53)
Observe that in example (172) a serial verb construction *tabi* ‘be stuck, of mastic substance’ and *yaga* ‘be on top, with stable base support’ are used to describe both the attachment relation and the elevation. What becomes salient in such locative relations depends on the pragmatics of which relation is considered to be prominently marked. In this case, the sticky attachment is more salient than the elevation because speakers consider it as a negative relation or space. That is, objects under normal circumstances are supposed to be located freely without being attached.

**Definition 18: The locative relation *tabi* ‘be stuck, of mastic substance’**

For any F and G, F *tabi* G, if F is stuck by means of a sticky substance on G and both resist separation.

**5.2.3.1.2 *labi* ‘be adhered or pasted, e.g., of insects or debris’**

The verb *labi* ‘be adhered or pasted’, in contrast to *tabi* ‘be stuck, of mastic substance’ is used to characterise attachment configurations in which the Figure is attached less firmly to the Ground by means of a mastic substance like resin or the Figure’s self-adhesive or gripping properties like insects, and creatures such as lizards on walls or trees. Locative scenes in the stimuli data (see Appendix 4(4A), at top right) that were localized with *labi* include various scenes with paper adhering weakly or partially to a pole (SUP 39, SUP 43, SUP 44), stamp on envelop (TRPS 3), lizard on wall (GUR 25), and spider on ceiling (TRPS 7).

(172) Laa la tab-i yag-a la teebule
     bowl DEF be stuck-STAT be on top stable-STAT FOC table
     la zuo
     DEF head

   ‘The bowl is stuck on top (stable base support) of the table top.’ (SUP 09)

(173) Pipa la lab-i la poole la
     paper DEF be adhered-STAT FOC pole DEF

   ‘The paper is adhered to the pole.’ (SUP 42)

(174) Bāŋá la lab-i la dangoone iŋa
     lizard DEF be adhered-STAT FOC wall body

   ‘The lizard is adhered (attached) to the body of the wall.’ (GUR 25)
The scene with butter spread on a knife (TRPS 12) was never used with any of the verbs discussed here. Instead, a different verb taɛ ‘be smeared’ was used. This latter verb does not include the meaning of sticky or mastic but conveys the meaning of something that spreads or smears. In Likpe, however, Ameka (2007:1097) suggests that the verb má ‘be pasted’ can be used to describe butter spread on a knife.

The scene with a plaster on a person’s shin (TRPS 35) attracted the use of both the stative and the dynamic positional verbs. Thus, example (175) has the stative verb describing plaster adhering to a person’s leg but (176) has a dynamic verb labelɛ to express that the plaster has been put on the person’s leg. The verb dikɛ ‘take’ combines with the dynamic positional verb labelɛ ‘put to adhere’ to express the meaning that the plaster has been put on the leg possibly by the person himself/herself or another agent. The stative verb labi ‘be adhered or pasted’ cannot be used in this case as (176) shows. For details on the stative and the dynamic verbs see §3.3.2.

(175) Pilasita la lab-i la nɛra na‘arɛ
plaster DEF be adhered-STAT FOC person leg
‘The plaster is adhered to a person’s leg.’ (TRPS)

(176) Nɛra la dike la pilasita labe-lɛ/*lab-i
person DEF take FOC plaster adhere-DYN/be adhered-STAT
a na‘arɛ
3SG leg
‘The person took plaster and pasted on his leg.’

Definition 19: The locative relation of labi ‘be adhered or pasted’

For any F and G, F labi G, if F is attached to G less firmly by means of a mastic substance or F is adhered to G by self-adhesive or gripping properties.

5.2.3.1.3 gu’ ‘be stuck, e.g., of insects or debris’

Prototypical locative scenes where small insects are attached to humans, animals, and objects either firmly or weakly, are localised with gu’ ‘be stuck’. An example is a tick on a cow’s udder (GUR 56) as illustrated below.
When flies settle on food, *gu'* is used to describe that the fly is stuck on the food (GUR 15) as shown in (178)). See Appendix 4(see 4A, the middle circle) for these scenes. However, it seems that the nature of the Ground and the form of attachment of the Figure also influence the speaker’s choice between *gu’* or *labi* in such scenes. When the speaker construes the Ground to be flat and expanse such as walls, and ceilings the preference is to use *labi*. For example, a fly and a spider in TRPS 52 receive first response by all the consultants as *labi* (example (179)). When speakers are asked whether or not it is not acceptable to use *gu’* they accepted that it could be used.

The meaning difference resides in the nature of the attachment and the insect type. If a wingless insect or one with wings attaches its legs firmly to the Ground for support without its whole body or wings in contact with the Ground it is localized with *gu’*. However, when an insect with wings or a wingless one attaches its whole body to the Ground in a flat manner or with wings spread, then the speaker will use *labi*. Generally, *labi* attachments have the semantic component of flattened posture of the Figure’s body.

**Definition 20:** The locative relation of *gu’* ‘be stuck, e.g., of insects or debris’

For any F and G, F *gu’* G, if F has a self-gripping property that permits it to be attached to G either firmly or weakly.

**5.2.3.2 Insertion-attachment verbs**

The insertion-attachment verbs describe rigid objects inserted into the Ground. Typical Figures are usually long, cross-sectional, thick or thin, which are inserted to
be tight-fit or loose in a Ground. In either case part of the Figure ends up being contained in the Ground tightly or loosely. The orientation of the Figure in an upright, tilted, or slanted position is irrelevant in such locative situations as we shall see below.

5.2.3.2.1 *firi* ‘be stuck in, e.g., of thin objects’

The verb *firi* ‘be stuck in’ describes prototypical long objects such as poles stuck in the ground and supported at the end that is stuck such as a fork-stick planted on ground (GUR 53), two scenes with one stick and another two sticks planted in the ground (PSPV 09, PSPV 20).

(180) Ziire la *fir-i* la tiŋa.
fork.stick DEF be stuck in-STAT FOC land
‘The fork-stick is stuck in the ground.’ (GUR 53).

(181) Dibe-si si-yi n *fir-i* tiŋa.
stick-CL4 CL4-two FOC be stuck in-STAT land
‘It is two sticks that are stuck in the ground.’ (PSPV 09)

The scenes with bottles stuck in the ground were also described with *firi*. They include one bottle on its base stuck half way in the ground (PSPV 58), and two others turned upside down and stuck in the ground (PSPV 28).

(182) Tua la *fir-i* la tiŋa.
bottle DEF be stuck in-STAT FOC land
‘The bottle is stuck in the ground.’ (PSPV 58)

A piece of wood forcefully lodged into the cover of a well (SUP 47) was described with this verb as well. All these scenes can be found in Appendix 4(4B) in the bottom circle (left). The verb *firi* is also used marginally to describe situations where people and animals are stuck in bog, muddy grounds, or sand in the riverbed or beach as illustrated in this example.

(183) Naafo la *fir-i* la kulega tintombi‘isego la puan
cow DEF be stuck in-STAT FOC river fine.sand DEF inside
‘The cow is stuck in the fine sand of the riverbed.’ (SPST 679)
Definition 21: The locative relation of *firi* ‘be stuck in, e.g., of thin objects’

For any F and G, F is in a *firi* relation with G, if F (usually thin and long) is stuck on G firmly.

5.2.3.2.2 *fugi* ‘be stuck in, not firm, of thick objects’

The verb *fugi* ‘be stuck in, not firm’ characteristically describes relatively long, thick, rigid objects inserted loosely into a ground. For example, lamp poles, spears, pegs and fork-sticks planted on ground are described using *fugi* as the following natural data show.

(184) Bugum poole la n *fug-i* tiña dee
fire pole DEF FOC be stuck.not.firm-STAT land CONJ
la a lui.
FOC 3SG fall

‘The lamp pole which is stuck less firmly on the ground is about to fall.’ (IDT 267)

(185) Nereba la dikc poole la *fuga-lc* la tiña
people DEF take pole DEF plant-DYN FOC land

‘The people took the pole and stuck it less firmly in the ground.’

(186) Bua kpa’a la *fug-i* la zalega
goat peg DEF be stuck.not.firm-STAT FOC loose

‘The goat’s peg is stuck less firmly (in the ground).’ (SPST 054)

Example (184) describes a scene of a lamp pole that was planted at the village square but was not firmly fixed by the workers. The causative construction in (185) expresses the speakers’ perception that the pole is in a stuck position as a result of the action of some agents (people). Example (186) also describes a goat tethered to a peg on the field and it (goat) broke loose leaving the peg. The scene in which a bulb is inserted in its holder (CONT 27) was also marginally characterised with *fugi*. See Appendix 4(4B), bottom top right for this scene. Generally, Figures described as *fugi* can easily be removed without much effort.
Definition 22: The locative relation *fugi* ‘be stuck, not firm, of thick objects’

For any F and G, F is in a *fugi* relation to G, if F is a thick and a long object, and F is stuck on G less firmly.

5.2.3.2.3 *figi* ‘be stuck in, not firm, of small pointed objects’

Similar to *fugi*, *figi* ‘be stuck in, not firm, of sharp or pointed objects’ is used to describe objects with sharp blades or small pointed objects inserted into a Ground object which are perceived not to be attached firmly. For instance, the scenes with the axes inserted into the stem of trees, (GUR 55) and (CONT 17) were respectively coded with *figi*. Refer to Appendix 4(4B), the middle circle at the bottom for these scenes.

(187) Lia la *fig-i* la tia la tile
axe DEF be stuck.not.firm-STAT FOC tree DEF stem
‘The axe is stuck (inserted) less firmly in the tree stem.’
(GUR 55, CONT 17)

Pens or similar objects that are inserted into their tops loosely are described with *figi*. Also in SUP 15 where feathers are pushed through the nostrils of a man, the verb was also used. Usually such objects are construed as not firmly inserted into the Ground and the selectional semantic restriction is that *figi* is used to describe small, thin or sharp objects while *fugi* selects thick, long, blunt objects.

Definition 23: The locative relation of *figi* ‘be stuck, not firm, of small pointed objects’

For any F and G, F is in a *figi* relation with G, if F is a thin or sharp or long object, and F is stuck on G less firmly.

5.2.3.2.4 *sɛgi* ‘be stuck in between, with force’

Attachment relationships in which the Figure is stuck or jammed into a narrow space in the Ground requiring some force to remove the Figure or for it to free itself, the verb used is *sɛgi* ‘be stuck in between’. The example below is a spontaneous
utterance describing a fat cow that got stuck at the entrance of a kraal because it was too fat to pass through.

(188) Naafɔ la ɔg-i la ŋa
    cow DEF be stuck.in.between-STAT FOC gate
    la nuurre gate mouth
    ‘The cow got stuck in between the gate of the kraal.’ (SPST 121)

In the stimuli corpus the scene with the ball stuck between the tree branches (PSPV 44) in Figure 24 below was described with both ɔgi ‘be stuck in between’ and yagi ‘be on top, with stable support’. This is one of the verbs that speakers’ show variation in their responses as noted in §2.3.4. Speakers were divided with five in favour of ɔgi ‘stuck between’ and five others choosing yagi as a result of the elevation. Either choice is motivated by whether or not the speaker chooses to focus on the ball stuck in between the Ground or its elevated location. Elevation will usually take precedence but in this case there was a split. Similarly, if paper is jammed or stuck in a printer it is described with ɔgi as in (190).

Figure 24: A scene depicting attachment relation of a Figure stuck in between a Ground

(189) Boole la ɔg-i/yagi
    ball DEF be stuck in between-STAT/be on top, stable-STAT
    la tia la yila zuo.
    FOC tree DEF branches head
    ‘The ball is stuck between/on top of (stable support) the branches.’ (PSPV 44)

(190) Pipa la ɔg-i
    paper DEF be stuck in between-STAT FOC printer

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Definition 24: The locative relation of \textit{s\text{\textsc{egi}}} ‘be stuck in between, with force’

For any \(F\) and \(G\), \(F\) is in a \textit{s\text{\textsc{egi}}} relation with \(G\), if \(F\) is stuck in between a narrow space of \(G\) in a tight fit relation, and \(G\) exerts pressure on \(F\).

5.2.3.2.5 \textit{\textsc{li}} ‘be inserted, tight fit’

The verb \textit{\textsc{li}} ‘be inserted, tight fit’ unlike \textit{s\text{\textsc{egi}}}, describes Figures that are in a tight fit relation with Grounds with narrow openings. Typical examples are capsule-like corks inserted into the mouth of a bottle to close it to ensure air-tight fit such as wine bottles. In the stimuli data scene TRPS 62 (see Appendix 4B, the last scene at bottom right) with a cork tightly fitted on a bottle is described as \textit{\textsc{li}} as shown in this example.

\begin{verbatim}
(191) Li\textsc{a} la \textsc{li} la koleba la nuure
      lid DEF be inserted.tight FOC bottle DEF mouth
‘The cork is inserted tightly on the bottle.’ (TRPS 62)
\end{verbatim}

It is important that the cork is capsule-like such as champagne corks that can be pushed in to the narrow opening of a container with a neck. Otherwise if it is a lid that covers over a bottle, a pot, or a jar mouth in an air-tight fit manner, \textit{\textsc{li}} is not used instead \textit{\textsc{vugi}} ‘be turned upside down’ is chosen as in this example.

\begin{verbatim}
(192) Li\textsc{a} la \textsc{vug-i} la koleba la nuure
      lid DEF be turned.upside down-STAT FOC bottle DEF mouth
‘The lid turned upside down on the mouth of the bottle.’ (i.e., covered)
\end{verbatim}

It was observed during the fieldwork, however, that some other flexible objects such as cloth, foam, sponge, paper or any other snugly material that can be squeezed to close a narrow opening of containers (e.g., pots, bottles, gourds, etc.) tightly or block holes on walls, trees, and grounds in an air-tight manner are all described with \textit{\textsc{li}}. The example below was used on the spot to describe pieces of clothing pushed tightly into a mouse hole on the floor of a room.
(193) Fuzanɛ la li la sagirega la yoko
rag DEF be inserted.tight FOC mouse DEF hole
la ti a da yese
DEF that it NEG exit
‘The rag is inserted tightly into (blocked) the mouse hole so that it can’t come out.’ (SPST 401)

Definition 25: The locative relation of li ‘be inserted, tight-fit’

For any F and G, F is in a li relation with G, if F is inserted tight fit or blocked a narrow space of G in a tight fit relation, and G exerts pressure on F.

From the discussion and examples of the insertion verbs, it can be observed that Gurenɛ makes a systematic distinction between the type and the shape of the object which is put into or inserted into a Ground where there is resistance between the two (e.g., poles planted on ground) or a narrow space (e.g., a cork inserted into a bottle mouth). Gurenɛ is quite similar to Korean, where Bowerman and Choi (2001:481-484) observe that Korean uses different verbs kkita ‘interlock, fit tightly’ to describe objects put into tight containers (e.g., a piece in a jigsaw puzzle) and nehta ‘put loosely in or around’ to describe objects put in loose containers (e.g., a book in a bag). A difference between Gurenɛ and Korean, however, is that while Korean uses its kkita to include surface-contact relations like putting a lego on a lego stack and nehta to describe an apple in a bowl, Gurenɛ will use one of the elevation verbs, pagi ‘be on top, of flat or flexible objects’ and the general locative and containment verb boi ‘exist’ or ‘be at’ to describe similar locative relations respectively.

5.2.3.3 Rope-attachment

The rope attachment verbs are used to describe a Figure attached to a Ground by being tied to it spontaneously or by an agent. The Figures include flexible or rope-like entities such as a rope, a string, elastic string, thread, twine, belt, tubes, cloth or hairband tied around the Ground. These Figures are mostly inanimates but they marginally include animate Figures like reptiles especially snakes, for example, pythons when they wound themselves around their prey. Three different verbs are used to express the degree of tightness, looseness, or elasticity of the Figure bound to the Ground (cf. Brindle & Atintono 2012). A semantic requirement for this type of
attachment is that the Figure is completely wound around the Ground. Kutscher and Genç (2007:1056) made similar observations in their discussion of the equivalent attachment verbs in Laz, restricting the configurations to situations where the Figure is completely tied around the Ground. As shown in Table 19 in §3.3.2 the verbs can be used to express both the stative and the dynamic locative situations.

### 5.2.3.3.1 **vile ‘be tied, not firm’**

When the Figure is wound around the Ground loosely *vile* is used. This is in contrast to *bobe* ‘be tied, firm’ and *lu* ‘be tied, very firm’ discussed below. Note that this verb is one of the verbs which can be used to express the stative and the dynamic (inchoative or agentive) attachment relations. Three scenes in the stimuli data showing this type of attachment include a rope wound around a stump (PSPV 15) and two other scenes tied around a rock (PSPV 36, TRPS 55). In all these scenes, the rope is tied loosely around the Ground. See Appendix 4(4C), top left of the first circle.

(194) Mi’a la vile la taŋa la kaɛ.
    rope DEF be.tied.not.firm FOC rock DEF be.round
    ‘The rope is tied (not firm) around the rock.’ (PSPV 15)

(195) Mi’a la vile la dogi’a la kaɛ.
    rope DEF be.tied.not.firm FOC stump DEF be.round
    ‘The rope is tied (not firm) around the stump.’ (PSPV 36)

**Definition 26:** The locative relation of **vile ‘be tied, not firm’**

For any F and G, F is in a *vile* relation with G, if F is loosely tied around onto G, and F is a single or multiple rope-like entities.

### 5.2.3.3.2 **bobe ‘be tied, firm’**

The verb *bobe* encodes the notion of moderate tying attachment of the Figure to the Ground. However, unlike *vile ‘be tied, not firm’*, this type of attachment is firm but also less tightly as compared to *lu* ‘be tied, very firm’. It can be used in the inchoative and genitive constructions. In example (196), the verb is used in the inchoative construction to describe an African python in a folktale which attacked a hunter by wounding itself around the body of the hunter.
Among the scenes in the stimuli sets, consultants describe ‘belt on a woman’s waist’ (TRPS 42) as *bobe* using the agentive construction in (197) while in (198) the inchoative construction is used. Also a headband tied around a person’s head (TRPS 46) was described with *bobe*. See Appendix 4(4C), the circle at the top middle for the picture scenes.

(197) Poka la *bobe* la siganɛ a sia
woman DEF be tied.firm FOC belt 3SG waist
‘The woman tied a belt on her waist.’ (TRPS 42)

(198) Siganɛ la *bobe* la poka la sia
belt DEF be tied.firm FOC woman DEF waist
‘The belt is tied firmly around the woman’s waist.’ (TRPS 42)

The dynamic (inchoative or agentive) construction is used for the description of adornment attachment relations as all the ten consultants favoured the use of the verb in dynamic agentive construction. A strong argument among Gureŋε consultants for the dynamic agentive construction is that humans usually deliberately put on these objects on themselves.

**Definition 27: The locative relation of *bobe* ‘be tied, firm’**

For any F and G, F *bobe* G, if F is rope-like tied firm around G, and G is animate or inanimate.

5.2.3.3.3 *lu* ‘be tied, very firm’

Firm attachment of a Figure to the Ground with a flexible object such as a rope or hairband is described using *lu*. The tighter the tying attachment is, the more speakers have a preference for *lu* rather than *vile* and *bobe*. This verb is also inherently a dynamic verb which describes Figures in attachment relations but can also be used to express the stative. A ruban tied very firm around a candle with a knot in TRPS 04
and a hairband tied very firm on a lady’s hair (SUP 18) both attracted the use of lu. These scenes can be found in Appendix 4(4C).

(199) A dikɛ la taya lu a zometo 3SG take FOC plastic tie.very.firm 3SG hair
‘S/he took a plastic and tied her hair very firm.’ (SUP 18)

In GUR 31 scene where a goat is put in a pan and tied it on to a bike carrier consultants used lu as illustrated below.

(200) Budaa la dikɛ la bua inɛ laa la puan man DEF take FOC goat do bowl DEF inside
lu la mi’a keekee la zuo tie very.firm FOC rope bicycle DEF head
‘The man took a goat and put it in the pan and tied it very firm with a rope on the bicycle.’ (GUR 31)

There are multiple Grounds in this scene which include the goat, the pan and the bike carrier. No speaker accepted either of the two tying verbs, vile or bobɛ discussed earlier due to the pragmatics of the event. They suggest that the preference for lu ‘tie, very firm’ is that if the man did not tie the goat very firm to the bike carrier but ties it loosely it may escape. Observe the interesting use of the verb inɛ ‘do’ together with puan ‘inside’ to express containment in Gurenɛ. The verb inɛ is usually used to express putting something into containment while the verb biŋɛ ‘put down’ is used to describe putting something not into containment.

**Definition 28: The locative relation lu ‘be tied, very firm’**

For any F and G, F lu G, if F is rope-like tied onto G very firm, and G is animate or inanimate.

**5.2.3.4 Piercing-attachment**

The piercing attachment relations describe scenes such as a Figure inserted to pass through the Ground. The Figure is usually long with a sharp end or point that can be inserted deep into the Ground or pass through the Ground to exit it at the other side.
The verb *vurɛ* ‘be pierced, of soft entities’ and *lu*’ ‘be pierced, of tough objects’ are
the only verbs used in this group. The difference between the two verbs is based on
the degree of toughness of the Ground that the piercing is performed. Examples from
the stimuli data include an arrow pierced through the body of a pig (SUP 33), an
arrow inserted through the body and fin of fishes (SUP 34, 35) respectively, and
another arrow skewed through an apple (TRPS 30). Consult Appendix 4(4D), the top
circle for all these scenes. The meaning of the verbs inherently include that piercing
is performed on a soft body with less resistance or a tough body with much
resistance. If the Ground was perceived to be tough the verb *lu*’ ‘pierce, of tough
entities’ is used instead. Views were divided with six consultants preferring *vurɛ* while
four others prefer *lu*’ especially the scene involving the pig where speakers perceived
the skin to be tough. Note that *yese* ‘pass out’ or ‘exit’ is used as a second serial verb
to express the arrow piercing through the body of the pig. The Figure is also impaled
by the Ground.

(201)  Bãarɛ la *vurɛ/lu*’
arrow DEF be pierced.soft/be pierced.tough FOC pig DEF
yese pass.out
‘The arrow pierced through the pig and exited it.’ (SUP 33).

Most of these scenes are perceived to have been caused by humans and as such,
consultants used the third person pronoun in a serial verb construction as in (202).
The third person plural pronoun *ba* functions as the subject in the construction to
imply that someone shot an arrow to pass through the body of the animal out. Notice
that in this example two verbs (*dikɛ* ‘take’; *tɛ* ‘shoot’) precede the piercing verb *vurɛ* in
the serial verb construction. The verb *dikɛ* ‘take’ and *tɛ* ‘shoot’ depict the events of
taking the arrow and shooting it before the result state of *vurɛ*.

(202)  Ba *dikɛ* la bãarɛ *tɛ* ti a *vurɛ*
3PL take FOC arrow shoot that it pierce.soft
zifo la puan yese
fish DEF inside pass.out
‘They took an arrow and shot it to pass through the fish out.’ (SUP 35)

One interesting perspective on piercing attachment relationships is that Gurenɛ
makes a semantic distinction between the reversal of the Figure and Ground using
two different verbs to describe them. Example (203) describes an arrow as a Figure pierced through an apple (TRPS 30) which is the Ground and speakers used *vurm* ‘pierce soft’ while example (204) depicts an apple as the Figure (TRPS 70) pushed through a skewer (Ground) with the verb *tũ* ‘be skewed’. These two examples illustrate different construals of the same scene which is an instance of a Figure/Ground reversal. The choice of the verb depends on the Figure/Ground reversal of the same scene. The two scenes (TRPS 30, TRPS 70) illustrating this reversal can be found in Appendix 4(4D).

(203) Bãarɛ la *vurm* la apule la yese
    arrow DEF be pierced. soft FOC apple DEF pass. out
    ‘The arrow pierced (soft) through the apple.’ (TRPS 30).

(204) Apule la *tũ* la bãarɛ la
    apple DEF be skewed FOC arrow DEF
    ‘The apple is skewed on the arrow.’ (TRPS 70)

Two other scenes involving papers on a skewer (TRPS 22) and toilet roll on a skewer (BERN 26) on the floor were both described with *tũ* ‘be skewed’ (see Appendix 4(4D), the last circle at the bottom). In the natural contexts data, khebabs on skewer are predicated with *tũ* for speakers construe them by default to be inserted on the skewer and not the other way round.

**Definition 29: The locative relation of *vurm* ‘be pierced, of soft objects’ or *lu*’ ‘be pierced, of tough objects’**

For any F and G if:

(i) F *vurm* G, F is a piercing object passing through G, and G is soft or

(ii) F *lu’* G, F is piercing object passing through G, G is hard or tough.

**5.2.4 Distribution verbs**

This subclass of positional verbs describes the configuration of a Figure. They may refer to the configuration of a single Figure that can spread out to cover part of the surface of the Ground or the entire Ground such as a tablecloth on a table or a mat spread on the floor. Alternatively, multiple Figures that are in a distributed configuration over a Ground, for example, mass-like entities such as grains, seeds,
flour are described with verbs in this class. Certain verbs in this class may describe a collection or aggregation of the Figures in a heap or a pile. See Appendix 5 for all the scenes of distribution. This is the only class of verbs speakers frequently use in combination with other positional verbs in a serial verb construction (SVC). When the verbs occur in non-SVC, their semantics is restricted to the description of the configuration of the Figure. When they are used in an SVC they describe the internal shape or configuration of the Figure, once its locative relation is established by means of another positional verb. The second verb in the SVC may come from the class of postural verbs or verbs of elevation to describe the actual spatial orientation of the Figure in the locative relation. They are mostly dynamic verbs used in inchoative constructions.

The verbs in this class can occur in the BLC construction and in terms of the BLC locative situations hierarchy they verbs occur at VI. The verbs are mostly used with inanimates. I present a summary of the verbs in Table 27 below.

**Table 27: List of distribution verbs and configuration types**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Configuration of Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>pĩ</td>
<td>be covered, completely</td>
<td>distribution</td>
</tr>
<tr>
<td>yaregɛ</td>
<td>be spread out, of mass-like or mat-like objects e.g., seeds, mat, cloth</td>
<td>distribution</td>
</tr>
<tr>
<td>yiregɛ</td>
<td>be scattered, of multiple objects</td>
<td>distribution</td>
</tr>
<tr>
<td>tie</td>
<td>be spread out</td>
<td>distribution</td>
</tr>
<tr>
<td>kugi</td>
<td>be heaped or piled up, of mass-like or multiple of objects</td>
<td>aggregation</td>
</tr>
<tr>
<td>kuurum</td>
<td>be coiled or folded, of flexible entities</td>
<td>aggregation</td>
</tr>
</tbody>
</table>

**5.2.4.1 pĩ ‘be covered, fully, e.g., of cloth’**

The verb *pĩ* ‘be covered, fully’ is used to describe locative scenes in which the Figure completely covers the upper surface or the entire Ground. When speakers perceive the covering as not complete, *pĩ* is not used. In the stimuli picture description, the three scenes with a cloth covering tabletop or egg (PSPV 14, 30, TRPS 29, BERN 27) received *pĩ* as in Figure 25. The Figures happen to be cloths covering the upper surface of a table or an egg. The semantic requirement of the verb is that the Figure covers completely the upper surface. If part of the surface of the Ground is exposed
like a cloth spread covering part of the tabletop or on basket mouth (PSPV 14, PSPV 16) and one on a chair back rest (BERN 21) as shown in Figure 25 then *pagi* ‘be on top, of flexible or flat shape’ will be used (see §5.2.2.2). In the natural text data, objects that can spread such as animal skins, mats, blankets, and creeping plants are described with *pĩ*.

**Figure 25: Scenes showing complete and partial covering of the surface of the Ground**

(205) Fuo la *pĩ* la teebule la zuo
    cloth DEF be covered FOC table DEF head

‘The cloth covers the top of the table.’ (PSPV 30, TRPS 29)

Mass-like entities like dust, sand, and flour that are resituated to occlude the surface of a Ground are described as *pĩ*. Speakers sometimes combine *pĩ* with *yaregɛ* ‘be spread out’ in a serial verb construction to describe the configuration and location of objects. The choice of an SVC or a non-SVC depends on the pragmatic intension of the speaker if s/he desires to make explicit the nature of the configuration. The example below describes a traditional mat used for covering pots of drinking water in the open in a compound.

(206) Šuŋɔ la *yaregɛ* *pĩ* la ko’om la zuo
    mat DEF be spread.out be covered FOC water DEF

‘The mat is spread and covers the water (i.e., water pots).’ (SPST 377)
Definition 30: The locative relation of $pi$ ‘be covered fully, e.g., of cloth’

For any F and G, F is in a $pi$ relation with G, if F is a spread-like object which completely covers the whole of G or the upper surface of G.

5.2.4.2 *yaregɛ (yɛregɛ) ‘be spread, of mass-like or spread-like entities’*

Configurations of mass-like or spread-like objects such as beans, peanuts or mats, skins, thatch which are distributed or spread on a Ground are described as *yaregɛ* ‘be spread out’. Two typical scenes in the stimuli sets that were described using this verb include beans on the floor (PSPV 11) and a mat spread on the floor (GUR 08). The verb *yaregɛ* is frequently used with the postural verb *gã* ‘be lying’ to express the location as spread and lying as the examples below attest. The verb has a cultural bias meaning referring mostly to harvested food crops usually spread out lying on the floor or on open fields to dry. Hence, it has a natural collocation with *gã* and acquires a fixed usage. Observe that the verb occurs as the first verb in the serial verb construction and this syntactic order cannot be reversed. The reversal of this order accounts for the unacceptable example in (209).

(207) *Tɛa la *yaregɛ* (gã) la tiŋa.*
beans DEF be spread lie.STAT FOC land
‘The beans are spread lying on the ground.’ (PSPV 11)

(208) Sunp la *yaregɛ* (gã) la tiŋa
mat DEF be spread lie.STAT FOC ground
‘The mat is spread (lying) on the floor.’ (GUR 08)

(209) *Tɛa la (gã) *yaregɛ* la tiŋa.*
beans DEF lie.STAT be spread FOC land
‘The beans are lying spread on the ground.’

It is probably worth noting that when a single seed of beans or peanuts is on a tabletop *dɔgi* ‘be on top, with unstable support or relation’ will be used but when they are in multiples and spread out *yaregɛ* is used.

The example below illustrates the use of *yaregɛ* with a verb of elevation. The distribution verb describes the configuration of the Figure while the verb of elevation codes the location.
The verb *yaregɛ* shows restriction in its combination with the other positional verbs that describe configurations that are vertically extended like verbs describing standing, leaning and sitting postures. The reason is that these postures require the entity’s whole body or part of it to be upwards or compact but the entities described by *yaregɛ* has a configuration which is not compact.

In the caused-video stimulus set clip one (CAUS 01) where a person is seen putting a cloth on a tabletop consultants’ described the scene using the expression below. This description involves the use of the dynamic verbs.

(211) A dikɛ la fuo *yaregɛ* pagɛ-lɛ teebule la zuo 3SG take FOC cloth spread put on top.flat-DYN table DEF head
‘He took a cloth and spread it on top (flat) of the table.’ (CAUS 01)

**Definition 31:** The locative relation of *yaregɛ* (*yɛregɛ*) ‘be spread, of mass-like or spread-like entities’

For any F and G, F is in a *yaregɛ* relation with G, if F is a single object or multiple objects, and F is spread out or distributed over G.

**5.2.4.3 *yiregɛ* ‘be scattered’**

Distributed configurations of multiple Figures which are relatively spaced out are described with *yiregɛ* ‘be scattered’. It is commonly used to describe mass-like entities, stalks scattered on the fields, and grains spread apart. None of the stimuli sets include a scene described with this verb. In the spontaneous speech data however, the example below was recorded.

(212) Kinkã la *yiregɛ* (gã) la samana stalk.PL DEF be scattered lie.STAT FOC farm zuo gee ti bonsi obe-ra head CONJ COMP donkeys chew-IPFV
‘The stalks are scattered on the farm and the donkeys are eating them.’ (SPST 474)
The verb is not applicable to objects in a stable base configuration e.g., of lots of bottles, calabashes, gourds scattered in a restricted space like on a tabletop. However, if these objects are scattered in a large space like on the floor of a large room *yiregɛ* can be used. The semantics of *yiregɛ* has much to do with the Ground space on which the Figures are distributed over.

**Definition 31: The locative relation of *yiregɛ* ‘be scattered’**

For any F and G, F is in a *yiregɛ* relation with G, if F is multiple objects relatively spaced out on G, and G is a large space.

**5.2.4.4 *tiɛ* ‘be spread out, of multiple long flexible objects from a centre’**

Multiple (long) flexible objects that are attached to a centre and spread out are coded with *tiɛ* ‘be spread out’. Typical examples are ground plants that spread out on the ground from the root such as pumpkins, calabash, and beans are described as *tiɛ*.

(213) Yɔka la *tiɛ* (gã) la si la puan
pumpkin DEF spread lie.STAT FOC millet DEF inside
‘The pumpkin plant is spread out lying in the millet plants.’ (SPST 62)

The verb is also commonly used to describe persons who sit with their legs stretching out. This use is restricted to only sitting postures. It can also be used to describe electricity wires, cables, ropes, that are stretched or spread out while attached to a Ground at a point. Like *yaregɛ* and *yiregɛ*, the verb also frequently occurs in a serial verb construction and often combines with *gã* as in (213). In fact, depending on the pragmatic interest of the speaker, s/he may use either verb or both if s/he focuses on the spreading out *tiɛ* is used but if the lying is in focus *gã* is used.

**Definition 32: The locative relation of *tiɛ* ‘be spread out, of multiple long flexible objects from a centre’**

For any F and G, F is in a *tiɛ* relation with G, if F is a single object or multiple objects attached to a centre, and F is spread out or distributed over G.
5.2.4.5  *kugi* ‘be in a heap, of mass or multiple objects’

Mass-like or multiple entities that are aggregated or collected in a heap or in a pile constitute prototypical Figures predicated with *kugi* ‘be in a heap, of mass-like objects’. They include the stimuli scenes with pepper fruits in a heap on ground (GUR 39), cassava in a pile on ground (PSPV 51), and a locative descriptive scene with firewood lying in a pile.

(214) Nanzu’u-si la kug-i (gã) la tiña pepper-CL4 DEF be in a heap-STAT lie.STAT FOC land
‘The pepper fruits are heaped lying on the ground.’ (GUR 39)

(215) Banki la kug-i (gã) la tiña cassava DEF be in a heap-STAT lie.STAT FOC land
‘The cassava is heaped lying on the ground.’ (PSPV 51)

(216) Daam dɔɔ-ɔɔ la kug-i (gã) la deo drink wood-CL8 DEF be in a heap-STAT lie.STAT FOC room la sia DEF waist
‘The firewood for brewing the beer is piled up lying at the foundation of the building.’ (LDFT 84)

The verb *kugi* ‘be in a heap’ collocates with *gã* ‘be in a lying posture’ in a serial verb construction as examples (214)-(216) show. The verb *kugi* describes the configuration of the Figure and often suggests that the Figure is in a lying position on the Ground. Thus, in the data it is often used as a serial verb construction with *gã* ‘be lying’. In the natural interactive discourse data the following example is an utterance describing bundles of stalks heaped on a farmland.

(217) Kinkã la kug-i (gã) la samanɛ stalk.PL DEF be in a heap-STAT lie.STAT FOC farm.land la puan DEF inside
‘The stalks are heaped lying on the farm land.’ (IDT 301)

Generally, objects that are round like fruits (e.g., oranges), and eggs which are placed in a small pile on an elevated Ground as in Figure 26, *kugi* and *dɔgi* were both used as illustrated in the example below. Speakers construe piles or heaps of objects as lacking any base to support them in a stable manner and therefore use *dɔgi* ‘be on top, with unstable support.’ This is in contrast with Goemai as Hellwig (2007:903)
points out those Goemai speakers’ construe piles or heaps of objects as being self-supported through a base and will describe such objects as sitting.

**Figure 26: Scene of oranges in a pile on a tabletop**

(218) Leemu la kug-i dog-a la orange DEF be in a heap-STAT be on top.unstable-STAT FOC kuka la zuo. chair DEF zuo.

‘The oranges are heaped on top (unstable support) of the table.’

(BERN 50)

Elevation takes precedence over configuration when objects are in a pile as eight consultants out of ten first responses to this scene was dogi while two consultants used both verbs. The verb doga is the variant form used when a verb precedes dogi in a serial verb construction. Also commonly used is another verb dɔ̃’ɔsɛ ‘put into small piles’, used by speakers to describe similar scenes where fruits and eggs are usually put into smaller piles of three to five for sale in a market situation. The verb dɔ̃’ɔsɛ has the plural suffix -se/ɛ discussed in Chapter 3 (§3.2.1).

**Definition 33: The locative relation of kugi ‘be in a heap, of mass-like or multiple objects’**

For any F and G, F is in a kugi relation with G, if F is in a heap or in a pile configuration on G, and F is mass-like or multiple objects.

**5.2.4.6 kuurum ‘be coiled or folded’, of flexible entities’**

The configuration of flexible objects such as ropes, clothes, reptiles (e.g., snakes), twines, sacks, that are coiled or unevenly configured are described with the verb kuurum ‘be coiled or folded’. The two scenes below show contrast in their configurations. Scene PSPV 16 below was described as kuurum while PSPV 24 was
described as *bogek* ‘be neatly folded’. The latter is excluded from the analysis mainly because it is restricted to only clothing and more so it is rarely used in the locative construction.

![Image of clothing and basket]

**Figure 27: Scenes showing contrast of configurations**

The verb *kuurum* like *kugi* is often used in a serial verb construction with the posture verb, e.g., *gã* ‘be in a lying posture’, or with any of the verbs of elevation as these examples show. It can, however, occur independently. The second verb in these examples expresses the position of the Figure.

(219) Fuo la *kuurum* pag-a la pi’o la zuo. cloth DEF be uneven be on top.flat-STAT FOC basket DEF head ‘The cloth is unevenly configured on top (flat) of the basket.’ (PSPV 16)

(220) Mi’a la *kuurum* pag-a la dogi’a la zuo rope DEF be coil be.on top.flat-STAT FOC stump DEF head ‘The rope is coiled on top (flat) of the stump.’ (TRPS 23)

**Definition 34: The locative relation of *kuurum* ‘be coiled or folded, of flexible entities’**

For any F and G, F *kuurum* G, if F is a single flexible object and F is coiled or is unevenly configured on G.

**5.2.5 The general locative and existential verb *boi***

The general locative or existential verb *boi* has a wide range of uses in Gurenc. They include generic physical location of entities at a non-precise part of a Ground (e.g., a person in a house), abstract location of entities (e.g., wisdom in some one’s head), containment such as ‘a bird in a cage’ and the description of some event (s) taking
place (e.g., funeral event ongoing at some place). In the folktale genre, speakers also use boi to describe the presence or existence of characters in folktales. The folktale narrator uses boi as a formulaic means to start a new folktale in the narrative session. The existential verb is the only positional verb that is used in this context. The verb can be used with animates as well as inanimates. The general locative verb can occur in the basic locative construction at level IV of the BLC locative situation hierarchy (see §4.2.2.2).

In the following sections, I discuss its general locative and containment uses with respect to the stimuli and the natural context data.

**5.2.5.1 General locative and existential uses**

The use of existential predicates to describe general location or existence of some entities has long been reported in several studies on existential and locative constructions in languages (see for example, Lyons 1967:388-399; Kimball 1972; Clark 1978; Freeze 1992; Ameka 1995, 2007; Brown 2007:237; Koontz-Garboden 2009). It is proposed in the theoretical literature that both locatives and existential are similar in their semantics and their underlying structure in most languages (see Lyons 1967:390; Clark 1978; Freeze 1992:557). The Guren data show consistency with this claim. However, unlike English where the verb be is used for existential construction and also used in other contexts for 'identifying' and 'attributive’ functions, in Guren the copula verb de performs these two latter functions and boi is used for existential and locative. Example (221) shows the identification function of the de ‘copula’ while example (222) illustrates the attributive. Note the unacceptable use with boi in the two examples below.

(221) Budibela la de/*boi la naba dayua
     boy DEF COP/be at FOC chief boy
     ‘The boy is/*exists the chief’s son.’

(222) A de/*boi la nere-molega
     1SG COP/be at FOC person-red
     ‘S/he is/*exists a fair person.’

The locative and existential uses are restricted to boi. The use of boi describes the existence of entities that are usually not within the immediate view of both the
speaker and the addressee in the discourse context, for which the entity’s position is unknown to the speaker. However, when the objects referred to are within the local space of the participants the most preferred strategy will be to use a specific positional verb to describe the precise locative relation. In example (223), my consultants described the location of the houses of some Gurenɛ speakers in a neighbouring village in Bolga.

(223) Gambibesi duma ye’a la boi la bilam
Gambibesi owners house DEF be at FOC there
‘The houses of Gambibego people is over there.’ (SPST 01)

(224) Mam wum ti ɔɔ rɔn boi solemitiŋa.
1SG hear COMP cold FOC beat Europe
‘I heard that it is cold in Europe.’ (SPST 444)

The locative adverbial demonstrative bilam ‘there’ in example (223) appears to suggest that both the speaker and the listener were close to the place of location and know exactly the location of the houses but this is not the case as we were both far from the place described by the speaker. The speaker uses boi ‘be at’ in this context to refer to the general location of a settlement area without being specific about the precise location of the houses. The example in (224) is uttered by a consultant seeking confirmation from me about the cold weather in Europe. In this example, it is the locative place adjunct Solemitiŋa ‘Europe’ that restricts the referent in space. However, the meaning of boi only asserts the existence of an invisible abstract entity ɔɔrɔ ‘cold’ but there is no indication of where precisely it can be found. This may be interpreted in context to mean the environment. The speaker in this case assumes prior world knowledge of the hearer of the location of the place described. Miller & Johnson-Laird (1976:379) observe that psychologically, the generic locative constructions presuppose the existence of some landmark whose location is known or can easily be recovered by both participants in the communication context and thus helps to narrow the domain of search for the target.

Figures that are located within view to both the speaker and the hearer are described with a specific positional verb depending on their positions or configurations. For example, my consultants describe houses that were within view in the neighbourhood
using ze’ ‘be standing’ as illustrated below. The vertical extension and stable base support of the houses calls for the use of ze’.

(225) bisɛ ye-suma wa n ze’ tu nɛŋa bɔba wa
look house-nice.PL this REL stand.STAT 1PL face side this
‘look at these nice houses standing in front of us.
(Fieldnotes_049_201005)

Whenever the position of the Figure is known and can be described with a positional verb, speakers do not use boi.

5.2.5.2 Containment uses of boi ‘be at’

The containment use of boi ‘be at’ applies to a Figure, which is completely or partially contained in a Ground. In a containment relation, the Ground is often taken to be a bounded region like a three-dimensional object such as a container or a room. The Ground may also be encirclement. Where the Ground is a container the Figure is necessarily in contact with part or parts of the Ground. For example, full containment scenes in the stimuli data include scenes such as a rabbit in a hutch (TRPS 54), a bird in a cage (GUR 67), water in a pot (CONT 23), a fly in a glass (CONT 26), a stick in a bowl (CONT 35), apple in a bowl (TRPS 02), and bottles in a basket (PSPV 60). For these scenes and the rest of the stimuli scenes see Appendix 6(see 6A&6B).

Some of the expressions that the speakers used to describe these scenes are stated below.

(226) So’ɔŋ la boi/(ze’) la berego la puan
rabbit DEF be at/stand.STAT FOC cage DEF inside
‘The rabbit is/standing in the cage (i.e., hutch).’ (TRPS 54)

(227) Niiŋa la boi/*yag-i la berego puan
bird DEF be at/be on top.stable-STAT FOC cage inside
‘The bird is in/on top of the cage.’ (GUR 67)

(228) Ko’om la boi la yoore la puan
water DEF be at FOC pot DEF inside
‘The water is in the pot.’ (CONT 23)

(229) Apuli la boi la pilete la puan.
apple DEF be at FOC plate DEF inside
‘The apple is in the plate.’ (TRPS 19)
It is interesting to note that when there are several animates in different orientations like goats in a pen with some lying and others standing Gurenɛ speakers natural response will be to use boi prioritizing the containment relation.

(230) Buu-si la boi la zuŋo la puan bɛbela
goat-CL4 DEF be at FOC hut DEF inside make.noise
‘The goats are in the pen making noise.’ (SPST 489)

(231) Buu-si la sisesi la ze’ la zuŋo puan
goat-CL4 DEF some DEF stand.STAT FOC hut inside
gee ti sisesi gã tiŋa bɛbela
CONJ COMP some lie.STAT land make.noise
‘Some of the goats are standing in the pen and some are lying down making noise.’

In (230), the use of boi disregards the current actual postures of the goats in standing and lying as speakers focus on the containment. Their posture is of no relevance. The prediction of Type III languages discussed in Chapter 4 is that the general locative verb can only be used to describe scenes that any of the specific positional verbs is ineligible. However, in Gurenɛ, speakers can still use a posture verb ze’ ‘be standing’ or gã ‘be lying’ when there is a pragmatic interest to differentiate Figures located in different positions, standing and lying as in (231). However, when the Figure is a single entity like the rabbit in a standing position in its hutch (TRPS 54), nine consultants point out that the use of ze’ ‘be standing’ is not acceptable since the rabbit is contained in the hutch (see (226)). However, one consultant’s first response was ze’ and only after hesitation that she said boi is preferred. Recall my discussion in §2.3.4 on response variation. Similarly, the scene with a bird perching in its cage (GUR 67) was described with boi but not with the elevated verb yagi ‘be on top, with stable base support’ as in (227). The implication of the choice of boi over posture or elevation verbs in these contexts suggests that the saliency of the containment leads to the disregarding of posture and elevation in these scenes.

Partial containment involves part of the Figure contained in the Ground and another part sticking out (see Appendix 6(6B)). Such scenes include a box in a bag (TRPS 67), a spoon in a cup (BERN 18), a bird in a tree hole with head sticking out (TRPS 66), a ladle in a bowl (CONT 37), a flower in a vase (CONT 22), apple in a plate (TRPS 19), and balls in a basket (PSPV 56) as the examples below show.
An interesting use of *boi* includes the description of insertion relations such as a key in a keyhole (BERN 31) as in (235) illustrates and a nail driven into one side of a box (CONT 19). It appears the speakers construe the spaces that the key and the nail occupy in these Grounds as containers. Recall that although these two scenes are similar to the insertion attachment verbs discussed earlier in §5.2.3.2, and the piercing attachment verbs in §5.2.3.3.4, the length of the Figures are shorter compared to typical insertion or piercing objects and speakers prefer to use *boi* to say that they are contained in these Grounds but not attached.

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(232) Daka la *boi* la tampɔɔ la puan.
box DEF be at FOC bag DEF inside
‘The box is in the bag.’ (TRPS 14)

(233) Desunkɔ la *boi* la kɔpi la puan
spoon DEF be at FOC cup DEF inside
‘The spoon is in the cup.’ (BERN 18)

(234) Apuli la *boi* la piletɛ la puan
apple DEF be at FOC plate DEF inside
‘The apple is in the plate.’ (TRPS 19)

Figures in a liquid medium in a container are also frequently described with *boi* to indicate that they are contained (see (236), (237) below) if the speaker has no interest to be precise about the suspension or immersion of the Figure in the liquid. The liquid medium serves as a containment Ground for the Figure (cf. Herskovits 1986:136). Such a medium will usually be perceived as being larger in dimension than the entity located in it. Examples of liquid medium that can act as Grounds in Gurenɛ includes water, oil, and all kinds of drinks (alcoholic and soft). The property of the verb *boi* in this context is that it predicates general location in containment but since other verbs are not used or preferred in containment situations, *boi* is used. If the Figure is afloat and the speaker intends to be specific then *pugi* ‘be afloat’ discussed in §5.2.2.7 will be used. Similarly, if the Figure is immersed and the speaker prefers to be specific, *muse* ‘be immersed’ will be the choice.

(235) Saafua la *boi* la kuleŋa la puan
key DEF be at FOC door DEF inside
‘The key is in the key hole of the door.’ (BERN 31)
Furthermore, encirclement locative relations such as the scenes in an encircled region like a house in a fence (TRPS 60), communication antennas in a fence (CONT 30), and an Island surrounded by water (CONT 41) were all described as boi. These scenes involve the Figure surrounded without contact with the Ground like those in the containment relations where part of the Figure is necessarily in contact with the Ground.

5.2.5.3 Negative spaces

The verb boi is also used to describe the location of Figures that are coincident with the Ground or what is generally considered as a negative space in the sense of Ameka & Levinson’s (2007a) typology. That is, the Figure is usually a damage part of a Ground. The scenes depicting negative spaces include a crack on glass (TRPS 26), a hole on shirt (TRPS 18) and another hole on tree (GUR 22). Recall that in §5.2.1.1 (see discussion under objects), it was observed that Guranc speakers describe holes on ground (earth) with gā ‘be lying’ but when the holes are on objects boi is used. In addition, a mark(s) on a person’s cheek (GUR 53), scar on a person’s face (SUP 16), paint on a person’s face (SUP 14), photo in a frame (TRPS 28), writings on a shirt (TRPS 68) and on wall (TRPS 03) are all described as boi. The speaker construes such scenes as located in the Ground without any further
specification. See Appendix 6(6C) for the scenes that pick out these locative relations. A few example sentences are given below.

(239) Virega la boi la fuo la inya.
hole DEF be at FOC cloth DEF body
‘The hole is on the shirt’s body.’ (TRPS 18)

(240) Yisere n boi a yagerɛ zuo
scar FOC be at 3SG cheek head
‘A scar is on his face.’ (SUP 16)

(241) Foote la boi la biseŋa la puan.
Picture DEF be at FOC mirror DEF inside
‘The picture is on the mirror.’ (TRPS 28)

The common meaning of boi to all the scenes described as negative spaces is that the Figure is perceived as being an intrinsic part of the Ground. In English, such scenes will attract the use of the preposition on as Herskovits (1986:143) points out that they are usually accidents or gaps on the surface of the Ground.

5.2.5.4 The formulaic use of boi in folktale genre

One other common usage of the verb boi in Guren is that it is used in folktales by narrators as a narrative strategy to start a story (see §2.3.1.2) for a description of the folktale genre). The narrator uses boi either to express the existence of his folktale or to draw the attention of his audience to the existence or presence of a particular main character in the folktale as examples (242)-(246) illustrate. These characters do not have any physical existence in the real world but are only understood in the folktale narrative context as fictional entities whose location are said to be in the house, river, forest or in space. To some extent, the use of boi in the folktale is similar to the general locative and existential uses discussed earlier because the reference is made to entities that are not within view. The only difference between the two situations is that in the generic locative uses, the Figures have real world referents but the folktale context does not have any real world reference.

(242) N solene n boi ti fua bona…
1SG.POSS folktale FOC exist and blind exist.HAB
‘My folktale exist and a blind man exist…’(ft_api_010_20100608)
This formulaic use of *boi* in Gurenc appears to be restricted to the folktale genre as there is no evidence of its use in anecdotes, life histories, or recounting of past events. Although the formulaic use in Gurenc is comparable to English story telling opening such as ‘once upon a time, there was a king…’, there is a difference in that whereas in English you will need to preface it with ‘once upon a time…’ this is not the case in Gurenc. The use of *boi* in the folktale genre appears not to have been much discussed in the positional verb literature and the Gurenc data provides some insights about the spatial description of entities that are non-existent in the real world to the study of the existential predicates in this direction.

**Definition 35: The locative relation of *boi***

For any F and G, if:

(i) for a general location or existence, F *boi* G, if F and G are not within view or,
(ii) for containment, $F \text{ boi } G$, if $F$ is fully or partially contained in $G$, and $G$ is a container or encirclement or $F$ is coincident with $G$ (negative space), and both $F$, and $G$ occupy the same space or

(iii) for the description of entities in a folktale, if $F \text{ boi } G$, $F$ is non-existent in the physical world.

5.2.6 Proximate/propinquity or relative distance location verbs

When Gurenɛ speakers want to indicate the relative distance in which one entity is located with respect to another, two possibilities are available. The speaker may choose to describe different distances using the positional verbs $lɛm$ ‘be near’ or $du$ ‘be very near’. The two verbs express a locative relation of the Figure and Ground not in contact with each other but are in proximity. It must be pointed out that how near or very near the Figure is to the Ground is a matter of relativity from the speaker’s perspective. However, it is self-evident that a distance of one metre between the Figure and the Ground is very near than a distance of about one hundred metres between them. Sometimes the use of the verbs may also include an indication of direction as speakers often use them to draw attention to objects located close to each other. The verbs can stand alone as independent verbs in the locative construction but they are frequently used with another verb chosen from the other semantic classes of verbs in a serial verb construction where they occur as a second verb as shown in the examples below. The proximate verbs describe the relative distance between two objects but they do not say anything about the position of the object(s). This explains why they are usually combined with the posture verbs. The posture verb encodes the posture or position of the Figure. The posture verbs, however, can be omitted if the speaker chooses not to describe the posture or configuration of the Figure but focuses on the relative distance between the Figure and the Ground. This explains why the posture verbs are presented as optional in the examples below. The verbs occur infrequently in the data because there were very few scenes in the stimuli sets as well as the natural data that depict proximate relations. They can also be used to express the stative and the dynamic locative situations.
5.2.6.1 *le* meaning ‘be near’, ‘proximate’

Typical scenes in the stimuli sets in which *le* meaning ‘be near’ is used include a pot lying by a stump (PSPV 40), a cup on its base near a table (SUP 06), and a mango lying by a bowl (CONT 06) as illustrated in the examples below. The proximate verb *le* meaning ‘be near’ describes the relative distance between two objects but does not say anything about the position of the object(s).

(247) Dukɔ la (gã) *le* la dogi’a la.
    pot DEF lie.STATUS be near FOC stump DEF
    ‘The pot is lying near the stump.’ (PSPV 40)

(248) Kɔpi la (ze’) *le* la teebule la na’arɛ
cup DEF stand.STATUS be near FOC table DEF leg
    ‘The cup is standing near the leg of the table.’ (SUP 06)

(249) Monko la (gã) *le* la laa la
    mango DEF lie.STATUS be near FOC bowl DEF
    ‘The mango is lying near the bowl.’ (CONT 06)

Apart from the use of the verb *le* to describe the relative distance between inanimate objects, the verb can also be used with animate entities such as the scene with a dog in TRPS 06 sitting near the doghouse.

(250) Baa la (dɔb-i) *le* la deo la
dog DEF squat-STATUS be near FOC room DEF
    ‘The dog is squatting near the room.’ (TRPS 06)

The example in (251) is an utterance where a speaker described to me and my documentation team the houses of a folktale narrator and a contact person that we enquired about. Upon reaching the village, we realised that the house of the folktale narrator (Azulemania) was about 140 metres to our contact person’s house but the house of our contact person (Adigenyoke) was indeed very close to the road (less than 10 metres).

(251) Azulemania yire la *le* la Adigenyoke yire
    PN house DEF be near FOC Namoo market
    la deee Adigenyoke yire la ko’ɔm du’ la
    DEF CONJ PN house DEF ASP be.very.near
    la Yelewoɔɔŋɔ pale la ya san gɔleɡɛ ya gɔbega
    FOC PN road DEF 2PL if turn 2PL left
    ‘Azulemania’s house is near to Adigenyoke’s house and Adigenyoke’s
house is very near to the Yelewɔŋɔ road if you turn to your left.’

(\textit{fieldnotes\_266\_20100424})

\subsection*{5.2.6.2 $du'$ ‘be very near’ or ‘close to’}

The verb $du'$ unlike $\textit{lem}$ describes very near locative relations between the Figure and the Ground that are so close to each other. The space between them could be inches apart.

\begin{verbatim}
(252) Bia la ze'e-le saana kuka la du' la
child DEF stand-DYN visitor chair DEF be.very.near FOC
dangoone la ti a iɲɛ la ŋwani zTi-re
wall DEF COMP 3SG do FOC how sit-DYN
‘The child’s stood the visitor’s chair very close to the wall and how will he sit on it.’ (SPST 379)
\end{verbatim}

In example (252), our organizer at a folktale session provides the utterance blaming his son for placing a bench too close to the wall for us to sit.

\textbf{Definition 36: The locative relation of proximate verbs $\textit{lem}$ and $du'$}

For any $F$ and $G$, $F$ and $G$ are never in contact with each other and if:

\begin{enumerate}
  \item $F \textit{lem} G$, $F$ is near to $G$ or
  \item $F \textit{du'} G$, $F$ and $G$ are very near to each other.
\end{enumerate}

\section*{5.3 Summary}

This chapter discussed in detailed the meaning, use and pragmatics of the positional verbs listed in Table 1 of Chapter 1 (§1.3). The analysis draws on cross-linguistic studies on posture and positional verbs to discuss the semantics of the Gurenc positional verbs noting in particular the similarities and the differences between the Gurenc data and the other languages investigated in the positional verb typology. I classified Gurenc as a positional Type III language based on Levinson & Wilkins (2006a) and Ameka & Levinson (2007a) basic locative construction (BLC) typology on positional verbs. As is typical of any Type III language, the positional verbs in Gurenc are many (over thirty) and their semantics describe very precise locative relations between the Figure and the Ground. The verbs were grouped under six semantic subclasses based on their meaning relations. They include verbs of body
position or posture (§5.2.1), verbs of elevation (§5.2.2), attachment verbs (§5.2.3), distribution verbs (§5.2.4), general locative verb (§5.2.5), and proximate or propinquity verbs (§5.2.6). A summary of each of these subclasses is as follows.

The verbs of body position or posture express information about the posture or body position of humans, animals and objects. For example, the posture verb zi ‘be in sitting a posture’ describes a body position of a person in a sitting posture while ze ‘be standing’ describes a standing posture of humans, animals and objects. Verbs describing other body positions such as squatting, leaning, and stooping postures belong to this subclass.

Verbs of elevation have unique spatial semantic properties, which are of interest to the cross-linguistic studies on spatial locative descriptions. They characterise the Figure as located on an elevated Ground thereby disregarding the actual posture of the Figure (e.g., standing, lying, sitting, stooping, and squatting). The verbs inherently have as part of their semantics location above floor level with spatial information about the Figure and the Ground such as shape, configuration, and orientation of the Figure. Examples include a bowl on a tabletop (SUP 01) and two birds on a tree branch (GUR 10) which attract the use of yagi ‘be on top, with stable support’ while pagi ‘be on top, of flexible or flat objects’ describes a tablecloth on a tabletop (PSPV 04, PSPV 14), and dogi ‘be on top, of unstable support or relation’ applies to prototypical objects like a ball(s) on a tabletop (PSPV 08, PSPV 21). The crucial semantic property of these verbs is that the Figure is on an elevated Ground with the choice of a particular verb depending on the configurational properties of the Figure and the Ground. The most important semantic factor concerning this class of verbs is that their use disregards the actual posture of the Figure. This semantic component of “elevation” as I have shown in the discussion in this chapter is that “elevation” appears to be more important in Gurenɛ than it is in other languages in the typological literature on posture, positional, and locative verbs (see §5.2.2.8).

The defining characteristic feature of verbs of attachment is that the Figure is in an attachment relation to a Ground. Some examples include, adhesive or grip attachment relations like labi ‘be adhered or pasted’, used to describe scenes such as the gripping attachment of a lizard on wall (GUR 25), paper pasted on pole (SUP
The verbs of distribution also describe the configuration of a single or multiple Figures spread out, disperse, (e.g., harvested crops spread out on floor or on the farm to dry) or a collection or aggregation of objects (e.g., fruits such as oranges or tubers in a heap or pile). Typical examples include *kugi* ‘be in a heap’ used to describe a heap of harvested pepper fruits on farm (GUR 39) and *yaregɛ* ‘be spread out’ of a mat spread on the floor (GUR 08).

The general locative and existential verb class has only one verb *boi* ‘be at’, ‘exist’. The verb is used to describe generic or containment locative relations. Its role for describing generic location only asserts that the Figure exists in a place without any indication of the precise position of the Figure (see §5.2.5.1). It is also used to describe containment relations (§5.2.5.2) such as full containment like a mango fruit in a bowl (CONT 01), a rabbit in a hutch (TRPS 54), and cassava in a basket (PSPV 53). Partial containment relations include a box in a bag with part visible (TRPS 14), a bird in a tree hole with its head sticking out (TRPS 66), and a house in a fence (TRPS 60). Its other uses include non-existence in a physical space such as in a folktale genre introduction it is used to indicate the existence of the main characters in a tale.

Two verbs belong to the subclass of proximate or propinquity, *leɛm* ‘be near’, and *du* ‘be very near’. The verbs are used by speakers to describe the proximate location of a Figure to a Ground to indicate how close or far they are in a spatial relation. This is the only instance of a spatial relation where the Figure and Ground are not in contact with each other. Examples in the stimuli sets include a scene with a fruit on ground near a bowl on its side (CONT 06), a pot on its side by a stump (PSPV 40), and a spoon on floor near a cup (BERN 17).

The relationships between the various semantic subclasses as shown in the discussion are generally mutually exclusive and describe specific locative relations. However, some verbs can be combined in a serial verb construction to express a
locative relation as discussed in §5.2.4 concerning the verbs of distribution class. Speakers also show some variation in their descriptions of the locative scenes and may choose a verb from any of these subclasses depending on whether or not the speaker wants to focus on one aspect of the locative relation or another which is salient or more preferred. For example, when the speaker focuses on the location of a Figure on earth such as a ball on ground (PSPV 07) they use gã ‘be in a lying posture’ which belongs to posture verbs but when the speaker's interest shifts to elevation, a similar locative scene with the ball on a tabletop (PSPV 21), dɔgi ‘be on top, with unstable support’ which belongs to verbs of elevation is preferred. The relationship between the various subclasses is, therefore, triggered by the semantics of the verbs and the pragmatics of the locative context. The verbs are to a large extent mutually exclusive in their meaning and use. If for example, a speaker is presented with a hypothetical locative scene with a Figure in containment, postural, elevation, attachment, distribution, and proximate locative relations the speaker's choice of a verb from the positional verb classes will be influenced by the pragmatics depending on which locative relation is more prominent or less prominent in the scene. Throughout the discussion in this chapter attention is paid to these semantic and pragmatic issues.

The important semantic and pragmatic factors that were found to influence the choice of one positional verb over the other in Gurenc locative constructions include properties of the Figure and the Ground. The Figure’s properties on one hand, include shape, canonical or non-canonical base support, salient dimensions or lack of it, animacy, position or orientation (vertical vs. horizontal), rigid or flexible body, individuating or mass-like, single or multiple, and the nature of its relation to the Ground. On the other hand, the Ground properties include elevation or non-elevation, containment or non-containment, vertical or horizontal support, and large spaced or small spaced. All these factors influence the choice of a particular positional verb for describing a locative relation as shown throughout the discussion in the chapter and the entire thesis.

The study also confirm that all the semantic subclasses of positional verbs identified in Chapter 1 can occur in the basic locative construction (BLC) discussed in §4.4.
They include verbs of body position, verbs of elevation, verbs of attachment, verbs of distribution, the existential verb and the relative distance verbs. Some of the verbs of distribution describe the internal disposition of the Figure (e.g., coiled rope, spread plant). When they occur in the BLC, they retain their Figure-internal properties (cf. Hellwig 2007:909 on similar semantics in Goemai). A serial verb construction containing a verb of distribution and a posture verb (in that order) is usually required to express the basic locative construction. The next chapter presents the summary and the conclusion of the thesis.
CHAPTER 6. CONCLUSIONS

6.1 Introduction

In the preceding chapters, I have discussed the semantics and grammar of a set of contrastive positional verbs in Gurenɛ from a typological perspective. This final Chapter presents the summary, findings, and suggestions for areas for possible future research. §6.2 presents a summary of the thesis and §6.3 provides an outline of the main findings and theoretical contributions to cross-linguistic studies on posture and positional verbs. Suggestions for future research conclude the chapter.

6.2 Summary of the thesis

The thesis sets out to document and describe in detail the semantics and grammar of Gurenɛ positional verbs in the context of recent cross-linguistic studies on spatial locative descriptions. Based on this focus of the study, the guiding research questions (§1.2) were: (i) What is/are the linguistic means by which Gurenɛ expresses spatial locative relations? (ii) What is its basic locative construction (BLC) type with respect to Levinson & Wilkins (2006a) and Ameka & Levinson (2007a) typology? (iii) What is the grammatical nature of the positional verbs used in the locative descriptions? (iv) What are the semantic and pragmatic factors that influence the choice of one verb over the other in the locative construction? (v) To what extent can we establish any possible lexical meaning relations among the positional verbs? And (vi) Are there any similarities and differences of the Gurenɛ data compared to other languages already investigated in the typological literature of spatial locative descriptions? These questions have been addressed in the discussions in the preceding chapters. In the following paragraphs, I will summarise the main discussions in relation to these questions without necessarily repeating details of the facts already discussed in the previous chapters.

An overview of the positional verb phenomenon was presented in Chapter 1 (§1.1). Throughout the thesis, the term positional verbs is used to refer to the six semantic subclasses discussed in Chapter 5, which includes verbs of body position or posture (§5.2.1), verbs of elevation (§5.2.2), attachment verbs (§5.2.3), verbs of distribution
While there are a number of alternative terms in the semantic literature with overlapping meanings such as posture verbs, verbs of body position, locative verbs, etc. (see Talm y 1985: 60-61, 2000a:25; 2007:118; Levin 1993:255; Levin & Rappaport Hovav 1995:282; Newman 2002a: vii; Levinson & Wilk in 2006a:15-16; Ameka & Levinson 2007a:847), I have chosen to use positional verbs as a cover term in Gurenɛ to represent the various semantic subclasses.

The overview also notes that Gurenɛ uses a set of over thirty contrastive positional verbs (see Chapter 1, Table 1) to describe the posture or location of a Figure which also includes aspects of the relation between the Figure and the Ground in the locative construction. It was observed in line with the first research question that the positional verbs constitute the main linguistic means that Gurenɛ speakers use for making locative statements about the position or configuration of both animate and inanimate entities located in space. The use of the positional verbs are usually obligatory in Gurenɛ whenever a speaker describes the location of an entity in space compared to English (but also in other Indo-European languages) where it is common to use a neutral verb, often the verb *be* (see Lemmens & Perrez 2010, forthcoming). There is, therefore, no other way for Gurenɛ speakers to express location without the use of the positional verbs which may be combined with postpositions. The positional verbs usually combine with postpositions in the locative construction but the verbs are considered the most important linguistic means used by speakers to express static locative relations because they constitute a rich semantic field for spatial descriptions. The postpositions which are mostly body-part terms are restricted to indicating the part of the Ground that the Figure can be found.

Methodological concerns were the focus of Chapter 2. A total of eight months was spent on fieldwork between 2010 and 2011 to collect three main kinds of data: natural, stimuli, and elicitations for the analysis. A quantified insight is also provided with descriptive statistics to show the number of occurrences of each verb per data type.

Chapter 3 discussed the sketch grammar of Gurenɛ with a focus on the essential grammatical properties of the verb with the aim of providing the necessary
background for the understanding of the analysis and the examples. In particular, the verb morphology (derivational and inflectional suffixes) and its relation to the aspectual properties of the positional verbs is discussed in light of Talmy’s (1985; 2000b, 2007) typology of three aspect-causative types in languages (§3.3.4), and how the Guren ɛ data aligns with Talmy’s two-way typology of verb-framed (V-languages) and satellite-framed languages (S-languages) (§3.3.3).

In Chapter 4, I discuss the overview of the cross-linguistic studies of spatial description focusing on Newman’s (2002a) typological volume on posture verbs and the MPI research on posture, positional and locative verbs (Levinson & Wilkins 2006a; Ameka & Levinson 2007a). The basic locative construction (BLC) typology of languages which is based on the number and types of verbs according to the MPI research tradition was presented and discussed in Chapter 4 (§4.4). In addition, the BLC typological predictions and generalizations were presented followed by the discussion of the Guren ɛ BLC (§4.4.2) in the context of these typological predictions and generalizations.

In Chapter 5, I discussed in more detail the semantics and pragmatics of the positional verbs. The semantics of each verb in the six semantic subclasses were discussed according to their use in describing animates vs. inanimates. It was shown that the key semantic and pragmatic factors that motivate speakers choice of a particular positional verb in Guren ɛ over the other in the locative construction is determined by the Figure’s properties such as shape, rigidity, stable vs. unstable support relation, canonical vs. non-canonical orientation, containment vs. non-containment, and for the Ground, elevation vs. non-elevation are crucial factors. For example, the posture verb gā ‘be in lying posture’, describes the lying posture of both animates and inanimates only on ground (earth) or at floor level while the elevation verb yagi ‘be on top, with stable support’ describes an entity on an elevated Ground with a stable base support.’ These factors may apply individually or in combination to determine which verb is used to describe a particular locative relation between the Figure and the Ground. One of the important issues noted in the discussion is that the pragmatic factors of the locative situations also play an important role in Guren ɛ locative predications which can lead to the underspecification of the description of the
locative scene. For example, it has been shown in the discussion in Chapter 5 that in a multiple contrastive scene where some Figures are located in different positions, e.g., in standing and lying positions on a rooftop, a speaker may use an elevated verb *yagi* ‘be on top, with stable support’ depending on whether or not the speaker’s interest is in the elevation or the orientation of the Figures. However, if the speaker is interested in contrasting the position of the entities the posture verbs *gâ* ‘be in a lying posture’ and *ze’* ‘be in a standing posture’ can be used but the Ground and the postpositional elements must be left out in the locative construction for it to be accepted. This phenomenon is something that has not been discussed thoroughly in the positional verb typological literature and the Gurenɛ data makes a contribution in this direction.

The discussion in Chapter 5 also relates the Gurenɛ data to the typological studies on posture and positional verb descriptions by drawing parallels and divergence. The detailed discussion of the semantics of the verbs and a summary in the form of a definition of the use of each positional verb was given in this chapter, usually after the detailed discussion. The findings of the study are presented in the next section.

### 6.3 Descriptive findings and typological contributions

The descriptive and typological findings of the study have important contributions to make to different areas of linguistics. In particular, it contributes to the cross-linguistic studies on the linguistic construction of space in general by expanding the scope of the language sample. More specifically, the study makes a contribution to spatial semantics with new data to add a different perspective from this under-described language. It further makes a contribution to the implications for the typological generalizations made about the use of posture, positional and locative verbs in locative descriptions in languages. Some of the most important findings of the study pertain to Gurenɛ speakers’ use of the positional verbs from both semantic and grammatical points of view.

In the first place, this study constitutes the first in-depth study of the positional verb phenomenon in any of the over twenty under-described Gur languages in Northern Ghana. Semantics and pragmatics are among the few areas in Gurenɛ, and indeed
the Gur languages that have been little studied. It has, therefore, contributed to increasing and deepening our understanding of some aspects of the semantic phenomena in Gurɛnɛ especially in spatial semantics. From the perspective of African languages and linguistics, the study may be the second detailed study of the postural phenomena in any African language as far as I know apart from Hellwig’s (2003) detailed PhD study of Goemai’s (a West Chadic language of Central Nigeria) postural system. Also Ameka (1995, 2007), Ameka & Essegbey (2001, 2006), and Essegbey (2005, 2007) contributions on this topic in Ewe, Likpe and Nyangbo from language specific and typological perspectives in linguistic journals and book Chapters are worthy of note here. This investigation, therefore, contributes to expanding the typological sample of the languages already investigated (see Newman 2002a; Levinson & Wilkins 2006a; Ameka & Levinson 2007a) and provides new insights on the positional verbs. Previous studies on posture, positional, and locative verbs in other languages have suggested an expansion of the language sample to provide a deeper insight into the meaning and use of these verbs (see Ameka & Levinson 2007a; Hellwig 2003; Levinson & Meira 2003). The broader the typological sample, the better we are in a position to understand the universality and diversity of the phenomena in languages.

The linguistic description of the location of entities in space which is expressed by positional verbs in some languages plays an important role in our linguistic knowledge of spatial relations. From a typological perspective, the study has provided significant analysis and insights into Gurɛnɛ positional verb semantics (see Chapter 5) to increase our understanding of languages that use the verbal component to express locative descriptions other than adpositions (cf. Pederson et al. 1998:560; Levinson & Meira 2003; Ameka & Levinson 2007a:850-67). In Gurɛnɛ, as is the case with other languages (Brown 1994, 2006 on Tzeltal; Hellwig 2003; 2007 on Goemai; Ameka 2007 on Likpe; Lemmens 2002, 2005 on Dutch) the use of the verbs in the locative construction includes information to describe the precise position or configuration of the entity located, of which adpositions hardly do. The findings emerged in this study on this under-described language, therefore, contributes to our understanding of linguistic theory and research on spatial
semantics or the linguistics construction of space. This study, it is hoped, will stimulate further studies in other Gur languages.

A second point that is of interest to the typological semantic literature on positional verbs is that among the few African languages (about three) investigated in the basic locative construction (BLC) typology of Levinson & Wilkins (2006a), and Ameka & Levinson (2007a), Gurenɛ shows similarities as well as differences with these languages. All the African languages investigated in the BLC typology employ the verbal component in their locative descriptions. However, a first difference shows up in the number of verbs that each language uses in its basic locative construction. In this study, I have classified Gurenɛ as a Type III language and argued that it uses more than thirty verbs in its BLC while these other African languages use far less verbs in their BLCs. Goemai, for example, as Hellwig (2003:10; 2007:893-916) observes, has five sets of contrastive verbs (four postural and one general verb) and belongs to postural Type II languages with Type III features. It thus, uses its verbs both to assert the current canonical position of the Figure and also presuppositionally, i.e., to describe Figures which are not in their current canonical position (see Hellwig 2003, 2007). Gurenɛ uses its positional verbs only to describe the current position of the Figures but never presuppositionally as I have argued in Chapter 5. That is, to say the verbs are not used to describe a Figure in non-canonical position. In their discussion of Ewe, a Kwa language spoken in Ghana, Ameka & Essegbey (2006:370-372) and Essegbey (2005) also point out that Ewe uses only one general locative verb in its BLC. Ewe is classified as a member of Type I languages. Likpe (a Ghana-Togo-Mountain language) uses fifteen positional verbs in its BLC and belongs to Type III languages (see Ameka 2007) just as Gurenɛ. The Gurenɛ data also shows similarities as well as differences with Likpe in the description of certain locative scenes as shown in my discussion of the positional verbs in Chapter 5. Likpe, however, has fewer verbs than Gurenɛ as demonstrated in my analysis and includes verbs that describe elevated locative relations of which Likpe does not have. Another African language, Nyagbo, a typological and genetic relative of Likpe as Essegbey (2007) reports employs only four positional verbs in its BLC and belongs to postural Type II languages.

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A third finding and one of the most important contributions and theoretical implications of the Gurenɛ data to the cross-linguistic studies on spatial locative descriptions is the sensitivity of the use of some of its positional verbs to describe the location of entities on ground (earth) and elevated Grounds (e.g., rooftop, treetop, tabletop, etc.). Thus, if the speaker construes the location of the Figure to be on the earth the actual posture verb applies, but if the location is construed to be on an elevated Ground the actual posture is neutralized or disregarded calling for the use of different verbs, notably verbs of elevation. The semantics of the verbs of elevation discussed in §5.2.2 appears to have greater importance in Gurenɛ than is the case with other languages observed in the cross-linguistic study of posture and positional verbs. I compared this “elevation” phenomenon with other languages in the positional verb typology where elevation has either been mentioned explicitly or left implicit. As shown in my discussion of the verbs of elevation from a typological context (see the discussion in §5.2.2.8), some languages such as Tzeltal (Brown 1994, 2006; Brown & Bohnemeyer 2007), Korean (Song 2002), Trumai (Guirardello 2002, 2007), and Laz (Kutscher & Genɛ 2007) have a few verbs or morphemes to describe height or elevated locations or none. But Gurenɛ has a whole lot more verbs (see §5.2.2) with precise semantics about the Figure and the Ground, suggesting that “elevation” is of much greater importance in this language than in the other languages. The Gurenɛ phenomenon offers some new insights into the typological literature on the positional verbs. This “elevation” phenomenon in Gurenɛ can contribute towards clarification of the range and type of semantic distinctions to be accounted for in the cross-linguistic descriptions of the positional verbs.

Furthermore, in the BLC typology of Ameka & Levinson (2007a), one of the predictions of Type III languages (see discussion following §4.2.2.1) is that most languages will use the general locative verb where the specific verb is not applicable. However, as it is shown in my discussion of the general locative verb boi in Chapter 5 (§5.2.5) in containment situations, Gurenɛ speakers prefer the general locative verb although when there is a pragmatic interest to show contrast, the positional verbs can still be used to describe some entities as gã ‘be in a lying posture’ while others are ze’ ‘be in a standing posture’.
One other significant contribution of the thesis is the discussion of the aspectual properties of the positional verbs based on Talmy’s aspect-causative types and lexicalization patterns typology (see §3.3.2). It is shown that Gurenë static and dynamic positional verbs deviate from the lexicalization patterns proposed by Talmy (2000, 2007) who observes that cross-linguistically there are three dominant lexicalization patterns of aspect-causative types: *stative* (being in a state), *inchoative* (entering into a state), and *agentive* (putting into a state). Some languages, like English, take the stative to be basic from which the inchoative and agentive are derived (e.g., *lie > lie down > lay*); other languages, like Japanese, take the inchoative as their base form (see §3.3.2). In Gurenë, positional verbs lexicalize these three aspect-causative types in two different ways. First, Gurenë lexicalizes the stative via verb roots such as *gã* ‘be in a lying posture’, *ți* ‘be in sitting posture’, and *ze’* ‘be in a standing posture’ or through the use of the stative suffix -i to realise verbs such as *pag-i* ‘be on top, of flat or flexible objects’, and *dog-i* ‘be on top, unstable support’, and *yag-i* ‘be on top, of stable support’. Secondly, Gurenë uses verb morphology (using the suffix -le or its variants) to derive the other two dynamic verb forms (inchoative and agentive) from the stative verb root. These derived stems are, however, neutral to the inchoative and agentive distinctions. Instead, it is the construction type that they participate in which is crucial to determining these aspectual notions. In other words, the opposition between static and dynamic is marked morphologically, that between inchoative and agentive is marked constructionally. This aspectual feature of Gurenë posture verbs appears not to have been reported in the typological literature on posture and location verbs. In line with Talmy’s (1985, 2000b, 2007) typological classification of languages as verb-framed versus satellite-framed languages which is partly based on whether or not a language expresses aspect on the verb root or satellites (see §3.3.3), it is argued that Gurenë share properties with both and cannot be said to belong exclusively to either type. Further, Gurenë like many other African languages uses some of its verbs in serial verb locative constructions and may be said to belong to a third type, equipollently-framed languages proposed by Slobin (2004, 2006).

From a methodological point of view, the study makes a contribution to Gur linguistics in particular and the investigations of this class of verbs in other
languages. Although I have adopted some of the methods and techniques suggested in the linguistic and semantic literature (see Lyons 1977a; Cruse 1986; Levinson 1992; Ameka & Levinson 2007a; Hellwig 2003, 2006, 2010, Lemmens & Perrez forthcoming) for the investigation, my corpus uniquely includes extensive digital recordings of oral genres. They include folktales, riddles, ritual genres, daily conversations, and praised songs. Most of these data have been transcribed and annotated and have been archived at the Endangered Languages Documentation Archives (ELAR) at SOAS, London. These materials, therefore, form a rich source of both digital and text corpus for Gur languages for later investigations in other aspects of their grammar. Within the typology of locative descriptions a stronger emphasis also needs to be placed on natural texts in addition to the use of stimuli based elicited data to provide a broader view or context of the meaning and use of the positional verbs. As demonstrated throughout the thesis, the use of the spontaneous data, the field observations and especially my folktale genre, provided some useful insights into how Gur speakers naturally describe locations in the local cultural context. Of particular interest, is my interactive discourse data, which requires the researcher to move to natural discourse settings such as a market place to observe and record expressions involving locative statements of speakers engaged in buying and selling discourse without posing a question (see §2.3.1.1). These kinds of natural spontaneous data such as my “Palace Genre” texts also provided useful insights into cultural-specific meanings associated with body postures. For example, the sitting posture of persons at the chief’s palace is used to mark power relations between the higher authority and the subjects, but this is not lexicalised as part of the verb meanings. They are only observable in certain social contexts.

6.4 Suggestions for future research

In the course of the study, a number of interesting issues occurred in the data but it was not within the scope of the present study to discuss them in detail. This section presents these issues for a possible future research.

An investigation into the use of the positional verbs in other Gur languages will be of interest to the typology of locative descriptions. The preliminary data that I have
collected at the initial stages of my study in two other related Gur languages (Dagbani and Dagaare) suggest that these two languages use verbs to express locative relations. However, it is not quite clear as to how many verbs the languages use in their basic locative constructions. Furthermore, an investigation into the similarities and differences of the semantics of the positional verbs between Gurenɛ and these other Gur languages will be of interest, for example, Ameka & Levinson (2007a) suggest in their BLC typology that languages from the same family may not necessarily belong to the same typological type. Brindle and Atintono (2012) comparative work on Gurenɛ and Chakali (a Gur language) topological relations suggests some similarities and differences. The investigation into these other Gur languages will be interesting in this direction to deepen our understanding in the study of these verbs.

One area that will also be of interest for future research is an investigation into the hierarchy of aspects of the locative situations of the various semantic subclasses of the positional verbs. For instance, it is quite clear from the study that when a speaker uses a verb of elevation, this disregards posture, and containment also disregards elevation. This suggests there may be some pragmatic implicature involved such that using a posture verb implicates non-elevation, and non-containment, and the use of elevation verbs also implicates non-containment. However, what is not entirely clear is what are the precise pragmatic factors and locative contexts that can be used to account for the hierarchy of containment, posture, elevation, attachment, and distribution. This could be investigated to show how exactly this pragmatic hierarchy works and whether or not we are dealing with pragmatic implicatures or some other pragmatic phenomena. I am aware of the use of a flow chart in some languages (see Kutscher & Schultze-Berndt 2007 on German positional verbs) to establish a hierarchy or network of relations between the positional verbs. A flow-chart does not appear to be suitable for the Gurenɛ phenomenon.

From a cognitive linguistics perspective, the use of some of the posture verbs to describe psychological states such as a person experiencing difficulties (e.g., poverty, financial crises) who can be described as ze’ ‘be standing’ or a person in a state of happiness or experiencing some comfort to be described as zi ‘be in a sitting
posture’ will be of potential interest to studies in the metaphorical uses of these verbs (see Serra Borneto 1996: 459-505) on German, Lemmens (2002; 2004) on Dutch, in a future research. Space and time did not permit me to do this in this present study as my focus was on their locative uses.

Another area that requires future attention is to investigate spatial language acquisition of Guréné learners of English. It was frequently observed that some speakers of Guréné (e.g., my consultants) have difficulty using English prepositions, they often describe objects in an on or in relation by using the positional verbs to say that the entity is in a standing or a lying posture. This might be a clear instance of the speaker’s transfer from Guréné to English or they may be under the influence of their mother tongue to use the positional verbs to describe the location of entities instead of prepositions (cf. Atintono 2012b). Lemmens & Perrez (2010) made a similar observation about French learners of Dutch because the latter uses posture verbs whereas the former does not. A thorough research in the use of the positional verbs from a language acquisition perspective will contribute to the theory and practice of second language learners of English or other languages which use verbs other than adpositions to express location. It will contribute to our understanding of the context in which the positional verbs can be used. The point is that in Guréné the use of a positional verb to describe the location of entities in space is obligatory in the grammar but this is not the case in English or in other languages.

Lastly, the aspectual system which is important to the understanding of the meaning of the verb grammar, discussed in the sketch grammar (§3.2.2.1) requires a thorough description to make clear the overlapping functions of the imperfective suffixes -ri and -ra to explore fully the various contexts of their use or the construction types that they participate in. Their overlapping functions have some interesting contribution to make in aspectual studies in general and Gur linguistics in particular.
REFERENCES


Abakah, Emmanuel Nicholas, Regina Oforiwah Caesar and James, Azure Ababila. 2010. The tonomorphology of reduplication in Akan, Dangme and Gurene. Studies in the Languages of the Volta Basin (6B):121-140


Brown, Penelope. 1994. The INs and ONs of Tzeltal locative expressions: the semantics of static descriptions of location. *Linguistics 32*:743-790.


Vox, Bert and Justin, Cooper. 1999. *Introduction to linguistic field methods*. Munich: Lincom Europa.


APPENDICES

The reproduction of any of the pictures in any of the stimuli requires explicit permission from their owners.

Appendix 1: Gur Positional Drawings and Photos

This stimulus set was designed by the author (Samuel Awinkene Atintono) specifically targeting different locative scenes in the community which are quite natural. Most of the scenes show cultural bias towards the Gur linguistic area in northern Ghana. However, some can be applied in other cultures especially in Africa and other parts of the world and may be with some refinement or not.
Appendix 2 : Stimuli Coding Verbs of Body Position or Posture

This Appendix depict all scenes described using the semantic posture verbs. They include lying, sitting, standing, squatting, and leaning verbs.
zi sitting postures (Appendix 2B)

sitting postures that attracts the use of yagi ‘be on top, of base support’

Verbs of position (2C) : ze ‘standing

Verbs of body position (2D): dabi ‘be squatting’
Verbs of body position (2E): leaning verbs

IDT 17
GUR 49
GUR 24
PSPV 13
GUR 36
BERN 37
GUR 13
PSPV 01
PSPV 65
PSPV 31
TRPS 58

"lean orthogonal, of objects"

Verbs of body position (2F): vugi ‘turned-upside down’

BERN 19
PSPV 12
PSPV 29
BERN 05

GUR 72
TRPS 05

scenes described as wearing a hat on the head
Appendix 3: Stimuli Scenes Coding Verbs of Elevation

All the scenes in this Appendix depict various types of elevated locative relations. They represent the total number of scenes that speakers describe in the stimuli with each verb. The scenes are further arranged according to animates (humans, animals & plants) and objects.

Verbs of elevation (3A): yagi 'be on top, with stable base support from below (humans, animals & plants)
Verbs of Elevation (3A): yagi ‘stable base support from below’ (objects)

Verbs of elevation (3A): yagi ‘stable support from above’ (objects)
Verbs of Elevation (3B): *pagi* 'be on top, of flexible or flat objects

PSPV 14  PSPV 04  PSPV 34  GUR 23  PSPV 02

PSPV 16  PSPV 24  PSPV 32  BERN 21  PSPV 64

BERN 30  BERN 13  SUP 10  SUP 11

PSPV 19  PSPV 54  TRPS 23  PSPV 63

SUP 27

animate

GUR 41  BERN 23
Verbs of elevation (3C): dogi ‘be on top of unstable base support objects

PSPV 21  PSPV 08  PSPV 18  PSPV 50

BERN 49  GUR 71  BERN 50

PSPV 52  PSPV 26  PSPV 23  PSPV 47

PSPV 35  PSPV 43  PSPV 61  BERN 24

TRPS 59  PSPV 06
Verbs of Elevation (3D): yuli 'hang dangling'

SUP 23  SUP 24  SUP 25  TRPS 63  BERN 14

GUR 46  TRPS 13  TRPS 57  TRPS 69  PSRV 49

TRPS 20  TRPS 27  GUR 61

BERN 51  BERN 03  BERN 32

Verbs of elevation (3E): pugi 'be'

GUR 01  GUR 02  BERN 16  GUR 28
Appendix 4: Stimuli Scenes Coding Verbs of Attachment

The stimuli scenes in this Appendix depict all kinds of attachment relations described using the verbs in the scenes. They include adhesion or grip attachment, rope attachment, insertion attachment of the Figure to the Ground. They represent the total number of scenes in the stimuli.
Appendix 5: Stimuli Scenes Coding Verbs of Distribution

The stimuli scenes in this Appendix represent all the picture scenes that consultants describe using different verbs to describe different configurations. They are further subgrouped according to the type of configuration the verbs describe.
Appendix 6: Stimuli Scenes Coding Containment Relations

The stimuli scenes in this Appendix represent all the picture scenes that consultants describe using *boi*. They are further subgrouped into Appendix 6A, 6B, and 6C based on full containment, partial containment, and contiguity of Figure and Ground.
boi 'be at', Partial containment of Figure in Ground (6B)

TRPS 67  BERN 18  CONT 37  BERN 31  CONT 19

TRPS 66  CONT 22  PVPS 56  TRPS 19  BERN 10

boi 'be at', Figure is part of or contiguous with Ground (6C)

GUR 53  SUP 14  SUP 16  SUP 17

CNT 40  SUP 21  SUP 22  TRPS 28  TRPS 68

Negative space

TRPS 26  TRPS 18  GUR 22  TRPS 03