Logophoricity: An Empirical-Semantic Assessment of *yè* in Ewe

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Abstract

This dissertation investigates a special class of anaphoric form, *yè*, in Ewe known as the logophoric pronoun. This research makes a number of novel observations.

In the first chapter, I introduce the reader to the phenomenon under investigation as well as provide information on Ewe and its dialects and, methodology. In Chapter 2, I present the pronominal system of Ewe which is categorised into strong and weak forms following Cardinaletti & Starke (1994) and Agbedor (1996). The distribution of pronouns is outlined which sets the tone for an overview of logophoric marking. In this respect, I present variations in logophoric marking strategies cross linguistically and show that Ewe differs significantly from other pronouns in this category. In an effort to explain the deviant case of ye, I entertain the idea that ye is a pure logophoric pronoun in the sense of Clements (1975) and thus, its additional *de re* and strict interpretation does not imply non-logophoricity.

Chapter 3 demonstrates that $y\dot{e}$ is sensitive to contexts which portray the intention of an individual. Following Sells (1987), the antecedent of yè must have an intention to communicate. I broadly categorize logophoric contexts into reportative (direct-indirect speech) or non-reportative (speaker's mental attitude, reporter's observation or background knowledge of a situation). Based on this categorization, indirect speech report (Clements 1975), discourse units such as a paragraph or an episode (Clements 1975), and sentential adjuncts such as purpose, causal and consequence clauses (Culy 1994a) are reviewed. The logophoric pronoun occurs in the complement of attitude verbs (Clements 1975), also termed logocentric (à la (Stirling 1994)) or logophoric predicates (à la (Culy 1994a)) as well as with non-attitudinal verbs (e.g. va 'come' or wo 'do' as in sentential adjuncts). I argue contra Clements (1975) and Culy (1994a) that yè can occur with perception predicates. I further provide three new instances of non-reportative contexts which are compatible with yè namely, as-if clauses, benefactive na clauses and alesi 'how' clauses. I show, corroborating previous studies that contexts which are necessary for the licensing of yè include all of the aforementioned except causal clauses. Among these contexts, the complementizer be or regarding cases where there is no be, an element in C (due to the Doubly-Filled-Comp Filter (DFCF) c.f. Chomsky & Lasnik (1977)), is sufficient to license yè. Following Bimpeh & Sode (2021), yè is licensed by feature checking (in the spirit of von Stechow (2004)): be bears the interpretatble [log] feature which checks the uninterpretable [log] feature of yè. I include a redefinition of logophoricity as pertaining to Ewe.

Given the disparity found in the literature concerning the interpretation of *yè*: Ewedome (pronounce Evedome) has only *de se* readings (Bimpeh 2019); while 'pure' Ewe, Mina (variety of Ewe spoken in Togo) Pearson (2015), Danyi (O'Neill 2015) and Anlo (pronounced Aŋlɔ) (Satık 2019) has *de re* readings; chapter 4 aims at lending empirical support to the ungoing discussion by verifying the interpretation of *yè*. Two acceptability judgment tasks were conducted namely, truth value judgment task and binary forced choice task. The results corroborate Pearson (2012, 2015) and others' discovery that *yè* has a *de re* interpretation in the Ewedome (contra Bimpeh (2019); Bimpeh et al. (2022)), Anlo and Tonu (pronounced Toŋu) dialects of Ewe.

In chapter 5, I discuss the relation between logophoricity ($y\dot{e}$, $y\dot{e}$ a) and Control (PRO). I show that yè may be restricted to a set of verbs which obligatorily require the morpheme a 'potential marker' (Essegbey 2008), in subject position. This set of verbs are those that are known as control verbs c.f. (Landau 1999) in English. As a result of this restriction, research such as Satik (2019) claims that yè a is the overt instantiation of PRO in English. According to the Ewe facts, it appears as though on one hand, yè and PRO share similar properties in logophoric contexts and on the other hand, $y\dot{e}$ in combination with the potential marker, a also share properties with PRO in subject control environments. Against this background, I discuss the relation between yè, yè a and PRO and show that neither yè in isolation nor yè in combination with a, contrary to Satik (2019), is the overt instantiation of PRO. I clarify that the potential morpheme a is not cliticised or combined with the logophoric y \dot{e} . The two forms are separate morphemes. The potential marker a only shows up in control environments because a sub-class of verbs require it for grammaticality purposes. As such, the property of *de se*-ness does not come from *yè* by itself, *yè a* or *a* but rather from the sub-class of verbs which require the potential marker a. Furthermore, in an attempt to situate this finding in **Bimpeh & Sode** (2021)'s theory on silent reflexive res arguments, I display that existing theories (*de se*-LFs or *de re*-LFs) cannot account for this finding.

Chapter 6 ends and concludes the dissertation.

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List of abbreviations

1, 2, 3	first, second, third person
ACC	accusative
ADDR	addressee
AFOC	argument focus
ASSOC	associative
ASP	aspect
AUX	auxiliary
BEN	benefactive
COMP / COMPL	complementizer
COND	conditional
CONJ	conjunction
СОР	copular
CORD	coordinator
CORR	correlate
DAT	dative
DEF	definite marker
DIM	diminutive
ЕМРН	emphatic marker
FOC	focus marker
FUT	future
GEN	genitive
HAB	habitual marker
IC	inherent complement
INDEF	indefinite marker
INGR	ingressive
INT	intensifier
INTER	interrogative
JUSS	jussive
LOG	logophoric pronoun
NEG	negative marker
NOM	nominative
OBJ	object

PART / PRT	particle
PAST / PST	past
PFAT	perfect absolute transitive
PFOC	predicate focus
PFV	perfective aspect
PL	plural
PM	person marker
POSS	possessive
POST	postposition
PREP	preposition
PRS	present
PROG	progressive
Q	question
QUOT	quotation marker
REDU	reduplication
REFL	reflexive
REL	relativiser
REP	repetitive
RP	reportative
SBJV	subjunctive
SG	singular
SUB	subject
Т	tense
ТОР	topic marker
V	verb

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To my husband, Gabby

Chapter 1

Introduction

The phenomenon under investigation is shown in (1) and (2).

- (1) Kofi and Koku are waiting on their friend Yao. Kofi can no longer wait so he decides to leave. Kofi says to Koku "I am leaving".
 - a. **Kofi**_{*i*} gblo be $y\hat{e}_i$ dzódzó-m. Kofi say COMP LOG leave.REDU-PROG 'Kofi said he is leaving.'
 - b. **Kofi**_{*i*} gblo be \acute{e}_j dzódzó-m. Kofi say COMP 3SG leave.REDU-PROG 'Kofi said he is leaving.' (Clements 1975:142) ex. 1-3, modified.
- (2) Ama found money on her way to school. Her friend, Esi, later complains of her missing money. Ama thinks "I found Esi's money".
 - a. **Ama**_{*i*} súsú be $\mathbf{y}\mathbf{\hat{e}}_{i/\star j}$ fò Esi_{*j*} fe ga. Ama think COMP LOG find Esi POSS money. 'Ama thinks she found Esi's money.'

Mental Attitude

Communicative Attitude

b. **Ama**_i súsú be $\mathbf{\acute{e}}_{*i/j}$ fò Esi_j fe ga. Ama think COMP 3SG find Esi POSS money 'Ama thinks she found Esi's money.'

The use of the pronoun $y\dot{e}$ in (1a) and (2a) expresses unambiguously the communicative (e.g. what X says) and mental attitude (e.g. what X thinks) of *Kofi* and *Ama* respectively, given the contexts in (1) and (2). The use of the regular third person singular pronoun \dot{e} in (1b) and (2b), on the other hand, expresses the communicative or mental attitude of someone else: a non-participant of the situations described in (1) and (2). Thus, the form $y\dot{e}$ in (1a) and (2a) is known as the LOGOPHORIC PRONOUN; and the phenomenon which describes the referential dependency holding between this pronoun and its antecedent is termed LO-GOPHORICITY. The term logophoricity was pioneered by Hagège (1974) who discovered

that in many African languages (see Culy (1994a, 1997) also, Güldemann (2003) for detailed logophoric geographical areas), a special class of pronominal forms are used to cater for referential ambiguities. This dissertation discusses one of such pronouns, *yè*, in Ewe (Niger-Congo, Kwa language), whose function is to disambiguate or keep track of referents (Clements 1972, 1975; Essegbey 1994; Dimmendaal 2001; Agbedor 2014; Ameka et al. 2017).

Logophors as a special case of Anaphors

Anaphors, simplex or complex, are characterised as expressions that have no inherent capacity for reference (Reuland 2006b). They depend on other expressions (antecedent) for their interpretation in a context. This means that the logophoric pronoun $y\dot{e}$ for instance, in (1a) and (2a), depend on the matrix subjects *Kofi* and *Ama* for their interpretation and even so, it would be considered anaphoric. Pronouns¹ are generally known to be analysed within the binding theory. Since the inception of the binding theory it has been observed that variations exist in anaphoric patterns. Nominal expressions that seemingly belong to the same class do not always behave in exactly the same manner. In particular is how locality is being computed. According to condition A of the binding theory (à la Chomsky (1981) and subsequent work), anaphors must be bound within their governing category. However, it was observed that there are some anaphors that did not require local antecedents. An example is what pertains in Ewe. The pronoun $y\dot{e}$ is long distance bound which means that its antecedent is typically found beyond its governing category, in violation of condition A of the binding theory. See (1a) again, repeated as (3).

(3) [Kofi_i gblɔ [be y $\dot{\mathbf{e}}_i$ dzódzó-m]] Kofi say COMP LOG leave.REDU-PROG 'Kofi said he is leaving.'

Other anaphors with this exceptional property include reflexives such as *himself* in English (Kuno 1972); *sibi* in Latin (Clements 1975); *sig* in Icelandic (Thráinsson 1976) and *zibun* in Japanese (Kuno 1972), among others. How has pronouns like *yè* and its kin been handled in the literature? The literature displays various attempts at re-formulating condition A of the binding theory. Three approaches that have featured prominently include the following. First, researchers such as Koster (1984); Manzini & Wexler (1987); Wexler & Manzini (1987) proposed that the governing category of anaphors be modified to include an opacity factor (F) i.e., (accessible) subject, Tense, Agr, or Comp. Compare (4) to (5).

(4) Definition of governing category: c.f. Chomsky (1981)**b** is a governing category for **a** if and only if **b** is the minimal category containing **a**,

¹Pronouns are also used as a cover term for anaphors and pronominals (Reuland 2006a).

a governor of **a**, and a SUBJECT (accessibe to **a**).

(5) Definition of governing category: c.f. Manzini & Wexler (1987)
b is a governing category for a if and only if b is the minimal category containing a, a governor of a, and F (F an opacity factor).

Other proposals like Hellan (1991), using Norwegian and Icelandic as case studies also posits that for long distance anaphors to be bound, they must fufil the containment condition. See (6).

(6) Containment condition c.f. Hellan (1991):
 A containment condition on an anaphor A requires that the anaphor occur in containment relation configuration (see diagram in 1a) where B is the binder of the anaphor and C is a constituent which contains A.



Another approach has been to attribute locality differences to movement operations. On this view, properties of long distance anaphoric dependencies are claimed to follow from general constraints on movement. For instance, Pica (1984, 1987) argues that long distance anaphors like sig undergo movement at LF to INFL, a position goverened by its prospective ancedent where it gets bound. This raises the possibility that some instances of long-distance binding might be reinterpreted as local binding, under the assumption that locality between the anaphor and the binder is established by movement (Harbert 1995). The third approach has been to assume that long distance anaphors are exempt from the relevant binding conditions. A case in point is the logophoric pronoun in Ewe. As illustrated by (3), the distribution of the logophoric pronoun is limited to positions where it is exempted from the condition A binding requirements. Under this approach, pronouns like yè have been situated within the direct discourse analysis (Kuno 1972). As argued by Sells (1987); Reinhart & Reuland (1991); Stirling (1994); Reuland (2006a) inter alia, the distribution of such pronouns are much freer, and they are goverened by discourse conditions such as perspective or point of view, rather than by syntactic principles. In this regard, structural binding relations are distinguished from relations goverened by logophoric strategy and, a report with yè for instance, rightly predicts a description from a higher subject's perspective or point of view. Consider (7) which illustrates that the report is made from the child's point of view rather than the reporter's.

(7) **devi la**_i me de é fia be wó kpo $y\hat{e}_i$ dzi nyuie o. child DEF NEG take 3SG show COMP 3PL see LOG top well NEG 'The child didn't reveal that he had been taken good care of.' (Sells 1987:451), my translation

Apart from being bound outside its governing domain, there other factors that show the distinct nature of $y\dot{e}$ compared to local anaphors. These are (a) that it may give rise to strict readings under ellipsis or the focus-sensitive particle *only* (chapter 5); (b) it occurs in a configuration that disallows inanimate antecedents (chapter 5); and (c) it has split or partial antecedent(s) c.f. (Charnavel 2019). To avoid repitition, details of (a) and (b) are provided in chapter 5. Example (8) illustrates an instance of (c) where the referent of $y\dot{e}$ -wó (Kofi and Ama) is jointly expressed by the pronoun. Note that for the sentence to be grammatical, the plural marker $w\dot{o}$ is added to $y\dot{e}$.

(8) **Kofi**_{*i*} gblo na **Ama**_{*j*} be **ye-wó**_{*i*+*j*} tso fò deka me. Kofi say to Ama COMP LOG-PL from stomach one inside 'Kofi told Ama that they come from the same family.' **Split antecedence**

Research questions

Employing empirical and semantic sources, I assess the distributional properties (some of which have received attention in the literature) of the logophoric pronoun. The following questions are addressed in the dissertation.

• Q1: In what environments does the logophoric pronoun occur and what licences it?

According to Clements (1975:141), the logophoric pronoun occurs in an evironment that expresses the speech, thought, feelings or general state of conciousness of a speaker. Other researchers such as Culy (1994a); Stirling (1994), to mention a few, identified logophoric pronouns occuring in purpose, causal and clauses of consequence generally refered to as sentential adjuncts (Culy 1994a). As such, following Clements (1975) and others, I argue that Ewe's *yè* is a pure logophoric pronoun which occurs in contexts portraying the intention of an individual. These may be categorized broadly into REPORTATIVE such as in indirect speech reports (Clements 1975), typically found in the complement of verbs which express the communicative act of an individual (e.g. *say, tell, suggest*, etc); or NON-REPORTATIVE such as in a stretch of discourse e.g. paragraph (Clements 1975), purpose clauses (Culy 1994a), clauses of effect or consequence (Culy 1994a), *as-if* clauses, benefactive *na* clauses and *alesi* 'how' clauses.

The latter category does not follow the direct-indirect speech paradigm; these are reported based on a speaker's mental attitude (e.g. what a speaker *thinks* or *believes*), or a reporter's observation or background knowledge of a situation. In addition, verbs in whose complement they occur may or may not be attitudinal (e.g. *va* 'come', *wo* 'do', etc in sentential adjuncts). Hence, the use of 'intentions' as a cover term since non-attitudes still carry the intention of the individual. Regarding licensing of ye, my hypothesis is that the complementizer *be*, as the common denominator among all the discussed contexts, is sufficient to license ye. However, regarding cases where there is no *be* (e.g. in *alesi* 'how' clauses), I employ the Doubly-Filled-Comp Filter (DFCF) c.f. Chomsky & Lasnik (1977), to account for its absence. The idea that *be* licenses ye is couched in Bimpeh & Sode (2021)'s analysis which in turn follows von Stechow (2004)'s feature checking analysis.

• Q2: What is the interpretation of *y*è?

There exists the debate on whether or not the logophoric pronoun in Ewe belongs to the selected class of pronouns that obligatorily express a first person's belief known as the *de se* belief, and have a *de se* interpretation thereof. Beliefs of this type correspond to an individual having an "T"-attitude such as, *Ama thinks "I am hungry*" or *Kofi believes " I am handsome"*. Under the *de se* reading, the individual whose attitude is communicated (attitude holder) is AWARE of what he says, believes or thinks. The pronoun that expresses such belief refers to the attitude holder's 'self' across his doxastic alternatives. On the other hand, there are situations in which we talk, think or believe a property about ourselves UNKNOWINGLY and therefore, we ascribe those thoughts or beliefs to someone else. A thought or belief of this type is known as the *de re* belief and constructions with such beliefs are said to have a *de re* interpretation. A standard way of testing this kind of attitude is by relying on 'mistaken' identity contexts or situations in the form of (9). Clearly in (9), the third person pronoun, *he*, refers to the attitude holder, John, in the actual world except that he is unaware that he thinks of himself as stupid. Thus, his belief corresponds to the sentence in (9a).

- (9) John went to the grocery store. He saw a trail of sugar going up and down the aisles and realised it must have been made by someone carrying a bag of sugar with a hole in it. He wondered who the shopper with the torn bag of sugar is, so that he can tell him. He thinks that that guy, whoever he is, is stupid. John, however, does not notice that the guy with the torn bag of sugar is himself (Perry 1979).
 - a. **John** thinks that **he** is stupid.

The interpretation of $y\dot{e}$ is important to this reseach because Pearson (2015) found that in Ewe (spoken in Ghana) and Mina (spoken in Togo)², $y\dot{e}$ is ambiguous between a *de se* and *de re* interpretation. This means that given a *de se* situation where John says "I am stupid" as well as a *de re* situation i.e. the same 'mistaken' identity context we saw in (9), (10) can be used to represent John's thought about himself as well as his thought about his unrecognised self (*res*).

(10)	John súsú be yè nye abuneto.	
	John think COMP LOG is stupid	
	'John thinks that he is stupid.'	
	yè = John	de se
	ye = the man with the torn bag of sugar	de re

Recently, Bimpeh et al. (2022) conducted a comprehension study on Ewe, Yoruba and Igbo and concluded that logophors in these three languages have an obligatory de se interpretation. Bimpeh (2019) also conducted a pilot study to test the availability of de re readings on the Ewedome dialect of Ewe. Her study contradicts Pearson (2015)'s findings. Against this background, one possible hypothesis is that $y \dot{e}$ is ambiguous between a de se and de re interpretation which corroborates Pearson (2015). On this view, yè requires an extra embedding under a concept generator to ensure that the attitude holder (the individual whose words or thoughts are communicated) X, bears an acquaintance relation to his res (unrecognised self) in all possible worlds (Pearson 2015). This dual interpretation of $y\dot{e}$ is confirmed by results of two experimental studies namely, binary forced choice and 'yes' or 'no' tasks (see chapter 4 for results and discussion). A second valid hypothesis is that yè is really an obligatory de se pronoun and that other factors (e.g., methodology, utterance time versus evaluation time, inter alia) combine during experiments for informants to get de re readings. This hypothesis corroborates Bimpeh (2019)'s work which concluded that yè is obligatorily read de se. This would mean that speakers who judge $y\dot{e}$ as true in 'mistaken' identity reports do not actually get a de re reading; something just goes wrong such as misunderstanding the scenarios which affects their judgment (Bimpeh 2019). If this hypothesis is plausible, then one is left to wonder whether true *de se* pronouns also allow strict readings to the extent that this property is availabe for Ewe's yè. Another issue of concern is how this finding bears on current theoretical considerations which until now does not predict a pronoun to both be read de se and allow strict readings.

²Mina is also known as Mina-Ewe, Ewe-Mina, Gengbe or simply Gen (Essizewa 2009).

• Q3: Is yè or yè a the overt instantiation of PRO in English?

In logophoric contexts as well as in control structures in English, the logophoric pronoun $y\dot{e}$ and $y\dot{e}$ in combination with a 'potential morpheme' (Essegbey 2008) seem to respectively parallel PRO (called big PRO), the null subject of an embedded infinitive in English. Due to this similarity, one would assume both $y\dot{e}$ and $y\dot{e}$ a to be an overt instantiation of PRO. The relevant examples are shown in (11) and (12). Due to the reason that English is not a logophoric language³ in order to replicate the Ewe example (11a), one may use *PRO* in (11b) to represent *Kofi* in the embedded clause. The same holds for (12) in that $y\dot{e} a$ in (12b) parallels *PRO* in (12a).

(11)	a.	Kofi _i gblo be $\mathbf{y} \hat{\mathbf{e}}_{i/*j} \mathrm{dz} \hat{\mathbf{o}}.$	
		Kofi say COMP LOG leave 'Kofi said that he left'	(Ewe)
		(Clements 1975:142)	
	b.	Kofi _{<i>i</i>} claimed PRO _{$i/*j$} to leave.	(English)
(12)	0	Kafe promised DDO to marry Ama	(English)

(12) a. Kofi_i promised PRO_{i/*j} to marry Ama_k. (English)
b. Kofi_i do-nugbe be
$$y \hat{e}_{i/j} a$$
 de Ama_x.
Kofi set-promise COMP LOG POT marry Ama
'Kofi promised to marry Ama.' (Ewe)

As a result of this similarity, Satık (2019) proposes that ye a is the overt counterpart of PRO. However, my hypothesis is that despite their similarities, the "controllee" i.e. ye or ye a, is not PRO contra Satık (2019). The diagnostics used in arriving at this claim comes from a comparison between properties of ye and that of PRO. In particular, an investigation of other kinds of readings of ye show that ye is ambiguous between a strict and sloppy reading (Bimpeh & Sode 2021) while PRO has only a sloppy reading (Landau 1999). Another issue raised is that the potential morpheme a is not cliticised or combined with the logophoric ye. The two forms are seperate morphemes. The potential marker a only shows up in a sub-class of verbs that requires it for grammaticality purposes. I further show that assuming Satık (2019) is right about ye a being PRO, then the property of de se-ness does not come from ye by itself, yea or a but rather from a sub-class of verbs which require an obligatory a marking. Furthermore, in an attempt to situate this finding in Bimpeh & Sode (2021)'s theory on silent reflexive *res* arguments, I argue that existing theories (de se-LFs or de re-LFs) cannot account for this finding.

³I follow Culy (1994a)'s categorization of languages into 'pure'(dedicated morphology), 'mixed' (non-dedicated morphology) and 'non-logophoric' (lack of logophoric pronoun) in this regard.

I proceed with a brief information on the language under study as well as sources of data used in the study.

1.1 Ewe and its dialects

Ewe (indigenously pronounced Eve) is a Niger-Congo language of the Kwa group that is a member of the larger unit of closely related languages known as the Gbe languages. According to Capo (1991:1 ff), (also Ameka (1991:1)), Gbe 'voice / language' refers to a dialect cluster comprising Gen, Aja, Xwla-xweda (Phla-Pherá), Fon, and Ewe. Speakers of these languages inhabit the Volta and Oti regions of Ghana, southern part of Togo, southern part of Benin, as well as parts of Ogun and Lagos state, Nigeria. Figure 1.1, c.f. (Capo 1991:xxiv) shows the areas in which Ewe is spoken.



Figure 1.1: Ewe speaking areas

Ewe is a cover term used to refer to a group of (sub) dialects spoken in the Volta and Oti regions of Ghana by about 2.5 million people, and in the southern part of Togo by approximately 1 million people. Also, about 500,000 speakers use the language as an L2, according to the most recent estimate available (2012 Ghana Statistical Service report on 2010 National census). As reported by Ameka (1991:3), the dialects of Ewe can be grouped geographically into (a) Southern, also known as coastal dialects (e.g. Anlo (Aŋlɔ), Tonu (Toŋu), Avenor, Dzodze, etc) and (b) Northern, also known as inland dialects, characterized indigenously as Ewedomegbe (Evedomegbe), literally, 'Ewe middle language' (e.g. Ho, Kpedze, Hohoe, Peki, Kpando, Fódome, Danyi, Kpele, etc). In addition to the spoken dialects, there is the unspoken standard variety (developed in the 19th century) which is believed to be largely influenced by the coastal dialects; this variety is what is used in written texts. Apart from the

print media, standard Ewe is also used in the audiovisual media (radio and TV). Ewe is taught in primary schools, Junior and Senior high schools, Universities, as well as in adult literacy programs (Ameka 1991:4). Previous studies on grammar include (Westermann 1930; Heine & Reh 1984; Schadeberg 1985; Ameka 1991; Duthie 1996), among others; phonology (Ansre 1961; Stahlke 1971; Capo 1991); and syntactic aspects of the language (Clements 1972; Collins 1993), to mention a few. I refer readers to interested portions of the aforementioned works.

1.2 Methodology

Data for this study stems from various sources. First, I made use of published materials such as thesis and articles. I re-examined data from previous studies on logophoricity in Ewe such as from Clements (1975); Essegbey (1994); Agbedor (2014); Ameka et al. (2017) and in other languages e.g., Mapun (Frajzyngier 1985), Yoruba (Adesola 2005; Anand 2006), Jula (Kiemtoré 2018, 2020). In these other languages, I translated relevant examples which were duly acknowledged but also included in the citation is my translation. Secondly, I relied on data from my field work conducted in the Volta region of Ghana. I elicited data from forty (40) Ewe speakers which cut across southern and northern dialects currently living in Ho, the Volta regional capital of Ghana. This data is reported in chapter 4 of this dissertation. Third, as a native speaker (northern dialect), I came up with my own examples. However, these were verified by three other native speakers - two northern dialect speakers from Ho and one southern dialect speaker from Denu. In this regard, all examples lacking a citation are either collected from my native speaker consultants or my own (also verified by native consultants). Given that Ewe is a tonal language, the tonal convention I adopt in this study is to indicate tones only to distinguish between homophonous words (e.g. $y \dot{e}$ =LOG vs. $y \dot{e}$ =FOC). Portions of this dissertation namely, chapters 4 and 5 have been published in Bimpeh (2019) and Bimpeh & Sode (2021) respectively.

1.3 Dissertation outline

This dissertation comprises six chapters. In chapter 2, I describe the pronominal inventory of Ewe. The chapter shows that personal pronouns in Ewe are mainly divided into strong and weak pronouns c.f. Agbedor (1996). The distributional properties of each category of pronoun is also presented which sets the stage for an overview of the logophoric marking phenomenon. Logophoric marking is discussed, on one hand, in terms of languages that employ a dedicated pronoun, and on the other hand, in terms of languages that use non-dedicated pronouns. I further examine the differences that exists between these two categories which show that Ewe only has the long distance binding property in common with other pronouns.

The chapter concludes with the claim that the presence of a property in other pronouns compared with the lack of it in $y\hat{e}$ does not disqualify it from being logophoric.

In response to question one (Q1), chapter 3, picks up from chapter 2 by exploring the environments in which the logophoric pronoun occurs. I claim that yè occurs in reportative (canonical direct-indirect speech reports) and non-reportative contexts (reports based on background knowledge of a matter or reports based on observation). The latter category involve the occurrence of yè in the scope of non-attitudinal verbs. In this regard, I claim that the general assupption of logophoric pronouns to attitude contexts should be revised to intentional contexts in order to cater for both attitudinal and non-attitudinal verbs. Also regarding non-reportative contexts, I propose three additional contexts namely, as-if clauses, clauses containing the benefactive na 'for' and alesi 'how' clauses. I also confirm that the occurrence of logophoric pronouns with complementizers cross-linguistically is borne out. yè, shows up in the context of the complementizer be which implicitly means say. Additionally, there must be an implicit matrix subject whose intention must be communicated. I also discuss another issue of significance namely, the status of be, in Ewe, in the absence of an established stance. For this, I also hypothesize that be is a complementizer. I follow Bimpeh & Sode (2021)'s analysis which claims that $y\dot{e}$ is licensed by feature checking: be bears the interpretable [log] feature which checks the uninterpretable [log] feature of yè. I redifine the concept of logophoricity as obtained in Ewe.

Chapter 4 substantiates Pearson (2015)'s claim that *yè* can be read *de re*. Support for this claim comes from results of two experimental studies namely, binary forced choice and 'yes' or 'no' tasks. This chapter answers question two (Q2).

Chapter 5 reacts to question three (Q3). The chapter discusses a seemingly alternative to $y\hat{e}$, namely $y\hat{e}$ -a which is restricted in subject position to a sub-class of verbs with a-marking. The distribution of $y\hat{e}$ -a is similar to that of PRO in English control structures. Thus, I discuss the notion of Obligatory Control (OC) in Ewe, with focus on whether the "controllee" in Ewe is PRO. My hypothesis is that although similar, the "controllee" i.e. $y\hat{e}$, is not PRO contra Satık (2019). One of the diagnostics used in arriving at this claim comes from an investigation of other kinds of readings of $y\hat{e}$. It shows that $y\hat{e}$ is ambiguous between a strict and sloppy reading. I also clarify that the potential morpheme a is not cliticised or combined with the logophoric $y\hat{e}$. The two forms are seperate morphemes. The potential marker a only shows up in a sub-class of verbs that requires it for grammaticality purposes. In this respect, I show that the property of *de se*-ness does not come from $y\hat{e}$ by itself, $y\hat{e}$ -a or -a but rather from a sub-class of -a marked verbs. Furthermore, in an attempt to situate this finding in Bimpeh & Sode (2021)'s theory on silent reflexive *res* arguments, I display that existing

theories (de se-LFs or de re-LFs) cannot account for this finding.

Chapter 6 summarises the main points and concludes the dissertation.

Chapter 2

Pronominal Inventory of Ewe

In general, pronouns are cross-classified according to their ontological status e.g. personal (*you, she, this, someone*), temporal (*now, then, sometimes*), or locative (*here, there, somewhere*) (Büring 2011:971). In this chapter, I focus on personal pronouns in Ewe which is tabularized in 2.1, c.f. Agbedor (1996:20). Personal pronouns in Ewe are not gender specified. They are also limited to human referents except the third person forms which may refer to non-human entities. Pronouns in Ewe mostly consist of homophonous pairs; as such, tones are used to make a distinction. Note that items in brackets indicate variants or alternate realisations of the unbracketed pronouns. Also, Throughout this work, as a convention, coreference (NPs with same referent) is indicated by coindexing (NPs carrying the same index) whereas non-coreference by different indexes.

-	SINGU	LAR	Strong	Weak (subject)	Weak (object)	Genitive
-		1sg.	nyè	mè	m	nyè
		2sg.	wò	è (nè)	wò	wò
		3sg.	éya	é (wò)	è	é
	Ι	Log.	yè (yì)			
P	LURAL	Stro	ong	Weak (subject	t) Weak (object	t) Genitive
	1pl.	mía	wó	míe	mí	mía
	2pl.	mìa	wó	mìe	mì	mìa
	3pl.	wóa	ιwó	wó	wó	wó
	Log.	yè-v	wó (yì-wó))		

Table 2.1: Pronominal inventory of Ewe

Table 2.1 shows the inventory of personal pronouns in Ewe. I follow the general division of pronouns into two distinct classes namely, strong and weak c.f. (Cardinaletti & Starke 1994). Previous research on Ewe personal pronouns also refered to strong forms as "absolute" (Westermann 1965) or "independent" (Duthie 1996). The weak, on the other hand, has also been referred to as "connected" forms (Westermann 1965). The general distinc-

tion between the two classes of pronouns is made based on their distribution i.e., position of occurence, semantics (pronoun's referents) and phonlogy i.e., reduction phenomena (Cardinaletti & Starke 1994). Thus, in § 2.1, except phonological differences (reduction phenomena and prosodic restructuring) which doesn not apply in Ewe, I will discuss the differences in Ewe pronouns in terms of distribution and semantics. The distributional properties of each category of pronoun (subject, object and genitive) is presented in § 2.2. Since logophoric marking is the topic of this dissertation, § 2.3 provides a discussion on logophoric marking strategies across languages. Finally, in § 2.4, I summarize the chapter.

2.1 Distinction between strong and weak pronouns

2.1.1 Distribution

Cardinaletti & Starke (1994) distinguished between strong and weak pronouns due to the different positions in which the pronouns surfaced or occured. In this respect, I will discuss pronoun distinction in connection with pre-verbal or post-verbal position § 2.1.1.1, peripheral position § 2.1.1.2, topicalisation § 2.1.1.3, modification § 2.1.1.4 and coordination § 2.1.1.5.

2.1.1.1 Pre-verbal vs. post-verbal postion

Strong pronouns occur in environments in which full NPs are allowed. Conversely, pronouns that occur pre-posed to the verb are considered the weak form (Kayne 1975; Cardinaletti & Starke 1994). As illustrated in (1), the pronoun *les* cannot be replaced by an NP therefore, it is weak (1a). By contrast, *elle* can be substituted by an NP which makes it a strong pronoun (1b).

- (1) a. Jean **les** trouve belles. John them find pretty 'John finds them pretty.'
 - b. Jean trouve elle belles. John find them pretty 'John finds them pretty.'
 (Kayne 1975:67), ex. 14(a & c)

Ewe is an Subject Verb Object (SVO) language. Hence, pronouns in Ewe do not have the option of occuring pre-verbally like in French (1a) unless they are the matrix subjects or in topicalised constructions. Nonetheless, the same generalistion that strong pronouns, not weak occur post-verbally holds. It is therefore possible to substitute *nyè* and *wò* respectively with a full NP.

(French)

(2) a. Ama do-nku **nyè** / **mè* tútútú dzi. Ama set-eye 1SG.(s) / 1SG.(w) INT top 'Ama remembers me in particular.'

(Ewe)

(Italian)

b. Kofi kpɔ wò / *è(nè).
 Kofi saw 2sG.(s) / 2sG.(w)
 'Kofi saw you.'

2.1.1.2 Peripheral postion

According to Cardinaletti & Starke (1994), weak pronouns cannot occur in a series of peripheral positions such as clefts, left-dislocation, right-dislocation and isolation (a sub-case of dislocation). I only show the example on clefts beacuse it is the only peripheral position that pertains in Ewe. We can observe in (3) that the weak pronoun *essa* is not possible in Italian (3a) while the strong pronoun *lei* works (3b).

(3) a. É *essa che è bella. it.is 3SG that is pretty 'It is she that is pretty.' (intended)
b. É lei che è bella. it.is 3SG that is pretty 'It is she that is pretty.' (Cardinaletti & Starke 1994:47), ex. 16(a)

In Ewe, clefting is achieved by pre-posing a focused construction (Ameka 2010). Focus in Ewe is marked depending on whether the focused constituent is an argument or a predicate. Ameka (1991, 2010) indicates that there are two focus markers i.e. argument focus ($y\acute{e}$) marker and predicate focus marker ($d\grave{e}$ or $d\grave{e}$ depending on the dialect). Thus, to make prominent the fact that money was given to Kofi (4a), Ameka (1991) notes that the argument focus marker, $y\acute{e}$, which is used for signaling focus on fronted numerals and adverbials occurs after the element to be focused (money), after which it is moved to the left periphery of the clause (4b). On the other hand, (4c) shows an example of how focus is marked predicatively using $d\grave{e}$.

(4)	a.	Papá na Kofi ga.		
		father give Kofi money 'Father gave kofi money.'	(Ewe)	
	b.	Ga yé Papá na Kofi money AFOC father give K. 'It is money that father gave to Kofi .'	(Clefting)	
		(Ameka 1991:5)		
	c.	Kofi dè wò sí K. PFOC 3SG escape		

'Kofi did escape' / Kofi escaped.' (Ameka 1991:6c)

I have shown how clefting is obtained in Ewe. I now return to the discussion on the distinction of strong and weak pronouns with respect to the peripheral postion. As shown in (5), strong pronouns can occur in clefts while the weak ones are blocked.

(5) a. Éya yé sí. 3SG.(s) FOC escape 'It is he who escaped.'
b. *É yé sí. 3SG.(w) FOC escape 'It is he who escaped.' (intended)

In addition to strong pronouns ocuring in cleft constructions, Agbedor (1996:22) states that in clefts constructions in Ewe, strong pronouns are seperated from the verb either by the focus marker or by a resumptive weak form. In example (6), the first person strong pronoun, $ny\dot{e}$ is able to occur with the argument focus marker $y\dot{e}$ in (6a) and with its weak counterpart $m\dot{e}$ in (6b). By contrast, the first person weak pronoun, $m\dot{e}$ rejects the co-occurence of the focus marker (6c) as well as a weak pronoun in (6d).

(6)	a.	Nyè yé xlẽ agbalẽ-a. 1SG.(s) FOC read book-DEF 'I read the book.'	strong + focus marker
		(Agbedor 1996:22) ex. 6	
	b.	Nyè, mè xlẽ agbalẽ-a. 1SG.(s), 1SG.(w) read book-DEF 'I read the book.'	strong + weak pronoun
		(Agbedor 1996:22) ex. 7a	
	c.	Mè (*yé) xlẽ agbalẽ-a. 1SG.(w) FOC read book-DEF 'I read the book.'	weak + focus marker
		(Agbedor 1996:22) ex. 5	
	d.	*Mè mè xlẽ agbalẽ-a. 1SG.(w) 1SG.(w) read book-DEF	week - week pronoun
		i leau the book. (Intellueu)	weak + weak pronoun

Now, in terms of intervention strategies (what can seperate a strong pronoun and a verb), while both first and second person strong pronouns rely on either the focus marker or thier respective weak resumptives, third person strong pronouns make an exception; they only allow the co-occurence of the focus marker but disallow their weak resumptives. Thus, as exemplified by the ungrammaticality in (7a), the third person strong pronoun, *éya* does not

permit the third person weak pronoun, \dot{e} to seperate it from the verb. But, in (7b), the focus marker is allowed.

(7)*éya, é dzó. a. 3SG.(s), 3SG.(w) go 'S/He is gone.' (intended) **3sg strong + weak pronoun** (Agbedor 1996:23) ex. 8a b. éya yé dzó. 3SG.(s) FOC go 'It is s/he that is gone.' **3sg strong + focus marker** (Agbedor 1996:23) ex. 8a

The same intervention strategies also apply to the plural forms. As illustrated by (8a) and (8b), both first and second person strong plurals can be separated by the focus marker as well as their weak counterparts. However, shown in (8c), first and second person weak pronouns disallow intervening elements, they cannot co-occur with the focus marker. Neither do they allow co-occurence with their weak counterparts.

- (8) a. Míawó / Mìawó yé xlẽ agbalẽ-a. 1PL.(s) / 2PL.(s) FOC read book-DEF 'We / you read the book.'
 (Agbedor 1996:22) ex. 7b, modified
 - b. Míawó, míe / Mìawó, mìe xlẽ agbalẽ-a.
 1PL.(s), 1PL.(w) / 2PL.(s), 2PL.(w) read book-DEF
 'We / You read the book.'

(Agbedor 1996:22) ex. 7a, modified

- c. Míe / Mìe (*yé) xlẽ agbalẽ-a.
 1PL.(w) / 2PL.(w) FOC read book-DEF
 'We / You read the book.' (intended)
- d. *Míe **mí** xlẽ agbalẽ-a. 1PL.(w) 1PL.(w) read book-DEF 'You read the book.' (intended)

Conversely, in example (9), the third person strong plural only allows the focus marker to separate it from the verb (compare (9a) to (9b)). The third person weak plural pronoun blocks any kind of intervening element, shown in (9c).

- (9) a. *Wóawó, wó dzó.
 3PL.(s), 3PL.(w) go
 'They are gone.' (intended)
 - b. Wóawó yé dzó.
 3PL.(s) FOC go
 'It is they that are gone.'

c. Wó (*yé) xlẽ agbalẽ-a.
3PL.(w) FOC read book-DEF
'They read the book.' (intended)

2.1.1.3 Topicalisation

Topicalisation is a syntactic mechanism by which an element is signaled as the topic of the sentence by movement. The topic is usally moved from its canonical position to the left periphery of the clause as illustrated by (10).

- (10) a. The DJ plays music for entertainment.
 - b. **For entertainment**, the DJ plays music.

Similar to the peripheral position is topicalisation. In such structures signaled by the topic marker la in Ewe, strong and weak pronouns differ. Only strong forms can be topicalised. Also they co-occur with their resumptive weak counterparts as illustrated by the comparison between the singular and plural pronouns in (11) and (12) respectively.

- (11)/Wò / éya / è a. Nyè la. mè / é xlẽ agbalẽ-a. 1SG.(s) / 2SG.(s) / 3SG.(s) TOP, 1SG.(w) / 2SG.(w) / 3SG.(w) read book-DEF 'As for me / you / him, I / you / he read the book.' (Agbedor 1996:27) ex. 29, modified b. *Mè / è / é la. mè / è / é xlẽ
 - 1sG.(w) / 2sG.(w) / 3sG.(w) TOP, 1sG.(w) / 2sG.(w) / 3sG.(w) read agbalē-a.
 book-DEF
 'As for me / you / him, I / you / he read the book.' (intended)
 Agbedor (1996:27), ex. 30
- (12) a. Míawó / Mìawó / Wóawó la, míe / mìe / wó xlẽ agbalẽ-a.
 1PL.(s) / 2PL.(s) / 3PL.(s) TOP, 1PL.(w) / 2PL.(w) / 3PL.(w) read book-DEF 'As for us / you / them, we / you / they read the book.'
 - b. *Míe / Mie / Wó **la**, míe / mie / wó xlẽ agbalẽ-a. 1PL.(w) / 2PL.(w) / 3PL.(w) TOP, 1PL.(w) / 2PL.(w) / 3PL.(w) read book-DEF 'As for us / you / them, we / you / they read the book.' (intended)

2.1.1.4 Modification

Modifiers are optional elements whose function is to modify other elements in a phrase. Modifiers include adjectives, adverbs, intensifiers, etc. In Italian, adverbs that modify a whole noun phrase (c-modifiers) do not modify weak pronouns. However, strong pronouns are compatible with c-modification (Cardinaletti & Starke 1994).

- (13) a. Anche *essa è bella.also she is beautiful'She is also beautiful.'
 - b. Anche lei è bella.
 also she is beautiful
 'She is also beautiful.'
 (Cardinaletti & Starke 1994:47) ex. 18a

In Ewe, strong pronouns can be modified in both subject and object position by adjectives while weak pronouns cannot. Therefore, in (14a), the first, second and third person strong singular pronouns, $ny\dot{e}$, $w\dot{o}$ and $\dot{e}ya$ in subject position can be modified by an adjective such as *xoxo* 'old' whereas in (14b), the modification of the weak first, second and third person weak pronouns $m\dot{e}$, \dot{e} and \dot{e} respectively results in ungrammaticality (14b). The same holds for the strong plurals, *míawó*, *mìawó* and *wóawó* as well as the weak plurals, *míe*, *mìe* and *wó* in (15).

- (14) a. Nyè / Wò / éya xoxo sia-yé wɔ devi-nu sia. 1sG.(s) / 2sG.(s) / 3sG.(s) old DEM-FOC do child-thing DEM.
 'This old I / you / he did this childish thing.' (literally) (Ewe)
 (Agbedor 1996:23) ex. 10, modified
 - b. *Mè / è / é xoxo sia-yé wo devi-nu sia.
 1SG.(w) / 2SG.(w) / 3SG.(w) old DEM-FOC do child-thing DEM.
 'This old I / you / he did this childish thing.' (intended)
 (Agbedor 1996:23) ex. 11, modified
- (15) a. Míawó / Miawó / Wóawó xoxo sia-yé wo devi-nu sia.
 1PL.(s) / 2PL.(s) / 3PL.(s) old DEM-FOC do child-thing DEM.
 'This old we / you / they did this childish thing.' (literally)
 - b. *Míe / Mìe / Wó **xoxo** sia-yé wɔ devi-nu sia. 1PL.(w) / 2PL.(w) / 3PL.(w) old DEM-FOC do child-thing DEM. 'This old we / you / they did this childish thing.' (intended)

A similar contrast holds in object position, where the first, second and third person strong singular pronouns, *nyè*, *wò* and *éya* in (16a) can be modified by the adjective *xoxo*. This modification does not obtain with the weak first, second and third person weak pronouns *mè*, *è* and *é* in (16b). Again, akin to their singular counterparts, both strong plurals, *míawó*, *mìawó* and *wóawó* as well as the weak plurals, *míe*, *mìe* and *wó* exhibit the same pattern in (17).

(16) a. Kofi fo nyè / wò / éya xoxo sia. Kofi beat 1sG.(s) / 2sG.(s) / 3sG.(s) old DEM
'Kofi beat this old me / you / him.' (literally) (Italian)

(Agbedor 1996:24) ex. 12, modified

- b. *Kofi fo-m /è /é xoxo sia. Kofi beat-1SG.(w) / 2SG.(w) / 3SG.(w) old DEM 'Kofi beat this old me / you / him.' (intended) (Agbedor 1996:24) ex. 13, modified
- (17) a. Kofi fo míawó / mìawó / wóawó xoxo sia. Kofi beat 1PL.(s) / 2PL.(s) / 3PL.(s) old DEM 'Kofi beat this old us / you / them .' (literally)
 - b. *Kofi fo míe / mìe / wó xoxo sia.
 Kofi beat 1PL.(w) / 2PL.(w) / 3PL.(w) old DEM
 'Kofi beat this old us / you / them.' (intended)

In addition to adjectival modification, intensifiers can also be used. In order to emphasize a pronoun contrastively with an intensifier, a strong pronoun, not weak is used; shown with the singular and plural forms in (18) and (19).

- / éya (18)Nyè /Wò kon di-m Kofi le. a. 1SG.(s) / 2SG.(s) / 3SG.(s) INT search-PROG Kofi be. ' I / You / He (in particular) is the one Kofi is looking for.' (Agbedor 1996:26) ex. 24, modified b. *Mè / è / é kon di-m Kofi le. 1SG.(w) / 2SG.(w) / 3SG.(w) INT search-PROG Kofi be. 'I / You / He (in particular) is the one Kofi is looking for.' (intended) (Agbedor 1996:26) ex. 25, modified (19)Míawó / Mìawó / Wóawó koŋ di-m Kofi le. a. 1PL.(s) / 2PL.(s) / 3PL.(s) INT search-PROG Kofi be. 'We / You / They (in particular) are the one Kofi is looking for.'
 - b. *Míe / Mìe / Wó koŋ di-m Kofi le.
 1PL.(w) / 2PL.(w) / 3PL.(w) INT search-PROG Kofi be.
 'We / You / They (in particular) are the one Kofi is looking for.' (intended)

2.1.1.5 Coordination

Coordination involves the linking of two or more elements (conjuncts or conjoints). Coordination in English is usually signaled by *and*, *or*, *but*. In Italian, a strong pronoun can be linked with an NP (20a) as well as another strong pronoun (20b). By contrast, a strong pronoun and a weak one cannot be conjoints (20c).

(20) a. Lei è Maria sono belle. she and Maria are beautiful 'She and Maria are beautiful.'

(Italian)

- b. Lei è lei sono belle.
 she and she are beautiful
 'She and she are beautiful.'
- c. Lei è *essa sono belle. she and she are beautiful 'She and she are beautiful.' (Cardinaletti & Starke 1994:47) ex. 18b

In Ewe coordinate structures, strong pronouns can be conjoined with other NPs without any restrictions. As shown in (21a), the strong singular pronouns are conjoined with the NP *Kofi*. However, the weak singular pronouns lack the ability to be conjoined with an NP as shown in (21b).

(21)	a.	Nyè	/ Wò	/ éya	kple Kofi yé fo devi-a.	
		'It was Kofi and I / you / him who beat the child.'				(Ewe)
	(Agbedor 1996:25) ex. 20, modified					
	 b. *Mè / *è / *é kple Kofi yé fo devi-a. 1SG.(w) / 2SG.(w) / 3SG.(w) and Kofi FOC beat child-DEF 'It was Kofi and I / you / him who beat the child.' (intended) (Agbedor 1996:25) ex. 21, modified 					

Like in Italian, it is also possible for two strong pronouns to be combined (22a). Whereas a strong and weak conjunct cannot be linked (22b). Also, two weak forms cannot be coordinated (22c).

(22)	a.	Nyè	kple wò	yé fo	devi-a.			
		1SG.(s	s) and 2SG.(s) FOC bea	at child-DEF			
	'It was I and you who beat the child.'							
	b.	Nyè	kple * è	yé fo	devi-a.			
		1SG.(s	s) and 2SG.(w) FOC be	at child-DEF			
	'It was I and you who beat the child.'(intended							
	c.	*Mè	kple è	yé fo	devi-a.			
		1SG.(s	s) and 2sG.(w) FOC be	at child-DEF			
		'It wa	s I and you w	who beat th	e child.'(intended)			

Plurals, whether weak or strong, do not show a disparity regarding coordinate structures. As displayed by (23), both strong and weak plural forms can be conjoined with the NP *Kofi*.

(23) a. Míawó / Mìawó / Wóawó kple Kofi míe / mìe / wó de sukuu. 1PL.(s) / 2PL.(s) / 3PL.(s) and Kofi 1PL.(w) / 2PL.(w) / 3PL.(w) go school 'We / You / They went to school with Kofi.'(Literally: We /you / they and Kofi went to school)
(Agbedor 1996:26) ex. 22, modified

b. Míe / Mìe / Wó kple Kofi mí / mì / wó de sukuu. 1PL.(w) / 2PL.(w) / 3PL.(w) and Kofi 1PL.(w) / 2PL.(w) / 3PL.(w) go school 'We / You / They went to school with Kofi.'(Literally: We /you / they and Kofi went to school)

(Agbedor 1996:26) ex. 23, modified

2.1.2 Semantics

In the previous section, it was pointed out that strong and weak pronouns differ with respect to their distribution namely, relation with verbs, ability to be modified and behaviour in coordinate structures. This section also situates the Ewe personal pronouns within Cardinaletti & Starke (1994)'s semantic distinction between pronouns; in particular, impersonal interpretation § 2.1.2.1.

2.1.2.1 Impersonal interpretation

When a pronoun has an impersonal interpretation, this means that it lacks a specific referent. According to Cardinaletti & Starke (1994), strong pronouns do not have an arbitrary interpretation, they must be referential while weak pronouns are capable of being impersonal. As discussed by Cardinaletti & Starke (1994), a number of reasons account for the imposibility of strong pronouns to have an impersonal reading. These include (a) impersonal subjects are existentially quantified; (b) impersonal reading requires specific time and referents; (c) impersonal pronouns restricts the inclusion of the speaker in their reference, among others. In most languages, this property is associated with the third person plural pronouns. As shown in the French example (24a), *ils* allows both referential and impersonal reading while *eux* cannot have an impersonal interpretation (24b).

(French)

(24)	a.	Ils m'ont vendu un livre pas cher They me sold a book not expensive 'They sold a cheap book to me.'
		referential 🗸 ; impersonal 🗸
	b.	Eux m'ont vendu un livre pas cher They me sold a book not expensive 'They sold a cheap book to me.'
		referential 🗸 ; impersonal 🗡
		(Cardinaletti & Starke 1994:51) ex. 28

In a similar manner, the weak third person plural $w \dot{o}$ in Ewe, behaves like the French *ils*. As illustrated in (25a), $w \dot{o}$ can have both referential and impersonal reading while the use of strong form $w \dot{o} a w \dot{o}$ in (25b) is ungrammatical to begin with.

(25)	a.	Wo a tenju dzra nu gbegble na mi.	
		3PL.(w) POT able sell thing spoil.REDU give 2PL.(w)	
		'They can sell something spoilt to you.'	(Ewe)
		referential 🗸 ; impersonal 🗸	
	b.	* Wóawó a teŋu dzrá nu gbegble na mì.	
		3PL.(s) POT able sell thing spoil.REDU give 2PL.(w) 'They can sell something spoilt to you.'intended	

1 1

I have discussed the distinction of Ewe pronouns into the strong and weak class following (Cardinaletti & Starke 1994)'s generalisation. In particular, I explored the distribution (where the pronoun occurs and its structural relation with the verb) as well as the semantics (interpretation). In the next section, I will delve into the distribution of the pronouns but not according to the strong and weak classification.

2.2 Distribution of personal pronouns

This section describes other distributional facts about the personal pronouns in Ewe. Focus is however, given to only singular forms; distinction with their plural counterparts¹ will be made where necessary. In addition to their distribution, I will follow the distinction of third person pronouns into "deictic", "anaphoric" and "bound" uses as suggested by Büring (2011:974). The deictic use of a pronoun is identified based on the context in which it is used. This means that the pronoun's referent changes depending on who is being refered to in the context, where an utterence-act takes place and the proximity of speaker. Anaphoric pronouns and deictic pronouns are closely related in that they also depend on contexts however, they differ from diectic pronouns in the sense that, they refer back to constituents in a sentence. Bound pronouns are those kinds of pronouns that have as antecedents a quantified DP (e.g. *every man*). As such, when a pronoun refers to a quantified DP, it has a bound use.

2.2.1 Subject pronouns

(0 -

All canonical clauses contain a subject and even in subjectless imperatives (e.g., *go home*), there is always an understood subject. At the general level, the subject may be defined as that functional element in the structure of the clause that prototypically expresses: (i) the semantic role of an agent, and (ii) the presentational status of topic (Huddleston et al. 2002). The prototypical subject has the form of an NP thus, subject pronouns in Ewe are identified on this basis. Their default position in declarative sentences is usually before the verb. This also holds for interrogatives since both structures in Ewe are the same except that the question marker occurs at the end of the interrogative sentence. See (26a) and (26b).

¹The plural forms are a combination of the weak object forms (mi, mi, wo), the particle a and the plural morpheme wo.

- (26) a. **é** lõ Kofi. 3SG love Kofi 'She loves Kofi.'
 - b. é lõ Kofi a?
 3SG love Kofi QPRT
 'Does she love Kofi?'

It can be noticed from Table 2.1, that all strong subject pronouns have only one realisation. According to Schadeberg (1985), these pronouns are read emphatically when a sentence contains no verb. As mentioned earlier, the first person pronoun, $ny\dot{e}$ is the absolute or strong form of the first person singular pronoun which is used when referring to oneself (Westermann 1965). Additionally, $ny\dot{e}$ (strong), but not me (weak) is used in negative constructions² as illustrated in (27).

- (27) a. **Nyè** me va o. 1SG.(s) NEG come NEG 'I did not come.'
 - b. *Mè me va o. 1SG.(w) NEG come NEG 'I did not come.' (Intended)

The second person strong pronoun, $w\partial$ is not positionally restricted. It occurs in the sentence initial (28a), internal i.e., post-verbally (28b) and final positions (28c). Note that the second occurrence of the first person singular, $m\dot{e}$ in (28c) changes to ma in combination with the future marker, a as a result of vowel coalescence ($m\dot{e} + a$).

(28)	a.	Wò deka yé le afeme a?
		2SG.(s) one FOC LOC home.inside QPRT 'Are you the only one at home?'
	b.	Mí de wò sukuu be na srɔ̃́ nu. 1PL.(w) put 2SG.(s) school COMP to study thing. 'We put you through school (in order) to study.'
	c.	Mè yi ma va tu wò . 1SG.(s) go 1SG.(w) come meet 2SG.(s) 'I will come back to meet you.' Lit: I will go and come and meet you

Finally, the third person pronoun, éya, is used to stress or make salient an argument. This is shown in the comparison between the third person weak pronoun (29a) and its strong counterpart (29b) which occurs sentence finally. As demonstrated in (29c), éya can occur sentence initially in combination with the focus marker when the focused constituent is pre-

²Negation in Ewe is marked with the discontinuous me...o elements also known as bipartite negation. The first part of the negative marker (*me*) occurs before the negated element while the second part of the negative marker (*o*) occurs after the negated element.

posed (*ex-situ*). In the canonical position (*in-situ*), on the other hand, *éya* occurs sentence internally (post-verbally) in (29d). Further, *éya* displays only a deictic use in (29b), (29c) and (29d) for instance, accompanied by a pointing gesture. It does not co-refer with *Kofi*; hence, it is not anaphoric (shown by different indexes) and it cannot be bound by the quantified DP *devi desiade* 'every child' in (29e).

(29)	a.	Kofi _i fo $\mathbf{\acute{e}}_j$.	
		'Kofi beat him.'	
	b.	Kofi _i fo éya _j . Kofi beat 3SG 'Kofi beat HIM.'	Deictic use
	c.	Éya _j yé Kofi _i fo kple ati. 3SG FOC Kofi beat with stick 'It is HIM that Kofi beat with a stick.'	Deictic use
	d.	Kofi _i fo éya _j kple ati. Kofi beat 3SG with stick 'Kofi beat HIM with a stick.'	Deictic use
	e.	Đevi desiade fo (*éya) / é-fe bolu. Child every hit 3SG / 3SG-POSS ball 'Every child kicked his ball'	

Concerning the weak subjects, the first person subject, $m\dot{e}$ is preverbal. According to Ameka (1991:57), this pronoun is cliticized or attached to verbs when it functions as a subject. In this use, the strong form $ny\dot{e}$ is ungrammatical. Compare (30a) to (30b).

- (30) a. **Mè** kpɔ Afi ndi sia. 1SG see Afi morning DEM 'I saw Afi this morning.'
 - b. *Nyè kpo Afi ndi sia.
 1SG see Afi morning DEM 'I saw Afi this morning.'

There are two forms for the second and third person weak singular pronouns which according to Clements (1975), are in complementary distribution. Generally, in matrix clauses, the second (\dot{e}) and third person (\dot{e}) weak subjects are used while their respective variants $n\dot{e}$ and $w\dot{o}$ are not used (Clements 1975:148-149). This can be seen in a comparison between the (a) and (b) alternatives of examples (31) to (33).

(31) a. $\dot{\mathbf{E}}_i$ va gbb nye_j. 2SG come beside 1SG 'You came to me.'

Deictic use

b.	*Nè va	gbə	nye.
	2sG come	beside	1SG
	'You came	to me.	' (Intended)

Deictic use	$\mathbf{\acute{E}}_i$ va gbo nye _j . 3SG come beside 1SG 'He came to me.') a.	(32)
	*Wò va gbo nye. 3SG come beside 1SG 'He came to me.' (Intended)	b.	
Anaphoric use	$\mathbf{\dot{E}}_i$ va eye $\mathbf{n}\mathbf{\dot{e}}_i$ dzó. 2SG come CONJ 2SG go 'You came and (you) left.') a.	(33)
Anaphoric use	$\mathbf{\acute{E}}_i$ va eye $\mathbf{w}\mathbf{\acute{o}}_i$ dzó. 3SG come CONJ 3SG go 'He came and (he) left.'	b.	

On the other hand, in embedded structrures such as with *wh*-questions, the second person $(n\dot{e})$ and third person $(w\dot{o})^3$ is used and not their respective variants \dot{e} and \dot{e} . Compare (34a) to (34b) and (35a) to (35b).

(34)	a.	nukata thing-Q-rea 'why did ye	nè Ison 250 ou leave	dzò? 3 leave .'
	b.	*nukata thing-Q-rea 'why did ye	è Ison 250 Du leave	dzò? 3 leave .' (intended)
(35)	a.	nukata thing-Q-rea 'why did sł	wò lson 350 ne leave.	dzò? g leave
	b.	*nukata thing-Q-rea 'why did sł	é ison 380 ne leave.	dzò? 6 leave ' (intended)

Another instance in which the second person $(n\hat{e})$ and third person $(w\hat{o})$ is used and not their respective variants \hat{e} and \hat{e} are in coordination structures. Consider the basic VP-coordination in (36)-(37).

³Collins (1993:164–169) offers an explanation to why the third person weak subject $w\dot{o}$ is used in *wh*questions and not \acute{e} . According to him, $w\dot{o}$ is only used when there is a filled spec CP. He assumes a T to C movement at LF, and also assumes that a *wh*-element in spec CP has a +Op feature that needs to be checked. $W\dot{o}$ is therefore an alternative non-inert form of 3SG that is used only if using the non-embedded 3SG (\acute{e}) would lead to the +Op feature of T not being checked since in his system, T is raised to AGR to check the +Op feature of T.

- (36) a. è fle molu eye nè da ε.
 2sG buy rice CONJ 2sG cook it
 'You bought rice and cook it.'
 - b. *è fle molu eye è da ε.
 2sG buy rice CONJ 2sG cook it
 'You bought rice and cook it.' (Intended)
- (37) a. é fle molu eye wò da ε.
 3SG buy rice CONJ 3SG cook it
 'She bought rice and cooked it.'
 - b. *é fle molu eye é da ε.
 3SG buy rice CONJ 3SG cook it
 'She bought rice and cooked it.' (Intended)

Examples (31a) and (32a) also represent the deictic use of the subject pronouns, whereby their interpretation is dependent on contextual information. As can be noticed from (33), $n\dot{e}$ and $w\dot{o}$ are used when the second and third person weak singular pronouns respectively, are mentioned a second time within the same sentence to refer to the same person. This is known as the anaphoric use of these pronouns. The interpretation of an occurrence of one expression depends on the interpretation of an occurrence of another. \dot{E} and $w\dot{o}$ also seems to be in complementary distribution in constructions involving conditionals (38) and quantifiers (39). In this regard, \dot{e} is neither anaphoric to *Kofi* nor bound by *no child* as shown in the (a) alternatives of (38) and (39). $W\dot{o}$ on the other hand, is anaphoric and bound. It may refer to *Kofi* in (38b) and may pick the quantifier, *no child* as an antecedent in (39b).

- (38) a. É a vivi na Kofi ne dě *é le Vasity.
 3SG POT sweet for Kofi if had 3SG LOC University
 'Kofi would be happy if he was in the University.' (Lit: It will be sweet for Kofi...)
 - b. É a vivi na **Kofi**_i ne dě $\mathbf{w} \mathbf{\hat{o}}_{i/j}$ le Vasity. 3SG POT sweet for Kofi if had 3SG LOC University 'Kofi would be happy if he was in the University.' (Lit: It will be sweet for Kofi...) Anaphoric use
- (39) a. **Đevi ade ke** me nyí tofi si ***é** fle o. child INDEF NPI NEG lick tofee REL 3SG buy NEG 'No child ate the candy which he bought.'
 - b. **Đevi ade** \mathbf{ke}_i me nyí tofi si $\mathbf{w} \mathbf{\hat{o}}_i$ fle o. child INDEF NPI NEG lick tofee REL 3SG buy NEG 'No child ate the candy which he bought.' **Bound use**

Notably, although \acute{e} is shown as not bound in the above examples, it nevertheless, has a bound use as exemplified in (40); namely, it refers to *every child*.

(40) **Devi desiade**_i fo \acute{e} - fe_i bolu. Child every hit 3SG-POSS ball 'Every child kicked his ball.'

Bound use

2.2.2 Object pronouns

The object is a core complement contrasting with subject and predicative complement. Out of the two types of object, the direct object occurs in both monotransitive and ditransitive clauses, whereas the indirect object occurs in canonical clauses only in ditransitives. Generally, the direct object may be defined as a grammatically distinct element of clause structure which in canonical agent–patient clauses expresses the patient role. Direct object arguments are associated with a wide range of semantic roles, but in other canonical clauses than those expressing agent–patient situations, the direct object has the same grammatical properties as the NP expressing the patient in agent–patient clauses (Huddleston et al. 2002). Like subjects, the prototypical object has the form of an NP which occur after the verb. Therefore, as objects, the set of pronouns m, wo and e occur post-verbally as shown in (41).

(41) a. Kofi kpɔ-**m** / **wò** / **è** . Kofi see-1sg / 2sg / 3sg 'Kofi saw me / you / him.'

The third person object singular pronoun \dot{e} has as allomorphs i and ε which are determined by the vowel of the preceding syllable. Thus, the phonological rule in (42) expresses change of $/\dot{e}/$ when it occur before i, u, ε , z, a or elsewhere. This change in sounds is exemplified in (43). Note that anytime $/\dot{e}/$ changes to take the form of any of its allomorphs, the vowel it assimilates to always maintains a low tone, even if the vowel of the preceding syllable bears a high tone as illustrated in (43b) and (43c).

- (42) Phonological rule: $\langle \hat{e} / \longrightarrow [\hat{i}] / - \hat{i} \text{ or u}$ $\langle \hat{e} / \longrightarrow [\hat{e}] / - \hat{\epsilon}, \hat{j} \text{ or a}$ $\langle \hat{e} / \longrightarrow [\hat{e}] / \hat{e} \text{lsewhere}$
- (43) a. Mè w**ù ì** . 1sg kill 3sg 'I killed it.'
 - b. Mè kpó ě.
 1SG see 3SG
 'I saw it. '
 - c. Mè tó è. 1sg pound 3sg 'I pounded it.'

Deictic use

(Schadeberg 1985:17), sect. 3

Example (43) illustrates a deictic use of the third person object pronoun. \dot{e} (changed to \dot{i}) is anaphoric with the antecedent *nufiala* 'teacher' in (44) but not bound by *sukuvi desiade* 'every child'.

(44) **Nufiala**_i fo **suku-vi desiade**_j si dzu $\mathbf{\hat{i}}_{i/*j}$. thing-teach-one.who beat school-child every REL insult 3SG 'The teacher beat every child that insulted him.' **Anaphoric use**

Object pronouns in Ewe can also occur as indirect objects (in clauses containing two objects i.e., direct and indirect) under a range if verbs such as *na* 'make, give', *tso* 'pass, take', *fle* 'buy', *de..fia* 'introduce', etc as exemplified in (45a)-(45c). Object pronouns functioning as indirect objects are mostly used to refer to receipients, which is also the case in traditional grammar.

- (45) a. Mè na devi la kpó-m.1SG make child DEF see-1SG'I made the child see me.'
 - b. Kofi xɔ nu-náná la na wò. kofi receive thing-give.REDU DEF give 2SG 'Kofi received the gift for you.'
 - c. Koku tso boolu la na ɛ.
 Koku take ball DEF give 3SG
 'Kofi passed the ball to him.'

2.2.3 Genitive

Possession is known to be difficult to capture cross-linguistically. One of the reasons for this difficulty comes from the restricted use of the term to ownership and its use in grammatical description (Ameka 1991). The terms genitive and possessive are generally used for constructions in which a noun occurs with another noun phrase denoting a possesor (Dryer 2007). While some languages mark the possessed noun (46a) others mark the possessor (46b).

(46)	a.	cān o -cīmān. John 3SG.POSS-canoe 'John's canoe.'	(Cree, Algonquian)
	h	cited in (Dryer 2007:178) ex. 82 de- ma' fu	
	0.	man-GEN pig 'The man's pig.'	(Hua, Trans-New Guinea)

cited in (Dryer 2007:178) ex. 81

Possession in Ewe is also hard to describe. It can either be nominal or verbal⁴. Adnominal possession in Ewe is expressed broadly (a) with the possessive linker, *fe* (or its dialectal variants $w \acute{o}$ in Anfoe, $b \acute{e}$ in Gbi and G $\tilde{\epsilon}$ and $m \acute{e}$ in Kpele), which occurs between the possessor and possessee; or (b) without a possessive linker but with a juxtaposition of the possessor and possessee (Ameka 1991). The genitive forms are used when possession is either alienable i.e., possession involves a conventional relationship (NP fe NP) or inalienable i.e., possession involves kinship relations and part-whole relations where the relationship is an inherent one (NP NP) in which case they either precede or follow the possessed. The first and second person forms have the option to either occur in the NP NP or NP fe NP sequence, as shown in (47) and (48).

(47)	a.	Nyè (fe) xo . 1SG POSS house 'My house.'	1SG NP fe NP
	b.	xɔ nyè. house 1SG 'My house.'	1SG: NP NP
(48)	a.	wò (fe) xɔ. 2SG POSS house 'Your house.'	2SG: NP fe NP
	b.	xɔ wò. house 1SG 'Your house.'	2SG: NP NP

On the contrary, the third person form, and their plural counterparts obligatorily require the possessive linker, fe. In this instance, it can only precede the possessed (49) and (50).

3SG NP fe NP	é *(fe) xo. 3SG POSS house 'His house '	9) a.	(49)
3SG: NP NP	⁵ xɔ é. house 3sG 'His house.' (intended)	b.	
Plurals: NP fe NP	Mía / Mìa / Wó *(fe) xɔ. 1PL / 2PL / 3PL POSS house 'Our / Your / Their house.'	0) a.	(50)

⁴I will not discuss predicative possession which goes beyond the scope of this section. Details can be found in Ameka (1991).

b. *x> Mía / Mía / Wó. house 1PL / 2PL / 3PL
'Our / Your / Their house.' (Intended)

Plurals: NP NP

In coordinated contstructions, only the NP fe NP sequence holds as illustrated in (51). Although the first and second person forms allow the NP NP sequence as shown previously in (47) and (48), when both forms are conjoined occurrence with NP NP sequence is ungrammatical (51b), unless each coordinate has an overt noun as exemplified by (51c).

- (51) a. **Nyè** kple **wò** fe xo. 1SG CONJ 2SG POSS house 'Yours and my house.' (literally)
 - b. *x> nyè kple wò.
 house 1SG CONJ 2SG
 'Yours and my house.' (Intended)
 - c. Xo nyè kple xo wò. house 1SG CONJ house 2SG 'Your house and my house.'

Notably, the NP_{possessor} NP_{possessor} structure can also be expressed in a variety of ways: (a) by the syntactic compounding of the two nominals. The structure is suprasegmentally marked by a high tone at the end (NP_{possessor} NP_{possessum} HT) (52a); (b) by definiteness marking on the possessum in some cases. The definite article in this usage may be referred to as the possessive article (NP_{possessum} DEF) (52b); (c) by the use of a possessed or possessum pronoun *to* (NP_{possessor} *to*) (52c); and (d) by the use of possessive suffixes *to*, *no*, *ví*, *si* and $d\check{e}$ (52d).

- (52) a. ŋutsu fokpă. man footwear 'Men's footwear.'
 - b. Sro la vá. Spouse DEF come 'His/her spouse came.'
 - c. Kofi tò. Kofi own 'Kofi's /Kofi's own.'

The genitive forms allow a range if interpretations. It includes kinship relations (e.g., John's sister), part-whole relations (e.g., John's hand), possession or ownership (e.g., John's sand-

wich), and various abstract relations (e.g., John's birthday). The most obvious or salient one from the earlier Ewe examples is ownership (of a house) which could be viewed from different lenses. An intepretation could be a mere description of a person's place of abode. Yet, another contexually possible interpretation is a decription of a place one hopes to acquire or own (e.g., dream house). However, when the genitive pronoun is modified with an intensifier such as ηuto^5 'very,' only one interpretation is possible namely ownership (a description of one's own house). See (53).

(53) Nyè ŋutɔ fe xɔ. 1SG INT POSS house 'My very own house.'

2.2.4 Logophoric pronoun

The Ewe pronoun, $y\dot{e}$ is reported to have evolved from the independent first person pronoun, *nye* (Heine & Reh 1984:252). Thus, (54), historically meant *you said: "I shall come"* which appears to be a case of indexical shift. However, see § 2.3.2 regarding the discussion on shifted indexicals.

(54) $\mathbf{\hat{e}}_i$ gblb be $\mathbf{y}\mathbf{\hat{e}}_i$ a va. 2SG say COMP LOG FUT come 'You said you shall come.' (Heine & Reh 1984:252) ex.1

yi is a dialectal variant of yi mostly used by the speakers of the inland dialects. Ameka et al. (2017:524) report for Avatime (kwa language spoken in Ghana) and O'Neill (2015) for Danyi (spoken in Ghana and Togo) that they, respectively, use this variant. According to (Heine & Reh 1984:252), "the emergence of the logophoric pronoun is the result of a syntactic re-analysis whereby direct speech came to be reinterpreted as indirect: the clause expressing direct speech was reanalysed as a subordinate object clause, being introduced by the complementizer *be*" (see chapter 3 for details on complementizer). Ameka (2004:7) also reveals that logophoricity in west African languages, like Ewe, "is an elaboration of a pervasive cultural practice in their grammars of triadic communication, i.e. the art of communicating with another through a third party". This form of communication is said to have originated from royal discourse where respect for the chief or king, as well as his sanctity, dictated the use of a spokesperson in communicating with the king. Triadic communication, therefore, spread to all communicative settings and left its mark on grammatical structures, such as the use of logophoric pronouns (see Yankah (1995); Ameka & Breedveld (2004) for

⁵My native speaker consultants prefer the reduplicated version of (53) i.e., Nyè η uto η uto fe xo which still means my very own house. Reduplication is only for emphasis.

more on triadic communication). Consequently, as has been observed by a wide body of researchers (Clements 1975; Hagège 1974; Sells 1987; Essegbey 1994; Dimmendaal 2001; Ameka et al. 2017), the main function of logophoric marking is to avoid ambiguity of reference between the reported speaker and someone else. In other words, a speaker indicates that he is reporting someone else's message and the logophoric marker is used to refer to that person. Importantly, the antecedent of *yè* is not always in the third person. *yè* can also be used to report a second person's speech as shown with the declarative in (55a) and interrogative (55b) respectively, and never occurs with a first person antecedent (55c).

(55)	a.	$\mathbf{\hat{e}}_i$ be $\mathbf{y}\mathbf{\hat{e}}_i$ a va.	
		2SG say LOG POT come 'You said you will come.'	Declarative
	b.	 è_i be yè_i va dó a? 2SG say LOG come arrive QPRT 'Did you say you have come / arrived?' 	Interrogative
	c.	* $\mathbf{m}\mathbf{\hat{e}}_i$ be $\mathbf{y}\mathbf{\hat{e}}_i$ a va. 1SG say LOG POT come 'I said I will come.' (Intended)	

While surveying the distribution of logophoric pronouns in logophoric languages, Hyman & Comrie (1981) came up with a person hierarchy for the pronouns ⁶. As shown in (56), the idea was that a third person subject is easily accessible for logophoric marking than a second person and in turn, a second person more accessible than the first person, which seems to be the case for Ewe as well, in at least the Ewedome and Anlo dialects⁷.

(56) **Person hierarchy**

3rd > 2nd > *1st (Hyman & Comrie 1981:33) ex. 41b

Another important distributional characteristic of $y\dot{e}$ is that it can only occur in embedded environments thus, they are disallowed in matrix clauses as shown by (57).

(57) *yè dzó. LOG leave 'He left.' (intended) (Pearson 2015:78) ex. 2

Earlier in Table 2.1, it was observed that the logophoric pronoun and its plural counterpart

⁶This corresponds to the phi feature person which I take up in section 3.5.2.

⁷In a personal communication with Felix Ameka, he mentioned that it was possible for $y\dot{e}$ to occur with the first person. This is prevalent with Ewe speakers in the Akpafu area (a village in the Jasikan Municipality in the Oti region of Ghana). However, due to inaccessibility to such a speaker, I only report information from available informats in the absence of the Akpafu data.

do not form part of the 'strong' and 'weak' distinction. What does this mean for Ewe if we consider the generalisation that (a) strong pronouns have more structure than weak pronouns (Patel-Grosz 2020) and (b) the weak pronoun is most suitable for a *de se* interpretation (Patel-Grosz 2020)? To answer this, I assume along the lines of Bimpeh et al. (2022) that the logophoric pronoun in Ewe comprises both the feature LOG (see also (von Stechow 2002)) and a variable pro compared to the regular third person pronoun which only has the free variable pro. In this sense, $y\dot{e}$ is a strong pronoun and thus, fits the first generalisation. Concerning the second generalisation, the regular third person pronoun \acute{e} does not have a *de se* interpretation (see (Bimpeh 2019; Bimpeh et al. 2022)) and thus, goes contrary to the second generalisation. It is interesting to note that other langauges like Yoruba and Igbo which employs the strong pronoun for logophoric marking do not fall out of this generalisation. The weak pronouns in the respective languages can be interpreted *de se* shown in (58).

(58) De se context: Donald Duck went to the grocery store to buy flour. Then, he mistakenly put sugar in his cart. Donald Duck went on and then, he saw a trail of sugar going up and down the aisles and thought that someone's bag had a hole in it and looked around for the guy. Donald Duck says: "I wonder who is losing sugar. Certainly, the guy who is losing sugar is stupid, and it is not me because I bought flour not sugar" Later he says "But I did not check! Let me see if it's me the stupid guy who is losing sugar." He checks in his bag and sees the sugar. Finally, he realised .

a.	Donald Duck súsú be yè / #é dzɔ-mo-vi. Donald Duck think that LOGP / ORDP exist.with-face-small	Ewo
b.	Donald Duck chèrè nà $y\acute{a}$ / \acute{o} bù ónyéńzúzù. Donald Duck think that LOGP / ORDP COP stupid.person	Lwe
	'Donald Duck thinks that he is stupid.'	Igbo
c.	Donald Duck rò pé òún / ó jé òmùgò. Donald Duck think that LOGP / ORDP COP stupid.person 'Donald Duck thinks that he is stupid.'	Yoruba
	(Bimpeh et al. 2022:5) ex. 14	

This shows that Ewe is different. Following Agbedor (1996:33), I assume that the logophoric pronoun is neutral as far as classification into strong and weak is concerned (whether syntactic or semantic). *Yè* bears the characteristics of both classes. For instance, *yè* can be modified and be focused, which is a hallmark of the strong pronouns. Example (59) illustrates the modification of *yè* by the adjective *xoxo* 'old'.

(59) Kofi nyá be Ama ble yè xoxo sia.
Kofi know COMP Ama deceive LOG old DEM
'Kofi knows that Ama deceived this old he.' (Literally)

(Agbedor 1996:33) ex. 46a

 $y\dot{e}$ can occur with both types of focus, it preceeds the argument focus marker in (60a) and occurs after the predicate focus marker in (60b).

(60)	a.	Mary _i gblo be $\mathbf{y}\mathbf{\hat{e}}_i$ $\mathbf{y}\mathbf{\acute{e}}$ dzó.	
		Mary say COMP LOG AFOC leave	
		'Mary said it was she who left.'	Argument Focus
	b.	Mary _i gblo be dè yè _i dzó.	
		Mary say COMP PFOC LOG leave	
		'Mary said she did leave.' (and not stay)	Predicate Focus

On the other hand, $y\dot{e}$ has characteristics of a weak pronoun; it can precede the verb as shown in (61).

(61) Kofi_{*i*} gblb be $y\hat{e}_i$ de sukuu egbea. Kofi say COMP LOG go school today 'Kofi said that he went to school today.' (Agbedor 1996:34) ex. 47

It was noted earlier, concerning genitives, that while the first and second person forms optionally take the possessive linker fe, the third person genitive only occurs with the possessive linker. In this regard, $y\hat{e}$ behaves like the first and second person pronouns, it may either be prefixed to the possessive linker, fe as shown in (62a) or may not (62b).

(62)	a.	$Kofi_i$	gblə	be	$y \hat{e}_i$ -fe	agbalẽ	xə-asì.
		Kofi	say	COMP	LOG-POSS	book	be-expensive
		'Kofi	said	that his	s book is ex	pensivo	e.'

b. Kofi_{*i*} gblb be $y\hat{e}_i$ -dada zb-mb. Kofi say COMP LOG-mother walk-path 'Kofi said that his mother has traveled.'

All examples of $y\dot{e}$ seen so far demonstrate that it is anaphoric; it marks coreference with a higher subject. It can also have a bound reading (63a), but not a deictic reading (63b).

(63)Hadzila desiade_i x $3-\epsilon$ -se be $y\hat{e}_i$ -fe gbe vivi. a. song-sing-one.who every take-it-hear COMP LOG-POSS voice sweet 'Every singer believes that her voice is sweet.' (literally) **Bound use** *yè a nye boolu fo la. b. LOG may be ball play one.who 'He may be a footballer.' (intended to be said after seeing a man display unique dribbling skills)

Worthy of note is that Ewe speakers use $y\hat{e}$ - $w\hat{o}$ in reference to plural antecedents. $y\hat{e}$ - $w\hat{o}$ comprises the logophoric pronoun $y\hat{e}$ and the regular plural marker, $w\hat{o}$. Thus, given the context in (64), the use of the plural marker, $w\hat{o}$, in (64b), is infelicitous when reporting on *Eli* and *Mansa*'s belief.

- (64) Context 3: Sir Nunya goes to class furious because his students have performed badly in his exams. He tells them how disappointed he is because only few people passed. Eli and Mansa are always among the best students, they believe they passed as usual.
 - a. Eli kple Mansa_i xɔ-ɛ-se be yè-wó_i dze-agbagba. Eli CONJ Mansa take-it-hear COMP LOG-PL IC-make.effort 'Eli and Mansa_i believed that they_i did well.' Anaphoric use
 - b. Eli kple Mansa xɔ-ɛ-se be *wó_j dze-agbagba. Eli CONJ Mansa take-it-hear COMP 3PL IC-make.effort 'Eli and Mansa_i believed that they_j did well.'

There is another use of $y\dot{e}$ - $w\dot{o}$ which includes the speaker even when the antecedent is singular, known as 'partial control' in English. Here, the referent of $y\dot{e}$ is not only Eli, the matrix subject but also those who passed the exam with him. Contrarily, when the plural marker, $w\dot{o}$, is used the matrix subject, Eli is not inclusive. This is shown by the contrast between (65a) and (65b).

- (65) a. Eli_i xɔ-ε-se be yè-wó_{i+j} dze-agbagba. Eli take-it-hear COMP LOG-PL IC-make.effort 'Eli_i believed that they_{i+j} did well' (Eli and Mansa /others who might have passed).
 b. Eli_ixɔ-ε-se be *wó_i dze-agbagba.
 - b. Ell $_i$ XD-E-Se De ***WO**_j dZe-agbagba. Eli take-it-hear COMP 3PL IC-make.effort Eli_i believed that they_j did well' (others, excluding Eli).

In terms of the genitive form, $y\dot{e}$ - $w\dot{o}$, unlike its singular equivalent, obligatorily require the possessive linker, *fe* shown in (66).

(66) Kofi kple Koku_i gblo be $*(y\hat{e}-w\hat{o}_i-f\hat{e})$ agbalẽ xo-asì. Kofi and Koku say COMP LOG-PL-POSS book be-expensive 'Kofi and Koku said that their book is expensive.'

In this section, I surveyed the distribution of subject pronouns, object pronouns, the genitive forms, and the logophoric pronoun. I turn to a synopsis of logophoric marking in the next section.

2.3 Overview of logophoric marking

Logophoric marking is known to be manifested in at least two broad ways: the canonical view in which a dedicated overt form is used to indicate coreference with the antecedent of an utterance; and the use of non-dedicated forms to indicate coreference with the antecedent of an utterance. I outline them subsequently.

2.3.1 The use of dedicated morphology

Hagège (1974:297), defined logophoric pronouns as used in indirect discourse to "represent the thoughts of a discourse participant or author". As such, "the reality of the reported process is imputed to the secondary speaker, from whom the primary speaker distances himself by using the logophoric pronoun" (Hagège 1974:297). Languages which make use of a dedicated form to mark logophoricity are known as 'pure' logophoric languages (Culy 1994a). Ewe is one of the west African languages to be brought into prominence on account of this kind of pronoun by Clements (1975), whose research is considered an extention of Hagège (1974)'s. According to Clements (1975), *yè* is a dedicated overt pronoun, used to mark reference to a speaker whose mental state or communicative act is reported. In accordance with Culy (1994a)'s classification of logophoric languages are reported to employ personal pronouns, four of them employ addressee pronouns, example (67), six encode logophoricity with a verbal inflection example (71) and fifteen languages are reported in the absence of data, c.f Culy (1994a:1060).

Languages with per- sonal pronouns	Languages with addressee pro- nouns	Languages with verbal inflection	Languages without data
Aghem,Angas,Babungo,Banda-linda,Bwamu,DonnoSo,Efik,Ewe,Fon,Gbandili,Gen-Mina,Ibibio,Idoma,Kuku-ruku,Lele,Mapun,Mundang,Mundani,Ngbaka,	Angas, Mapun, Pero, Tikar	Akoose, Ekpeye, Gokana, Ibibio, Moru/Logo/ Kaliko	Avatime, Dood- waayaayo, Duupa, Feroge, Kresh, Kolbila, Mundu, Ndogo, Nkon, Nyang, Nzakara, Pape, Pere, Ténhé, Yulu
Ngwo, Noni, Sara- ngambay, Sura, Tubiri, Yag Dii			

Table 2.2: 'Pure' logophoric Languages

2.3.1.1 Addressee Pronouns

Since the examples shown thus far (previous chapter and sections) involve a language with personal pronouns namely, Ewe, I will begin with languages with addressee pronouns. The data in Mapun (67) generally shows reference to an addressee. If the third person pronoun in the embedded clause refer to the addressee rather than to the speaker of the main clause, then *gwar* is used (67a). Frajzyngier (1985:33) notes that the word *gwar* occurs as an independent lexeme which means 'man.' On the other hand if the reference in the embedded clause is made to persons other than the addressee of the main clause then, *wur* is used (67b); c.f. Frajzyngier (1985:28).

(67) a. n- sat n- wur_i ni gwar_i ji. 1SG say BEN 3SG COMPL 3SG come 'I told him_i that he_i should come.' (Frajzyngier 1985:28) ex. 12b b. n- sat n- wur_i ni wur_j ji. 1SG say BEN 3SG COMPL 3SG come 'I told him_i that he_j should come.' (Frajzyngier 1985:28) ex. 12a

Also in Pero, there are two different sets of second person markers, *ka* and *peemu*, used to refer to addressees and are pragmatically determined. The former is used only when what is being said is directed to the present hearer of the conversation (68a) whereas the latter, is used in reference to an addressee of the reported conversation (68b). *Peemu* is anaphoric in the sense that it refers to a previously mentioned addressee of a reported conversation. As explained by Frajzyngier (1985:33), it is the use of one set of pronoun rather than the other that makes it possible to determine whether what is being said is directed to the present hearer or is directed to the hearer of the reported conversation.

(68)'di ko kan **ka** daklani-a. a. settle COMPL ASSOC 2PM bad-INTER 'Is it bad that he settled with you?' (Frajzyngier 1985:33) ex. 22a 'di b. ko peemu daklani-a. kan settle COMPL ASSOC 2PM bad-INTER 'Is it bad that he settled with you?' (Frajzyngier 1985:33) ex. 22b

2.3.1.2 Verbal logophoricity

The definition of logophoricity has been expanded to include verbal marking. However, verbal marking and the traditional logophoric pronouns have the same behaviour, differing

(Pero)

(Mapun)

purely in terms of the formal integration of the pronominal marking and the verb stem into one word, or their separation into two words. A marker is considered as a verbal logophoric marker if it is a verbal form (affix or clitic) used in clauses embedded under verbs of speech or thought which indicates that one of the arguments of the subordinate clause is coreferential with one of the arguments (speaker or source) of the matrix clause. In addition, the use of this form must be obligatory in the contexts in which it is possible (Curnow 2003:2). Under this definition, Curnow (2003) distinguishes between three types of verbal logophoricty: logophoric cross-referencing, logophoric first person marking, and logophoric verbal affixes. In terms of logophoric cross-referencing, languages in this category have a system of verbal cross-referencing of person and an additional verbal form to specifically mark logophoricity. For example, the Bantu language Akoose, spoken in Nigeria, has verbal prefixes which for human referents mark person form obligatorily shows that the subordinate subject is different from the matrix subject; coreference is therefore, shown using a special logophoric prefix $m \dot{a}$.

- (69) a. à-hóbé ă **á**-hàg. he-said RP he-should go 'He_i said that he_j should go.' (Curnow 2003:2) ex. 3
 - b. à-hóbé ă **mó**-hàg. he-said RP LOG-should go 'He_i said that he_i should go.' (Curnow 2003:2) ex. 4

(Akoose)

- Also in the Nilo-Saharan language Kaliko, spoken in Zaire; the verb prefixes indicate person and number of the subject, with third person singular being zero (\emptyset) and a special logophoric cross-referencing prefix $y\bar{I}$.
- (70) a. tà tá $(\epsilon \delta y \bar{I}) \not O$ -ātsā tá. 3SG+speak CPL he 3SG-come CPL 'He_i said that he_j came.' (Curnow 2003:2) ex. 5 b. tà tá yī-ātsā tá.
 - 5. ta ta yi-atsa ta. 3SG+speak CPL LOG-come CPL'He_i said that he_i came.' (Curnow 2003:2) ex. 6

(Kaliko)

Another type of verbal logophoric marking, referred to here as a logophoric verbal affix, is the least common verbal marking of logophoricity, being reported only for two closely related Niger-Congo languages of Nigeria, Gokana (Hyman & Comrie 1981) and Kana. De-

spite its rarity, it is probably the most discussed verbal logophoric marking. The logophoric verbal affix $\dot{\epsilon}$ is a special verb suffix used to show coreference of some subordinate argument with an argument of a matrix clause of speech or thought; the presence of this suffix contrasts with its absence as shown in (71) below.

- (71) a. aè kɔ aè dò- $\hat{\mathbf{e}}$. he said he fell-LOG 'He_i said that he_i fell.' (Curnow 2003:6) ex. 16
 - b. aè kɔ aè dò. he said he fell 'He_i said that he_j fell.' (Curnow 2003:6) ex. 17

(Gokana)

A quite different strategy is the use of a first person verb affix to indicate logophoricity. In such languages the subject of a subordinate clause under a verb of speech or thought is coreferential with a matrix clause argument by using a verbal inflection on the subordinate verb which in independent clauses shows that the subject is first person. For example, in the Nilo-Saharan language Karimojong, spoken in Uganda, a subordinate verb is marked with first person to indicate logophoricity (Novelli 1985) cited in (Curnow 2003). The same phenomenon is also found, for example, in the Niger-Congo language Donno Sɔ, spoken in Mali and Burkina Faso (Culy 1994b). Donno Sɔ also has a system of verbal affixation where finite verbs (in matrix clauses) can agree in person and number with their subjects. Thus, in (73), the first person verbal affix agrees with the (third person) logophoric pronoun *inyemɛ* whereas in (72) the first person verbal affix agrees with the (third person) simple pronoun.

(72)	àbu papà tolim εbè àlózì iŋèz Morotó. AUX father say that 1SG.go.non-PST 3SG Moroto 'The father _i said that he _i was going to Moroto.'	(karimojong)
	(Novelli 1985) cited in (Curnow 2003:4) ex. 9	
(73)	Oumar [minne inyeme mõ gendezem] gi. Oumar field LOG POSS regard.PROG.1SG said 'Oumar _i said that he _i will look at his _i field.'	(Donno Sɔ)
	(Culv 1994b:123)	

2.3.2 The use of non-dedicated morphology

The second aspect of logophoric marking involves the use of non-dedicated morphology to refer to an individual whose attitude is communicated. Languages in this category have the logophoric use as a secondary function. Culy (1994a) classified them as 'mixed' logophoric

languages. I present an overview of variations reflected in this strategy of logophoric marking. First, the English personal pronouns *he* or *him* may have a logophoric use. As shown in (74), *he* and *him* may refer to the matrix subjects *Kofi* and *Ama* respectively.

(74) a. Kofi_i said (that) he_i saw Ama_j. (English) b. Kofi_i said (that) Ama_j slapped him_i .

A number of languages also employ reflexive pronouns for the logophoric function. English for instance, does this but with restrictions. In accordance with Clements (1975:145)'s explanation for (75), the difference in acceptability of such pairs depend on the semantic consideration of whose point of view is expressed by the clause that contain the reflexive. Thus, in (75a), *John* may be understood as having reflected on the proposition uttered by *Mary* while in (75b), such interpretation may be unavailable.

a. Mary_i said to John_j that physicists like himself_j were a godsend. (English)
b. *Mary said about John that physicists like himself were a godsend. (Clements 1975:145) ex.12

According to Stirling (1994), apart from discovering distinct pronominal forms in African languages, Hagège (1974) also studied indirect reflexives, also known as Long-Distance Reflexives (LDRs), in Latin and Japanese. These reflexive pronouns have their antecedents outside of a local domain and only subjects qualify as their antecedents. Stirling (1994) notes that LDRs appear to be restricted to semantically defined contexts in which logophoric pronouns occur, and for this reason, analogies were drawn between them. According to Clements (1975:142), as exemplified in (76), the reflexive pronoun *sibi* in Latin, refers uniquely to Cicero, and the non-reflexive pronoun *eum*, to someone else. Similarly, the Japanese reflexive, *zibun* also allows a speaker to avoid referential ambiguity between its antecedent *John* and some other individual (76b).

Cicero dixit eum sibi maledixisse. (76)a. Cicero say 3SG 3SG insult 'Cicero_{*i*} said that he_i (eum) had insulted him_i (sibi)'. (Latin) (Clements 1975:142) ex. 7 John-wa zibun-o nikunde-iru onna b. kekkon-sita. to John-TOP self-DO hate woman with married 'John_i married a woman_i who hates him_i." (Japanese) (Huang 2002:217) ex.17

The logophoric use of long-distance reflexives has been identified in Icelandic as well as other East Asian languages including Korean and Mandarin Chinese. Icelandic has two anaphoric elements: the complex, *sjálfan sig* and the simple *sig*. *Sig* is a third person form in-

variant of gender and number and has a logophoric use (Sigurjónsdóttir & Hyams 1992:363). In (77a), the antecedent of *sig* represents the person (distinct from the speaker) whose wish or opinion is reported. Like in Japanese, the Korean (77b) and Mandarin Chinese (77c) *caki* and *ziji* respectively, are used in a sentence or discourse to report the attitude of an internal protagonist, as opposed to an external speaker (Huang 2002).

(77)	a.	Skoðun Önnu _i er að sig _i vanti _{subj} hæfileika. opinion Anna's is that REFL lacks talent 'Anna's _i opinion is that she _i lacks talent.'	(Icelandic)
		(Sigurjónsdóttir & Hyams 1992:373) ex. 18a	
	b.	Kim-nun Inho-kacaki-ulchingchahanun-kes-ultulessta.Kim-TOP Inho-NOM self-ACC praise-fact-ACCheard'Kim _i heard Inho praising him _i .'	(Korean)
		(Huang 2002:216) ex.15	
	c.	Xiaoming zuiba guan bu zhu ziji . Xiaoming mouth control NEG RV self 'Xiaoming _i , mouth _j cannot control him _i .'	(Chinese)
		(Huang 2002:217) ex.16	

Another twist in the variation of 'mixed' logophoric languages comes from languages such as Yoruba (Adesola 2005), Jula (Kiemtoré 2020), and Abe (Koopman & Sportiche 1989), which have simple and emphatic pronouns but employ the emphatic pronoun for logophoric purposes. For instance, in Jula, the emphatic third person *ale* functions as a logophoric pronoun by referring to the matrix subject 'Peter', the person whose words is being reported, and not to the subject of the embedded clause 'Mary' or somebody else (78a). Similarly, in Yoruba, *oun* is obligatorily required to take and corefer with the designated argument Olu, in the matrix clause as its argument (78b).

	Piyeri _i be a lon ko Mariyamu _j ye ale _{i/*j} neni.	(78) a.
(Inla)	Peter PRS CORR know COMP Mary PFV LOG insult	
(Jula)	Peter _i knows that $Mary_j$ insulted \min_i .	
	(Kiemtoré 2018:5) ex. 8b	
	Olú _i ti kéde pé ó _{*i} ri bàbá òun _i .	b.
	Olu ASP announced that he see father him	
(Yoruba)	'Olu _i has announced that he_j saw his_i father.'	
	(Adesola 2005:163) ex. 1b	

Another diversity in languages without a dedicated morphology concerns the use of first person pronouns (shifted indexicals) in languages such as Amharic (Schlenker 1999) or in Zazaki (Anand & Nevins 2004). According to Schlenker (1999:14), Amharic's *I*, is used to refer to the author of the actual speech act and to the reporter of the reported speech act

namely John in (79). While in Zazaki, the forms *I*, *you*, *here* and *yesterday* are reported to be shiftable in the scope of the verb *zano* 'say' (Anand & Nevins 2004:21). I focus on the first and second person pronouns, *I* and *you* respectively, shown in (80). The deictic markers *yesterday* and *here* do not form part of the discussion at issue.

- (79) Situation to be reported: John says "I am a hero."
 - a. Jon jəgna nə-ññ yɨl-all John hero be.PF-1SO 3M.say-AUX.3M
 'John says that (I am, John) is a hero.' (Amharic): First person shift (Schlenker 2003:68) ex. 53
- (80) Heseni_i (mi_k-ra) va ke $\epsilon \mathbf{z}_{i/k}$ dewletia. a. Hesen.OBL (I.OBL-to) said that I rich.be-PRES 'Hesen said that (I am, Hessen is) rich. (Zazaki): First person shift (Anand & Nevins 2004:21) ex. 4 Heseni_i b. (Ali_k-ra) va ke $\mathbf{ti}_{i/k}$ dewletia. Hesen.OBL (Ali.OBL-to) said that you rich.be-PRES 'Hesen said that (Ali is, you are) rich. (Zazaki): Second person shift
 - (Anand & Nevins 2004:21) ex. 5

Messick (2017) discusses another type of indexical shift in Telugu where third person pronouns with first person agreement shifts. In this language, only the agreement morphology shifts, with nothing special happening with the subject, which is a regular non-shifted pronoun. Shown in (81), only the agreement morpheme shifts while the subject is a non-shifted and non-logophoric third person pronoun.

(81)	Rani [tanu exam pass ajj-aa-n-ani]	nam-mu-tundi.	
	Rani [3SG exam pass happen-PAST-1SG-COMF	P] believe-PAST-F.SG	
	'Rani believes that she passed the exam.'		(Telugu)
	(Messick 2017:25), ex. 11		

In the strict sense, shifted indexicals are not logophors. However, these two can be likened to each other on grounds that they are both used in reporting attitudes and for that matter, express a *de se* thought (one that an attitude holder has about himself or herself). Also, the basis for their comparison stems from the reason that shifted indexicals are restricted to those contexts that logophoric pronouns may occur. For instance, like logophoric pronouns, shifted indexicals occur in the scope of communicative and mental verbs, and they seem to be licensed by the complementizer (Messick 2017:9). Moreover, logophoric pronouns and shifted indexicals have a similar distribution i.e. they occur typically in embedded environments.

Worthy of mention is that in English, for instance, there exist the use of a null form (\emptyset) like PRO (the null subject of an embedded infinitive)⁸ which parallel instances of logophoricity (82).

(82)	a.	Kofi _{<i>i</i>} claimed PRO _{$i/*j$} to leave.	(English)
	b.	Kofi _{<i>i</i>} be $\mathbf{y}\mathbf{\hat{e}}_{i/*j}$ dzó.	
		Kofi say LOG leave	
		'Kofi said that he (Kofi) left'	(Ewe)
		(Clements 1975: p.142)	

Although logophoric marking involving dedicated and non-dedicated forms are similar, for which one cover term is used, there exists differences between them, which raises doubts on the productiveness of subsuming them under one notion. As a matter of fact, researchers such as Sells (1987); Von Roncador (1992); Culy (1994a); Nau (2006), among others, have argued for the narrow use of the term logophoricity to only include the use of dedicated morphology while logophoricity in the broader sense implies the use of non-dedicated morphology. Culy (1994a:1055), for instance, suggests that the "accepted logophoric use of reflexives and other pronouns is a phenomenon distinct from 'true' logophoricity." In effect, a clear and fine-grained notion of what exactly logophoricity is, as well as how languages, especially Ewe, differ in this respect is essential for researcher's discussion of the phenomena. I explore some of the differences between 'pure' logophoric languages particularly, Ewe and 'mixed' logophoric languages.

2.3.3 Differences between Ewe and 'mixed' logophoric languages

2.3.3.1 *yè* vs. long distance reflexives

Ewe's *yè* differs from long distance reflexives. This observation has been shared by researchers such as Clements (1975) and more recently by Simeonova (2020). Cross-linguistic characteristics of long-distance reflexives include the following: (a) Local use; (b) only sloppy reading under ellipsis; (c) obligatory *de se* interpretation and (d) restriction to one antecedent. I discuss these subsequently.

(a) Local use

In languages where the long-distance reflexive pronoun can have a logophoric use (83b), the designated reflexive pronoun additionally has its local use (83a), shown in the Mandarin Chinese examples. Note however, that in these languages, there exists a local reflexive which does not have a logophoric use (83c).

⁸I do not categorize PRO because it is null and cannot be captured under any of these broad categories either 'pure' or 'mixed' logophoric languages.

(83)	a.	Zhangsan _i piping-le $ziji_i$. Zhangsan criticized-Perf self	
		'Zhangsan criticized himself.'	(Mandarin): Local use
		(Huang & Liu 2000:162) ex. 62	
	b.	Zhangsan _i juede Lisi _j zai piping ziji _i . Zhangsan think Lisi at criticize self 'Zhangsan thinks Lisi is critisizing him.'	(Mandarin): Non-local use
		(Huang & Liu 2000) ex. 51	
	c.	Zhangsan _i rewei Lisi _j hen ziji _{i/j} / taziji _{*i/j} . Zhangsan think Lisi hate self/himself 'Zhangsan thinks that Lisi hates himself/him.'	(Mandarin): Non-log use
		(Huang & Liu 2000) ex. 3a.	

On the other hand, in Ewe, it is not the case that $y\dot{e}$ has a local use or doubles as the reflexive in the language. As mentioned earlier, $y\dot{e}$ typically occurs in embedded environments and thus, it cannot refer to Kofi, neither is its occurrence in the construction grammatical, shown in (84a). In addition, examples (84b) and (84c) respectively show the non-local use and lack of non-logophoric use of $y\dot{e}$.

(84)	a.	*Kofi lõ yè. Kofi love LOG	
		'Kofi loves himself.' (intended)	(Ewe): Local / reflexive use of log
	b.	Kofi _i súsú be Ama _j me lo $\mathbf{y} \mathbf{\hat{e}}_{i/*j/*}$ Kofi think COMP Ama NEG love LOG 'Kofi thinks that Ama doesn't love him'	^k 0. NEG (Ewe): Non-local use
	c.	Kofi lõ i *yè / e_j . Kofi love LOG / 3SG	
		Kofi loves him. (intended)	(Ewe): Non-log use

The logophoric form in Ewe is morphologically unrelated to the reflexive and these two forms are dissimilar in terms of the syntactic and semantic conditions governing their occurrence (Clements 1975:147). Reflexives in Ewe are formed by suffixing (first and second person forms) or prefixing (the remaining personal pronouns) the form *dokui* 'self' to the genitive forms of the personal pronouns. See (85) for the full range of reflexives.

(85) **Paradigm of Ewe reflexives**:

dokui-nye 'myself' dokui-wò 'yourself' é- dokui 'himself, herself, itself' miá- dokui 'ourselves' mià- dokui 'yourselves' wó- dokui 'themselves'

(Clements 1975:149)

Unlike in Chinese, the reflexive form in Ewe cannot be long-distance bound and it is restricted solely to the reflexive function. Compare (86a) to (86b).

(86) a. Kofi lõ é-dokui. Kofi love 3sG-self 'Kofi loves himself.' (Ewe): Reflexive (local) (Clements 1975:150) ex. 19
b. *Kofi be é-dokui dzo. Kofi say 3sG-self go 'Kofi said that he left.' (intended) (Ewe): Reflexive (non-local) (Clements 1975:150) ex. 20

(b) Only sloppy reading

LDRs only allow a sloppy reading when embedded under VP ellipsis shown by the Mandarin example in (87a) i.e., *Wangwu feels that Lisi often cheated him (Wangwu)*. The strict reading: *Wangwu feels that Lisi often cheated Zhangsan*, is unavailable. In Ewe, first noted by Culy (1994a), yè is ambiguous between the strict (*others do not believe that Ama loves Kofi*) and sloppy reading (*others do not believe that Ama loves them*) under the focus sensitive particile, *only* in (87b). See also Bimpeh & Sode (2021) for details on the strict-sloppy readings of yè.

(87) a. Zhangsan juede Lisi chang qipian ziji, Wangwu ye shi. Zhangsan feel Lisi often cheat self Wangwu also be 'Zhangsan feels that Lisi often cheated him, and so does Wangwu.' (Chinese) (Huang & Liu 2000) ex. 103
b. Kofi ko yé xɔ-ε-se be Ama lõ yè. Kofi only FOC take-it-hear COMP Ama love LOG 'Only kofi believes that Ama loves him.' (Ewe)

(Culy 1994a:1082) ex. 41

(c) Obligatory *de se* interpretation

LDRs are interpreted obligatorily *de se*. The *de re l de se* distinction illustrates how formal theories evolve in response to new pieces of linguistic observation. Importantly, these linguistic observations not only include the well-formedness of a sentence, but also its truthvalue judgment offered by linguists given a corresponding scenario. This means that given (88), *ziji* in (88a) can only be interpreted from *Zhangsan*'s first-person's point of view known as the *de se* reading. Unlike in (88b) where the use of *ta* is interpreted from his third-personal perspective, which means that he is unaware that his purse was stolen, this is known as the *de re* reading. On the other hand, Pearson (2015) shows for Ewe that *yè* is ambiguous between a *de se* and *de re* interpretation in (89). This means, *yè* can be used to describe an attitude holder's belief even if he lacks awareness of himself.

- (88) Zhangsan sees a pickpocket running away with his own purse without realising it is his own purse and decides to report to the police. A speaker who knows that the purse actually belongs to Zhangsan, can report on the matter with the following:.
 - a. Zhangsan_i shuo pashou tou-le **ziji**_i-de pibao. Zhangsan shuo pickpocket steal-perf self's purse 'Zhangsan_i said that the pickpocket_j stole his_i purse.' (Huang & Liu 2000) ex. 40
 - b. Zhangsan shuo pashou tou-le **ta**-de pibao. Zhangsan shuo pickpocket steal-perf self's purse 'Zhangsan_i said that the pickpocket_j stole his_k purse.' (Huang & Liu 2000) ex. 39
- (89) John has just found an old paper that he wrote, but he doesn't realize that he is the author of the paper. He reads it and is impressed by what a good paper it is. He says that "whoever wrote this paper would receive an award" (Pearson 2015:79).
 - a. John gblo be yè le cleva.
 John say COMP LOG COP clever
 'John said that he was clever.'
 (Pearson 2015:80)

(d) Restriction to one antecedent

A final property of LDRs is that they allow multiple LDRs in the same clause and crucially, they permit coreference with only one antecedent when embedded under different attitude predicates (Culy 1997; Simeonova 2020). For instance, in Korean (90), where there are two occurrences of *caki*, only one antecedent each is allowed as shown in (90a) and (90b), and disallows different antecedents in (90c) - (90d). This is in contrast to Ewe, as illustrated in (91) which allows the readings that Korean disallows. The two logophoric pronouns in the same clause have different antecedents. As Culy (1997:849) explains, "the two pronouns are even arguments of the same predicate."

(90)[Mary-ka caki-uy chayk-ul caki-uy chinkwu-eykey John-i [Tom-i John-nom Tom-nom Mary-nom self-gen book-acc self-gen friend-to cwuessta-ko] sayngkakhayssta-ko] malhayssta. gave-comp thought-comp said 'John said that Tom thought that Mary gave self's book to self's friend.' '... Mary gave self (=Tom)'s book to self (=Tom)'s friend.' a. '... Mary gave self (=John)'s book to self (=John)'s friend.' b. *'... Mary gave self (=Tom)'s book to self (=John)'s friend.' с. d. *'... Mary gave self (=John)'s book to self (=Tom)'s friend.' (Korean)

(Park 2018:32) ex. 19

- (91) Kofi_i xɔ- ε -se be Ama_k gblɔ be $\mathbf{y}\mathbf{\dot{e}}_{i/k}$ fo $\mathbf{y}\mathbf{\dot{e}}_{i/k}$. Kofi take-3SG-hear COMP Ama say COMP LOG beat LOG
 - a. 'Kofi_i believed that Ama_k said that he_i beat her_k .'
 - b. 'Kofi_i believed that Ama_k said that she_k beat him_i .' (Ewe) (Culy 1997:850) ex. 10

2.3.3.2 yè vs. Emphatic pronouns

In this section, I show distinctions between Ewe and languages that make use of emphatic forms for logophoric marking. Concerning these, their simple forms (regular third person) are ambiguous between a coreferential and non-coreferential reading. On the contrary, as stated by Clements (1975), such ambiguity does not exist with the third person form in Ewe. It is non-coreferential with the attitude holder (individual whose attitude is communicated). Compare Jula in (92a) to Ewe in (92b). Strikingly, $y\dot{e}$ does not have an emphatic use. Ewe has a third person emphatic pronoun, $\dot{e}ya$ which does not have a logophoric function either. It cannot be used to refer to Kofi and as (93a) shows, it is ungrammatical; only in combination with the focus marker ($y\dot{e}$) redeems the construction (93b).

(92)	a.	Mariyamu _i kó $\mathbf{a}_{i/j}$ taga-la. Mary say 3SG go-PFV 'Mary _i said that she _j / he _j left.'	(Jula)
		(Clements 1975:142), (Kiemtoré 2018)'s adaptation	
	b.	Kofi _i be $\mathbf{\acute{e}}_{*i/j}$ dzó. Kofi say 3SG leave 'Kofi said he is leaving.'	(Ewe)
		(Clements 1975:142)	
(93)	a.	*Kofi be éya dzó. Kofi say 3SG leave 'Kofi said he is leaving.'	(Ewe)
	b.	Kofi _i be éya $_{*i/j}$ yé dzó. Kofi say 3SG FOC leave 'Kofi said it is he who left.'	
		(Clements 1975:142), adapted	

Worthy of note is that unlike in Ewe, the emphatic forms in Yoruba and Jula also have a non-logophoric use as shown in example (94).

(94) a. **òun** ló fa kiní yen. 3EMP is 3SG pulled.thing that

(Jula)

'It was he that caused that thing.'(Yoruba): Non-log use(Bamgbose 1966) cited in (Culy 1994a:1058) ex.3bAdama $_i$ ye ale_j Adama $_i$ ye ale_j yé.Adama PFV 3EMP see'Adama saw him.'(Jula): Non-log use(Kiemtoré 2018:4) ex. 6b(Jula): Non-log use

Emphatic forms used for logophoric purposes are obligatorily marked *de se* while Ewe is not (shown earlier in §2.3.3.1). This is shown in the Jula example in (95) where the *de se* reading of *ale* is excluded (95b). As illustrated in (95a), the third person form *a* also seems incompatible with a *de se* context; only (95c) can be used to report Madu's speech. Similarly, Adesola (2005:183) claims that Yoruba uses different pronouns to represent the readings in which a 'source' has self-knowledge and one in which he is unconscious about himself. More concretely, the use of *òun* only yields a *de se* reading i.e., the subject of the propositional attitude verb is aware of self-reference (96a) while the use of *rè*, a weak pronoun, other than the regular third person pronoun, *ó*, yields a non-*de se* reading (96b).

- (95) Madu once found under his bed an old box filled with letters. He read one of them, and was impressed by the beauty of the writing. However, the letter was not signed, so that the author could not be identified. Madu admired the writing skill of the author of the letter but failed to realize that it was he himself who had written the letter while in college. He says: "Whoever wrote this letter is intelligent." (Pearson 2015), (Kiemtoré 2018)'s adaptation.
 - a. ?Madu_i ko \mathbf{a}_i hakili ka di. Madu say 3SG mind COP good 'Madu said that he is intelligent.' (Kiemtoré 2018:9), ex 18c

b.

b. #Madu ko ale hakili ka di.
 Madu say LOG mind COP good
 'Madu said that he is intelligent.'

(Kiemtoré 2018:9), ex 18b

- c. Madu ko mogo min ye letiri sebe hakili ka di. Madu say person REL PFV letter write mind COP good 'Madu said that whoever wrote that letter is intelligent.' (Lit: Madu said that the person who wrote the letter is intelligent.) (Kiemtoré 2018:9), ex 18a
- (96) a. Olú gbàgbó pé ilé **òun** ti wó.
 Olu believe that house he ASP fall
 'Olu believes that his house has collapsed.' (Yoruba)

(Adesola 2005:183), ex 33c

b. Olú gbàgbó pé ilé rè ti wó.
Olu believe that house he ASP fall
'Olu believes that his house has collapsed.'
(Adesola 2005:183), ex 33d

Furthermore, Kiemtoré (2020) reports that in Jula, there is a contrastive focus meaning associated with *ale*; it is typically present in correcting statements. This is not a surprising function of emphatic markers. As mentioned earlier, the emphatic pronoun in Ewe *éya* is used in combination with the focus marker to perform similar function. The dialogue in (97), shows the use of *ale* to correct the addressee of the statement that *Abi has come*.

- (97) a. A: Jon na-na? Afi waa Abi? who come-PFV Afi or Abi 'Who has come? Afi or Abi?'
 - b. B: Afi le na-na. Afi FOC come-PFV 'Afi has come.'
 - c. A: Abi waa? Abi PART 'Abi?'
 - d. B: onhon **ale** na na. no 3EMP NEG.PFV come 'No, She has not come.' (Kiemtoré 2020:55) ex. 39

Ale induces a contextual set of alternatives for its antecedent in (98). This function is similar to that of the focus-sensitive marker *only*. Its use show that within a determined set of alternatives, only the element it focuses i.e. *Adama* holds.

(98) a. Adama_i na-na. ale_i ye an fo. Adama come-PFV 3EMP PFV 1P1 greet 'Adama came. He greeted us.' (No one else than Adama greeted us) (Kiemtoré 2020:48) ex. 32a
b. ale donron na-na

3EMP PART come-PFV 'Only S/HE has come (no one else has come.)' (Kiemtoré 2020:52) ex. 35b

Worthy of note is that the form *le* in *ale*, is the focus marker in the language. Again, in this regard, the ability of *ale* to be used for contrastive focus is not out of place. In the same vein, Adesola (2005:162) suggests that ∂un can be focused. It can be used as part of the sentence that answers *wh*-questions which qualifies it as semantic focus in (99). The use

(Yoruba)

Jula

of *oun* connotes that "its referent is the topic of discussion out of several possible choices" (Adesola 2005:167).

(99) a. **òun** nkó? he QPRT 'Where is he?' (Yoruba) (Adesola 2005:167) ex. 5
b. **òun** ti lo sí Boston. he ASP go to Boston 'He has gone to Boston.'

(Adesola 2005:167) ex. 6

In comparison to Jula and Yoruba, Ewe's ye does not mark focus; neither is it used contrastively. See example (100). The focus marker ye may be similar to ye but they differ in tone. Moreover, ye is not historically related to ye.

(100)	a.	Ame ka yé va? person QPRT FOC come 'Who came?'	(Ewe)
	b.	Kofi yé va. Kofi FOC come 'KOFI came.' (Lit: it is Kofi who came)	
	c.	Ama a? Ama QPRT 'Ama?' (Lit: Is it Ama?)	
	d.	ao, Kofi yé no, Kofi FOC 'No, it is KOFI.'	

Another difference between Ewe and languages that use the emphatic pronoun for logophoric purposes is the fact that Ewe lacks the infinitival as such, the embedded subject is always spelled out as the logophoric pronoun while in Yoruba and Jula for instance, the infinitival exists. Thus, in what is known as control structures, depending on the verb, there is the possibility of either spelling out the embedded subject as the emphatic pronoun in a finite clause as shown in (101a) and (102a) or assuming a null subject in an infinite clause shown in (101b) and (102b).

(101)	a.	Zan ye layidu	ta	ko	ale	bena Maria	am furu			
		John PFV promise	e take	e COMI	P LOG	FUT Mary	marry			
		'John promised to	o mar	ry Mar	y.' (L	it. John tool	k the pror	nise that	he will n	ıarry
		Mary)						(Jula):	finite, +I	LOG
	b.	Zan tun be a	fɛ	[ka PF	RO M	ariam furu]				

Mary

marry

John PST COP 3SG at INF

'John tried to marry Mary.' (Lit. John was at it to marry Mary) Infinite,-LOG

(Alassane Kiemtoré, p.c)

(102)	a.	Adé sọ wípé òun ni ó fệ Olá.	
		Ade say that he LK/FOC RP marry Ola 'Ade said that he married Ola.'	(Yoruba): finite, +LOG
	b.	Adé se ìlérí láti PRO fé Olá. Ade make promise for that marry Ola	
		'Ade promised to marry Ola.'	Infinite, -LOG
		(Mary Amaechi, p.c)	

Also in Yoruba, when the embedded subject is spelled out overtly as the emphatic pronoun ∂un , it occurs in both subject and object control constructions (103) whereas Ewe's $y\dot{e}$ can only occur in what is known in English as subject control constructions (104).

(103)	a.	$Oliu_i$ sèlérifún Ade NO_{i+LOG} pé $olim{oun_i}$ ńbò.Olu promise for Adethat hePROG come'Olu promised that he is coming.'(Yoruba): Subject control				
		(Adesola 2005:186) ex. 38a				
	b.	Adé so fún Olé $_i$ pé kí òun $_i$ lo ki bàbá Ojó.Ade say to Olu that that he go greet father Ojo'Olu told Ade that he should visit Ojo's father.' Object control				
		(Adesola 2005:186) ex. 38b				
(104)	a.	Kofi _i dze-agbagba be $\mathbf{y}\mathbf{e}_{i/\star j}$ a wo do nyuie le sukuu. Kofi IC-make.effort COMP LOG POT do work well in school				
		'Kofi tried to do well in school.' (Ewe): Subject control				

b. Kofi_i zľ-dzi na Mary be $*\mathbf{y}\mathbf{e}_i$ a / $\mathbf{n}\mathbf{\acute{e}}_{*i/j}$ wo do nyuie le sukuu. Kofi hit-top for Mary COMP LOG POT /JUSS do work well in school 'Kofi forced Mary to do well in school.' **Object control**

2.3.3.3 yè vs. Shifted indexicals

This section distinguishes between Ewe and languages with shifted indexicals. One of the major difference obviously stems from the fact that first or second person forms can shift in languages slated for this purpose while in Ewe, there are no such shifts. Like other 'mixed' logophoric pronouns discussed earlier, shifted indexicals resist the *de re* reading. I show the relevant examples for the Amharic *I*, c.f. Schlenker (1999:65).

(105) John, who is a candidate in the election, is so drunk he doesn't remember who he is. He watches TV and sees a candidate he finds terrific, thinking that this guy must be a hero. This candidate happens to be John himself though he doesn't realize it.

- a. #Jon jəgna nə-ññ yil-all. John hero be.PF-1SO 3M.say-AUX.3M 'John says that he is a hero.'
- b. Jon sõwyew jəgna näw alä. John the-man hero is said 'John said the man is a hero.' Schlenker (1999:21) ex. 12

The final difference between $y\dot{e}$ and shifted indexicals is shown in the Telugu case (3rd person pronoun with 1st person agreement shifts) where *tanu* can occur as a matrix subject in the matrix clause as illustrated in (106). However, as we have seen earlier in (§ 2.2.4), $y\dot{e}$ cannot occur in the matrix clause.

(106) tanu parigett-ææ-Du.
3SG run-PAST-M.SG
'He run.'
(Messick 2017:28) ex. 15b

Table 2.3 shows a summary of differences between $y\dot{e}$ and other forms used for logophoric marking.

PROPERTY	yè	LDRs	Emphatic	Shifted in-
			forms	dexicals
Long distance bound	1	✓	\checkmark	\checkmark
Only sloppy reading	X	\checkmark	NA	NA
Obligatory de se reading	X	1	\checkmark	\checkmark
Coreference with one an-	X	1	NA	NA
tecedent				
Contrastive focus use	X	NA	1	NA
Object control	X	NA	1	NA
Person shift	NA	NA	NA	1
Occurs in matrix clauses	X	X	×	1

Table 2.3: Summary of differences between yè and logophoric use in other languages

Note: \checkmark = possible; \varkappa = not possible; NA = non applicable (in the absence of reference)

2.3.4 Discussion

The semblance between so-called logophoric forms in 'mixed' logophoric languages in comparison to $y\dot{e}$ falls apart when we take a closer look at their properties as I have explored in (§ 2.3.3). From Table 2.3, the only property which $y\dot{e}$ shares with the other pronouns is long-distance binding. However, we immediately observe a divide regarding all other properties; the presence or unavailability of all properties to the other pronouns against $y\dot{e}$'s lack of it. This observation is interesting because the connection between logophoricity and, for instance, the property of *de se* has been made (Morgan 1970; Sells 1987). *De se* involves reporting attitudes about oneself as well as logophoricity thus, the relation made between the two is not out of place. Nonetheless, it seems that in Ewe, the property of being de se and being logophoric are mutually exclusive such that one wonders if $y \dot{e}$ is logophoric after all. Satık (2019:2), for instance, argues that "yè is not a logophoric pronoun; it is instead just a pronoun that has to be bound at the left-periphery of the embedded clause, regardless of whether or not the predicate that embeds the clause is attitudinal." There are two routes to this: (a) since forms categorised as logophoric markers have an obligatory de se interpretation as we have seen so far, it seems plausible to give up on the idea that yè is a logophoric pronoun. Logophoricity, then, is a misnomer in Ewe; in that yè simply marks coreference of some sorts while the other pronouns are logophoric. However, the second route (b), which I argue for in this dissertation is that when we consider the genesis of this term, namely from Clements (1975), following Hagège (1974), who described Ewe as the prototypical case and from which other studies on the phenomenon sprung, route (a) seems to be implausible and dismissive. Clements (1975)'s idea was to refer to pronouns, morphologically distinct from personal and reflexive pronouns whose function is to exclusively, designate the individual whose speech, thought, feelings and general state of consciousness as logophoric. Thus, the fact that yè can be used to report the unconsciousness of an attitude holder (de re) or additionally has strict readings does not suddenly exclude it from being logophoric. Previous work that share this intuition include Cole et al. (2001:XXV) who assert that:

"the analogy between long-distance reflexives and logophoric pronouns collapses when the two are compared in a fine-grained fashion ... while the term 'logophoricity' appears to be too well-established to banish it from discussions of long-distance reflexives, it is important to recognize that there is strong evidence against the hypothesis that long-distance reflexives are covert logophoric pronouns. Furthermore, the system of logophoricity found with long distance reflexives is entirely separate from that found with "classic" logophoric pronouns is quite different from that found with long distance reflexives of various types."

What went wrong? If indeed $y\dot{e}$ has an additional *de re* reading then, the claim that $y\dot{e}$ is obligatorily read *de se* was incorrect from the onset. Even though this goes contrary to researchers who unified all first person perspectival forms (Sells 1987; Chierchia 1989; Schlenker 1999), distributional differences between $y\dot{e}$ and other forms calls this unification into question. Trivial as this may seem, I also draw the reader's attention to Figure 2.1, a 'google books Ngram' ⁹ comparison of the terms 'long distance reflexives' (LDRs) and

⁹Ngram facilitates the visualisation of how words or phrases developed and have been used over time using 30 million scanned books on google relating to the terms searched (source: Google).

'logophoric pronoun' (LPs) between 1975 to 2019, with a smoothing of 3¹⁰. This is aimed at verifying how these terms were used and how their appearances in the literature relate to each other over the selected period, they emerged.



Figure 2.1: Ngram graph showing the emergence and development of LPs and LDRs

We can observe from Figure 2.1 that while there was a rise in the use of LPs from 1977, the use of LDRs was still steady until 1983, a year, which additionally shows an equal gradual increase in the use of both terms till 1989. The use of LPs saw a continuous rise from 1989 to 1997 and a peak between 1998 to 2005, this constitutes the period within which semantic accounts were rendered for the null form, PRO; and by extention, these kinds of anaphoric forms (egs. (Chierchia 1989; Schlenker 1999; Heim 2002; von Stechow 2002)). On the other hand, we notice that the use of LDRs decreased from 1992 until 1997, rose again between 2000 to 2007 and remained steady until 2015. Note the similarity in rise and fall for the use of both pronouns between 1999 to 2005. The reason for this similarity could be attributed to the fact that the notion of LPs was 'trending' and this constitutes the period for which researchers made the analogy between them such that, LDRs became logophoric as well. The analogy was due to the observation that natural languages encoded overtly, attitudes about oneself in their grammar.

Consequently, we can conclude that readings such as only *de sel* sloppy readings are a property of languages that are not 'pure' logophors. The *de re* and strict readings of *yè* is not ungrammatical in the language. Therefore, I assume, along the lines of Messick (2017) that the economy constraint namely, 'prefer *de se*' apply in 'mixed' logophoric languages (107); see also Patel-Grosz (2020); Schlenker (2005) for similar proposals. *yè* has perspectival properties even if it is not obligatorily read *de se*. The notion of *de se* must therefore, be separated from that of logophoricity.

¹⁰https://books.google.com/ngrams/graph?content=logophoric+pronouns, long+distance+reflexives&year_start=1975&year_end=2019&case_insensitive= on&corpus=26&smoothing=3.html.

(107) **Prefer** *de se*!

Whenever an element in an attitude report is coreferential with the attitude holder, prefer *de se* construal over *de re*, if the interpretation results in ungrammaticality. (Messick 2017:101) ex.24, modified.

2.4 Chapter Summary

This chapter began with a description of the personal pronouns in Ewe which are classified into strong and weak forms (Agbedor 1996). The reason for this classification is due to (a) the structural relation of the pronouns with verbs; (b) their ability to be modified; (c) their ability to be coordinated with an NP; and (d) their behaviour with respect to focalisation and topicalisation. The distribution of subject pronouns, object pronouns, the genitive forms and the logophoric pronoun was also provided. An overview of logophoric marking was presented, logophoric marking strategies were examined, and a comparison between 'pure' logophors (e.g. $y\dot{e}$) and 'mixed' logophors (e.g. long distance reflexives) was made. It was discovered that the only property yè shared with other pronouns is long distance binding. The chapter concludes with the claim that $y\hat{e}$ is a pure logophoric pronoun in the sense of Clements (1975) namely, a pronoun used to communicate the speech, thought, emotions, or general state of conciousness of an individual. Thus, its additional de re and strict interpretation does not imply non-logophoricity. The de se property for instance, may be unique to languages that do not use a dedicated morpheme to mark logophoricity. As a result, the economy constraint prefer de se (speakers prefer a de se interpretation over de re because a de re construction is ungrammatical) applies in 'mixed' logophoric languages.

Chapter 3

Logophoric Contexts and Licensing

This chapter concerns logophoric contexts namely, environments or domains in which the use of the logophoric pronoun, yè is permissible. As mentioned in chapter 1, I will discuss logophoric contexts along the lines of these two broad categories: reportative and non-reportative. While reportative involves the typical direct-indirect report paradigm, nonreportative represents an extention of reportative contexts. Thus, reports that were observed or based on a speaker's mental attitude (e.g. what a speaker thinks or believes) or a speaker's background knowledge is captured under this category. I begin with a review of literature premised on reportative and non-reportative contexts in § 3.1 and § 3.2 respectively. In addition, I offer my view on previous literature, with supporting data, for arguments raised which I am in dis-favour of. The range of contexts known to permit logophoric marking include indirect speech reports (Clements 1975), typically found in the complement of verbs which express the communicative act of an individual (e.g. say, tell, suggest, etc); stretch of discourse e.g. paragraph (Clements 1975), purpose clauses (Culy 1994a), causal clauses (Culy 1994a), clauses of effect or consequence (Culy 1994a), found in the complement of (non)attitudinal verbs. In § 3.3, I provide other non-reportative logophoric contexts which the literature is silent on namely, as-if clauses, benefactive na-clauses and alesi 'how' clauses. At the end of the section, I provide a summary in § 3.4 which shows that the complementizer be is sufficient to license the logophoric pronoun. This is in congruence with previous studies (Clements 1975; Collins 1993; Culy 1994a; Essegbey 1994; Dimmendaal 2001; Orita 2009; Ameka et al. 2017; Bimpeh 2019). However, in terms of instances where there is no be (e.g. see alesi 'how' clauses), I employ Chomsky & Lasnik (1977)'s Doubly-Filled-Comp Filter (DFCF) to account for its absence. In § 3.5, I further situate the idea that be licences yè within Bimpeh & Sode (2021)'s, feature checking theory which prominently follows (von Stechow 2004). O'Neill (2015)'s theory which provides support for Bimpeh & Sode (2021)'s idea is also noted. In the absence of an established stance on the status of be, I show in § 3.6 that its complementizer function is borne out. Before I conclude and summarise the chapter in § 3.7, I redefine the concept of logophoricity as pertaining to Ewe.
3.1 Previous research: reportative contexts

3.1.1 Indirect speech reports

It is common knowledge that there are two types of reported speech. Direct, which aims at quoting the original utterance, and indirect, which relays the content expressed by a speaker. As Clements (1975:141) puts it, a speaker may either report the events subjectively, according to his own perception of them, or maintain his distance from the events he is reporting, and depict them through the eyes of another person. Clements (1975:141), makes the generalisation that $y\dot{e}$ is restricted to indirect speech contexts thereby, replacing the appropriate first person form. This claim is supported by Stirling (1994:52), who notes that the "dependent clauses in which logophoric pronouns are licenced are archetypally contexts of reported speech." Example (1b), in Ewe, therefore, corresponds to an indirect report of (1a) and we observe that $y\dot{e}$ shows up in this context. Moreover, since there is no speech report in whose scope the logophoric pronoun can appear, we observe the illicitness of (2) as illustrated by Pearson (2015).

(1)"**me***^{<i>i*} dzó." Kofi_{*i*} gblɔ be a. Kofi say COMP 1SG leave 'Kofi said (that) I left.' **Direct speech** (Clements 1975:142) ex. 2 $Kofi_i$ gblo be $\mathbf{y}\mathbf{\hat{e}}_i$ dzó. b. Kofi say COMP LOG leave 'Kofi said (that) he left.' **Indirect speech** (Clements 1975:142) ex. 1 (2)*yè dzó. LOG leave 'He left.' (intended)

(Pearson 2015:78) ex. 2

The occurrence of logophoric pronouns or logophoric markers in indirect speech reports is not only prominent in Ewe but attested cross-linguistically e.g. Culy (1997) for Donno So, Adesola (2005) for Yoruba, among others. This is not surprising since the motivation for the use of such forms is to avoid ambiguous referents. Example (3) shows instances of logophoric marking in the aforementioned languages, whereby *inyeme* and *oun* occur in the complement of *gi* 'say' and *gbà* 'accept' respectively.

(3) a. $\operatorname{Oumar}_i \operatorname{Anta}_j \operatorname{inyem}_i$ was be gi. Oumar Anta LOG-ACC seen AUX said 'Oumar said that Anta had seen him.'

(Donno So)

(Culy 1997:848) ex. 6a
b. Olu_i gbà kí òun_i rí bàbá òun_i. Olu accept that he see father his 'Olu agreed to see his father.' (Adesola 2005:19) ex. 25

(Yoruba)

Notably, all communicative verbs in Ewe are obligatory with the exception of *gblo* 'say', when reporting on the communicative act of an attitude holder, without resulting in ungrammaticality¹. See the data pattern in (4). The optionality of *gblo* 'say' is as a result of the complementizer *be* which developed historically from the verb *say*. Clements (1975) reports that *be* still carries the force of the verb *say*. However, Heine & Reh (1984) also depart from this view and claim that *be* after grammaticalisation, is desemanticised (loses its meaning as a verb of saying). Details of this omission will be discussed later in section 3.5.

(4) a. Kofi_i (**gblb**) be $y\dot{e}_i dz\dot{o}$. Kofi say COMP LOG leave 'Kofi said (that) he left.'

(Clements 1975:142) ex. 1

- b. $\operatorname{Kofi}_i *(\mathbf{l5})$ be $y \hat{e}_i dz \hat{o}$. Kofi agree COMP LOG leave 'Kofi agreed he left.'
- c. Kofi_i *(**do-ŋugbe**) be yè_i a dzó. Kofi set-promise COMP LOG POT leave 'Kofi promised to leave.'

We have seen verbs of saying at play in indirect speech reports as a context for logophoric marking. In what follows, I discuss other verbs that ensure logophoric marking.

3.1.2 Logophoric marking verbs

In this section, I present verbs which introduce logophoric contexts in the form of their clausal complements (Stirling 1994). Apart from communicative verbs (or verbs of saying), which we have seen in § 3.1.1, Clements (1975) as well as Culy (1994a) notes that cross-linguistically, logophoric markers also reside in clauses introduced by verbs of thought,

(i) exɔ-a (di) be yè a gba. house-DEF about.to COMP LOG POT break 'The house is about to collapse.' Clements (1975:168) ex. 67

¹Another verb which is optional in the presence of *be*, although not a verb of saying, is *di* 'want.' As explained by Clements (1975:168), *di* in such instances does not mean *want* or, *seek*, as in *the house wants to collapse* in (i). The intention of the house cannot be communicated since it is inanimate. *di* here has a derived meaning namely, *about to* as shown in (i) below.

perception², etc. This view is supported by Koopman & Sportiche (1989) who state that logophoric pronouns only occur in the context of logophoric verbs.

"there is a class of verbs that typically, but not exclusively, includes verbs of saying like *say* and verbs of perception like *see* called 'logophoric verbs'. In contexts embedded under a 'logophoric verb', and only in these contexts, would a logophoric pronoun refer to a person whose speech or perception is communicated" (Koopman & Sportiche 1989:578).

This fact not withstanding, languages differ in the kind of verbs that allow logophoric marking. See Table 3.1 c.f. Culy (1994a).

Table 3.1: Distribution of verb classes allowing logophoric marking with their corresponding languages

VERB CLASSES:	Languages
Speech	Aghem, Akoose, Angas, Ekpeye, Fon,
	Gbandili, Gen-Mina, Ibibio, Kukuruku,
	Lele, Mambila, Mapun, Moru, Noni, Pero,
	Sara-ngambay, Sura
Speech, thought	Bwamu, Donno So, Mundang, Ngbaka, Tubiri,
	Yag Dii
Speech, thought, knowledge	Babungo, Banda-linda, Efik, Ewe, Gokana,
	Idoma, Mundani, Ngwo, Tikar
Direct perception	None

While investigating 32 languages, Culy (1994a) observed a pattern in Table 3.2 among attitude verbs (he refers to them as logophoric predicates³) based on which he stipulated a

²Perry & Barwise (1983) distinguishes between two kinds of perception reports. Direct perception contrats with indirect in the sense that indirect perception reports typically have finite embedded clauses. For instance, Beryl saw Meryl feed the animals differs from Beryl saw that Meryl fed the animals. Both sentences differ with respect to the interpretation of their embedded complements. From i(a-c), we can conclude that (c) is a valid inference. However the same cannot be said for ii. (c) is an invalid inference.

(i)	a.	Beryl saw Meryl sprinkle the white powder on Cheryl's dinner.	Direct perception
	b.	The white powder was the most deadly poison.	
	c.	Beryl saw Meryl sprinkle the most deadly poison on Cheryl's dinner	
(ii)	a.	Beryl saw that Meryl sprinkle the white powder on Cheryl's dinner.	Indirect perception

- b. The white powder was the most deadly poison.
- c. Beryl saw that Meryl sprinkle the most deadly poison on Cheryl's dinner

 3 Stirling (1994) also refers to these verbs which allow pronouns in their embedded clause 'logocentric verbs'.

hierarchy⁴ due to the frequency of verbs allowing logophoric marking. See (5).

VERBS:	Allow logophoric marking with the verb	Disallow logophoric marking	Total
say	29	0	29
think	13	0	13
know	6	1	7
hear	0	3	3

Table 3.2: Frequency of verbs allowing logophoric marking

(5) The logophoric hierarchySpeech> thought > knowledge > direct perception

We notice from Table 3.2 that the speech verb dominates whereas verbs of direct perception are the least frequent. According to Culy (1994a:1067), "there is no known language that uses logophoric pronouns with direct perception predicates (*hear*, *see*)". He attributes this to reliability of information i.e. what is said is more objective than what is thought and perceived. Also, speech can be heard or seen. However, we can only infer from what one is thinking, hearing or knowing (ibid., 1063). In light of this, languages like Mapun which uses the addressee pronoun *gwar* to mark logophoricity distinguishes speech from other predicates. Mapun allows logophoric marking with *sat* 'say, tell' but disallows it with *naa* 'see' shown in (6).

(6)	a.	n- sat -n- wur ni gwar ji.	
		1SG say BEN 3SG COMP ADDR come	
		'I told him _i that he _i should come.'	(Mapun): [+SPEECH, +LOG]
		(Frajzyngier 1985:28) cited in (Culy 1994a:1	065) ex. 15a
	b.	n naa wur <i>wur</i> pi dim n kaano.	
		1SG see 3SG 3SG PROG go PREP Kano	
		'I saw him going to Kano.'	(Mapun): [-SPEECH, -LOG]
		(Frajzyngier 1985:29) cited in (Culy 1994a:1	065) ex. 15c

Ewe was reported (Culy (1994a) does not provide data to this effect) to have speech, thought and knowledge as verbs that allow logophoric marking as shown in (7), (ibid., 1062). According to Culy (1994a), referencing Clements (1975), the regular third person pronoun occurs in the complement of *se* 'hear' (8a) which indicates that logophoric marking is incompatible with perception verbs. However, when *se* is further embeded, logophoric marking is possible (8b). Agbedor (2014:62) makes a similar observation. He expalins that even though

⁴Note that Stirling (1994:259) also stipulates a hierarchy of logocentric verbs, which can be likened to Culy (1994a)'s : Communication > thought > psychological state > perception.

se is a predicate which should trigger logophoricity, (8a) is ungrammatical because it is an overlapping clause. It is only when (8a) is embedded in another logocentric predicate, that the grammaticality of the sentence is redeemed as exemplified in (8b).

(7)	a.	Ama _i súsú *(be) yè _i fó dì. Ama think COMP LOG be dirty 'Ama thinks that she is dirty.'	Thought
	b.	Ama _i nyá *(be) yè _i fó dì. Ama know COMP LOG be dirty 'Ama knows that she is dirty.'	Knowledge
(8)	a.	Kofi _i se koku _j wò _j -nɔ \acute{e}_i /*yè dzu-m. Kofi hear Koku 3SG-be:PST 3SG /LOG insult-PROG 'Kofi heard Koku insulting him.'	Perception
	b.	(Clements 1975:157) ex. 40, cited in (Culy 1994a:1068) Kofi _i gblo be $y \dot{e}_i$ se koku _j $w \dot{o}_j$ -no $y \dot{e}_i$ dzu-m. Kofi say COMP LOG hear Koku 3SG-be:PST LOG insult-PROG 'Kofi said that he heard Koku insulting him.'	
		(Clements 1975:157) ex. 41, cited in (Culy 1994a:1068)	

The restriction of logophoric verbs to *speech*, *thought* and *knowledge* in Ewe is not borne out. This presents a problem for Clements (1975), Culy (1994a), and others, who assume this to be the case. Logophoric marking does not resist predicates of direct perception. Apart from the use of the verb *se* 'hear or feel' in isolation (9a), the use of the ability modal, *teŋu*, gives further evidence that the speaker has direct sensory evidence for the utterence in (10)⁵; since, modals pass on their epistemicity to the complement of the sentence. There is a sense in which an example like (9a), can be used. Supposing Kofi gains consciousness after being kidnapped and could tell by the sound of heavy waves and engine that he is on a river, (9a) is grammatical. Still in a kidnap case, (9b) can be uttered assuming Kofi could hear his kidnappers discussing plans to kill him. Thus, Kofi has direct perception of his present circumstance. Also, it can be witnessed in (10) that Ama can directly preceive the dropping of the cup which is not impossible if we consider a situation where Kofi is reluctant about carrying out the request of Ama and as a result, drops the cup in a rather angry manner.

- (9) a. Kofi_{*i*} se be $y\hat{e}_i$ le to dzí. Kofi hear COMP LOG is river on 'Kofi heard that he is on water.'
 - b. Kofi_{*i*} se é be wó_{*j*} le yè_{*i*} wu ge. Kofi hear 3SG COMP 3PL is LOG kill INGR 'Kofi heard (it) that they are going to kill him.'

⁵I will revisit examples like this later in §3.3.3

(10) Ama_i teŋu se ale (si) Kofi_j tso tsi no nu la da de anyi na Ama could hear how REL Kofi take water drink thing DEF put down ground for yè_{i/*j}.
LOG
'Ama could hear how Kofi put down the drinking cup for her.'

Again, although direct perception predicates are the least represented in Culy (1994a)'s hierarchy, this does not mean that no language allow them to introduce a logophoric domain. In Boko (Mande language spoken in Nigeria and Benin), for instance, the complement clause of a direct perception verb constitutes a logophoric domain.

(11) ā 'è álé lélè. 3SG.PFAT see.PERF 3SG.PROG.LOG fall.PROG 'He saw himself falling.' (Boko) (Yashima 2015:31) ex. 59

Regarding Culy (1994a)'s hierarchy therefore, I suggest Table 3.3 to be the case for Ewe.

LOGOPHORIC PREDICATES:	Occurrence in Languages
Speech	Possible
Thought	Possible
Knowledge	Possible
Direct perception	Possible

Table 3.3: Revised hierarchy of logophoric predicates in Ewe

3.1.2.1 Beyond Culy (1994a)'s logophoric verbs

The logophoric class of verbs may be extended beyond Culy (1994a)'s hierarchy of verbs which are attitudinal. Other attitude verbs in whose complement the logophoric pronoun occurs but does not fall within Culy (1994a)'s hierarchy are counterfactual attitude verbs such as *dream* (Pearson 2015). These are verbs that one can hold coherently towards a content while simultaneously believing that that content is false (Pearson 2018). The first $y\dot{e}$ refers to the 'dream subject' i.e. the one who is dreaming namely, *John*. The second and third $y\dot{e}$, picks up either the 'dream self' i.e. the one in the dream or the 'dream subject'⁶, *John*. Consider (12).

John koudrin *(be) yè nyi Barack Obama koudo yè na yè-dokui cadeau.
 John dream COMP LOG COP Barack Obama CONJ LOG give LOG-REFL gift
 'John dreamt that he was Barack Obama and he gave himself a gift.'
 (Pearson 2015:105) ex.74

⁶See Pearson (2018) for the details of the interpretation of dream reports.

In addition to *dreams*, other counterfactual predicates which allow logophoric marking but has not been demonstrated for Ewe include wish (13) and *imagine* (14).

- (13)nye $Bill_i$ fe didi *(be) ame é si fi $\mathbf{y}\mathbf{\hat{e}}_i$ la me-a-ga 3SG COP Bill POSS wish.REDU COMP person REL steal LOG DEF NEG-POT-REP 3-CW azõ 0. do-3SG again NEG 'It is Bill's wish that whoever robbed him would not do it again.' (Blumberg 2018:523) ex.2, my translation
- (14) Kofi_i kpɔ ɛ le súsú me *(be) yè_i nye Yesu eye yè_i tsɔ nyè_j Kofi see 3SG in mind inside COMP LOG COP Jesus CONJ LOG take 1SG:POSS nuvõ-wó ke-m_j. sin-PL forgive-1SG 'Kofi imagined that he was Jesus and he forgave my sins.' (Lit: Kofi saw it in his mind that he was Jesus...) (Ninan 2007:1) ex. 2, my translation

There exist different classes of verbs that take *that*-complements as well as infinitives which have not been discussed in relation to logophoricity. It is not certain if they are all attitudinal. However, the realm of attitudes and attitude expressions are diverse (Asher 1987:125). Thus, these verbs are discussed in so far as they involve the intention of an individual. For instance, the factive verbs in Table 3.4, are referred to as "intentional factives" (Bonevac 1984:211) or "factive anaphoric" (Asher 1987:127). This is because such verbs allow anaphoric relations between a pronoun and an NP (its antecedent) and require a certain background of mental states (Asher 1987:130). The assumption is that one cannot *regret* that an event took place without having had a reconsideration of his actions which involves a cognitive activity. As it is shown subsequently, the class of verbs in Table 3.4, allow logophoric marking in Ewe. See Table 3.4 on category of verbs based on Karttunen (1971a,b,c, 1973).

Table 3.4:	Classes	of	verbs
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Factives	Semi-factives	Non-factives	Implicatives	Non-implicatives
Regret	Discover	believe	manage	try
Forget	Realise	know	remember	want
Resent	Notice	assume	see fit	hope

(a) Factives

Concerning factivity, verbs can be divided into factives, semi-factives and non-factives. Since elements that mark reports lose their factivity, it is interesting to see the behaviour of $y\hat{e}$ with factives. Note, that I will not discuss non-factives since a chunk of previous examples are non-factives and allow logophoric marking.

Factives

(15)É te-de Kofi_i dzi be a. $\mathbf{y}\mathbf{\hat{e}}_i$ tó nyatefe. 3SG press-put Kofi on COMP LOG speak word.true 'Kofi regrets that he spoke the truth.' = Kofi spoke the truth b. Ama_i **ŋɔble** be $\mathbf{y}\mathbf{\hat{e}}_i$ dé tsi sefofo la. Ama forget COMP LOG pour water flower DEF 'Ama forgot that she watered the flower.' = Ama watered the flower Ama_i **ŋɔble** be $\mathbf{y}\mathbf{\hat{e}}_i$ a dé tsi sefofo la. с. Ama forget COMP LOG POT pour water flower DEF 'Ama forgot to water the flower.' \neg Ama watered the flower

As exemplified by (15), both (15a) and (15b) presuppose the truth of their respective complements. According to Karttunen (1971b:128), P presupposes Q, just in case that if P is asserted, denied or questioned, then the speaker ought to believe that Q. In example (15c) on the other hand, *noble* 'forget' loses its factivity, yet, it allows logophoric marking. The fact that *yè* can occur with factives is in itself surprising.

Semi-factives were distinguished from factives because verbs of this class do not consistently retain their factivity when asserted, denied or questioned (Karttunen 1971c). In questions for instance, semi-factives permit both factive and non-factive reading (Karttunen 1971c:63). The presupposition of a sentence ought to remain whether the main sentence is a negative assertion, an interrogative or the antecedent of a conditional construction. $y\hat{e}$ occurs in this class as well. Thus, in (16), the negative assertion with de-dzesi 'realise' as well as the interrogative with *va nya* 'discover' (lit: come to know), loses its factivity respectively.

(16)John_i me **de-dzesi** be $\mathbf{y}\mathbf{\hat{e}}_i$ me tó a. nyatefe 0. John NEG to-recognise COMP LOG NEG speak word.true NEG 'John didn't realise that he did not speak the truth.' Semi-factives = John did not speak the truth (Karttunen 1971c:63) ex. 22b, my translation John_i de wò va nya be $\mathbf{y}\mathbf{\hat{e}}_i$ bú a? b. John did 3SG come know COMP LOG lost QPRT 'Did John discover that he was lost.' $= / \neg$ John did not discover that he was lost (Karttunen 1971c:63) ex. 24c, my translation

(b) Implicatives

Verbs that belong to this class also commit a speaker to the truth of the proposistion as, its negation results in contradiction Karttunen (1971a). It is interesting to note that infinitive

taking verbs belonging to this category do not permit logophoric marking whereas *that*-complement taking verbs allow logophoric marking. Compare (17a) and (17b) to (17c).

(17)a. John dze-agbagba kpp nya la gbo. John IC-make.effort see matter DEF beside 'John managed to solve the problem.' (Lit: see to the matter) Implicatives ~ John solved the problem (Karttunen 1971a:342) ex. 6a, my translation John_{*i*} **do-nku-dzi** sa \acute{e}_i -fe b. υɔ tru la. John set-eye-on lock 3SG-POSS door lock DEF 'John remembered to lock his door.' ~ John locked his door (Karttunen 1971a:342) ex. 6a, my translation John_i **do-nku-dzi** be $\mathbf{y}\mathbf{\hat{e}}_i$ sa **yè**_i-fe tru la. c. υɔ John set-eye-on COMP LOG lock LOG-POSS door lock DEF 'John remembered that he locked his door.'

~ John locked his door

(Karttunen 1971a:342) ex. 6a, adapted

Non-implicatives, on the other hand, do not commit the speaker to the truth of the proposition. A negation of non-implied sentences do not result in contradiction. Another interesting observation lies in the fact that dze-agbagba which translates to both 'try' and 'manage' and both being infinitival taking predicates behave differently in permiting logophoric marking. While dze-agbagba 'manage' is incompatible with ye in (17a), dze-agbagba 'try' on the other hand, freely allows the occurrence of ye (18b).

(18)John_i no **mokpo-m** kpo nya a. be $\mathbf{y}\mathbf{\hat{e}}_i$ a la gbo. John was path-see-PROG COMP LOG POT see matter DEF beside 'John hoped to solve the problem.' (Lit: see to the matter) Non-implicatives \neg John solved the problem (Karttunen 1971a:342) ex. 7, my translation John_i dze-agbagba be $\mathbf{y}\mathbf{\hat{e}}_i$ a b. kpo nya la gbo. John IC-make.effort COMP LOG POT see matter DEF beside 'John tried to solve the problem.' (Lit: see to the matter) \neg John solved the problem

(Karttunen 1971a:342) ex. 7, adapted

Table 3.5 summarizes findings from the classes of verbs surveyed in this section.

In this section, I evaluated literature on indirect speech reports as a context for logophoric marking. I went on to present verbs in whose complement the logophoric pronoun occurs according to Culy (1994a)'s logophoric hierarchy. I further, raised a number of counter-

VERBS		Logophoric marking
Factive verbs		
That-complement	<i>ŋɔble</i> 'forget'	\checkmark
Infinitive	<i>te-de dzi</i> 'regret'	\checkmark
	noble 'forget'	1
Semi-factive verbs		
That-complement	<i>de-dzesi</i> 'realise'	\checkmark
	va nya 'discover'	1
Implicative verbs		
That-complement	do-nku-dzi 'remember'	\checkmark
Infinitive	dze-agbagba 'manage'	X
	do-nku-dzi 'remember'	X
Non-implicative verbs		
Infinitive	məkpəkpə 'hope'	\checkmark
	dze-agbagba 'try'	✓

Table 3.5: Summary of verb classes

arguments with supporting data particularly on the restriction of verbs in Ewe to *speech*, *thought* and *knowledge* in whose scope the logophoric marker occurs. The domain of logophoric verbs extends beyond Culy (1994a)'s hierarchy. In this respect, verbs other than those in Culy (1994a)'s logophoric hierarchy were also outlined. These are counterfactual verbs (dream, imagine, and wish), as well as verbs involving factivity (factive and semifactives), and verbs invloving implication (implicatives and non-implicatives). I now turn to a review of previous research on non-reportative contexts.

3.2 Previous research: non-reportative contexts

3.2.1 Stretch of discourse

Logophoric pronouns are observed in a stretch of discourse. As stated by Clements (1975:170), $y\hat{e}$ may occur in extended reportative context, representing the attitude of the individual(s) designated by the antecedent. This may be in the form of an entire passage, paragraph or episode which Clements (1975) describes as discourse units. Below is an example from an oral retelling of the "Monkeys and the moon" tale.

(19)Wó ame $et\tilde{a}_i$ -a wó dui vevie be yè-wó_i a de dzinu_i la 3PL persom three-TOP 3PL plan INT COMP LOG-PL POT put moon DEF yè-wó_i a Ne yè-wó_i di-i_i me ko a, to-a me. tə-a river-DEF inside. When LOG-PL put-3SG river-DEF inside INT TOP, LOG-PL POT no yè-wó_i nuto yè-wó_i si, wò_i-a ale be wò_i-a ko \hat{e}_i no take 3SG 3SG-POT stay LOG-PL INT LOG-PL hands, so COMP 3SG-POT stay

na yè-wó_i yesiayi Ne didi-m le zã me. zã do koa, $dzinu_i$ bright-PROG for LOG-PL everytime at night inside. When night fall INT, moon na no didi-m na **yè-wó** $_i$ ke viviti me-a-ga dogo na give be bright-PROG give LOG-PL then darkness NEG-FUT-REP return give **yè-wó**_i azõ o. LOG-PL ever NEG. 'The three of them resolved that they would take the moon out of the water. When they take it out of the water, they would lift it so that it would always be with them,' so that it will be shinning for them always in the night. When night comes, the moon will shine and darkness would disapear.'

Clements (1975:170-171) ex. 72

In narratives like (19), the point of view adopted is essential in obtaining logophoric marking. As illustrated by (19), the narrator uses the plural form of the logophoric pronoun, $y\dot{e}$ - $w\dot{o}$ to consistently refer to the *three monkeys*. In this regard, the use of $y\dot{e}$ - $w\dot{o}$ is evaluated not from the narrator's point of view but from the monkey's. On the contrary, in example (20) below, since the point of view taken is that of the speaker, $w\dot{o}$ is used and not $y\dot{e}$.

(20) É_i le tame bu-m tso nyonu-vi_j si wò_i kpo etso si va yi 3SG is head.inside think-PROG about woman-DIM REL 3SG see day REL come go la nu.
DEF self
'He is thinking about the young lady who he saw yesterday.'
(Hagège 1974:299) cited in (Culy 1994a:1075) ex. 31b, my translation

Hagège (1974) notes for Tubiri, for instance, that the use of the logophoric pronoun indictates the representation of someone else's view. Thus, as illustrated in (21), (21a) differs from (21b) in the sense that, the speaker does not integrate his own discourse in what the interested party thinks.

(21) \hat{a}_i Dik li māy_i ma:gā s $\mathbf{\bar{e}}_i$ kó n sú: mònò. a. he think of young.girl REL LOG see anaphoric yesterday Correl 'He's thinking of the young girl that he saw yesterday.' [Non-objective, +LOG] (Hagège 1974:299) cited in (Culy 1994a:1075) ex. 31a b. á Dik li māy ma:gāà kó n mònò. sú: he think of young.girl REL he see anaphoric yesterday Correl 'He's thinking of the young girl that he saw yesterday.' [Objective, -LOG]

(Hagège 1974:299) cited in (Culy 1994a:1075) ex. 31b

3.2.2 Sentential adjuncts

In the narrow sense, languages admit logophoric marking in various sentential domains. These include purpose, causal and clauses of consequence or effect c.f. Culy (1994a). I outline these subsequently.

3.2.2.1 Purpose clause

Purpose clauses carry the connotation of purpose. According to Culy (1994a), many languages allow logophoric marking in purpose clauses. Thus, it is not cross-linguistically uncommon. He explains, referencing Wiesemann (1986), that logophoric marking in purpose clauses is an extension and grammaticalisation of indirect discourse markers (Culy 1994a:1071). While this claim is not verified, purpose clauses relate to logophoricity in the sense that intentions are a type of thought. On the contrary, Culy (1994a) also reports that there at least two languages, Gbandili and Lele⁷ that allow logophoric marking in purpose clauses but not with thought predicates. Thus, the assumption that intentions are a type of thought may not be the case (Culy 1994a:1091). Ewe also allows the occurrence of $y\dot{e}$ in purpose clauses. Although Culy (1994a) does not give an example of purpose clause in Ewe, I translate his Donno So example (22a) presented in (22b). Worthy of note is that in purpose clauses, the higher predicate is always non-attitudinal as shown by example (22).

- (22)a. $Omar_i ma_i$ go **inyem** ϵ_i le soyye giaa yele. SO Omar 1SG-SUBJ word the LOG with speak said came 'Omar came in order for me to talk with him about the problem.' (Donno So) (Culy 1994a:1071) ex. 24 b. $Omar_i$ va be $\mathbf{y}\mathbf{\hat{e}}_i$ a nyà la fo-nu tso nu.
 - Omar come COMP LOG POT beat-mouth about matter DEF body 'Omar came in order to talk about the problem. (Ewe) (Culy 1994a:1071) ex. 24, my translation

Clements (1975), also shows that purpose clauses can serve as a domain that is associated with the point of view of an internal protagonist.

- (23) a. devi la xo tohehe be yè a ga da alakpa ake o. Child DEF recieve ear-pull.REDU COMP LOG POT again tell lies REP NEG 'The child_i recieved punishment so that he_i wouldnt tell lies again. (Clements 1975:160) ex. 50
 b. devi la xo tohehe be wò a ga da alakpa ake o.
 - b. devi la xo tohehe be wò a ga da alakpa ake o. Child DEF recieve ear-pull.REDU COMP 3SG POT again tell lies REP NEG

⁷This argument occurs in (Culy 1994a)'s footnote numbered 32, on page 1091 and he does not show data for this claim.

'The child recieved punishment so that he wouldnt tell lies again. (Clements 1975:161) ex. 51

The two sentences in (23a) and (23b) above are identical except that the former involves a logophoric pronoun, whereas the latter an ordinary pronoun. According to (Clements 1975:161), in both cases, the embedded pronoun can be interpreted as coreferential with the matrix subject, but there is a subtle difference in meaning. The sentence in (23a) conveys the meaning that the child voluntarily received punishment (for his own purpose of preventing himself from lying), while the sentence in (23b) is interpreted as the child received punishment against his will (and someone else has an intention of curing his habit of lying). While I agree that $y\dot{e}$ occurs in purpose clauses, I find both sentences ungrammatical. Clements (1975) himself notes that some speakers find (23a) "strange" on the grounds that such a situation is unlikely to happen. I think that reluctance to accept (23) is in order. First, negation is marked with a discountinous element and Clements (1975)'s sentences lack the first part of the element i.e., *me*. In effect, to communicate (23a) from the child's perspective (24a) is better. Secondly, including the first part of the negation marker in (24b) doesn't redeem the sentence. A better option is (24c) which assumes an unpronounced pronoun.

- (24) a. devi la xo tohehe be yè me a ga da alakpa ake Child DEF recieve ear-pull.REDU COMP LOG NEG POT again tell lies REP o.
 NEG
 'The shild, recieved punishment so that he wouldn't tall lies again
 - 'The child_i recieved punishment so that he_i wouldn't tell lies again.
 - b. *devi la xo tohehe be wò me a ga da alakpa ake Child DEF recieve ear-pull.REDU COMP 3SG NEG POT again tell lies REP o.
 NEG

'The child recieved punishment so that he wouldn't tell lies again.

c. devi la xo tohehe be me a ga da alakpa ake o. Child DEF recieve ear-pull.REDU COMP NEG POT again tell lies REP NEG 'The child recieved punishment so that he wouldn't tell lies again.

3.2.2.2 Causal clause

Another sentential adjunct in which logophoric marking is said to be possible, is the causal clause. Causal clauses express a clause or reason that bring about the situation expressed in the main clause (Hetterle 2015). As stated by Culy (1994a), Ewe and Yag Dii (he does not provide an example for this language) show this. He remarks that in both languages, a subordinator used elsewhere with logophoric domains is used as part of an indication of cause (ibid., 1071-1072). See the Ewe example in (25a). Sells (1987), also reports for Japanese that logophoric marking pertains in causal clauses, shown in (26).

(25)a. Kofi_{*i*} dzó **ela bena** Ama_{*i*} kpɔ yè_{*i*}. Kofi leave because COMP Ama see LOG 'Kofi left because Ama saw him.' (Ewe) (Culy 1994a:1072) ex. 25 b. Kofi_{*i*} dzó **be** Ama_{*i*} kpɔ yè_{*i*}. Kofi leave COMP Ama see LOG 'Kofi left because Ama saw him.' (lit: Kofi left (with the reason) that Ama saw him) (26)Takasi_i wa [Yosiko_i ga mizu o **zibun**_i no ue ni kobosita **node**]

Takasi TOP [Yosiko NOM water ACC REFL GEN on LOC spilled because]nurete-simatta.wet-got'Takasi got wet because Yosiko spilled water on him.'(Japanese)(Sells 1987:466) ex. 60

Culy (1994a:1091), in his footnote numbered 33, reports a personal communication with James Essegbey (a professor of Linguistics and Ewe researcher), who suggests that majority of Ewe speakers would rather use *be* instead of *elabena* as shown in (25b). This seems to point to the use of both *be* and *elabena*⁸ to indicate *causes* in Ewe. Note that *bena*, glossed as 'complementizer' is described as an allomorph of *be* (Westermann 1965; Clements 1975). Even though both *be* and *bena* occur in the same context and position, *bena*⁹ is always used in standard or written Ewe while *be* is used in everyday speech. In this regard, since my data was gathered from everyday speech, in all examples involving the complementizer, I will maintain the use of *be*.

I do not corroborate the claim that logophoric marking obtains in causal clauses with *because* in Ewe. Consider the minimal pairs in (27) and (28).

- (27) a. Context: Oedipus' mother fell down the stairs and knocked down Oedipus with her...
 - b. Oedipus_i dze anyi **elabena** $\acute{e}_{i/*j}$ -fe dada_j hã dze anyi. Oedipus fall gound because 3SG-POSS mother also fall gound 'Oedipus fell because his mother (also) fell.'
 - c. Oedipus dze anyi **elabena *yè**-fe dada hã dze anyi. Oedipus fall gound because LOG-POSS mother also fall gound 'Oedipus fell because his mother (also) fell.'

⁸I point out here that the word for *because* which is *elabena* is formed from a combination of morphemes meaning 'it is that.' \acute{e} is the third person pronoun, *le* is the present tense form of the verb 'to be', *-a* can be analysed as a stem-extender and *bena* is a complementizer. Thus, *é-le-a-bena* becomes *elabena* due to vowel coalescence. I thank Enoch Aboh for discussions on this subject.

⁹Clements (1975:166) notes that speakers use *bena* in the same sense as *be*. However, *bena* is regarded as 'bookish' or 'emphatic'.

(Hara 2006:176), ex. 35a, adapted

- (28) a. Kofi_{*i*} fe awu fa **elabena** Ama_{*j*} tro tsi fo de $\dot{\mathbf{e}}_{i/*j}$ ŋu. Kofi POSS shirt wet because Ama pour water beat on 3SG self 'Kofi is wet because Ama poured water on him.'
 - b. Kofi fe awu fa elabena Ama tro tsi fo de *yè ŋu. Kofi POSS shirt wet because Ama pour water beat on LOG self 'Kofi is wet because Ama poured water on him.' (Nishigauchi 2014:162) ex. 12, adapted

The question then is, what differenciates Culy (1994a)'s example (25a) in (§ 3.2.2.2), from my examples? Why does *elabena* 'because' allow logophoric marking in (25a), repeated here as (29) and disallows it the examples above? I offer two possibilities. First, it could be an issue of individual speaker variation since Culy (1994a)'s example (29), was reported as unacceptable for Orita (2009)'s informants (see quote below) as well as mine. Only a further embedding made (29) acceptable, shown in (30). I use the question mark(?) to signal the dissonace among speakers.

"According to Culy (1994a:1972) ex. 25, Ewe allows logophoric marking in the causal clause, yet, my informants judged that the logophoric pronoun in the causal clause is completely bad. However, the logophoric pronoun can be used in causal clause if it is embedded in the *be* clause" (Orita 2009:8).

- (29) ?Kofi dzó elabena Ama kpɔ yè. Kofi leave because Ama see LOG
 'Kofi left because Ama saw him.' (Ewe)
 (Culy 1994a:1072) ex. 25, my translation.
- (30) Kofi_i dzó **elabena** \acute{e}_i nya be Ama_j kpɔ **y** \grave{e}_i . Kofi leave because 3SG know COMP Ama see LOG 'Kofi left because he knew (realised) that Ama saw him.' (Ewe) (Culy 1994a:1072) ex. 25, my translation

Second, if (29) was a grammatical construction, then the possibility of the occurrence of *yè* could be attributed to the presence of the complementizer *be/bena* in *elabena*, in congruence to Clements (1975)'s assumption that *be* triggers *yè*. Evidence comes from languages like Bengali and Tamil, whereby the same form *bole* and *enru* respectively, paralles with the quotatative marker 'that' and 'because' (Chisarik & van der Wurff 2003). Thus, the grammatical possibility of (29) will not be surprising since *because* is one of the stages in a grammaticalisation hierarchy that verbs of saying follow (Saxena 1995), see also (Klamer 2000). In this regard, Chisarik & van der Wurff (2003:2) propose that the path from *say* to *because* leads via a stage of 'think/reflect/consider/cogitate' but only in a context where the element

in question takes a clausal complement. Hence, (31a) could be reinterpreted as (31b). Otherwise, we still need to expalin the contradiction between examples (29) and (27c), as well as (28b).

(31) a. We didnt go outside *that* ('thinking/reflecting/considering/cogitating') it was hot.

(Chisarik & van der Wurff 2003:2) ex. 5a.

b. We didnt go outside *that* ('because') it was hot. (Chisarik & van der Wurff 2003:2) ex. 5b.

One may wonder if there are other forms for expressing *because* in Ewe and if this allows for logophoric marking. The form *éyata* 'it is why' comes close to *elabena* 'because' in the language and in the same vein, it does not permit the occurence of *yè* as shown in (32). Note that the construction with *éyata* is an inverse of the one with *elabena*. In terms of *éyata*, the reason an event took place precedes the result while with *elabena* the reverse holds.

(32) Ama_i tro tsi fo de Kofi_j nu **éya-ta** (***yè**) / $\acute{\mathbf{e}}_{*i/j}$ -fe awu fa. Ama pour water beat on Kofi self 3SG-why LOG / 3SG-POSS shirt wet 'Ama poured water on Kofi that is why he is wet.'

A point to note is that purpose clauses can be used to answer *why* questions as example (22) shows. In this regard, purpose clauses are also causal. They represent reversals of causal constructions as demonstrated in (33). As Jones (1991) puts it, *because* is a reverse of *in order to*. However, we can notice from (33b) that the occurence of *yè* is ungrammatical. Thus, Culy (1994a)'s claim may not be the case in Ewe.

- (33) a. Omar_i va be $y\hat{e}_i$ a fo-nu tso nyà la ŋu. Omar come COMP LOG POT beat-mouth about matter DEF body 'Omar came in order to talk about the problem. (Ewe) (Culy 1994a:1071) ex. 24, my translation
 - b. Omar_i fo-nu tso nyà la ŋu elabena $\dot{\mathbf{e}}_i$ / (*yè) va. Omar beat-mouth about matter DEF body because 3SG / LOG come 'Omar talked about the problem because he came.'

3.2.2.3 Clauses of effect / consequence

Regarding clauses of effect in Ewe, Culy (1994a) reports that logophoric marking is only permitted in the present tense but not in the past. Culy (1994a) renders Clements (1975:155-156)'s explanation that in the present tense, Koku's coming is not yet of objective fact, but remains in the sphere of Kofi's intention. However, in the past tense, it is objectively the case that Koku came to Kofi.

- (34) a. Kofi_i **wɔ-wɔ**-m be Koku_j va $\mathbf{y}\hat{\mathbf{e}}_i$ gbɔ. Kofi REDU-do-PROG COMP Koku come LOG side 'Kofi is arranging for Koku to come to him.' **Causal: present continuous**
 - b. Kofi_i wo- ε be Koku_j va \acute{e}_i gbo. Kofi do-3SG COMP Koku come 3SG side 'Kofi had Koku come to him.' **Past** (Clements 1975:155), cited in (Culy 1994a:1072)

I find the claim that in clauses of effect, logophoric marking is only permitted in the present tense and not past untenable. Meanwhile, I don't agree with the judgments of both sentences in (34), repeated as (35). On one hand, in my opinion, (35a) means that 'Kofi is pretending or behaving as if Koku has visited. In which case the form, *abe* 'as-if', in place of *be*, clearly brings out this meaning (*abe* is discussed in § 3.3.1). On the other hand, (35b) means 'Kofi made it possible for Koku to visit.' As a correction measure, I would rather use the minimal pairs (36a) and (36b), then we get logophoric marking in both tenses. Notice that apart from altering Culy (1994a)'s choice of verbs to *dzra do* 'to prepare', the use of *le* and *nz*, the present and past tense forms of the verb *to be* respectively, also redeems the sentences by making clear the role of the tense markers. (36c) parallels Culy (1994a)'s original past tense example in (35b) but then, the construction is better with *na* 'make/ give'. The clause following *na* is a consequence of the previous action and it is typically the goal for which the previous action was carried out.

(35)	a.	Kofi $_i$ wɔ-wɔ-mbeKoku $_j$ vayè $_i$ gbɔ.KofiREDU-do-PROG COMP Kokucome LOG side'Kofi is arranging for Koku to come to him.'Causal: present continous				
	b.	Kofi $_i$ wɔ- ϵ be Koku $_j$ va \acute{e}_i gbɔ.Kofi do-3SG COMP Koku come 3SG side'Kofi had Koku come to him.'Past				
		(Clements 1975:155), cited in (Culy 1994a:1072)				
(36)	a.	Kofi _{<i>i</i>} le dza-dzra-m do *(be) Koku _{<i>j</i>} na va $\mathbf{y}\mathbf{\hat{e}}_i$ gbo. Kofi is prepare-REDU-PROG IC COMP Koku to come LOG side 'Kofi is preparing for Koku to come to him.' Present				
	b.	Kofi i mass $dza-dzra-m$ prepare-REDU-PROG IC COMP Koku to come LOG side $do *(be)$ 				
	c.	Kofi _i <u>na</u> *(be) Koku _j va $\mathbf{y}\mathbf{\hat{e}}_i$ gbo. Kofi make COMP Koku come LOG side 'Kofi had Koku come to him.' (Lit: made possible for / Koku come to him) (Clements 1975:155), cited in (Culy 1994a:1072), my translation				

Similarly, in (37), we observe that both forms of the past tense permits logophoric marking.

(37) a. Nufiala_i le fu-de-m $na-m_i$ be ma_i wo do na thing.teach.onewho is to-worry-PROG for-1SG COMP 1SG.POT do work for $\mathbf{y}\mathbf{\hat{e}}_i$. LOG 'The teacher is worring me to work for him.' **Present Cont.** b. Nufiala_i **no** fu-de-m wo do $na-m_i$ be ma_i na thing.teach.onewho was to-worry-PROG for-1SG COMP 1SG.POT do work for $\mathbf{y}\mathbf{\hat{e}}_i$. LOG 'The teacher was worring me to work for him.' Past Cont. Nufiala, c. de-fu $na-m_i$ be ma_i wo do na $\mathbf{y}\mathbf{\hat{e}}_i$. thing.teach.onewho to-worry for-1SG COMP 1SG.POT do work for LOG

Past Simple In this section, I reviewed non-reportative contexts that allow logophoric marking. These

were: stretch of discourse, purpose clauses, causal clauses and clauses of consequence. The section argued that yè does not occur in causal clauses with elabena 'because' or éyata 'it is why'. I now introduce new non-reportative environments which allow the occurence of yè.

3.3 New non-reportative logophoric contexts

'The teacher worried me to work for him.'

3.3.1 As-if clause

The *as-if* construction in English has a range of uses. Four of its core uses are illustrated in (38).

- (38)Pedro danced as if he was possessed by demons. Manner use a.
 - It tastes as if there was an angel peeing on my tongue (Dutch comliment to the b. chef) **Perceptual resemblance report**
 - As if i have time to answer all these emails! (said while opening inbox) Root c. sacarstic use
 - Cher: Ugh as if! (uttered when a gross guy makes an advance) Clueless use d. (Bledin & Srinivas 2019:163) ex. 1-4

Similar to English, the approximate marker, abe in Ewe (Westermann 1930), has a variety of functions. Abe together with a discontinuous particle ene, shows a manner use¹⁰ by providing

¹⁰Manner is also expressed in Ewe by an adverb ending in *toe* as shown in (ii).

⁽i) é zə-na fiatce. 3SG walk-HAB chief.ADV 'He walks regally.' (Duthie 1996:91)

an answer to *how*-questions such as *how does Eli speak?* shown in (39a). In (39c), *abe* also combines with *alesi* 'how' and *ene* to convey a manner reading. Note that this approach of answering the question in (39a), requires the repetition of the modified VP (*fo-na-nù* 'speaking'). The elision of the modified VP results in ungrammaticality as shown in (39d).

(39)	a.	Ale ke Eli fo-i	na-nù?		
		how NPI Eli bea	t-HAB-mouth		
		'How does Eli s	peak?'		
	b.	Eli fo-na-nù	blewu abe fofo-la ene	•	
		Eli talk-HAB-me	outh slowly like father-DEF PRT		
		'Eli speaks slow	ly like his father.'		Manner use
	c.	Eli fo-na-nù	blewu abe alesi fofo-la	fo-na-nù	ene.
		Eli talk-HAB-mo 'Eli speaks slow	outh slowly like how father-DE ly like his father.'	F talk-HAB-mou	th PRT
	d.	*Eli fo-na-nù	blewu abe alesi fofo-la	ene.	
		Eli talk-HAB-me	outh slowly like how father-DE	F PRT	

'Eli speaks slowly like his father.' (intended)

Also, *abe* together with *ene*, in (40), introduces a degree use i.e. an equality comparison or resemblance, similar to the perceptual resemblance report in English (38b). The only difference here is that the comparison is not perceptual.

(40)	Dela fe	dɔ-me	nyo	abe	Kofi tə	ene.		
	Dela POS	s stomach-in	side good	as	Kofi own	I PRT		
	'Dela is a	as generous a	ıs Kofi.'				Degree / as u	ise

Abe in combination with *ene* also has a root sarcastic use as shown in (41a) but not a clueless use as such constructions are rarely uttered in the language. At best, a full construction is needed, without *ene* in which case the clueless use resembles the sarcastic use (41b).

(41)	a.	Abe dě me-a xle agbalẽ-a-wo ene.	
		as.if PFOC 1SG-FUT read book-DEF-PL PRT.	
		'As if I will read all the books.' (said with a pile of books i	infront of an individ-
		ual who has not intension of reading all the books)	Sarcastic
		use	
	b.	Abe dě wò ka-m!	
		as.if PFOC 3SG care-1SG	
		'As if I care!' Sar	castic / Clueless use

In addition to the above mentioned uses, *abe* can be used in isolation as a preposition to illustrate items or examples in (42a). However, in complex subordination structures such as (42b), whereby an element of similarity (as) is combined with an element indictating hypotheticality (if/though) to yield *as-if* or *as-though*, in English (López-Couso & Méndez-

Naya 2012:174), the discontinous particle *ene* occurs.

- (42) a. Wó fle-na nu abe abladzo, te kple tadi gbesiagbe.
 3PL buy-HAB things such as palntain, yam CONJ pepper everyday
 'They buy items such as plantain, yam and pepper everyday.' 'preposition'
 - b. ŋutsu la dó-yli de srõ la dzi abe vi-e ene.
 man DEF make-noise put wife DEF on as-if child-DEF PRT
 'The man shouted at his wife (in a manner) as though he would a child.' 'as-though' use
 (L épag Course & Méndez Naue 2012:174), adapted

(López-Couso & Méndez-Naya 2012:174), adapted

In what follows, I focus on another use of *abe* which mostly occurs with trigger words such as *wp* 'do', to report a person's attitude without necessarily involving an actual quotation $(43)^{11}$ - (44).

- (43) Yiyi wo abe yè le nu nyá-m.
 Spider do as-if LOG is thing know-PROG
 'Spider behaved as if he is clever.'
 Ananse stories (tales of the spider), adapted
- (44) Petro wo **abe yè** me le nu-fo-la-wo dome o. Peter do as-if LOG NEG is mouth-speak-one.who-PL among NEG 'Peter behaved as-if he was not among the talkertives.'

I claim that such constructions also constitute an environment for logophoric marking. It is not certain why the particle *ene* is optional in the logophoric use. I assume that its optionality comes from the lack of comparison between two entities. The use of *abe* entails that the content of the clauses in (43)- (44) are false. Thus, it is not the case that *spider* nor *Peter* is clever or not among the talkatives respectively. The use of *abe* conveys the intention of the matrix subjects, *spider* and *Peter*, to be portrayed as clever and not a talkative respectively. A speaker must be able to notice or observe this intention in order to utter any of the sen-

- (i) Yiyi wo abe dě wò le nu nyá-m (ene).
 Spider do as-if PFOC 3SG is thing know-PROG PRT
 'Spider behaved as if he is clever.'
- (ii) Petro wo **abe** dě me le nu-fo-la-wo dome o (ene). Peter do as-if PFOC NEG is mouth-speak-one.who-PL among NEG PRT 'Peter behaved as-if he was not among the talkertives.'

¹¹I would like to point that one of my speakers prefered (i)-(ii) versions of the sentences in (43) and (44), which are without the logophor. It may seem that the predicate focus particle plays a role in excluding the logophor. However, this is not clear since, I have shown independently (see chapter 2) that the logophoric pronoun can occur comfortably with both types of focus markers in Ewe.

tences in (43) or (44). English mostly uses complex subordinators combining an element of similarity (as) with an element indicating hypotheticality (if, though) yielding 'as if' and 'as though' (López-Couso & Méndez-Naya 2012:174). Nonetheless, in Ewe, it is not the case that *abe* is seperated into -*a* to mean *as* and *be* to mean *if*, as English does. Instead, I assume that the *be* in the form *abe*, is likely to be the same as the complementizer, *be*, whereas -*a* may just be an affix. This assumption is made on grounds that the clause beginning with *abe* is the complement of the verb wo 'do.' This may not be surprising since *as-if* clauses in languages such as English have been analysed as complements based on substitution (45). In such cases, Huddleston et al. (2002:962), for instance, suggest that there is no perceptible change in meaning.

- (45) a. É wo abe devi la le agbagba-dze-m be yè-a mlo-anyi.
 3SG do as-if child DEF is make.effort-IC-PROG COMP LOG-POT lie-down
 'It looked as if the child was trying to fall asleep.' 'as-if'-clause
 - b. É wo **be** devi la le agbagba-dze-m be **yè**-a mlo-anyi. 3SG do COMP child DEF is make.effort-IC-PROG COMP LOG-POT lie-down 'It seemed that the child was trying to fall asleep.' **'that'-clause**

Another possible criterion for aligning *as-if* clauses to *that*-clauses is pronominalisation as proposed by McCawley (1988:143) see also, López-Couso & Méndez-Naya (2012:176). Notice that the structure in (46), represents the pronominalization of both the *as-if* and *that*-clauses in (45a) and (45b).

(46)	é wɔ/dzɛ sigbe.	
	3SG do/appear so	
	'It looks/ appears so.'	pronominalised form
	(López-Couso & Méndez-Naya 2012:176), adapted	

3.3.2 Benefactive *na* clause

Another example of a construction that allows logophoric marking but is not clearly seen as a logophoric domain is one with *for* (Culy 1994a:1072). Culy (1994a) reports this for Donno So and explains that the logophoric reading is optional in this kind of construction (compare (47a) to (47b)) and can only refer to a subject (47c). Notably, in such constructions, the *for* morpheme is absent. Culy (1994a:1073) also suggests that like in purpose clauses, the licensor here takes the form of a verb *say*, which is also absent.

(47) a. Omar gine go **inyem'** mõ giaa uze. Omar house the LOG POSS said built 'Omar_i built the house for himself_i.' (**Donno so):** [for, +LOG] (Culy 1994a:1073) ex. 27a

- b. Omar ginε go wo mõ giaa uze. Omar house the 3SG POSS said built 'Omar_i built the house for himself_i/ him_k.' (Donno so): [for, -LOG] (Culy 1994a:1073) ex. 27b
 c. mi Andañ arige wo/ *inyem' mõ giaa obaa bem. I Anda-OBJ shirt 3SG/* LOG POSS said gave AUX-1SG 'I_i gave the shirt to Anda_j for him_x.'
 - (Culy 1994a:1073) ex. 28

I suggest that in Ewe, constructions with *na* translated depending on the context as 'for, give or to' (mostly realised as *for*) constitute a logophoric domain. They allow logohoric marking in embedded structures. This can be seen in conditionals (48)-(49), as well as in structures that do not typically allow for logophoric marking like relative clauses (51).

- (48)kpp dzi-dzp Kofi_{*i*} tso nunana ade $Ama_i de$ ne de a. wo-a Ama PFOC 3SG-POT see heart-straight if PFOC Kofi take gift INDEF na y $\dot{\mathbf{e}}_i$. va come give LOG 'Ama would have been happy if Kofi brought her a gift.' (lit: if Kofi brought a COND: [+Pverb, +LOG] gift for her) ne de Kofi_{*i*} tso nunana ade **na** $y \hat{e}_i$ la, $Ama_i a$ b. va kpp if PFOC Kofi take gift INDEF come give LOG TOP, Ama POT see dzi-dzə. heart-straight 'If Kofi had brought Ama a gift, she would be happy.'
- (49) a. Ama_i de wo-a **kpɔ ga** ne de Kofi_j tsɔ sika va **na yè**_i. Ama PFOC 3SG-POT see money if PFOC Kofi take gold come give LOG 'Ama would have been rich if Kofi had brought her gold.' [-Pverb, +LOG]
 - b. ne de Kofi_j tso sika va **na** $y\hat{e}_i$ la Ama_i a kpo ga. if PFOC Kofi take gold come give LOG TOP Ama POT see money 'If Kofi had brought Ama a gift, she would be rich.'
 - c. Ga a no Ama_i si ne de $Kofi_j$ tso sika va **na** y \dot{e}_i . money FUT be.PST Ama hand if PFOC Kofi take gold come give LOG 'Ama would have been rich if Kofi brought her gold.'

Regarding conditionals, they are marked with the morpheme ne; the (b) sentences are alternatives of the (a) sentences although, many speakers prefer the anaphoric (a) to the cataphoric (b) relation. It is possible for one to argue that $kp_{2} dzidz_{2}$ 'be happy' triggers logophoric marking in (48) since, verbs of psychological states are known to perform this function (Clements 1975). However, when substituted with a non-psych verb such as $kp_{2} ga$ 'be rich', it can be observed that ye is present and the sentence is grammatical (49). Note that Moreover, the combination of words that express *joy* namely kp_{2} and $dzidz_{2}$ as well as those that express to be rich i.e. kp_2 and g_a contain the perception verb 'see.' Thus, I use an alternative of be rich which is expressed with $g_a \ le \ asi$ 'money in hand' to clearly indicate my point in example (49c).

Concerning relative clauses, languages differ in whether or not they constitute a logophoric domain. Whereas in Mundang (50) logophoric marking (only personal pronouns occur) does not pertain in relative clauses (Hagège 1974) cited in (Sells 1987), in Ewe for instance, the facts are different. Logophoric marking is only permited with a condition, that is, to have logophoric marking within a relative clause that is in a logophoric domain. This possibility only resides with relative clauses that modify a non-clausal complement of a logophoric pronoun (Culy 1994a:1073). According to (Huang 2000:185) cited in (Agbedor 2014:62), this phenomenon is known as the skipping effect wherby the embedding under a logophoric predicate of a sentence which originally does not allow logophoric marking can render it logophoric. In this case, the logophoric pronoun skips over one or more layers of embedding to reach the logophoric trigger. Compare in (51) the Ewe and Gokana examples whereby Ewe makes use of the skipping effect to mark logophoricty with *gblɔ* 'say' while Gokana allows logophoric marking without the skipping effect.

(50)	à 3sc 'He (<mark>H</mark> a	fá mò lɨ dìb má kàl mè nē. G say you know man REL surpass me Q e asked, "Do you know a man who is taller than me?"" agège 1974:294) in (Sells 1987:466) ex. 2	(Mundang)
(51)	a.	Ama do-ŋku nyonuvi hi dze *yè/é gbo dzi. Ama set-eye girl WH stay LOG/3SG side on 'Ama remembered the girl who stayed with her.'	
		(Culy 1994a:1074) ex. 29a	(Ewe)
	b.	Ama gblo be yè do-ŋku nyonuvi hi dze yè gbo dzi. Ama say COMP LOG set-eye girl WH stay LOG side on 'Ama _i said that she _i remembered the girl who stayed with her _i .'	
		(Culy 1994a:1074) ex. 29a	(Ewe)
	c.	lébàreé kommè zib giã e aè zar-èè Lebare said I stole yams that he bought-LOG 'Lebare _i said that I stole yams that he _i bought.'	
		(Culy 1994a:1074) ex. 29b	(Gokana)

I show therefore, in (52) that without the so-called skipping effect, na also triggers logophoric marking even in relative clauses. Similar to Donno So, the consturction with na is subject oriented and disallows reference to non-subjects.

(52) a. Ama_i do-ŋku nyonuvi_j si fle avo **na yè**_i. Ama set-eye girl REL buy cloth for LOG 'Ama remembered the girl who bought cloth for her.'

b. Kofi_{*i*} **na** nu devi_{*j*} si fia mo $\mathbf{y}\mathbf{\hat{e}}_i$. Kofi give thing child REL show path LOG 'Kofi rewarded the child who directed him.'

3.3.3 Alesi 'how' clause

Logophoric marking is also possible in *alesi* 'how' contexts. *Alesi* is like the German *wie* 'how'; a question word which is generally asks for manner or method (Umbach et al. 2019). According to Umbach et al. (2019), manner reading allows for clarification questions with *wie* to be answered by the manner in which the event was performed, shown in (53).

(53) a. Anna sah, wie Berta ihre Tasche packte.
'Anna saw how Berta packed her bag.' (...namely, messy) Manner reading
b. Und Wie hat sie ihre Tasche gepackt?
'And how did she do that?' (...running shoes first, then some T-shirts and on top a sweater)
(Umbach et al. 2019:1) ex.2

There is a second reading namely, the eventive reading, which does not allow for *wie* clarification questions, but only for questions addressing the reason an event came about.

(54)	a.	Anna sah, wie Berta ihre Tasche packte.					
		'Anna saw how Berta packed her bag.'					
	b.	Was ist geschehen? / Wie ist das gekommen?					
		'What happened?' / How come?' (she had a fight with her sister)	Eventive				
		reading					
		(Umbach et al. 2019:1) ex.3					

Alesi, like *wie* has both the manner and eventive reading, shown in (55). However, regarding the eventive reading in (55b), we can observe that the occurence of *si* is illict in the construction. The assumption is that in Ewe, the morphology of the *how* word is reflected in the distinction between a manner and eventive reading. German, on the other hand makes no distinction in the morphology of the *how* word.

		'How did it happen?'	Eventive reading
		how 3SG happen PRT	
	b.	Ale(*si) wò dzɔ yi?	
		'Kofi saw how Ama packed her bag.'	Manner reading
		Kofi see how Ama pack 3SG-POSS load	
(55)	a.	Kofi _i kpo alesi Ama _j fo $e_{*i/j}$ -fe agba.	

Constructions which express the manner use of *alesi* constitute an environment for logophoric marking in Ewe. As shown in (56), *alesi* expresses the manner in which *Ama* and *Kofi* heard and paid attention to an event respectively, and *yè* is used to refer to them. Sentence (56) can be continued with (57) to show the eventive reading.

- (56) a. Ama_i se **alesi** Kofi_j dzu $y \hat{e}_{i/*j/*k}$. Ama hear how Kofi insult LOG 'Ama heard how Kofi insulted her.'
 - b. Kofi_{*i*} do-tó **alesi** Ama_{*j*} dzi ha la na $\mathbf{y}\mathbf{\hat{e}}_{i/*j}$. Kofi give-ear how Ama sing song DEF for LOG 'Kofi paid attention to how Ama sang (the song) for him.'
- (57) Ale(*si) wò dzɔ yi? how 3SG happen PRT 'How did it happen?'

Eventive reading

3.4 Interim summary

In previous sections, contexts for logophoric marking was discussed. These are reportative (indirect speech reports) and non-reportative (stretch of discourse, sentential adjunts, asif clause, benefactive *na* clause and *alesi* clause). Verbs which allow logophoric marking was also discussed. In particular, Culy (1994a)'s hierarchy of logophoric verbs (speech, thought, knowledge and direct perception), counterfactual verbs (dream, imagine and wish), and intentional vebs (factives and implicatives). However, with respect to non-reportative contexts (stretch of discourse § 3.2.1, purpose § 3.2.2.1, consequence § 3.2.2.3, 'as-if' clause § 3.3.1, benefactive *na* § 3.3.2, and *alesi* clause § 3.3.3) it seems that the verbs in whose complement *yè* occurs are non-attitudinal. Concerning purpose clauses, I argue that there is a desire or a *wanting* accompanying them¹². In this sense, (58a), entails the desire of the matrix subject (58b). In other words, (58a) bears the intention of (58b). The same holds for clauses of consequence (example repeated); it follows that because Kofi wants Koku to visit (59a), he is making arrangements to that effect (59b).

- (58) a. Kofi va be yè a de Ama. Kofi come COMP LOG POT marry Ama 'kofi came in order to marry Ama.'
 - b. Kofi di be yè a de Ama.
 Kofi want COMP LOG POT marry Ama 'kofi wants to marry Ama.'

¹²This idea is corroborated by Pearson (2012:444)'s claim that purpose clauses arguably constitute an exception to the generalization that $y\dot{e}$ must occur in the scope of an attitude predicate.

(59) Kofi di a. be Koku na va yè gbo. Kofi want COMP Koku to come LOG side 'Kofi wants Koku to come to him.' (Clements 1975:155), cited in (Culy 1994a:1072), adapted b. Kofi le dza-dzra-m-do be Koku na va vè gbo. Kofi is prepare-REDU-PROG-IC COMP Koku to come LOG side 'Kofi is preparing for Koku to come to him.' (Clements 1975:155), cited in (Culy 1994a:1072), my translation

I argue, following Culy (1994a) that intentions are a type of thought. As such, what $y\dot{e}$ needs is a verb that communicates an intention which accounts for why $y\dot{e}$ can still occur when embedded under non attitude verbs. Also, this assumption augers well with *abe* 'as-if' clauses. For instance, in (60) (repeated), one ascribes to *spider*, the thought that he, himself is clever¹³.

(60) Yiyi wo abe yè le nu nyá-m.
Spider do as-if LOG is thing know-PROG
'Spider behaved as if he is clever.'
Ananse stories (tales of the spider), adapted

Regarding benefactive *na* clauses, as mentioned earlier (§ 3.3.2), the morphemes which constitute the verb *be rich* (61a) contain *kpɔ* 'see.' *do* ηku (61b) also translates to 'set eye' which involve some form of perception. In terms of example (61c), I assume that *na* being benefactive ensures the occurence of $y\dot{e}$ since it expresses clearly a causal relation between the one who does the action (*Kofi*) and the one who benefits (*devi*). Thus, benefactive *na* clauses pattern with the idea of assuming intentions of speakers.

- (61) a. Ama_i de wo-a **kpɔ ga** ne de Kofi_j tsɔ sika va **na yè**_i. Ama PFOC 3SG-POT see money if PFOC Kofi take gold come give LOG 'Ama would have been rich if Kofi had brought her gold.'
 - b. Ama_i **do-ŋku** nyonuvi_j si fle avo **na yè**_i. Ama set-eye girl REL buy cloth for LOG 'Ama remembered the girl who bought cloth for her.'
 - c. Kofi_{*i*} **na** nu devi_{*j*} si fia mo $\mathbf{y}\mathbf{\hat{e}}_i$. Kofi give thing child REL show path LOG 'Kofi rewarded the child who directed him.'

Alesi 'how' clauses are also not different since they also occur with perception verbs (62).

(62) Ama_i se **alesi** Kofi_j dzu $y \tilde{e}_{i/*j/*k}$. Ama hear how Kofi insult LOG 'Ama heard how Kofi insulted her.'

¹³I thank Chris Collins for discussions on *abe*.

Thus, eventhough clauses categorised under non-reportative contexts are not attitudinal, they are similar. Constructions with them entails something about the thoughts of the matrix subject, which is exactly what holds in attitude reports. We simply need to adjust the kind of verbs $y\hat{e}$ occurs with, to intentional to cover these cases. Intentionality implies that the performer of the action of the main clause is somehow involved in (or controls) the realization of the situation in the clause (Schmidtke-Bode 2009). In the next section, I provide an account of $y\hat{e}$ licensing based on the various contexts which I have explored.

3.5 Logophoric licensing in Ewe

3.5.1 *be* licenses *y*è

From our previous surveyed contexts it seems that every appearance of $y\dot{e}$, require the occurrence of *be*. Simply, whenever there is $y\dot{e}$, *be* is present. See (63) for a recapitulation of discussed contexts that show this.

(63)	a.	Kofi _i gblo *(be) $y\dot{e}_i$ dzó. Kofi say COMP LOG leave 'Kofi said (that) he left.'	Indirect speech
		(Clements 1975:142) ex. 1	
	b.	Wó ame $et\tilde{D}_i$ -a wó dui vevie *(be) yè-wó _i -a 3PL person three-DEF 3PL decide INT COMP LOG-PL-FUT tD-a me. river inside 'The three of them decided to put the moon into the river.'	de dzinu _j la put moon DEF extract from
		stretch of discourse	
	c.	Omari _{<i>i</i>} va *(be) $y\dot{e}_i$ -a fo-nu tso nyà la Omar come COMP LOG-POT beat-mouth about matter DEF 'Omar came in order to talk about the problem.	ŋu. body Purpose clause
	d.	Kofi _i le dza-dzra-mdo*(be)Koku _j na va $\mathbf{y}\mathbf{\hat{e}}_i$ Kofi is prepare-REDU-PROG ICCOMP Koku to come LOG'Kofi is preparing for Koku to come to him.'	gbo. side Clause of effect
	e.	Yiyi _i wo *(abe) $y\hat{e}_i$ nyá nu. Spider do as-if LOG know thing 'Spider behaved as if he is clever.' Translated from <i>Ananse</i> stories (tales of the spider)	As-if clause

The reverse (when there is *be*, $y\dot{e}$ is present), however, is not the case as shown in (64). Infact, Collins (1993) in example (65), makes a similar observation in Kpele, a dialect of Ewe spoken in the north of Kpalime in Togo (Collins 1993). A simple, straight forward explanation is that in these examples (64) and (65), $y\dot{e}$ does not occur because it needs a subject anchor which is absent. The third person pronouns, \acute{e} and $w\grave{o}$ respectively do not refer to the matrix subjects. Only in reference to the matrix subject (local or long distance), would $y\grave{e}$ occur.

- (64) a. Me kpɔ é **be** é nɔ kɔ-di-m. 1 SG see 3 SG COMP 3 SG was IC-play-PROG 'I saw (it) that he was playing.'
 - b. Me kpp é be *yè np kp-di-m.
 1 SG see 3 SG COMP LOG was IC-play-PROG 'I saw (it) that he was playing.'
- (65) Kofi_{*i*} bia be lamata $w \delta_{*i/j}$ fo Kosi_{*k*}. Kofi ask COMP why 3SG hit Kosi 'Kofi asked why he hit Kosi.' (Collins 1993:164) ex. 16

All our previous constructions that allow logophoric marking irrespective of the verb, contain the morpheme be in (63). In its absence, the sentences are ungrammatical (shown with (*)). Thus, it seems convincing to conclude that due to consisitency of occurrence in the above contexts, and its omission resulting in ungrammaticality, be suffices the occurrence of yè. Cross-linguistic studies on logophoric marking recognize the role of the complementizer, which tends to be homophonous to the verb say, in ensuring logophoric marking (Clements 1975; Sells 1987; Koopman & Sportiche 1989; Essegbey 1994; Culy 1994a; Huang 2000; Dimmendaal 2001; Orita 2009; Nikitina 2012; O'Neill 2015; Pearson 2015; Bimpeh 2019), among others. Sells (1987:448), for instance, posits that in Gokana, "the presence of the complementizer, ko is sufficient for logophoric marking". This claim is corroborated in other languages. For instance, according to Clements (1975:165), in Ewe, "a comparison between clauses with be and those without be, indicates that all logophoric pronouns are introduced by the complementizer." Dimmendaal (2001:133) also testifies that the trigger of the logophoric pronoun in Ewe, is the reported speech marker, be, signifying the obligatoriness of be for logophoric marking. Compare all examples of Ewe seen so far. Also, Stirling (1994:260) records that the complementizer, $g\bar{a}$ in Tubiri always introduces the logophoric context, and in Icelandic, the complementizer, $a\delta$ is required. Similarly, in their documentation of Abe, Koopman & Sportiche (1989) describe a correlation between the complementizer, kO and the referential use of the n-pronoun in the language. According to them, "logophoric effects seem to depend on the arbitrary syntactic property of taking a kO-complement. The logophoric pronoun occurs only in a subset of kO-complements" (Koopman & Sportiche 1989:580). Aside the aforementioned languages, Banda-linda and Efik also show such a correlation between a complementizer and logophoric marking (Culy 1994a:1070). On the contrary, Culy (1994a) argues that not all languages show such a correlation. In Donno so for example, (66) shows that the presence of the complementizer, g_{2} , does not ensure the achievement of logophoric marking. As observed in (66b), the absence of the complementizer g_{2} does not result in illicit sentences as would be the case in Ewe.

(66)	a.	mi woñ y	waa bem	go	igi	WЭ.	
		1SG 3SG-OBJ S	seen PST-1SG	СОМР	know	AUX	
		'S/He _i knows t	hat I saw her/	$\lim_{i/k}$	2		(Donno) so: [+COMP, -LOG]
		(Culy 1994a:10)70) ex. 22c				
	b.	mi woñ y	waa bem	igi	WЭ.		
		1sg 3sg-obj s	seen PST-1SG	know	AUX		
		'S/He _i knows t	hat I saw her/	$\lim_{i/k}$,		(Donno sɔ): [-COMP, -LOG]
		(Culy 1994a:10	071) ex. 22d				

On the other hand, in Wan, Nikitina (2012) suggests that logophoric marking is independent of the use of the complementizer (also, quotative marker), $d\delta\bar{o}$ (67). The presence of the complementizer, *se*, is also optional in Mundang (Stirling 1994:260). This shows that the link between logophoric pronouns and complementizers may not be universal.

(67)	a.	yāá	yr	āló lé	dóō	pō	kū	6ā	òŋlé ò.	
		3sg+c	OP cc	mplain PR	OG QUO	T thin	g any	LOG	G.SG at NEG	
		She_i c	ompla	ains that sl	he_i has n	othing	g to v	vear.'	(Lit. she is c	omplaining that
		she has	noth	ing at her _L	$_{OG})$				(Wan): [+	QUOT, +LOG]
		(Nikiti	na 201	12:283) ex	. 3a					
	b.	è gé	ì	lèŋ 6ā	gbòk	ōlē	1	кā.		
		3sg sa	id 1so	G to LOG.	SG mater	rnal.ui	ncle o	died		
		She_i to	ld me	that her _i r	naternal	uncle	had o	lied.'	(Wan): [-	QUOT, +LOG]
		(Nikiti	na 201	12:283) ex	. 3b					

The novel Ewe data shown on benefactive na in (68a) and *alesi* 'how' clauses in (68b), seem to challenge the claim that $y\dot{e}$ is only possible in a clause headed by *be*. These examples are clearly not a *be*-clause and yet, logophoric marking is permitted.

(68)	a.	Ama _i do-ŋku nyonuvi _j si fle avo na yè _i . Ama set-eye girl REL buy cloth for LOG 'Ama remembered the girl who bought cloth for her.'	Benefactive <i>na</i> clause
	b.	Ama _i se alesi Kofi _j dzu y $\dot{\mathbf{e}}_{i/\star j}$. Ama hear how Kofi insult LOG 'Ama heard how Kofi insulted her.'	Alesi clause

One is left to wonder if it is the case that $y\dot{e}$ prefers any kind of embedding. The answer is no! If it was so, $y\dot{e}$ would occur in relative clauses without an earlier embedding under a verb or without *na*. I argue that (68a) is not inconsistent with previous claims on the subject since

relative clauses occupy the C position. As such, there cannot be two C elements namely *be* and *si*. Regarding (68b), I offer the following explanation: Ewe employs the Doubly-Filled-Comp Filter (DFCF), of the type (69), known to be operative in English. The DFCF, first introduced by Chomsky & Lasnik (1977), excludes the co-occurrence of a *wh*-phrase and a complementizer in a *comp* position as shown in (70). Applying (69), to Ewe, we observe that it is not the case that (71) is not well-formed. Hence, the deletion of the complementizer, *be*. I postulate for Ewe that since DFCF is a PF-phenomenon, whenever the *comp*-position is filled by any other element other than *be*, *be* is present (at least semantically) but it is not spelled out overtly.

- (69) *[$_{COMP}$ wh-phrase φ], $\varphi \neq e$
- (70) In the domain COMP, delete [_αφ], where α is an arbitrary category and φ an arbitrary structure.
 (Chomsky & Lasnik 1977:446)
- (71) *... alesi be Kofi dzu yè.
 ... how COMP Kofi insult LOG
 '*... how that Kofi insulted her'

Another set of examples to ponder on is (72). As shown earlier, while (72a)- (72c) is not a logophoric environment, (72d)- (72e) is logophoric. This explains why $y\dot{e}$ occurs in (72d)-(72e) and not in (72a)- (72c). Now, (72e) is out due to DFCF but what about (72b)? Firstly, even if we assume a hidden *be* (in gray), the sentence is still ungrammatical because of *wo*. As showns in (72c), (72b) can be redeemed by deleting *wo* which renders the sentence either logophoric or non-logophoric. (Collins 1993:164), explains that this ungrammaticality is due to *wo*-selection i.e., *wo* is an alternative form of the regular third person singular é and thus, in the presence of an overt complentizer (be), if there is a lexical subject, *wo* is not selected (see (Collins 1993:164-171) for more details).

- (72) a. Kofi_i se Koku_j wo_j no $\mathbf{\acute{e}}_x$ dzu-m. Kofi hear Koku 3SG be-PST 3SG insult-PROG 'Kofi heard Koku insulting him (someone else)
 - b. *Kofi_i se be Koku_j wo_j no $\mathbf{\acute{e}}_x$ dzu-m. Kofi hear COMP Koku 3SG be-PST 3SG insult-PROG 'Kofi heard Koku insulting him (someone else)
 - c. Kofi_i se be Koku_j no $\mathbf{\acute{e}}_x / \mathbf{y}\mathbf{\acute{e}}_i$ dzu-m. Kofi hear COMP Koku be-PST 3SG / LOG insult-PROG 'Kofi heard that Koku was insulting him (someone else/ Kofi)
 - d. Kofi_i se alesi Koku_j dzu $y\dot{e}_i$. Kofi hear how Koku insult LOG 'Kofi heard how Koku insulted him (Kofi)

e. *Kofi_{*i*} se be alesi Koku_{*j*} dzu $y\hat{e}_i$. Kofi hear COMP how Koku insult LOG 'Kofi heard how Koku insulted him (Kofi)

In the end, by reason of consistency with Ewe data, our earlier claim that be (or C element) licenses $y\dot{e}$ is borne out.

3.5.2 Accounting for be

Having identified *be* as the logophoric licensor, this section aims at accounting for *be* following Bimpeh & Sode (2021). I begin with von Stechow (2004), which provides a background to Bimpeh & Sode (2021)'s system.

3.5.2.1 von Stechow (2004)

In his quest to account for the indexical shift in Amharic, Schlenker (1999) proposed that all first person perspectival pronouns should be read *de se*. However, von Stechow (2004) modified Schlenker (1999)'s theory of such pronouns because his analysis fails to incorporate an analysis of the feature tense. I present von Stechow (2004)'s feature theory independent of the *de se* or *de re* status of *yè*.

To begin, I follow Heim (2008)'s definition of features. Features as used here, refers to ϕ -features namely person, number and gender. For instance, the noun *boy* has the features spelled out in (73) iff the individual being referred to is not the speaker nor addressee, is one entity, and has the property of being male.

- (73) a. $[3^{rd}] = \lambda x$: x excludes speaker and addressee in an utterance context (c)
 - b. [Singular] = λx : x is an atom
 - c. [Masculine] = λx : x is a male (Heim 2008:36-37), simplified version

According to Heim (2008:37), features are useful to "constrain the range of possible antecedents". Feature checking takes place between two features of the same sort namely, the checker and the checkee, with the checkee being in the checking domain ¹⁴ done under agreement, i.e. when a checkee and a checker are adjacent, they are not projected further. Alternatively, feature checking could be done by movement either by the bearer of the features or by abstract movement of the features. Movement is done in order to get rid of uninterpretable features. For instance, in (74), movement of *John* to spec, T deletes the uninterpretable ϕ -features of *likes* (takes two arguments: subject and object). If *John* remains in

¹⁴The checking domain of head A consists of everything adjoined to it, and of its specifier(s) c.f. Chomsky (2014).

the domain of the VP, the sentence would lack a subject and due to the External Projection Principle (EPP), the feature of *likes* cannot be checked by *John*. After movement out of the VP, the ϕ -features of *likes* are checked by *John*.

(74) [TP John T [VP t_{John} likes Mary]] $\downarrow __\uparrow$

Consequently, both approaches (checking under agreement and movement), are compatible with different variants of the 'Minimalist' tradition. At Logical Form (LF) of the grammar (the input to semantic interpretation e.g. after quantifier raising), checkees are non-interpretable and checkers are interpreted if they have semantic content.

In von Stechow (2004)'s system, features are morphological, or purely syntactical and encode binding properties. At the Phonological Form (PF)-branch of the grammar (where the words are realized as sounds e.g. after ellipsis), the morphological features determine the pronunciation of the expression. von Stechow (2004) further assumes that all features are still present at surface structure / spell-out. At LF, only interpretable features survive while, non-interpretable features are deleted. Feature deletion is under projection and variable binding, formulated in (75).

- (75) Feature deletion under projection and variable binding.
 - a. Binding requires agreement of ϕ -features at S-structure.
 - b. Delete the ϕ -features that are syntactically projected. (LF)
 - c. Delete the features of a moved phrase to all variables it binds.(LF) (von Stechow 2004:435)

I illustrate von Stechow (2004)'s feature deletion principle with bound variables, verbal quantifiers, and logophoric pronouns.

(a) Bound variables

- (76) a. SS: $[Only I_5]^{1st} = 8 \text{ did } my_8 \text{ homework.}$
 - b. LF: [DP Only 5 ^{1st}]^{1st} $\lambda_8 t_8^{1st}$ did 8^{1st's} homework (von Stechow 2004:433)

Example (76) is an instance of a bound variable (pronoun that has quantified DPs as its antecedent). Features of semantically bound variables such as *only I* are not interpreted, therefore my in (76) cannot be interpreted. At LF, each pronoun has a numerical index (e.g. index 5) which are variables and mapped to semantic values by an assignment. In the surface

structure in (76), I_5 is interpreted as a variable which bears the interpretable feature I^{st} (since I is a first person pronoun, see (77) on interpretation), which restricts the denotation of the variable 5 to the actual speaker I. Pronouns and their antecedents must agree in features. However, the possessive my is a bound variable which is not interpreted therefore it lacks the variable 5. The first person feature is projected to the only-DP, a generalised quantifier that must be Quantifier Raised (QR)-ed for type reasons. After QR, the moved DP at LF, λ -binds the trace t_8 and the variable 8, which translates the possessive pronoun signaling coreference. The feature first person on the quantified DP is transmitted to the variable 5 due to the principle in (78).

- (77) $[1^{st}] = \lambda x$: x includes speaker in an utterance context (c)
- (78) Principle of feature transmission under variable binding: Transmit features of a moved phrase to all variables it binds. (Heim 2002)

The binding of the variables has the effect that the transmitted features are not interpreted. (76) can therefore be paraphrased as (79), where the two occurrences of x in the that-clause correspond to the two variables 8 in the LF.

(79) Everyone x such that x is different from me does x's homework.

(b) Verbal quantifiers

(80) illustrates how the feature deletion rule in (75), applies to the verbal quantifier *hope*.

(80) John hopes that he wins.

Generally, verbs are assumed to have a subject, a world and a time argument. This means that an attitude is attributed to an individual i.e. the holder of the attitude, a world in which the individual holds an attitude, and a time. Thus, the verb *hope* is assumed to be a quantifier that must quantify over individuals, world and times. The features person, tense and mood are required to match in the morphology by some appropriate agreement mechanism.

- (81) Feature deletion under verbal quantifiers
 - a. S-structure: [VP hopes^{ind.pres.3} $_{<456>}$ [CP ... $w_4^{ind} t_5^{pres} he_6^3 wins$]] $\downarrow _ \uparrow Morphological agreement$
 - b. LF movement: [VP hopes^{*ind.pres.3*} $\lambda_{<456>}$ [VP $w_4^{ind} t_5^{pres} he_6^3$ wins]] (von Stechow 2004:436)

In (81), only the indicative and the present features of the variables in the matrix sentence are interpreted. The indicative feature restricts the denotation of the world variable to the actual world and the present feature restricts the denotation of the time variable to the actual time. The features of the embedded variables are deleted under variable binding. Note that the bound pronoun he_x is in no way anaphoric to the matrix subject *John*.

(c) Logophors

The crucial property of logophoric pronouns is that they must occur in the scope of an attitude verb; verbs which communicate the speech, thoughts or emotions of an individual (Clements 1975). This means that in languages with logophoric pronouns, attitude verbs can bind individual / world pronouns in the syntax. According to this view, logophoric pronouns are a special kind of anaphoric pronoun whose features can only be checked by an attitude verb as its binder. Thus, a verb of attitude deletes the features of the variables it binds under agreement with its checkees. Note that a checkee **a** agrees with a checker **b** if **a** = ***b** (von Stechow 2004); *3 is the checker and 3 the chekee in (82b). Logophoric pronouns are variables with case and ϕ -features. They have the feature *log*. Thus, (82a) translates to (82b). von Stechow (2004) assumes in (82b) that the logophoric pronoun *yè* carries a feature *log*] that can only be checked by a feature *[log]* on an attitude verb if the corresponding attitude verb binds that pronoun at LF. Under this assumption, the combination of binding by verbs and feature checking under binding therefore garantuee that *yè* can only occur in the semantic scope of a licensing attitude verb.

(82) a. Ama said she_{LOG} remembered the girl who stayed with her_{LOG}. (Ewe) b. Ama³ says^{*3} $\lambda_{<x^3...>...x^{3.log}}$ remembers^{*3} the girl who stayed with x^{3.log}

Due to data in (83), it is clear that although binding by verbs is assumed, it is not the attitude verb that bears the *log* feature. In this regard, von Stechow (2004)'s analysis does not account for Ewe's $y\dot{e}$.

- (83) a. Kofi_i se Ama_j dzu *yè. Kofi hear Ama insult LOG 'Kofi heard Ama insult him.'
 - b. Kofi_{*i*} se be $Ama_j dzu y \dot{e}_i$. Kofi hear COMP Ama insult LOG 'Kofi heard that Ama insulted him.'

In what follows, I present Bimpeh & Sode (2021)'s analysis of $y\dot{e}$ which is able to account for the facts in Ewe.

3.5.2.2 Bimpeh & Sode (2021)

In § 3.5.1, it was shown that *be* is the logophoric licensor in Ewe. As a result, I assume along the lines of Bimpeh & Sode (2021) that *be* is the element that bears the interpretatble *log* feature and not the attitude verb as concluded in the previous section. It is widely accepted that *yè* is bound by a non-local c-commanding operator (λ). This is analogous to von Stechow (2004)'s account which assume binding by verbs (ATT). Under this analogy:

- a. A binding operator inherits the logophoric features of its arguments.
- b. A binding operator can check all inherited logophoric features on the pronouns that it binds.

This is schematized in (84). (85) represents the parallel to von Stechow (2004)'s binding by verbs.

- (84) ... Verb $[\lambda_1^{log} \mathbf{b} \mathbf{e}^{\text{LOG}} [\dots \mathbf{y} \mathbf{\hat{e}}_1^{log} \dots]]$ $\uparrow _ _ \downarrow$ (Bimpeh & Sode 2021:14)
- (85) ... Verb^{LOG} [ATT₁ ^{log} be [... yè^{log} ...]] $\downarrow ____\uparrow$ (von Stechow 2004)

According to Bimpeh & Sode (2021), the interpretable feature [LOG] of *be* licenses the uninterpretable feature [log] of the operator in Spec,CP under Agree. The uninterpretable feature [log] of the logophoric pronoun is in turn licensed by feature checking under binding by the operator. Due to the doubly-filled-comp-filter, the *alesi* clause as we saw earlier, is consistent with this account (86).

(86) ... Verb
$$[\lambda_1^{log} \text{ alesi}_{\text{LOG}} [... y \hat{\mathbf{e}}_1^{log} ...]]$$

 $\uparrow __\downarrow \downarrow$

Also, the same rule applies to the benefactive na clauses. The relative clause marker si bears the interpretatble *log* feature (87).

(87) ... Verb
$$[\lambda_1^{\log} \mathbf{si}^{\log} [\dots \mathbf{y} \mathbf{\hat{e}}_1^{\log} \dots]]$$

 $\uparrow \qquad \downarrow$

A similar observation on *be* in Danyi (dialect of Ewe) is made in O'Neill (2015), according to which *be* is a special complementizer. Thus, its absence implies that there is no logophoric marking. O'Neill (2015) analyses logophoric pronouns as being bound by a Pivot (one from

whose point of view the report is made, c.f. (Sells 1987)), POV-holder (Op), for short see (88). In her approach, *be* is a verbal Speech Act head (vSA) that selects a Speech Act Phrase (SAP). Following assumptions that logophoric pronouns are bound by an operator in the left periphery of the clause (Heim 2002; von Stechow 2002), left periphery heads (Op) can bear a [+/-coin(cidence)] feature, interpreted as relation between their arguments. The [+/-coin(cidence)] feature is motivated for tense, aspect, person, location, among others. In (88), Op bears a [-coin] feature and values vSA_{be} also as [-coin]. The POV holder (pro) and Op match person features of an antecedent for [-author, -participant] on grounds that a logophoric pronoun must be disjoint from an external speaker ([-author]). Her analysis of yi as reliant on *be* and not the attitude predicate is thus, corroborated. See O'Neill (2015) for details of her approach.

(88)



(O'Neill 2015:31), adapted

In this section, *be* was identified as the logophoric licensor. The section showed that previous studies accounted for the logophoric pronoun by assuming under binding by verbs that the verb carries the *Log* feature. However, following Bimpeh & Sode (2021), one needs to assume a *Log* feature on *be* to account for the facts in Ewe. This feature is transmitted to the λ operator and in turn checked under binding by the operator. The next section discusses the status of *be*.

3.6 The status of *be*

An issue of concern is that the status of what seems to be the complementizer (be) in Ewe has not been clearly established in the literature. To a large extent, *be* seems to be restricted
to reportative contexts by introducing what someone *said*, *thinks* or *believes*. Although it is not clear if this restriction holds, a question worth investigating is- what kind of reportativity comes from *be*? The literature records the following grammatical categories: *verb*, *complementizer* and *verbal preposition*. I include two new functions namely, *reportative evidential* and *logophoric complementizer*. The strongest hypothesis is to assume that although *be* performs other grammatical functions depending on context of use, it is mainly a complementizer. The reason is that in different languages, many complementizers are related to morphemes for other purposes. In this respect, the most common verbal source of complementizers is the verb *say* and these complementizers are known to occur in indirect speech. I discuss away the various grammatical and functional categories associated with the form, *be* in Ewe.

3.6.1 *be* as a verb

The use of *be* as a main verb is synonymous with the verb *gblɔ* 'say, speak, tell' as shown in (89) (Clements 1975:166-167).

(89) Kofi be yè dzó.
Kofi say LOG leave
'Kofi said (that) he left.'
(Clements 1975:142) ex. 1

However, Clements (1975:166) suggests that this analysis runs into difficulties when *be* is compared to main verbs such as *gblɔ* 'say, speak, tell.' While true main verbs (with few exceptions) take the full set of inflectional forms, *be* is highly restricted in this respect. If we compare all (a) alternatives to their (b) counterparts from examples (90) to (92), we observe that *gblɔ* shows all the syntactic properties of a main verb by inflecting for tense, preverbs and aspect while *be* does not (Clements 1975:166).

(90)	a.	ma- gblɔ	be	Kofi le afe	me.	
		1sG-T-say	COMP	Kofi is home	POST	
		'I will say	that Ko	ofi is at home.	,	Tense
		(Clements	s 1975:1	66) ex. 62a		
	b.	*ma- be 1SG-T-say 'I will say	Kofi le V Kofi is that Ko	e afe me. home POST ofi is at home.	,	
		(Clements	s 1975:1	66) ex. 63a		
(91)	a.	me-ga- gb l 1SG-REP-	b be say COM	Kofi le afe	e me. me POST	
		'I will say	again t	hat Kofi is at	home.'	Pre-verbs

(Clements 1975:166) ex. 62b

- b. *ma-ga-be Kofi le afe me. 1SG-REP-say Kofi is home POST 'I will say again that Kofi is at home.' (Clements 1975:166) ex. 63b
- (92) a. me gbɔ-gblɔ-m be Kofi le afe me. 1SG REDU-say-PROG COMP Kofi is home POST 'I am saying that Kofi is at home.' (Clements 1975:166) ex. 62c
 b. *me be-be-m be Kofi le afe me.

'I am saying that Kofi is at home.'

(Clements 1975:166) ex. 63c

1SG REDU-say-PROG COMP Kofi is home POST

Aspect

How then do we reconcile the defectiveness of *be* in (90b), (91b) and (92b) with (89), where *be* is grammatical? According to Clements (1975), the sentence in (89) does not contain a main verb. Rather, while *be* retains the semantic properties of the verb *say*, it is derrived from an underlying structure containing the main verb *gblo*, which is deleted by an optional rule. See the adapted structure in (93).



Orita (2009:12) offers a raising explanation of Clements (1975)'s original deletion analysis. According to her, in structures like (89), *be* raises to V to delete *gbls* as shown in (94).



I advance two possibilies for cases like (89). First, we could assume a null verb of saying i.e. \emptyset *gbl*₂, like in Russian that has null verbs and copulas, which may not be attributed to

deletion rules¹⁵. I repeat the sentence in (89) as (95) for convenience. Alternatively, we could assume that *be* serves double duty i.e. verb + complementizer, if we consider the possibility that after grammaticalisation, *be* still carries the force of the verb say^{16} like $g\bar{a}$ in Tubiri.

(95) Kofi Ø be yè dzó.
Kofi COMP LOG leave 'Kofi said that he left.'
(Clements 1975:142) ex. 1

Orita (2009:15ff) provides the co-occurence of adverbs as further evidence for the lack of verbal properties of *be*. Whereas *gblɔ* allows the co-occurrence of manner adverbs such as *sesie/kpoo* 'loudly/quietly', *be* disallows such interaction. See (96).

(96) Kofi gblo é sesie/kpoo yè a. be kpo Ama. Kofi say 3SG loudly/quietly COMP LOG see Ama 'Kofi said (it) loudly/quietly that he saw Ama. (Orita 2009:16) ex. 27a b. *Kofi be é sesie/kpoo be yè kpɔ Ama. Kofi say 3SG loudly/quietly COMP LOG see Ama 'Kofi said (it) loudly/quietly that he saw Ama.

(Orita 2009:16) ex. 27c

In addition to the facts presented by Clements (1975) and Orita (2009), I propose negation as a crucial test for the verbal properties of *be* since verbs can be negated. We observe in (97b) that negation with *gblo* is grammatical but, not with *be* as demonstrated by the illicitness of (98b). Note that negation in Ewe is marked by a discontinuous *me...o* element. The first part of the negative morpheme precedes and is attached to the main verb while the second morpheme occurs at the end of the clause (Agbedor 1994).

(97)	a.	Daavi gblo be yè yi asime. Daavi say COMP LOG go market 'Daavi said she has gone to the market.'
	b.	Daavi me-gblo be yè yi asime o . Daavi NEG-say COMP LOG go market NEG 'Daavi did not say she has gone to the market.'
(98)	a.	Daavi be yè yi asime. Daavi say LOG go market

'Daavi said she has gone to the market.'

¹⁵I thank Chris Collins for drawing my attention to this possibility.

¹⁶Note that also in Tubiri, the complementizer, $g\bar{a}$ may occur by itself, with the matrix logocentric predicate being omitted, in which case, $g\bar{a}$ carries the force of the verb of *saying* (Stirling 1994:261).

b. *Daavi me-be yè yi asime o.
Daavi NEG-say LOG go market NEG
'Daavi did not say she has gone to the market.'

Furthermore, I propose verb focalisation as another test. Ewe verbs can be focused with the predicate focus marker, $d\dot{e}$ (Ameka 2010). However, notice from (99b) that verbal focalisation of *be* is impossible.

(99) a. dè wò gblɔ é PFOC 3SG say 3SG 'He did say it.' (as opposed to wishing it)
b. *dè wò be é PFOC 3SG say 3SG 'He did say it.' (intended)

3.6.2 *be* as a complementizer

Clements (1975) suggests that one of the functions of be is a complementizer. However, he does not provide evidence for this. Thus, this section presents evidence that be is a complementizer.

When we observe the examples we have seen so far involving *be*, it can be noticed that its distribution is similar to the *that / whether*-complementizer in English. First, *be* introduces finite subordinate clauses and it is essentially compatible with declaratives (100b), interrogatives (101b), indicatives (102b) and subjunctives (103b).

(100)	a.	. It is clear [that he made a mistake].				
	b.	é me kɔ [be é wɔ vodada]. 3SG inside clear COMP 3SG do mistake 'It is clear that he made a mistake.'				
(101)	a.	Kofi asked whether Koku had eaten. Closed Int	terrogative			
	b.	Kofi bia Koku be é du nu a? Kofi ask koku textsccomp 3SG eat thing QPRT 'Kofi asked Koku whether he has eaten.'				
(102)	a.	Kofi's belief that John Mahama is the president annoyed Ama.	Indicative			
	b.	Kofi fe xo-se be John Mahama nye dutato Kofi POSS take-hear COMP John Mahama is country.head.owner dodziku na Ama. annoy for Ama. 'Kofi's beleif that John Mahama is the president annoyed Ama.'	la : DEF			

(103) a. The judge ruled that the thief be shot.

Subjunctive

b. Vonudro la de-gbe be ne wó-a da tu fiafito la. judge DEF declare COMP SUBJ 3PL-POT throw gun thief DEF 'The judge ruled that the thief be shot.'

One other reason to consider *be* as a complementizer is attributed to historical development. As attested cross-linguistically, *be* grammaticalized from the verb *be* 'say' and as grammaticalisation has it, the constituent of which it is part of, changes from VP to sentence complementizer. According to (Heine & Reh 1984:37), this process is known as desemanticalisation whereby, a lexical item receives a second, non-lexical function, which may ultimately become its only function. The cross-linguistic common pattern is for the grammaticalised complementizer to occur in the same position as its ungrammaticalised verb form i.e. to precede its IP complement (Heine & Reh 1984).

Finally, *be* is a complementizer due to selection. It is a property of complementizers to be selected for by specific lexical items like verbs. For instance, according to Roussou (2010:3), in modern Greek, the verb *ksero* 'know' selects the complementizer *oti* 'that' and excludes *an* 'if' whereas the reverse pattern holds for the verb *anarotjeme* 'wonder' which selects *an* 'if' and excludes *oti* 'that.' The same holds for the English translations (see also (Bresnan 1972)) in (104) and (105). Note that in negated or interrogative constructions the verb *know* selects both 'if' and 'that.'

- (104) ksero oti/*an o Janis elise to provlima. know-1SG that/if the John solved-3SG the problem 'I know that/*if John solved the problem.'
 (Roussou 2010:3) ex. 1a
- (105) anarotjeme an/*oti o Janis elise to provlima. wonder-1SG if/that the John solved-3SG the problem 'I wonder if/*that John solved the problem.'
 (Roussou 2010:3) ex. 1b

Same selection pattern holds in Ewe. *Nya* 'know' selects *be* 'that' but it is incompatible with the *if*-conditional *ne* or its eleborate form *ne*-($w\dot{o}$)-*nye-be* 'if it is that' as illustrated by (106a) and (106b). We observe the reverse in (107a) and (107b) with *wonder*.

(106) a. me nyá be John Kpo nya la gbo. 1SG know COMP John see matter DEF beside 'I know that John solved the problem.' (lit: John saw to the matter)
b. *me nyá ne John Kpo nya la gbo. 1SG know COND John see matter DEF beside 'I know if John solved the problem.' (lit: John saw to the matter) Translated from (Roussou 2010:3) ex. 1a

- (107) a. *me bía-dokui-nye be John kpɔ nya la gbɔ.
 1SG ask-self-my COMP John see matter DEF beside
 'I wonder that John solved the problem.' (lit: John saw to the matter)
 - b. me bía-dokui-nye ne-wò-nye-be John kpo nya la gbo.
 1SG ask-self-my COND-it-is-that John see matter DEF beside 'I wonder if John solved the problem.' (lit: John saw to the matter) Translated from (Roussou 2010:3) ex. 1b

3.6.3 *be* as a logophoric complementizer

The use of *be* overlaps in a way that logophoric complementizers do i.e. indicating an attitudinal context and in the sense of Kratzer (2006:2), logophoric complemenizers introduce a doxastic or epistemic perspective. They have the component of being semantically selected for by an attitude verb. Other reasons for which *be* could be likened to logophoric complementizers is, first, compatibility with purpose and causal clauses as we saw in (§ 3.1.2). Second, logophoric complementizers need to have an anchor (Bianchi 2003). The marked case for logophoric anchoring is to the individual other than the speaker. On the other hand, employing an ability modal such as *tenju* 'able' as a test, shows that *be* is not a logophoric complementizer as exemplified in (108).

(108) Ama tenu se be yè le tosisi la dzi. . Ama able hear COMP LOG LOC river DEF on 'Ama was able to hear that she is on the river.'

3.6.4 *be* as a verbal preposition

Clements (1975) posits that *be* is a verbal preposition or verbid in Ansre (1966)'s terms. This means that *be* is "assigned to the grammatical category of a verb, but never occurs as a main verb, due to lexical restictions which limits it to the function of preposition" (ibid., 167). *be*, then, subcategorizes object clauses that characterizes the thought, speech and perceptions of individuals other than the speaker-narrator. His evidence stems from examples like (109) where the verb *gbe* 'to refuse' which is inherently negative does not require a redundant expression of negation in a subordinate clause. Thus, assigning *be* a status similar to *gblo* 'say' would give us a translation like 'Kofi refused, saying he would not eat it' (Clements 1975:167).

(109) Kofi gbe be yè me du ge o. Kofi refused COMP LOG NEG eat INGR NEG 'Kofi refused to eat (it).'

(Clements 1975:167) ex. 64

Analysing (109) as 'Kofi refused, saying he would not eat it' does not explain the function of *be* as a verbal preposition neither does retention of its verbal properties. A simple gesture of rejection (head shaking) on Kofi's part also warrants (109) and shows that Clements (1975)'s translation, 'Kofi refused, saying he would not eat it,' is not justified. Also, regarding the verbal retention of *be*, in example (110a), one would expect *be* to be possible since it involves a verb of telling. However, only the true verb of saying *gblo* rescues the construction (110b). So, this cannot be the whole story.

- (110) a. *Kofi be nyatefe nya ade na-m.
 kofi tell matter.true word INDEF to-1SG
 Intended: 'Kofi gave me a true information.' (lit: Kofi told me a true matter)
 - b. Kofi gblo nyatefe nya ade na-m.
 kofi tell matter.true word INDEF to-1SG
 'Kofi gave me a true information.' (lit: Kofi told me a true matter)

3.6.5 *be* as a reportative evidential

Evidentials are simply described as markers that express the source of information or type of evidence that a speaker has for the information conveyed (Speas 2008). Every language employs different strategies in encoding evidentiality. Where as some languages express this phenomenon by means of a grammatical category, like in English, with reporting verbs, claims, opinions; adverbs, parentheticals, prepositional phrases or with particles; other languages express evidentiality by evidential extensions of non-evidential categories – such as the perfect aspect in Georgian and participles in Lithuanian (Aikhenvald et al. 2007). While African languages are suggested to not exhibit evidentiality (Aikhenvald et al. 2004:291), in Ewe, the use of the complementizer *be* seems to play a role in indicating how one knows a particular fact, like quotative evidentials. In (111a), thus, the verb kpp 'see' which is associated with direct perception may be seen as the evidential trigger. However, the use of *be* in (111b) adds credence to the report and shows that a speaker has first-hand information about what he communicates.

- (111) a. Daavi kpɔ Kofi wò va do.Daavi see Kofi 3sG come arrive 'Daavi saw Kofi arrive.'
 - b. Daavi kpp é *(be) Kofi va do. Daavi see 3SG COMP Kofi come arrive 'Daavi saw (it) that Kofi had arrived.'

Reportative evidentials also preserve their speech report contribution (Simeonova 2020:178).

Hence, even when embedded under a non-communicative attitude verb such as *think*, the speech property is preserved in the sense that the speaker reported a thought that was said. These findings are supported by data from Tagalog (112a) and Azeri (112b). The difference between these languages and Ewe (113) lie in the fact that both Tagalog and Azeri have reportative evidential markers *daw* and *miş* respectively other than the complementizers in their languages.

(112)	a.	Palagay ni Geroge na mananalo daw ang Conservative Party				
		hold.opinion GEN Geroge COMP win.FUT REP NOM conservative party				
		sa halalan.				
		OBL election				
		'George thinks that the conservative party will win the election.'				
		\rightarrow George said that the C. party will win.				
		(Simeonova 2020:179) ex. 174a (Tagalog)				
	b.	Mahsa diyiir belke yagis yag-ir- miş . Mahsa thinks that rain fall-DUR-REP 'Mahsa thinks that it is raining.'				
		\rightarrow Mahsa said that it is raining.				
		(Simeonova 2020:180) ex. 175a (Azeri)				
(113)	Ko	fi súsú be tsi le dzadza-m.				
	Kofi think COMP water is fall.REDU-PROG					
	'Ko	ofi thinks that it is raining.' (he said so). (Ewe)				
	(Si	meonova 2020:180) ex. 175a, my translation				

be on the surface may seem similar to reportative evidentials. On the contrary, a number of reasons puts *be* at odds with reportative evidentials. First, reportative evidentials freely occur in matrix declarative clauses as shown in (114a) and (114b) but *be* does not (114c).

(114)	a.	Zavalja lo . rain.REP 'Reportedly, it started raining.'	
		(Simeonova 2020:174) ex. 167a	(Bulgarian)
	b.	Umuulan daw . rain REP 'Reportedly, its raining.'	
		(Simeonova 2020:174) ex. 167b	(Tagalog)
	c.	* be tsi dza. COMP water fall 'that it rained.' (intended)	(Ewe)
		(Simeonova 2020:174) ex. 167a, my translation	

Secondly, the literature on evidentials generally acknowledge the unavailability of reported evidentials when embedded under perception predicates (Aikhenvald et al. 2004; Sauerland & Schenner 2007; Simeonova 2020). Particularly, this holds for Bulgarian (115a), Tagalog (115b) and Azeri (115c). However, there is no such restriction with *be* in Ewe as illustrated by (115d).

(115)	a.	*Yavor vidja , che zavalja lo . Yavor saw that rain.REP 'Yavor saw that it started raining.' (intended)	
		(Simeonova 2020:169) ex. 160a	(Bulgarian)
	b.	* Nakita ni Willie na tumalon daw si Carlo. saw GEN Willie C jumped REP NOM Carlo 'Wille saw that Carlo jumped.' (intended)	
		(Simeonova 2020:169) ex. 160b	(Tagalog)
	c.	*Ayşe-yi tor-un ũstũ-dan atlan-ar-ken gŏrdǔm miş. Ayşe-ACC fence-DAT over-DAT jumped saw REP 'I saw that Ayşe jumped over the fence.' (intended)	
		(Simeonova 2020:169) ex. 160c	(Azeri)
	d.	Yavor kpo be tsi no dzadza-m. Yavor see COMP water was fall.REDU-PROG 'yavor saw that it was raining.'	(Ewe)
		(Simeonova 2020:174) ex. 167a, my translation	

Finally, speech verbs like *claim* can be used both reportatively (to report a speech act) or performatively (to perform a speech act) (Sode & Sugawara 2020). See (116).

(116)	a.	Peter claims that the information he gave is correct.	Reportative
	b.	I hereby claim that the information given is correct.	Performative
		(Sode & Sugawara 2020:4) ex. 3	

Now, reportative markers resist a concord interpretation (the indefinite reporter is not embedded under the attitude verb) if the attitude verb is used performatively (Sode & Sugawara 2020). However, *be* allows the concord interpretation while resisting the embedded interpretation (the indefinite reporter is embedded under the attitude verb) which points to the fact that *be* and reportative evidentials do not belong to the same category. See (117).

- (117) me tsɔ mɔnukpɔkpɔ sia gblɔ be nyanya si me na la le etefe.
 1SG take opportunity DEM say COMP information REL 1SG give DEF is correct 'I hereby claim that the information given is correct.'
 (Sode & Sugawara 2020:4) ex. 3, my translation
 - a. Embedded interpretation (AttV >REP): #I claim that someone said the in-

formation given is correct.

b. **Concord interpretation** (Att V= REP): I claim that the information given is correct.

(Sode & Sugawara 2020:5) ex. 4

We have seen that *be* does not necessarily come with speech report effects. *be* turns up in various contexts that may or may not be attitudinal. It has qualities of being verbal, where it occurs alone as the main verb; verbal preposition, due to lexical restrictions of occuring as a main verb; reportative evidential, whereby it may contribute to the evidence of a report; or a logophoric complementizer compatible with attitudes and perspectival contexts. However, I conclude, that *be* is a complementizer like complementizers across languages but with special properties ¹⁷. Particularly, based on historical development of such forms, and selection.

Definition of Logophoricity

This dissertation began with the defining logophoricity as the phenomenon which describes the referential dependency holding between the logophoric pronoun and its antecedent. Now, having compared Ewe's ye with other logophoric forms crosslinguistically, as well as explored contexts in which the logophoric pronoun occurs, I suggest that the logophoric pronoun in Ewe be characterised in the following way:

- Logophoric pronouns occur in both reportive and non-reportative contexts transmitting the words or thought of an individual or individuals other than the speaker or narrator.
- The antecedent does not occur in the same context as the logophoric pronoun.
- the antecedent designates the individual or individuals whose words or thoughts are transmitted in the reportive context in which the logophoric pronoun occurs.
- It is a variable with Phi-features [2nd, 3rd].
- It has the feature LOG+pro (Bimpeh et al. 2022)
- It is bound by an operator that is licensed by the complementizer be.

3.7 Chapter summary

In this chapter I explored contexts which permitted logophoric marking. I began with a review of contexts discussed in the literature including indirect speech reports, stretch of

¹⁷This is in support of Collins (1993:163) claim that "there are no objections to *be* being a complementizer, although its properties are somewhat special".

discourse, and sentential adjuncts. I raised arguments in disagreement with some of the environments said to guarantee logophoric marking such as causal clauses. Three additional contexts were introduced namely, *as-if* clause, benefactive *na* and *alesi* 'how' clauses. Verbs in whose complement the logophoric pronoun occured was also discussed. It was concluded concerning non-reportative contexts that they involved intentions. Purpose clauses for instance, have the property of describing the content of the mental state of an attitude holder. Further, the chapter showed that the complementizer *be* is the logophoric licensor. In cases where there is no *be* in the clause containing the logophoric pronoun, an element in C (e.g. *si* in the benefactive clause) makes up for its absence. Alternatively, the doubly-filled-comp filter also accommodated its absence. An analysis of how *be* licenses *yè* was provided following **Bimpeh & Sode** (2021). The idea is that *yè* is licensed by feature checking: *be* bears the interpretable [*log*] feature which checks the uninterpretable [*log*] feature of *yè*. The chapter also investigated the status of *be* which concluded that *be* is a complementizer and redifined the concept of logophoricity as pertaining to Ewe.

Chapter 4

The Interpretation of *yè*: Empirical Contribution

In light of contrasting views concerning the interpretation of logophoric pronouns in the literature, this chapter aims at lending empirical support to the ungoing discussion on the interpretation of $y\dot{e}$. In particular, it is the goal of the chapter to verify the existing claim that the logophoric pronoun, $y\dot{e}$, in Ewe is ambiguous between a *de se* and *de re* reading, first observed by Pearson (2012, 2015), and later by O'Neill (2015); Satuk (2019); Bimpeh & Sode (2021). Two experimental tasks were conducted namely, truth value judgment task and, binary forced choice task. The chapter is organised as follows: in § 4.1, I present previous empirical research on the subject under discussion. My research questions, as well as hypotheses, are outlined in § 4.2. A detailed description of the experimental tasks are presented in § 4.3 and 4.4 respectively. In general, the results offer some reflections to current debates regarding the interpretation of logophoric pronouns and its affinities cross-linguistically. More specifically, the results show that the analogy between 'pure' logophoric pronouns like $y\dot{e}$, and other forms (null or overt) is incorrect, as raised in chapter 2. Thus, both experiments corroborate Pearson (2012, 2015) as well as others. § 4.5 offers a general discussion on the findings. I end the chapter with a summary in § 4.6.

4.1 **Previous research**

One of the puzzles in the semantics and philosophy of language literature concerns whether or not logophoric pronouns are true *de se* pronouns when used in attitude reports. In other words, are logophoric pronouns used obligatorily in first person reports? Attitude reports are reports about what some person (X), *thinks*, *wants*, *believes*, *hopes*, to mention a few. They typically take two forms: (a) an expression with an attitude verb that relates an individual and a proposition: X thinks/wants/believes that P; or (b) an an expression with an attitude verb that relates an individual and a property: X ascribes to himself the property expressed by the complement of the verb (Lewis 1979). The standard approach (in the sense of being widely accepted) to logophoric pronouns has been to assume an unambiguous *de se* attitude stance (Sells 1987; Chierchia 1989; Schlenker 2003, 1999, 2011; von Stechow 2004). The competing view, however, argues for a *de re* interpretation of logophoric pronouns, using Ewe's *yè* as a case study (Pearson 2012, 2015). I discuss these two views subsequently.

4.1.1 *yè* has a *de* se reading

In traditional analysis of first person perspectival pronouns like PRO, an obligatory *de se* interpretation is assumed (Morgan 1970; Chierchia 1989). I'll illustrate this once again with a nice 'real' world scenario shared by Amy Rose Deal.

(1) An Asian woman was declared missing from a party touring the Eldgjá volcanic region in south Iceland after getting off the party's bus to freshen up. She only hopped off the bus briefly, but had also changed her clothes - and her fellow travelers did not recognize her when she climbed back on again to continue the party's journey. When the details of the missing person were issued, the woman reportedly didn't recognize her own description [woman with a pink sweater] and unwittingly joined the search party for herself ¹

a.	#The Asian woman _i claimed PRO _i to be missing.	False, de se
b.	The Asian woman claims that she is missing.	True, de re

Given (1), both (1a) and (1b) present possible ways of presenting the attitude of the Asian Tourist woman. Explained in Bimpeh (2019), at the time of the search, (1b) means "the Asian woman believes that the woman in the pink sweater is missing." She is unaware of being the individual the search party, including herself, is looking for. If she wasn't ignorant, it would be strange to refer to herself with a definite description (the woman with the pink sweater), which is not how we talk about ourselves in real life anyway. This is known as the *de re* reading where the Asian woman has a belief about the woman in the pink sweater, her unrecognised self (*res*). Thus, under this reading, she would not be committed to saying "I am missing." On the other hand, uttering (1a) means that the Asian woman is aware that she is the woman with the pink sweater. Since this is not the state of her mind at the time of the search, we observe that the reading is out. This is known as the *de se* reading. Against this background, Pearson (2012, 2015) posit the awareness condition stated in (2) which must be fulfilled in order for an attitude to be read *de se*.

(2) The awareness condition:

Ihttp://www.dailymail.co.uk/news/article-2195642/Asian-tourist-unwittingly-joins-se
html.

"A sentence S reports an attitude *de se* only if its truth depends on the bearer of the attitude being aware that the individual whom the attitude is about is herself" (Pearson 2012:2).

The question is, how has scenarios like (1) been analysed in the literature? I'll omit the background and debates involving propositions (p) and properties (P) which began with Lewis (1979). I begin therefore, with the centered world analysis (Chierchia 1989; Percus & Sauerland 2003) which seems to be widely accepted. A centered world consists of a world-individual pair. The individual is considered the center of the world, and the world is seen from the perspective of that individual (Percus & Sauerland 2003).

(3) Lexical entry for *claim* (Pearson 2015)

 $[[claim^{dese}]]^{c,g} = \lambda P_{\langle e, \langle s, t \rangle \rangle} \lambda x_e \lambda w_s. \forall \langle w', y \rangle \in claim_{x,w} P(y)(w')$ where $claim_{x,w} = \{\langle w', y \rangle : what x claims in w is true in w' and x identifies himself as y in w' \}$

(4)	a.	Asian woman claimed [λx_1 [PRO ₁ to be missing	g]] LF
	b.	$\lambda x \lambda w. x$ is missing in w.	Intension of the complement
	c.	$\forall < w', y > \in claim_{Asianwoman,w}$, y is missing in w	' Truth conditions

According to (3), objects of *de se* attitudes consists of the world-individual pairs ($\langle w', y \rangle$). The attitude verb *claim*, is assumed to be a universal quantifier which quantifies over the centered world. The verb *claim* takes as a first argument a property and as a second argument an individual shown by the denotation $\lambda P_{\langle e, \langle s, t \rangle \rangle}$. Claim returns the value true under the conditions that the propositions expressed by for instance, being missing is a superset of the attitude holder's claim-alternatives (worlds that the attitude holder considers as candidates of herself). This condition must be satisfied because it is the attitude holder's mental state that determines which worlds belong to her *claim*- alternatives. Applied to our example in (1), attitude de se involves the attitude holder's self-ascription of properties. Thus, as schematized in (4), PRO is non-referential and bound by an abstractor in the embedded clause (4a). A de se attitude of the Asian woman is one where she self-ascribes the property of being missing. As philosophers inform, we are not always aware of the world in which we inhabit. In this respect, we may be able to identify candidates of ourselves in any given world, captured by $(\langle w', y \rangle)$. Now, the Asian woman's state is one where she herself is not missing. The interpretation of the embedded clause is captured by (4b) and (4c) translates: for any y that the Asian woman claims as a candidate for herself, it is not the case that y is missing. PRO always denotes the attitude holder in the complement of an attitude verb. This means that in (4), the LF is dedicated to only capture unambiguous de se reports. However, this fails to account for Pearson (2015)'s findings on the overt *yè* which although, similar to PRO, has additional *de re* readings.

Due to the similarity between Ewe's *yè* with PRO, researchers such as Heim (2002); von Stechow (2002); Schlenker (2003) also assumed that *yè*, like PRO, is bound by some abstractor in the left periphery of the clause. As a matter of fact, Schlenker (2003) speculated that Ewe's *yè* is the natural language counterpart of quasi-indicators (à la Castañeda (1968)). Recall from chapter 1 that *yè* occurs and parallels PRO in instances of subject control. The relevant example in (5), as well as the distribution of *yè* and PRO (a là (von Stechow 2004)) is shown in (6) for the reader's perusal. Note that *yè* lacks the *local* feature; an indication that it may not be like PRO.

(5)	a.	Kofi _{<i>i</i>} tried PRO _{<i>i</i>/*<i>j</i>} to do well in school.	English
	b.	Kofi _{<i>i</i>} dze-agbagba be $\mathbf{ye}_{i/*j}$ a wo do nyuie le sukuu. Kofi IC-make.effort COMP LOG POT do work well in school 'Kofi tried that he (kofi) would do well in school.'	Ewe
(6)	a.	Properties of PRO = $[log + local]$	

b. Properties of $y\dot{e} = [log]$ (von Stechow 2004:458)

The Heim (2002); von Stechow (2002) idea is the following: Since both PRO and $y\dot{e}$ bear the feature [*log*], it is assumed that this feature is uninterpretatble and must be checked under binding by the abstractor which bears the same feature, over centered worlds. An attitude predicate passes the feature [*log*] to the individual abstractor that it introduces in embedded C, thereby enabling this feature to be checked on PRO or the logophor (Pearson 2015:84). By being abstracted over, and by agreeing with the attitude verb (through feature checking), it is predicated in this framework that $y\dot{e}$, like PRO has an obligatory *de se* interpretation; it takes the attitude holder as an antecedent. (7) shows a correlation between $y\dot{e}$ and PRO c.f. (Pearson 2015:84).

- (7) a. $[_{CP1}\lambda w_1 [w_1 \text{ Asian woman believed}_{[log]} [_{CP2} \lambda x_{2[log]}\lambda w_3 [w_3 \text{ PRO}_{2[log]} \text{ to be missing }]]]$
 - b. [_{CP1}λw₁ [w₁ Asian woman believed_[log] [_{CP2} λx_{2[log]}λw₃ [w₃ yè_{2[log]} to be missing]]]]
 (Pearson 2015:84) ex. 16

Inspired by the discussion, Bimpeh (2019) conducted a pilot study on the logophoric pronoun in the Evedome dialect of Ewe and argues that $y\hat{e}$ has only a *de se* reading in agreement with the standard analysis. Using an elicitation production task, data was collected from ten

native participants via Skype and Whatsapp (video and audio features). First, participants were exposed to reported speech scenarios shown in (8a) and the instruction was to complete the interaction by producing sentences (e.g., (8b)) that answered the question asked by the scenario. This was done to verify the presence of the logophoric pronoun in their grammar.

- (8) a. Mawuse and Akpene are having a conversation. Mawuse says to Akpene "I am hungry". What did Mawuse say? .
 - b. Mawuse gblo be do le yè wù-m. Mawuse say COMP stomach is LOG kill-PROG 'Mawuse said that she is hungry.'
 (Bimpeh 2019:2) ex.2b

Secondly, participants were given 'mistaken' identity scenarios (9a) with test sentences such as in (9b) each containing a blank space, with the goal of filling in the gaps with the appropriate pronoun that suited the 'mistaken' identity scenarios. However, some participants had difficulties in performing this task. Instead of a pronoun, they produced relative clauses to represent the attitude holder (9c). Hence, the task was modified. The instruction was to substitute the relative clause with a pronoun that best described the *res* (the unrecognized self of the attitude holder). This way, the participants would rather use the third person pronoun é, not the logophoric $y\hat{e}$, to represent the *res* of attitude holders (9d). This reflects the fact that the logophoric $y\hat{e}$ does not have a *de re* reading since $y\hat{e}$ could not be used to describe a situation where the attitude holder is unaware of his or her immediate condition, as illustrated by (9e).

(9) a. John is so drunk that he has forgotten he is a candidate in the election. He watches someone on TV and finds that person a terrific candidate, who should definitely be elected. Unbeknownst to John, the candidate he is watching on TV is himslef.

(Schlenker 2011:12)

- b. John súsú be wó a tsia
 John think COMP 3PL POT chose
 'John thinks that ... will be elected.'
 (Bimpeh 2019:8)
- c. John súsú be wó a tsia ame si le TV la dzi. John think COMP 3PL POT chose person REL is TV DEF on 'John thinks that the person on TV will be elected.' (Bimpeh 2019:8)
- d. John súsú be wó a tsia **é**. John think COMP 3PL POT chose 3SG 'John_i thinks that he_j will be elected.' (Bimpeh 2019:8)

e. #John súsú be wó a tsia yè. John think COMP 3PL POT chose LOG 'John_i thinks that he_i will be elected.' (Bimpeh 2019:8)

Bimpeh (2019)'s study thus, contradicts Pearson (2015)'s. She attributes the differences in judgments to confused informants, dialectal differences, methodology and type of attitude predicates used (Bimpeh 2019:10-13). Readers may consult Bimpeh (2019) for a detailed discussion on these reasons.

A more recent work by Bimpeh et al. (2022:3-4) also revealed that $y\dot{e}$ in Ewe is obligatorily read de se. The study also investigated *oun* in Yoruba as well as yá in Igbo. They elicited data from three Ewe speakers (two Anlo dialect and one Ewedome dialect), two Yoruba speakers and two Igbo speakers. All data was elicited via multiple Zoom sessions with each speaker, transcribed live by the experimenters and checked by the speakers. They used a binary grammaticality judgment task designed as a yes/no task with joint presentation for both types of pronoun (LOGP vs. ORDP) and contexts as described in Marty et al. (2020): speakers were asked to express their grammaticality judgments on both sentences (one with LOGP and one with ORDP), but they were free to accept as grammatical both sentences, one sentence or none. Data points were verified across several attitude predicates such as think, hope, say, promise, and want. Speakers' spontaneous comments on the reasoning behind their responses were also noted. First, they confirmed the basic fact that LOGPs unambiguously refer to the attitude holder. Examples (10a)–(10c) illustrate this using several embedding predicates. With respect to ORDP, their results for Ewe align with Clements (1975) and Bimpeh (2019): ORDPs cannot co-refer with the attitude holder (given a neutral context).

- (10) a. Koku₁ súsú be $\mathbf{y}\mathbf{\hat{e}}_{1/*2} / \mathbf{\hat{e}}_{*1/2}$ lõ Afi. Koku thinks that LOGP / ORDP love Afi 'Koku thinks that he loves Afi.'
 - b. Koku₁ le mɔ-kpɔ-m be $y\hat{e}_{1/*2} / \hat{e}_{*1/2}$ a de Afi. Koku COP path-see-PROG that LOGP / ORDP POT marry Afi 'Koku hopes that he will marry Afi.'
 - c. Koku₁ be yè_{1/*2} / é_{*1/2} a de Afi. Koku say LOGP / ORDP POT marry Afi 'Koku said that he will marry Afi."
 (Bimpeh et al. 2022:4) ex. 10 (a-c)

Next, they tested *de re* ('mistaken identity') contexts. Across all three languages, LOGPs were consistently rejected in *de re* contexts by all speakers, while ORDPs were accepted as shown in (11a). They observed that LOGPs were judged infelicitous, while the ordinary

pronouns were fine for their consultants.

- (11) *De re* Context: Donald Duck (DD) went to the grocery store to buy flour. Then, he mistakenly put sugar in his cart. DD went on and then, he saw a trail of sugar going up and down the aisles and thought that someone's bag had a hole in it and looked around for the guy. DD says: "I wonder who is losing sugar; Certainly, the guy who is losing sugar is stupid, as he does not check". Later he says: "Is it me the stupid guy who is losing sugar? No, because I did not buy sugar but flour".
 - a. Donald Duck súsú be #yè / é dzɔ-mo-vi.
 Donald Duck think that LOGP / ORDP exist.with-face-small 'Donald Duck thinks that he is stupid.'
 (Bimpeh et al. 2022:4-5) ex. 13 (a)

4.1.2 *yè* has a *de re* reading

In the absence of necessary field work on the interpretation of $y\dot{e}$, Pearson (2015) presents novel data with respect to 'mistaken' identity scenarios and dream reports², in comparison to reported speech scenarios that show that contrary to assumptions on $y\dot{e}$ e.g. Schlenker (1999), the Ewe logophoric pronoun is not obligatorily read *de se*. Data was gathered from five bilingual Ewe/French speakers, two of them are 'pure' Ewe speakers while the other three are Mina speakers, the Ewe variety spoken in Togo (Voegelin & Voegelin 1964). The data collected comprised in-person elicitation sessions which was supplemented with followup questions via email and Skype. Collection of data took the form of binary judgments of grammaticality and of truth/falsity relative to scenarios described by the researcher (Pearson 2015:94). Informants' spontaneaous comments about the reasons for their answers were also noted down. Due to the subtlety of judgments bearing on the de selde re distinction, the ideal approach was to repeat core *de re* scenarios across elicitation sessions, with judgments of truth/falsity of particular attitude reports relative to these scenarios being elicited afresh each time (Pearson 2015:94). This was done either with identical sentences to those tested in previous elicitation sessions or with a different attitude verb. Concerning 'mistaken' identity reports, the results showed that yè has de re readings as demonstrated in (12a) with respect to (12). Pearson (2015:106) postulates two manings of say (13) and (14). The sentence in (12a) gets either of the LFs in (15) or in (16).

(12) John has just found an old paper that he wrote, but he doesn't realize that he is the author of the paper. He reads it and is impressed by what a good paper it is. He says that "whoever wrote this paper would receive an award" (Pearson 2015:79), bold face mine.

²See (Pearson 2015) for details on dream reports.

- a. John be yè le cleva.
 John say LOG COP clever
 'John said that he was clever.'
 (Pearson 2015:80)
- (13) $[[say^{dese}]]^{c,g} = \lambda P_{\langle e, \langle s, t \rangle \rangle} \lambda x_e \lambda w_s. \ \forall \langle w', y \rangle \in say_{x,w'} P(y)(w')$ where $say_{x,w'} = \{\langle w', y \rangle : what x says in w is true in w' and x identifies himself as y in w' \}$

Expressions (15) and (16) respectively, provide the computations for the *de se* and *de re* readings for (12a).

- (15) a. [CP1 λw_1 [w_1 John says_[log] [CP2 $\lambda x_{2[log]}$ λw_3 [w_3 yè₂[log] is clever]]]] b. [[CP1]]^{c,g} = λw . $\forall < w', y > \in say_{John,w'}$ y is clever in w'
- (16) a. [CP1 λw_1 [w_1 John says_[log] [CP2 $\lambda G_2 \lambda x_{3[log]} \lambda w_4$ [w_4 [r_{es} P G₄ yè₃[log] $w_4 x_3$] is clever]]]]
 - b. [[CP1]]^{c,g} =λw. ∃G: G is suitable for John in w & ∀ <w', y> ∈ say_{John,w'}G(y)(w')(y) is clever in w'
 (Pearson 2015:107)

Pearson (2015:107) explains that (15) is the familiar *de se* case; which is false in (12). However, for the latter case (16), the *de re* interpretation requires an extra embedding of the logophoric pronoun under a concept generator. The concept generator is a function that assigns in each world an individual concept to a pair of individuals namely *John* to his *res* through an acquaintance relation. On the reading in (16), the sentence is true just in case there is some concept generator G suitable for John such that in all of John's *say*-alternatives <w', y>, the individual picked out by G applied to y at <w', y> is clever in w'. If G is suitable for John, then for any epistemic alternative y of John, G(y) = G(John). Consequently, for any *say*-alternative of John's <w', y>, G(y)(w')(y') = G(John)(w')(y). In (12), a salient acquaintance relation is that relation R that x bears to u in w just in case x is reading u's paper in w; John bears this relation to himself. Let G be that concept generator such that John bears R to G(John)(w)(John), and for each of John's *say*-alternatives <w', y>, y bears R to G(John)(w')(y) in w'. If so, then at each of John's *say*-alternative of John's <w', y>, y bears R to G(y)(w')(y) in w'. G witnesses the existential quantifier (16b) in (12) as needed.

After Pearson (2015), other researchers examined the interpretation of logophoric pronouns in other dialects of Ewe. For instance, O'Neill (2015) investigated the distribution of yi, the Danyi (one of the dialects spoken in inland and coastal Togo (Duthie 1996)) Ewe logophor. Relying on data from her native speaker consultant, she replicated Pearson (2015)'s study and showed that the Danyi logophor yi, also has a *de re* interpretation as exemplified in (17), a modified version of (Pearson 2015)'s scenario in (12).

- (17) Kofi was reading an old essay he found in his filing cabinet, and thought to himself that the author of the essay was very smart. Unbeknownst to him, he had written the essay many years before.
 - a. Kofi_k xo se bè yi_k le klévà. Kofi receive hear COM LOG COP clever 'Kofi_k thought that he_k was smart.' (O'Neill 2015:20) ex. 15

Satik (2019) also presented data from the Aŋlɔ (also Anlo, the southern Ghanaian dialect of Ewe) dialect of Ewe to illustrate that Pearson (2015)'s claim is borne out. Data was obtained from one primary native speaker consultant. Two other consultants, also native speakers of the Aŋlɔ dialect, went over the data to determine if they agreed with the intuitions. The data was obtained through a mixture of in-person and Skype sessions and follow-up questions via email. Two other speakers of different Ewe dialects also provided their input on the sentences that were obtained after the elicitation sessions concluded. Satik (2019) 's research corroborated Pearson (2015)'s that $y\dot{e}$ has *de re* readings. His informants also used $y\dot{e}$ in Pearson (2015)'s scenarion((12)). However, according to Satik (2019), his informants did not accept (18a) as correct, given (18). He attributes this to the presence of *a* (the potential marker) which according to him, induces control. Granted that Satik (2019)'s data is right, this raises a number of questions: why does $y\dot{e}$ show inconsistent interpretations i.e., have a *de re* interpretation in one context but has *de se* in the other? Since Satik (2019) entertains the idea of "control", what is the relationship between $y\dot{e}$ and "control"? These issues are the topic of discussion in the next chapter (chapter 5).

- (18) Kofi is a war hero who suffers from amnesia and remembers nothing of his wartime experiences. Suppose this person sees a TV program describing his own exploits, and is impressed with the courage exhibited by that person, who he does not know is himself. Kofi comes to believe that the hero will win a medal.
 - a. #Kofi_i emo kpom be yè_i-a ho kplu. Kofi expect see COMP LOG-POT COP medal '#Kofi_i expects PRO_i to get a medal.' (Satık 2019:11), ex. 29

While researchers mainly used 'mistaken' identity scenarios, Bimpeh & Sode (2021), employed the focus-sensitive particle, *only*, to determine the interpretation of *yè*. The idea is that in the environment of *only*, a *de se* pronoun only has a sloppy interpretation, shown with the reflexive pronoun, *sig* in Icelandic (19) and *PRO*, in German (20). Twelve native speaker consultants (ten over Whatsapp and two over Facebook), were asked to judge whether sentences could be used in a situation described by the scenarios provided. The results demonstrated that indeed, *yè* has sloppy readings as predicted. However, additionally, strict readings could be triggered with a verb such as *believe* (21a) and with an Exceptional Case marking (ECM) verb such as, *want* (22a).

- (19) Aðeins Jón_i telur að María elski **sig**_i. only Jon believes that Maria loves self 'Only Jon_i believes that Maria loves him_i.' (Culy 1994a:1081) / (Sells 1987:467)
 - a. Jon believes that Maria loves Jon and no one else believes that believes that Maria loves him.
 sloppy reading
 b. *Ion believes that Maria loves Ion and no one else believes that believes that
 - b. *Jon believes that Maria loves Jon and no one else believes that believes that Maria loves Jon. strict reading
- (20) Nur Kofi_i glaubt **PRO**_i klug zu sein.
 only Kofi believes PRO smart to be.
 'Only Kofi_i believes that he_i is smart.' (only sloppy reading)
 (data elicited from Frank Sode)
 - a. Kofi believes that Kofi is smart and no one else believes that he is smart. **sloppy** reading
 - b. *Kofi believes that Kofi is smart and no one else believes that Kofi is smart. **strict reading**
- (21) Scenario: Kofi stayed overnight in a cemetery to prove his bravery. His friends, Mansa and Yao planned to play a trick on him. They know the cemetary guard so they ask him to dress up as a ghost to scare Kofi. In the night Kofi sees a scary

creature walking through the vicinity. He thinks that he saw a ghost. The next day, when he told the scenario to Mansa and Yao, they both burst into laughter (Bimpeh & Sode 2021:2).

- a. Kofi_{*i*} ko yé xose be $\mathbf{y}\hat{\mathbf{e}}_i$ kpo ŋoli. Kofi only FOC believe that LOG see ghost 'Only Kofi believes that he saw a ghost.'
- b. 'Kofi believes that Kofi saw a ghost and ...
 ✓ ... for all x, if x ≠ Kofi, then ¬(x believes that Kofi saw a ghost)' strict
 ✓ ... for all x, if x ≠ Kofi, then ¬(x believes that x saw a ghost)' sloppy
 (Bimpeh & Sode 2021: 2) ex. 3
- (22) Kofi is already quite rich. He has plans for a huge investment. His friends, however, are worried about him and think that if he gets any richer, they might lose him as a friend. (Bimpeh & Sode 2021:3)
 - a. Kofi ko yé di be yè-a kpɔ ga sugbɔ. Kofi only FOC want COMP LOG-IRR see money plenty
 'Only Kofi wants to be richer.' (lit. to get more money)
 - b. 'Kofi wants that Kofi is richer and ...
 ✓ ... for all x, if x ≠ Kofi, then ¬(x wants that Kofi is richer)' strict
 ✓ ... for all x, if x ≠ Kofi, then ¬(x wants that x is richer)' sloppy
 (Bimpeh & Sode 2021:3).

The strict reading of $y\dot{e}$ should therefore serve as additional evidence that $y\dot{e}$ has a *de re* interpretation since true *de se* pronouns do not have strict readings. However, additional strict readings are excluded simply because the traditional *de se* theories do not predict it. The reason is that obligatory *de se* elements require binding by the attitude predicate whose subject is the logophoric pronouns's antecedent (λ -binding introduced by the attitude predicate) whereas to get strict reading, binding by verbs is unneccessary (Bimpeh & Sode 2021). It could also be the case that $y\dot{e}$ is very different from the other so-called perspectival pronouns as entertained in chapter 2. This puzzle is taken up in the next chapter (chapter 5). In the following section, I present my research questions and hypotheses.

4.2 **Research questions and hypotheses**

Since Pearson (2015), the assumption that $y\dot{e}$ is a *de se* pronoun has been in dispute. We observed from § 4.1 that there are contradictory views in the literature concerning the interpretation of $y\dot{e}$. For instance, in 'mistaken' identity reports, Pearson (2015)'s informants used $y\dot{e}$ to represent the *res* (unrecognized self) of attitude holders, while Bimpeh (2019)'s did not. Also, informants who used $y\dot{e}$ in 'mistaken' identity scenarios spoke either the Aŋlo,

Mina or Danyi dialects of Ewe. Whereas, those who did not, spoke the Euedome dialect of Ewe. Against this background, we explored (Q1) whether speakers of Ewe differed in the use of ye in 'mistaken' identity scenarios. Put differently, is the *de re* interpretation of ye dialectal? Given the above question, we hypothesize (H1) that speakers of Ewe do not differ in the use of ye in 'mistaken' identity scenarios. Against the background that the *de se* reading is a given, this means that if speakers across dialects chose ye in mistaken identity contexts (also *de re* contexts) then, ye is ambiguous between a *de se* and *de re* interpretation in all dialects. The reason is that the same overt pronoun, (ye) and its variant (yi), is used across all dialects to mark logophoricity. In this regard, differences in the use of ye is not expected. We predict, following our hypothesis that since 'pure' Ewe and Mina (Pearson 2015), Danyi (O'Neill 2015) and Aŋlɔ (Sattk 2019) speakers use ye in 'mistaken' identity contexts then, other speakers of Ewe would also use ye in 'mistaken' identity contexts (contra (Bimpeh 2019) for Evedome).

In order to test my hypothesis and answer my research questions, I employed the truth value judgment task (TVJ) and binary forced choice task (BFC) in two seperate experiments. These are described in the next sections.

4.3 Experiment 1: interpretation of yè

A TVJ task is used to test a participant's comprehension by systematically isolating possible predetermined interpretations, exposing them to participants and evaluating whether they accept the interpretations (Blume et al. 2017:146). In this task, participants were asked to interprete sentences and judge (yes/no) whether a given interpretation is possible. As reported by Blume et al. (2017), TVJ is nicely suited for testing interpretations hard to elicit or hardly available.

4.3.1 Method

4.3.1.1 Participants

Twenty Ewe-speaking adults participated in this study (mean age= 37.5; SD= 8.9; range= 24-50 years; males= 15). All participants were non-linguists and were recruited from Ho, the capital of the Volta region of Ghana. Although the Evedome dialect of Ewe is predominant in this community, twelve of the participants spoke the Evedome dialect while eight spoke the Aŋlɔ dialect of Ewe. Participants were randomly selected at various locations. Ten of them were recruited from the Evangelical Presbyterian University (EPUC), five from Akpokope Junior High School and five from Ho Technical University (HTU). All participants from EPUC and HTU involved students while those from Akpokope school were teachers. Thus,

their level of education is tertiary. They also spoke English (official language) and Akan (lingua franca). The task was described in English, hence, their proficiency in English was crucial.

4.3.1.2 Design and materials

The TVJ task was a 2x2 design. The first factor is the type of pronoun with two levels namely, the logophoric pronoun $(y\hat{e})$ or the regular third person singular pronoun (\hat{e}) . The second factor was the type of scenario, also with two levels: 'mistaken' identity or reported speech. The regular third person pronoun and reported speech served as control items. In total, experiment 1 comprised eight test items (contexts), with four conditions (two items per condition) used to elicit data. These items were either adapted from existing literature on attitude reports eg. Perry (1979), or constructed by the experimenter (see appendix 1 for test items). Examples of each condition are given below. Condition one presented a combination of a 'mistaken' identity scenario and the use of the regular third person pronoun, \hat{e} in the test sentence as shown in (23a). Condition two involves the same scenario and the logophoric pronoun, $y\hat{e}$ exemplified in (23b).

- (23) Sample stimulus (*de re* specified): John went to the grocery store. He saw a trail of sugar going up and down the aisles and realised it must have been made by someone carrying a bag of sugar with a hole in it. He wondered who the shopper with the torn bag of sugar is, so that he can tell him. He thinks that that guy, whoever he is, is stupid. John did not notice that the guy with the torn bag of sugar is himself. (Perry 1979:3).
 - a. Test sentence (condition 1): John súsú be é nye abunetɔ.
 'John thought that he is stupid.'
 Yes [] No []
 - b. Test sentence (Condition 2): John súsú be yè nye abuneto.
 'John thought that he is stupid.'
 Yes [] No []

Condition three consisted of a combination of a reported speech scenario and \acute{e} (24a) while condition four, comprised the same scenario with $y\grave{e}$ (24b).

(24) Sample stimulus (*de se* specified): John went to the grocery store. He saw a trail of sugar going up and down the aisles and realised it must have been made by someone carrying a bag of sugar with a hole in it. He wondered who the shopper with the torn bag of sugar is, so that he can tell him. He thinks that that guy, whoever he is,

is stupid. John, however, noticed that the guy with the torn bag of sugar is himself. Adapted from (Perry 1979:3).

- a. Test sentence (Condition 3): John súsú be é nye abuneto.
 'John thought that he is stupid.'
 Yes [] No []
- b. Test sentence (Condition 4): John súsú be yè nye abuneto.
 'John thought that he is stupid.'
 Yes [] No []

Four versions of the experimental items were created and evenly distributed (5 participants per list) across four lists (according to a latin square design on random.org). Consider Table 4.1 for lists. This randomisation was done to avoid similar sequences of items. Thus, each participant saw all items in each condition.

List 1	List 2	List 3	List 4
Item 4: RS, é	Item 2: RS, yè	Item 5: RS, yè	Item 8: RS, yè
Item 3: RS, yè	Item 8: MI, yè	Item 1: RS, yè	Item 5: RS, é
Item 2: MI, é	Item 5: MI, é	Item 4: MI, é	Item 3: MI, é
Item 1: MI, yè	Item 7: RS, é	Item 7: MI, yè	Item 4: RS, yè
Item 7: RS, yè	Item 4: MI, yè	Item 3: MI, yè	Item 7: MI, é
Item 6: MI, é	Item 3: RS, é	Item 2: RS, é	Item 6: MI, yè
Item 5: MI, yè	Item 1: MI, é	Item 8: MI, é	Item 1: RS, é
Item 8: RS, é	Item 6: RS, yè	Item 6: RS, é	Item 2: MI, yè

Table 4.1: Randomised items across 4 lists for TVJ task

4.3.1.3 Procedure

In this study, the instrument used to elicit data is a written questionnaire (see appendices for details). Questionnaires were used because it was practical, participant friendly and logistically conducive with regards the research area. Moreover, its use was not unnatural for residents since questionnaires were employed for data collection projects such as census in the community. The questionnaire comprised a brief instruction to guide participants in answering their questions. These were followed by eight items, their corresponding test sentences, and a 'yes' or 'no' option to choose from. All test sentences consisted of attitude holders (one whose attitude is reported) and their proposition (content of their attitude). Participants' task was to evaluate each sentence relative to the scenarios, either specified for *de se* or *de re* attitude and judge whether or not the corresponding test sentences correctly describes the scenario. Afterwards, participants were required to tick 'yes' if the test sentence described the scenario alluded to, and 'no', if otherwise. Occasionally, some participants

asked whether these scenarios happen in real-life or gave comments about how smart (e.g. Mr. Kumi) or annoying (e.g. Ben) attitude holders in the scenarios were. However, these interactions with them did not interfere with the answers provided. The questionnaires were distributed to two participants at a time. Since all participants from this study were students, I sought permission from two lecturers (in EPUC and HTU) to use thier offices during specific times of the day (e.g. their break hours or when they had a lecture) to administer the questionnaires. However, in Akpokope JHS, I was allowed a spot on the school's compound where I set up to receive participants. In each location, participants were seated apart while filling out the task, under the supervision of the experimenter. They took approximately twenty minutes to complete the task. A written informed consent was obtained from each participant before the task was administered. Participants' background was also collected.

4.3.2 Results

A total of twenty responses (from all participants) were collected from this study. Figure 4.1 shows a summary of results for the different conditions.



Figure 4.1: TVJT: Summary of results for different conditions

In relation to our four conditions, the data showed that in condition 1, 32.5% of the responses attest to \acute{e} being used in 'mistaken' identity reports while, 67.5% of respondents considered

it unacceptable. In condition 2, 37.5% of participants also accepted the use of $y\dot{e}$ in 'mistaken' identity reports while, 62.5% responded in the negative. Conditions 3 and 4 saw rises in the acceptance of their respective conditions. In condition 3, 65% accepted the use of \dot{e} in reported speech scenarios whereas, 35% rejected it's use. Finally, in condition 4, 92.5% of participants accepted the use of $y\dot{e}$ in reported speech while 7.5% responded negatively. In all, assuming a 50% threeshold, and considering only the acceptance of a condition, participants performed below 50% in conditions 1 and 2 while in conditions 3 and 4, participants performed above 50%, in the acceptance of conditions presented to them. Having revealed the distribution of 'yes' or 'no' responses with respect to the different conditions, I show the distribution of 'yes' or 'no' responses in the 4 conditions with respect to Evedome (12 speakers) and Aŋlo (8 speakers) dialects in Figure 4.2.



Figure 4.2: TVJT: Summary of results for Aŋlo and Evedome speakers in the different conditions

We tested whether speakers of Evedome and Aŋlɔ dialects would perform differently in the four conditions. Our hypothesis was that speakers of Ewe would not perform invariably in the 4 conditions. Thus, Figure 4.2 shows differences and similarities between the speakers of Evedome and Aŋlɔ dialects with respect to the four conditions. In condition 1, 25% of Aŋlɔ speakers and 37.5% of Evedome speakers accepted the use of \acute{e} in 'mistaken' identity scenarios while 75% of Aŋlɔ speakers and 62.5% of Evedome speakers rejected its use. Revealing a higher acceptability performance of Evedome speakers over the Aŋlɔs although, both dialect performed below chance. Condition 2 showed a similar trend where Evedome

speakers accepted the use of $y\dot{e}$ in 'mistaken' identity scenarios over the Anlo speakers, with the Anlos performing below a 50% threshold and the Evedomes performing a little below a 50% threshold. In this regard, 31.25% Anlos and 41.67% Evedomes accepted the condition while 68.7%5 Anlos and 58.33% Evedomes respectively rejected the condition. Conditions 3 and 4 demonstrated opposite results with higher percentages in the acceptance of the two conditions. Specifically, in condition 3, Anlo and Evedome speakers accepted \dot{e} in reported speech with 58.82% and 69.56% respectively, while rejecting the condition with 41.18% and 30.44% respectively. Interestingly, while the Anlos performed a little above 50%, the Evedomes performed above 50%. Finally, in condition 4, speakers of both dialects performed above 50% with a slim margin between them. 93.75% of Anlo speakers accepted yè in reported speech likewise Evedome speakers with 91.67%. On the other hand, 6.25% and 8.33% of Anlo and Evedome speakers rejected the use of yè in reported speech. Accordingly, we concentrate on condition 2 where we tested how individual participants performed given the use of $y\dot{e}$ in 'mistaken' identity scenarios. This is shown in Figure 4.3, a summary of all 'yes' responses. Since participants saw all conditions twice, 2.0 represents an exhaustion of the two possibilities (5 participants), 1.0 also represents the acceptance of the use of $y\dot{e}$ in 'mistaken' identity scenarios once out of the 2 possibilities (5 participants) and 0.0 means the participant did not choose the condition at all (10 participants).



Figure 4.3: TVJT: Summary of results for all individuals in condition 2 (MI, yè)

4.3.3 Discussion

The truth value judgment task generally investigated the interpretation of the logophoric pronoun in Ewe. The two main schools of thought has been that yè has a de se interpretation as predicted by traditional analysis (Morgan 1970; Sells 1987; Chierchia 1989; Culy 1994a; Schlenker 1999; Anand 2006) as well as reported by Bimpeh (2019) and more recently, Bimpeh et al. (2022). On the other hand, yè could also have a de re interpretation as reported by (Pearson 2015; Satuk 2019). Taking into account the disparity in reports concerning the interpretation of *yè*, more specifically, we tested whether the *de re* reading (*yè* in 'mistaken' identity scenarios) was available to both Anlo and Evedome speakers. The results of this study demonstrates that both de se and de re are possible interpretations for yè in both dialects of Ewe. Although this is the case, most participants had preference for the de se reading see condition 4 (C4: RS, yè) in comparison with the de re reading see condition 2 (C2: MI, $y\dot{e}$). This is shown in the high percentage difference between 'yes' responses for C2 (37.5%) and C4 (92.5%) respectively captured in (Figure 4.1). Our findings therefore support previous claims by (Pearson 2015; Satik 2019; Bimpeh & Sode 2021) that yè shows ambiguity between the de se and de re readings and goes contrary to Bimpeh (2019) and Bimpeh et al. (2022)'s observation that yè has an obligatory de se reading. Additionally, our data shows that in 'mistaken' identity reports, the regular third person pronoun, \acute{e} , is used which corroborates Bimpeh (2019) and Bimpeh et al. (2022). Considering dialectal variation in the use of yè in 'mistaken' identity scenarios (C2) which translates to a de re interpretation, both Anlo and Evedome speakers showed no variation which confirms our hypothesis. In Figure 4.2, 31.25% Anlo 41.67% Evedomes got the de re reading. The slight percentage difference comes from the uneven number of speakers i.e. 12 Evedome against 8 Anlo speakers. Otherwise, speakers showed same preferences contra Bimpeh (2019). An inspection of Figure 4.3, also shows a 50-50 split in the participants responses (10 participants chose yes in 2 out of 2 responses, 5 participants chose 1 out of 2 responses and 5 participants chose 0 out of 2 responses). Thus, to erase any doubt of biases towards 'yes' responses as is known about 'yes/no' tasks Blume et al. (2017), we replicated this study as discussed in the next section.

4.4 Experiment 2: replication of experiment 1 for the interpretation of yè

In a BFC task, conditions are explicitly compared. Participants reveal their preference by choosing the sentence that is most (or least) acceptable when presented with two (or more) sentences, (Schütze & Sprouse 2014:32). The BFC task was resorted to, to replicate the results of the TVJ task. As mentioned earlier, this was to eliminate doubts on response biases

in the sense that participants could have selected *yes* responses throughout. A replication of experiment one was also done to make certain that participants from study one were attentive. This task involves more than e.g, ticking 'yeses.' A participant needs to understand the given scenario and to make decisions based on his or her understanding. Details of this study is outlined subsequently.

4.4.1 Method

4.4.1.1 Participants

Twenty Ewe-speaking adults (mean age= 43.75; SD= 16.17; range= 23-75 years; males= 11) were recruited for this study. Notably, these twenty participants did not participate in the TVJ task. These participants were randomly recruited from Ho, the Volta regional capital. Ten adults were recruited from Societe Generale Bank, the other ten from Ho municipal hospital, Trafalgar. Participants from the bank consisted of two waiting customers, two security persons and six members of the administrative staff. On the other hand, those from Trafalgar were all staff of the hospital. Thus, their level of education varied between Senior high school to tertiary level graduates, with one case of illiteracy. Participant's dialect in this study was not evenly distributed; fifteen adults were Evedome speakers, three spoke Aŋlo and two spoke Toŋu (also Tonu). ³

4.4.1.2 Design and materials

Due to the nature of this task, only one factor (type of scenario) was varied with 2 levels: 'mistaken' identity and reported speech scenarios. Like study one, this experiment comprised eight test items (contexts). Unlike the TVJ task, the pronouns at issue were not essential here since participants were required to fill in the gaps with one of the pronouns under study summing up to two conditions, with all participants seeing each condition 4 times. Condition one is composed of a reported speech scenario followed by a test sentence with a gap, and two corresponding pronoun options ($\acute{e} / y\acute{e}$) to fill in the gap with. Condition two on the other hand, is made up of a 'mistaken' identity scenario followed by a test sentence with a gap, and two corresponding pronoun options ($\acute{e} / y\acute{e}$) to fill in the gap with. These are illustrated below:

(25) Condition 1, (*de se* specified): Efo Kosi and his family are relocating to a new house so most of their belongings have already been moved out. While cleaning the last bit

³Toŋu, which means by the river, refers to speakers located at the lower basin of the Volta river. The dialect is spoken by about 40,000 people (estimate from the Ghana's 2010 housing and population census)The geographical area begins from the east of the Volta river towards the coastal grooves below Sogakope. The Toŋu speaking area includes Mepe, Vume, Tefle, Sokpoe, among others. See (Kpoglu 2019:11) for more on the Toŋu dialect.

of his study, he found an old report card which read: English language C, Biology D, Mathematics C+, Physics F. Efo Kosi saw his name on the report card and believed it was not a good example for his son, Kofi. This was definitely a bad performance. **Test sentence**:

- a. Efo Kosi xoese be me wo do nyuie le suku o. Efo Kosi believe COMP NEG do work well in school NEG 'Efo Kosi believed he performed badly in school.'
 a. é b. yè
- (26) Condition 2, (*de re* specified): Efo Kosi and his family are relocating to a new house so most of their belongings have already been moved out. While cleaning the last bit of his study, he found an old report card which read: English language C, Biology D, Mathematics C+, Physics F. Efo Kosi called his son and began to lecture him about the consequences of not performing well in school. Unknown to Efo, the results he saw was his and not his son's.

Test sentence:

a. Efo Kosi xoese be me wo do nyuie le suku o. Efo Kosi believe COMP NEG do work well in school NEG 'Efo Kosi believed he performed badly in school.'
a. é b. yè

Lists for this study was the same as the one used in study 1, with the exclusion of pronouns. I repeat it here, with the changes effected for this study.

List 1	List 2	List 3	List 4
Item 4: RS	Item 2: RS	Item 5: RS	Item 8: RS
Item 3: RS	Item 8: MI	Item 1: RS	Item 5: RS
Item 2: MI	Item 5: MI	Item 4: MI	Item 3: MI
Item 1: MI	Item 7: RS	Item 7: MI	Item 4: RS
Item 7: RS	Item 4: MI	Item 3: MI	Item 7: MI
Item 6: MI	Item 3: RS	Item 2: RS	Item 6: MI
Item 5: MI	Item 1: MI	Item 8: MI	Item 1: RS
Item 8: RS	Item 6: RS	Item 6: RS	Item 2: MI

Table 4.2: Randomised items for BFC task

4.4.1.3 Procedure

In this study, a written questionnaire was also used in data elicitation. Like in study one, questionnaires comprised a brief instruction to guide participants in answering their questions. These were followed by eight items, their corresponding test sentences, and a \acute{e} or $y\grave{e}$ option to choose from. All test sentences consisted of attitude holders (one whose attitude

is reported) and their proposition (content of their attitude). The tests were distributed to two participants at a time. Participants were seated apart while filling the questionnaires, under the supervision of the researcher. Participants took approximately twenty minutes to complete the questionnaire. All participants completed their task by themselves except three. One of them had no formal education as such, could not read or write, while the other two gave me the excuse of being tired to read. In the case of the illiterate, I read the scenarios as well as test sentences to her in Ewe. I also wrote on her behalf what she thought was the suitable pronoun relative to the scenario. In the case of the participants who claimed to be tired, I read out the scenarios for them while, they wrote down the answers themselves. A written informed consent was also obtained from each participant before the task was administered, followed by participants' background information (age, gender, dialect and level of education).

4.4.2 Results

Responses from all 20 participants was gathered for this study.



Figure 4.4: BFCT: Summary of results for the two conditions

Figure 4.4 summarises the percentage of responses by participants in the reported speech (CI) and 'mistaken' identity conditions (C2) with $y\dot{e}$ and \dot{e} . In condition one (RS), 43.75% of the participants preferred to use $y\dot{e}$ while 56.25% preferred to use \dot{e} . Conversely, in condition, two (MI), 66.25% of respondents preferred to use $y\dot{e}$ whereas, 33.75% preferred the

use of \acute{e} . Regarding condition one, responses in favour of both \acute{e} and $y\acute{e}$ was a little above and below 50% respectively. On the other hand, condition two showed the reverse. While responses in favour of \acute{e} was below 50%, that for $y\acute{e}$ was above 50%.

Previously, we observed in Figure 4.2 (§ 4.3.2) that the *de re* interpretation was available to both Aŋlɔ and Evedome speakers of Ewe. This study also confirms this; see Figure 4.5.



CONDITIONS AND THE DIFFERENT DIALECTS

Figure 4.5: BFCT: Summary of results for Aŋlɔ, Evedome and Tɔŋu speakers in the two conditions

Aŋlɔ, Evedome and Toŋu speakers showed no variation in the use of $y\dot{e}$ in 'mistaken' identity scenarios. In all dialects speakers accepted $y\dot{e}$ in 'mistaken' identity scenarios with 91.67%, 61.67% and 62.50% respectively. Interestingly, eventhough the number of Evedome speakers were more than that of the Aŋlɔs and Tɔŋus, the percentage of acceptance in Aŋlɔ and Tɔŋu dialects were higher and above 50%.

Since participants saw each condition four times, Figure 4.6, shows a closer look at their individual performance regarding condition 2 (mistaken identity). Figure 4.6, shows that out of the 4 possibilities, six participants exhausted all 4 instances of the occurence of condition 2. Four participants selected condition 2 in 3 out of 4 instances, seven participants selected condition 2 in 2 out of 4 instances and lastly, three participants selected condition 2 in 1 out of 4 instances. There was no participant who disprefered $y\dot{e}$ in 'mistaken' identity scenarios unlike in study one where 10 participants did not chose the condition at all (see Figure 4.3).



Figure 4.6: BFCT: Summary of results for all individuals w.r.t condition 2

4.4.3 Discussion

The binary forced choice task, like the truth value judgment task investigated the interpretation of the logophoric pronoun in Ewe. Particularly, whether the de re reading of yè was available to all speakers of Ewe tested in this experiment namely, Anlo, Evedome and Tonu. Due to the 50-50 responses from study one (TVJT), this study served as a follow up on study one. The study was conducted to find out if the results from study one could replicated to achieve the same or better results. Better results in this regard could inform us about methodological effects of data elicitation which was alluded to in Bimpeh (2019). The following results was obtained: First and foremost, yè can be used in 'mistaken' identity reports which indicates that the *de re* interpretation of yè is available to participants. Nonetheless, most participants preferred the de se reading to the de re reading. This finding therefore aligns with the results for study one. Also, on one hand, this finding validates previous claims by (Pearson 2015; Satik 2019; Bimpeh & Sode 2021); and on the other hand, contradicts Bimpeh (2019); Bimpeh et al. (2022). Secondly, we found that the third person pronoun, \acute{e} , is used in 'mistaken' identity reports which is consistent with Bimpeh (2019)'s observation that é is used in de re contexts. We also found that Ewe speakers accept the use of \acute{e} in reported speech. This finding is also consistent with Pearson (2015)'s and contradicts Clements (1975). Thirdly, participants preferred reported speech with yè condition in which attitude holders were aware of themselves. A detailed discussion on our findings is also provided in the general discussion. See (§4.5).

4.5 General Discussion

Generally, the aim for conducting experiment one (TVJT) and two (BFCT) was to investigate the interpretation of the logophoric pronoun, $y\dot{e}$, in Ewe. In the narrow sense, the study sought to determine whether speakers of Ewe tested (Aŋlɔ and Evedome in study one, Aŋlɔ, Evedome and Tɔŋu in study two) differ in the use of $y\dot{e}$ in 'mistaken' identity contexts. I present a summary of findings from the two studies.

First, both studies showed that the logophoric pronoun, *yè*, has a *de re* reading. Secondly, both studies revealed that the *de se* reading (the use of *yè* in reported speech) was prefered over the *de re* (the use of *yè* in 'mistaken' identity scenarios). Finally, Evedome, Toŋu and Aŋlo speakers did not show variation in their use of *yè*.

In relation to our aim, data from the truth value judgment task revealed that yè has a de re reading, demonstrated by the use of yè in 'mistaken' identity reports. On the surface, this is a surprising finding because $y\dot{e}$, which was described by Clements (1975) as the pronoun used to unambiguosly communicate an individual's speech, thoughts, feelings, emotions, or attitude in indirect discourse, can also be used to report the attitude of an individual who does not have knowledge of being the referent of a reported speech act. A possible explanation is that participants were mostly confused since they are not used to such scenarios. Thus, despite the distinction between scenarios where attitude holders were aware (RS) and ones where attitude holders were unaware (MI) of themselves, to avoid a further confusion, participants had a bias to simply resorting to the default maker, yè, to refer to attitude holders. Also, participants may have chosen yè in mistaken identity scenarios because they were aware of both the attitude holder and the unrecognised description of the attitude holder being the same individuals. On the other hand, the *de re* use of yè could be part of its properties which Clements (1975) failed to account for while providing its distribution. So that $y\dot{e}$ is intentional and does not care about the awareness of its antecedent, only if it can access this antecedent as the one who communicated an attitude. This attribute of $y\dot{e}$ is clearly exhibited in dream reports (although this experiment did not target dream reports) where $y\dot{e}$ picks up as antecedents both 'dream subject' (the individual dreaming) and 'dream self' (the individual in the dream). If yè was obligatorily read de se, it shouldn't pick the 'dream self' as antecedent (see Pearson (2015); Bimpeh (2019) for dream reports in Ewe). Another surprising observation was for majority of participants to reject \dot{e} in 'mistaken' identity reports. The reason is that the third person pronoun, \dot{e} , is used to report the attitude of an individual other than the attitude holder (Clements 1975). As such, to give a report on an individual who has

no knowledge of being the referent of his or her own speech act implied some other speaker hence, \dot{e} should have been used. One other strange finding was for \dot{e} to be used in reported speech. Although Pearson (2015) first made this discovery, I found the use of \dot{e} in such contexts strange by virtue of the fact that in reported speech, é signals disjoint referent; once again, it is used to report the attitude of an individual other than the attitude holder (Clements 1975). Otherwise, why would a language have two sets of pronouns if one of them could serve the same purpose? Also, our findings could have been influenced methodologically. As pointed out by Bimpeh (2019), it is more appropriate to elicit this kind of data by allowing participants to freely provide constructions which required the use of the targeted pronouns, rather than to have them judge sentences as true or false. Which perhaps, is the reason Bimpeh (2019) obtained consistent results. Another reason, maybe trivial, in relation to the truth value judgment task is that participants could have been sloppy by not paying critical attention to the task. However, the binary forced choice task also demonstrated similar findings by the truth value judgment task. Thus, one cannot attribute the finding obtained in the truth value judgment task to methodological influence. In Bimpeh et al. (2022)'s research, they found that better results were achieved when they interviewed participants by talking them through the experiment rather than eliciting data through questionnaires via email. Hence, once again, the specific tasks (TVJT and BFCT) may not have been by themselves problematic but generally, the use of questionnaires. Worthy of note is that eventhough the de *re* interpretation is borne out, data from both truth value judgment and binary forced choice tasks also showed that participants had preference for *de se* over *de re* reading. Comparing conditions two and four, we observed that participants performed better in reports that involved scenarios where the attitude holder was aware of himself (C4: RS, yé) as opposed to reports that involved scenarios where the attitude holder was unaware of himself (C2: MI, yé). This also confirms Pearson (2015)'s awareness condition.

Our hypothesis that differences should not be found among speakers of Ewe tested in their use of $y\dot{e}$ in 'mistaken' identity scenarios was confirmed by both studies. The prediction was that since the *de re* reading was available to 'pure' Ewe (Pearson 2015), Aŋlɔ (Satık 2019), and Danyi speakers (O'Neill 2015), there would't be variation. In addition, the same overt pronoun, $(y\dot{e})$ and its variant $(y\dot{r})$ is used across all dialects. Results from study one showed that both Evedome and Aŋlɔ speakers used $y\dot{e}$ in *de re* contexts. Both groups of speakers showed the same response pattern although their percentage-responses varied slighty. We assume that the difference in their percentage-response is due to the imbalance (12 for Evedome and 8 for Aŋlɔ) in the number of participants across the different dialects, which may have caused a higher acceptance in Evedome speakers (41.67%) than in Aŋlɔ (31.25%) speakers. The same can be said of study two. All three groups of Ewe speakers namely: Aŋlɔ (91.67%), Evedome (61.67%) and Toŋu (62.50%) use $y\dot{e}$ in *de re* contexts. In connection with Bimpeh (2019)'s findings i.e. that Evedome speakers reject the *de re* reading of $y\dot{e}$,
we found contrastive results i.e. Evedome speakers accept the use of $y\dot{e}$ in *de re* contexts. We speculate that the differences stems from Bimpeh (2019)'s methodological approach. Specifically, in a replacement task, she instructed her participants to substitute a relative clause i.e. structure containing the *res* of attitude holders (e.g. the one whose pants is on fire) with the competing pronouns under discussion ($y\dot{e}$ and \dot{e}). This approach made it impossible for participants to replace $y\dot{e}$ with the relative clause since this relative clause contained a description of an attitude holder's *res* which could only be reported with a descriptive pronoun, in this case, \dot{e} .

4.6 Chapter summary

This chapter addressed the contradiction found in the literature concerning the interpretation of the logophoric pronoun, $y\dot{e}$, in Ewe. We empirically sought to determine whether the *de re* interpretation of $y\dot{e}$ is available to speakers of Ewe based on the dialects tested. We hypothesized that Ewe speakers do not show differences in their use of $y\dot{e}$ in *de re* contexts. To test these, we conducted a truth value judgment task and a binary forced choice task with three groups of native speakers of Ewe. Both studies showed that, the logophoric pronoun, $y\dot{e}$, has a *de re* reading in Aŋlɔ, Evedome and Toŋu dialects of Ewe, which confirms Pearson (2015); Satık (2019); O'Neill (2015). Secondly, it is easier for one to choose $y\dot{e}$ in contexts in which an attitude holder is aware of himself than in contexts in which the attitude holder is unaware of himself. This was reflected by a higher acceptance for *de se* over the *de re* scenarios presented. Finally, Evedome, Aŋlɔ and Toŋu speakers did not show differences in their use of $y\dot{e}$ which points to the fact that dialectal variation does not exist in the use of $y\dot{e}$ in *de re* contexts contra Bimpeh (2019).

Chapter 5

Relation between Logophoricity and Control

In chapter 4, we confirmed the *de re* interpretation of the logophoric pronoun, $y\dot{e}$ in Ewe. This means that it is possible for $y\dot{e}$ to be used to refer to a speaker in a situation where he is not aware of himself. Granted that the *de re* construal is available, as hinted in chapter 1, there are known similarities between $y\dot{e}$ and the null subject of an embedded infinitive PRO (called big PRO), in logophoric contexts as well as in control structures such that one would assume $y\dot{e}$ to be an overt instantiation of PRO. Particularly, first noticed by Satik (2019), in control environments, $y\dot{e}$ combines with an *a* morpheme (glossed as the potential modal morpheme (Essegbey 2008) or irrealis marker (Satik 2019)) to parallel PRO. This chapter explores the relation between the logophoric pronoun and control ($y\dot{e}$, $y\dot{e}$ *a* and PRO) and shows that despite the similarites between them, neither $y\dot{e}$ nor $y\dot{e}$ *a* is the overt counterpart of PRO (contra Satik (2019)). According to Satik (2019), $y\dot{e}$ in the context of irrealis *a* ($y\dot{e}$ *a*), has properties of overt PRO rather than of a logophoric pronoun. The chapter is organised in the following way: § 5.1 examines the relation between $y\dot{e}$ and PRO while § 5.2, investigates the relation between $y\dot{e}$ *a* and PRO. In § 5.3, I spell out an analysis of how things could be modelled and in § 5.4, I end the chapter with a summary.

5.1 Relation between *yè* and PRO

In an indirect speech report where we expect a logophoric pronoun in Ewe, in English, PRO can occur. Consider (1b) and (1a), repeated here.

- (1) Kofi and Koku are waiting for their friend Yao. Kofi can no longer wait so he says "I am leaving". To report this:
 - a. **Kofi**_{*i*} gblo be $\mathbf{y} \mathbf{\hat{e}}_{i/\star j}$ dzó. Kofi say COMP LOG leave

	'Kofi said that he left'	(Ewe)
	(Clements 1975:142), adapted	
b.	Kofi _{<i>i</i>} claimed PRO _{$i/*j$} to leave.	(English)

As we have seen throughout in this dissertation, yè is used to report the attitude of an individual. Thus, in (1a), yè is used to report Kofi's speech. As a non-logophoric language, English may use PRO to report Kofi's speech as well. Note the change of verb from say in Ewe to claim in English which is due to the verb's PRO-taking properties (à la Pesetsky (1991)). Therefore, PRO is the null pronoun postulated in the subject position of non-finite clauses. The motivation for PRO comes from (a) the binding theory whereby an anaphor requires the presence of a local antecedent; (b) the Extended Projection Principle (EPP) which requires that all clauses have a subject (covert or overt); (c) theta criterion which states that every theta role must be associated with a syntactic position even when there is no overt argument, and (d) nominal agreement where predicate nominals must agree with the subject of a copular clause; see Sportiche et al. (2013) for a discussion. Thus, in (1b), PRO is the subject of the non-finite clause to leave which translates to [Kofi claimed [Kofi to leave]]. By observing the similarity between (1a) and (1b), we could conclude that $y\dot{e}$ is identical to, or is PRO in English and vice versa. However, a closer inspection at their properties, formulated in (2), shows otherwise. According to von Stechow (2004:458)'s distribution of these two forms, the only similarity is binding, modelled by the feature log. This means that in attitude contexts, PRO is a special case of the logophoric pronoun, but restricted to locality (shown by *local*). Also, PRO can only occur in a sub-class of contexts in which yè can occur.

(2) a. Properties of PRO = [log + local]
b. Properties of yè = [log]
(von Stechow 2004:458)

The next section examines a detailed comparison between *yè* and PRO. It shows environments in which *yè* occurs but PRO does not and vice versa. More specifically, syntactic diagnostics including (*locality*, and restrictions on *person*, *position* and *predicate*) as well as semantic diagnostics namely (*arbitrary*, *de se* and *sloppy interpretations*) will be explored.

5.1.1 Syntactic differences between yè and PRO

5.1.1.1 Locality

PRO cannot refer to an NP outside of the clause in which it is contained. In other words, the antecedent of PRO must be local (Landau 1999). Thus in (3), PRO can only refer to *Koku* but not to *Kofi*. In Ewe, on the other hand, *yè* is known to be long-distance bound; its antecedent is non-local. As such, any comprehensive depth of embedding is allowed. As exemplified in

(4), $y\dot{e}$ can refer to any of the antecedents in the higher clause.

(3)	Ko	fi_i thinks that Koku _j promised PRO _{*i/j} to marry Ama _k . (En	glish)
(4)	a.	Kofi _i súsú be Koku _j gblo be $\mathbf{y} \mathbf{\hat{e}}_{i/j}$ de Ama _x . Kofi think COMP Koku say COMP LOG marry Ama 'Kofi thinks that Koku said that he has married Ama.'	(Ewe)
		yè= Kofi and Koku	
	b.	Kofi _i be Koku _j súsú be Yao _x xɔ-é-se be $\mathbf{y}\mathbf{\hat{e}}_{i/j/x}$ zɔ-mó. Kofi say Koku think COMP Yao take-it-hear COMP LOG walk-path 'Kofi said (that) Koku thought that Yao believed (that) he had travelled.'	
		yè= Kofi, Koku and Yao	

5.1.1.2 Person restriction

Given that PRO bears the feature [null], claiming that it is not person restricted could be problematic¹. Nonetheless, agreement with PRO is possible in a language like Spanish which shows that PRO recieves ϕ -features (as discussed in chapter 2 c.f. Heim (2008)) from its controller (Satik 2019:4). The sentence in (5) can be paraphrased as *the victim_{fem} tried that the victim_{fem} be transfered_{fem}*. As illustrated in (5) which is an infinitive construction, the gender feature (fem) on the matrix subject agrees with that of the verb *transferida*. The null subject *la victima* would in turn, bear the *fem* feature based on agreement.

(5) La victima intensó ser transferida / ?tranferido.
DEF victim.FEM tried.3SG be.INF transfered.FEM / transfered.MASC
'The victim tried to be transfered.' (Spanish)
(Davies & Dubinsky 2007) cited in (Satık 2019:31) ex. 87

Considering the Spanish setting, we pursue the intuition that PRO is not restricted to person. What this means is that PRO can have as antecedent all personal pronouns for instance, first, second and third persons. See (6).

(6)	a.	\mathbf{I}_i tried \mathbf{PRO}_i to go.	(English)
	b.	You _{<i>i</i>} tried PRO _{<i>i</i>} to go.	

c. **He** $_i$ tried **PRO** $_i$ to go.

However, in Ewe, $y\dot{e}$ can occur with all personal pronouns except the first person. The examples in (7) show this. However, in (7b) and (7c), notice that $y\dot{e}$ occurs with *a*. Infact, the occurence of $y\dot{e}$ in isolation results in ungrammaticality. This will be revisited in § 5.2.

¹I thank Deniz Satik for pointing this out to me.

(7)	a.	* $\mathbf{M}\mathbf{e}_i$ dze-agbagba be $\mathbf{y}\mathbf{\hat{e}}_i$ dzó.	
		1SG IC-make.effort COMP LOG go 'I tried to go.' (intended)	(Ewe)
	b.	$\hat{\mathbf{e}}_i$ dze-agbagba be (*yè) / yè _i a dzó. 2SG IC-make.effort COMP LOG / LOG POT go 'You tried to go.'	
	c.	$\dot{\mathbf{e}}_i$ dze-agbagba be (*yè) / yè _i a dzó. 3SG IC-make.effort COMP LOG / LOG POT go 'He tried to go.'	

5.1.1.3 Position restriction

PRO is the subject of a non-finite clause. Therefore, it not the case that it can occur in a non-subject position. On the contrary, $y\dot{e}$ does not have the property of being restricted by position, illustrated in (8) and (9).

(8)	*John saw PRO.	(English)
(9)	Koku _i gblo be Kofi _j kpo $y \hat{e}_i$. Koku say COMP Kofi see LOG 'Kofi said that Koku saw him.'	(Ewe)
5.1.1	.4 Predicate restriction	

PRO can only occur with a sub-class of predicates in which $y\dot{e}$ can occur. I examine three categories of verbs based on Pesetsky (1991)'s classification. Note that Pesetsky (1991)'s verb classification is not cross-linguistic; it only covers English.

(a) believe-class

First is *believe*, which is categorized as having [+ECM, -PRO] features. Exceptional Case making (ECM) verbs like *believe* allow overt subjects, shown by the ungrammaticality of (10a). However, *yè* does not have such a restriction as (11) is grammatical in Ewe. Other types of verbs that occur within the *believe*-class are *fancy, consider, imagine, judge* (Peset-sky 1991:27).

(10)	a. *Kofi _i believes PRO _i to be handsome.	(English)
	b. Kofi _{<i>i</i>} believes himself _{<i>i</i>} to be handsome.	
(11)	Kofi _{<i>i</i>} xɔ-é-se be $y\hat{e}_i$ dze-deka. Kofi take-it-hear COMP LOG IC-be.whole 'Kofi believes that he is handsome.'	(Ewe)

(b) want-class

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Another class of predicates considered is a [+ECM, +PRO] verb such as *want*. While verbs like *believe* prohibit PRO and take overt subjects, there are others like *want* that take both overt subjects and allow PRO. Other verbs in this category include *desire, need, wish* (Peset-sky 1991:48). Compare (12a) with (12b). Regarding Ewe, *di* 'want' disallows the occurrence of *yè* in isolation (13a). The verb requires *yè* to occur in combination with the potential mood marker -*a* (13b) which we will discuss further in § 5.2.

- (12) a. No one wants him to swim. (English)
 b. No one wants to PRO swim.
- (13) a. *Ame adeke me di be $y\hat{e}_i$ fu-tsi o. person INDEF.NPI NEG want COMP LOG move.limbs-water NEG 'No one wants to swim.' (Ewe)
 - b. Ame adeke me di be $y\hat{e}_i$ **a** fu-tsi o. person INDEF.NPI NEG want COMP LOG POT move.limbs-water NEG 'No one wants to swim.'

(c) Demand & pursuade-class

The final class of predicate we will survey is one with [-ECM, +PRO] features such as *de-mand* and *pursuade*. These two verbs under this class are considered because *demand* is subject controlled whereas *pursuade* requires object antecedents. Since our previous examples show instances of 'subject control' (where PRO is controlled by a subject antecedent), it is expedient to include a predicate that triggers 'object control' (where PRO is controlled by a subject antecedent).

(14)	a.	$Bill_i$ demanded PRO_i to turn off the lights.	(English)	
		(Pesetsky 1991:18) ex. 66e		
	b.	Bill _i bia be $y e_i$ a tsí kadi la. Bill ask COMP LOG POT off light DEF 'Bill demanded to turn off the light '	(Fwe)	
		Diff definanced to turn on the fight.		

Concerning *pursuade*, *ble...nu* 'pursuade' prohibts both $y\dot{e}$ by itself, or in combination with -*a* to occur (16b); the jussive marker $n\dot{e}$ is used instead.

(15)	Ко	\mathbf{fi}_i persuaded Koku _j PRO _{*i/j} to arrive early.	(English)
(16)	a.	* Kofi _{<i>i</i>} ble Koku _{<i>j</i>} nu be $y\hat{e}_i / y\hat{e}_i$ a va kábá. Kofi lie Koku mouth COMP LOG / LOG POT come early 'Kofi persuaded Koku to arrive early.' (lit: Kofi persuaded Kok	tu that he arrives
		early)	(Ewe)
	b.	\mathbf{Kofi}_i ble Koku _j nu be $\mathbf{n}\mathbf{\acute{e}}_i$ va kábá.	

Kofi lie Koku mouth COMP JUSS come early

'Kofi persuaded Koku to arrive early.' (lit: Kofi persuaded Koku that he arrives early)

A note on the jussive marker is due. According to (Ameka 2008:152), *né* occurs in many routine expressions such as a response to the introductory phrases for the performance of different genres of verbal acts. A speaker expresses his wish, desire, command or request about a third person referent with *né*. The addressee may not be physically present as shown in (17a) which may be expressed in a form of prayer or soliloquy. In such instance, the speaker has no control over the action carried out. However, when the addressee is physically present, he is intended as the mediator of the action carried out in which case the causative marker *ná* may be introduced. Thus, example (17b) is interpreted as I (speaker), command or request my addressee to see to it that the children are brought to me.

- (17) a. gbogbo-võ-wó né do. spirit-bad-PL JUSS exit 'Let evil spirits come out.'
 (Ameka 2008:152) ex. 32
 - b. **ná** devi-la-wó **né** va gbo nye. make child-DEF-PL JUSS come beside 1SG 'Let the children come to me.'

Against this background, the occurrence of the jussive marker in (16b) is not surprising since the addressee is being requested to arrive early. Moreover, jussive markers and mood markers are known to conspire to create a control environment e.g. (Madigan 2008; Grano & Lotven 2019) for Korean and Gengbe² respectively. Notably, *yè* seems to be subject-oriented and that is probably why it cannot refer to the object in the 'object control' cases. However, Clements (1975) refutes this claim with the observation that with perception verbs like *se* 'hear' and in subordinate clauses involving psychological verbs, the experiencer is often the object which serves as the antecedent of the logophoric pronoun as illustrated in (18a). Clements (1975)'s claim is also debatable in the sense that psychological verbs can also be used agentively shown in (18b). In which case *Ama* is the experiencer of the hapiness but does not require on *Ama* to be an object.

(Gengbe)

²While Gengbe is closely related to Ewe, I'll like to draw the readers attention to the difference between Ewe and Gengbe namely, Ewe disallows the $y\acute{e}...n\acute{e}$ sequence whereas Gengbe allows it $(je...n\epsilon)$. Thus, (i) is a Gengbe variety of the Ewe example in (16b) shown below.

⁽i) **Kofi**_{*i*} ble Koku_{*j*} nu be **je** $\mathbf{n}\varepsilon_i$ va kábá Kofi lie Koku mouth COMP LOG JUSS come early Kofi persuaded Koku to arrive early.' (Grano & Lotven 2018), my translation

(18) a. Dzi-dzo Ama_i be $y\hat{e}_i$ dzì vì. heart-straight Ama COMP LOG bear child 'Ama was happy that she bore a child.' (Clements 1975:163) ex. 57

> b. Ama_i kpo dzi-dzo be $y\dot{e}_i$ dzì vì. Ama see heart-straight COMP LOG bear child 'Ama was happy that she bore a child.'

In this section, we investigated syntactic differences between $y\dot{e}$ and PRO. A survey of the syntactic properties above reveals that $y\dot{e}$ and PRO are dissimilar. Thus, $y\dot{e}$ is not the overt counterpart of PRO. See Table 5.1 for summary. I explore semantic differences between $y\dot{e}$ and PRO in the next section.

PROPERTY	yè	PRO
1. Locality	X	✓
2. Person restriction	✓	×
3. Position restriction	X	 ✓
4. Predicate restriction:		
believe	\checkmark	×
want	N/A	1
demand	N/A	1
persuade	N/A	1
5. object control	N/A	 ✓

Table 5.1: Summary of syntactic differences

5.1.2 Semantic differences between yè and PRO

This section concerns characteristics involving the interpretation of the forms under discussion. The following readings are investigated: arbitrariness, de se and sloppy. This is done to determine the semantic differences between $y\dot{e}$ and PRO.

5.1.2.1 Arbitrary reading

According to Landau (1999), PRO can have an arbitrary reading. In other words, it is a property of PRO to occur uncontrolled. Generally, arbitrariness in Linguistics, is the absence of natural or necessary connection between a word and its form. This means that PRO can lack an antecedent in which case, the controller is understood to be anybody in general, known as the arbitrary reading of PRO; c.f (19).

- (19) a. It is not allowed to PRO perjure oneself.
 - PRO to steal hexes from witches is dangerous.
 (Adger 2004:251) ex. 81-83

In arbitrary control, $y\dot{e}$ does not occur in Ewe as observed in the (a) alternatives of (20) and (21). In the (b) alternatives, a generic form (*ame ade* 'a person') is used instead to show the arbitrary reading of the sentences.

- (20) a. *Mo me li be yè né da alakpa de édokui dzi o.
 path NEG exist COMP LOG JUSS throw lie on REFL top NEG
 ' It is not allowed to perjure oneself.' (intended)
 - b. Mo me li be **ame ade** né da alakpa de édokui dzi o. path NEG exist COMP person INDEF JUSS throw lie on REFL top NEG 'It is not allowed to perjure oneself.'
- (21) a. *yè afɔku yé wò nye be né fi adzetɔ-wó fe dzosatike. LOG danger FOC 3SG is COMP JUSS steal witch-PL POSS magic.medicine 'To steal hexes from witches is dangerous.' (intended)
 - b. afoku yé wò nye be ame ade né fi adzeto-wó fe danger FOC 3SG is COMP person INDEF JUSS steal witch-PL POSS dzosatike.
 magic.medicine
 'To steal hexes from witches is dangerous.'

5.1.2.2 *De se* reading

As discussed in chapter 4, PRO is obligatorily read *de se* while $y\dot{e}$ is ambiguous between *de se* and *de re* readings. I repeat the applicable examples in (22) and (23).

(22) Scenario 1 (*de se*): John claims: "I am clever."

Scenario 2 (*de re*): John has just found an old paper that he wrote, but he doesn't realize that he is the author of the paper. He reads it and is impressed by what a good paper it is. He says that **"whoever wrote this paper would receive an award"**

- a. John claims that **he** is clever. [\checkmark S1, \checkmark S2]
- b. John claims **PRO** to be clever. [\checkmark S1, #S2]
- (23) John gblb be yè le cleva. John say COMP LOG COP clever
 'John said that he was clever.'
 (Pearson 2015; Satık 2019) & my field work: [√ S1, √ S2]

5.1.2.3 Sloppy reading

PRO in an infinitival complement of an attitude verb with an *only*-DP as its subject can only have a sloppy interpretation and excludes the strict reading³. See the English example in (24) and its translation in (25).

³The strict and sloppy reading of PRO can also be tested under ellipsis.

(24) Only Kofi wants **PRO** to change.

(25) Kofi wants that Kofi changes and ...
(a.) ... for all x, if x ≠ Kofi, then ¬(x wants that x changes).' - sloppy
(b.) * ... for all x, if x ≠ Kofi, then ¬(x wants that Kofi changes).' - strict

According to Bimpeh (2016), [DP ko yé] in Ewe is analogous to [only DP] in English. Whereas English marks focus with $_F$ indexed on the focus element, Ewe marks focus morphologically with yé. yé, together with particles (*ko, dzaa, dede, pɛ, sɔŋ*) traditionally described as intensifiers (Duthie 1996) in Ewe indicate exclusion as illustrated in (26) below.

- (26) Context: Kofi, Yaw and Baba attend a party. Kofi drinks beer, Yao Cola and Baba wine and that's all they drank. I was informed that Kofi and Yao drank beer at the party...
 - a. Kofi ko yé no biya le azã-du-fe.
 Kofi only FOC drink beer at feast-eat-place 'Only kofi drank beer at the party.'
 (Bimpeh 2016)

Now, research by Bimpeh & Sode (2021) argue that given the right context, $y\dot{e}$ can have the strict interpretation; c.f (27).

- (27) Scenario: Kofi stayed overnight in a cemetary to prove his bravery. His friends, Mansa and Yao planned to play a trick on him. They know the cemetary guard so they ask him to dress up as a ghost to scare Kofi. In the night Kofi sees a scary creature walking through the vicinity. He thinks that he saw a ghost. The next day, when he told the story to Mansa and Yao, they both burst into laughter.
 - a. Kofi_{*i*} ko yé xɔ-é-se be $y\hat{e}_i$ kpɔ́ ŋɔli. Kofi only FOC take-it-hear COMP LOG see ghost 'Only Kofi believes that he saw a ghost.'
 - b. 'Kofi believes that Kofi saw a ghost and ...
 ... for all x, if x ≠ Kofi, then ¬(x believes that Kofi saw a ghost).' strict reading
 (Bimpeh & Sode 2021:2)

Exploring the semantic (interpretation) properties of $y\dot{e}$ and PRO, we can once again, witness the asymmetry summarised in Table 5.2. In our next section, we will delve into the proper-

⁽i) Kofi wants to change. John too

This gives us only the sloppy interpretation: John wants to change. Whereas the strict reading: John wants Kofi to change is excluded.

ties of y e a and PRO, to verify the relation between them.

PROPERTY	yè	PRO
1. Arbitratry interpretation	X	\checkmark
2. De re interpretation	1	×
3. Strict readings:	1	×

Table 5.2: Summary of semantic differences

5.2 Relation between *yè a* and PRO

5.2.1 Overview of control

Control is the relation between some antecedent namely, the 'controller' and (an) understood subject(pl) that is, PRO, the 'controllee' (Landau 1999:10). Thus, in the English example (28), *John* and *PRO* are in a control relation because they are coreferential and John provides the interpretation for PRO.

(28) John_i wants [PRO_i to go.]

Languages exhibit the control relation differently. For instance, according to Polinsky & Potsdam (2002), Tsez (North-east Caucasus), shows the reverse pattern of English where the 'controllee', signalled by Δ , occurs in the matrix clause and the 'controller,' in the embedded clause. This is known as 'backward control' (29).

(29) $\Delta_{i/*k}$ [Kidb \bar{a}_i ziya bišra] yoqsi. girl.ERG cow.ABS feed.INF began 'The girl began to feed the cow.' (Tsez) (Polinsky & Potsdam 2002:246) ex.2

Yet, there exist languages in which overt pronominal elements are controlled such as Korean (Madigan 2008), Hungarian, Zapotec (Boeckx et al. 2007), modern Greek, Serbo-Croatian (Zec 1987) cited in (Madigan 2008), among others. In Korean, for instance, Madigan (2008) claims that the long distance reflexive, *caki/casin* (57a), first person singular, *na* (57b) and the second person singular, *ne* (57c) can be controlled.

(30) a. Jwuhi₁-ka Inho₂-eykey **caki/casin**_{1/*2}-i cip.ey ka-Ikela-ko J-NOM I-DAT self-NOM home-LOC go-FUT-C yaksok-ha-yess-ta. promise-do-PST-DC

(English)

'Jwuhi promised Inho that she would go home.' (Madigan 2008:36) ex.4c

(Korean)

- b. Na-nun Inho-eykey ney-ka cip-ey ka-keyss-ta-ko yaksok-ha-yess-ta.
 1-TOP 1-DAT 1-NOM home-LOC go-VOL-DC-C promise-do-PST-DC 'I promised Inho that I would go home' (Madigan 2008:248) ex.16a
- c. Ne-nun Inho-eykey ni-ka ilccik ttena-keyss-ta-ko kocip-ha-yess-ta.
 2-TOP 1-DAT 2-NOM early leave-VOL-DC-C insist-do-PST-DC 'You insisted to Inho that you would leave early'.
 (Madigan 2008:248) ex.16b

As we saw earlier in § 5.1, the use of the logophoric pronoun, $y\dot{e}$ overlaps with PRO in attitude contexts but I have shown that it is not PRO. Concurrently, I also hinted in the introduction (chapter 1) that there is an overlap use of $y\dot{e} a$ and PRO in control constructions. Thus, the question on whether PRO and $y\dot{e} a$ differ, or whether they are isomorphs is due. Put differently, is there a correlation between $y\dot{e} a$ and PRO? According to Culy (1994a), control contexts seem to be mutually exclusive to logophoric marking. He states that he is "unaware of any language that treats a control complement as a logophoric domain" (Culy 1994a:1082). He supports his argument with pure logophoric languages like Tubiri and Yag Dii, which does not treat the complement of *want* as a logophoric domain. Also in Donno so, whenever, there is logophoric marking, there is no control and vice versa (31).

(31)	a.	Omar ma so go inyeme le	səyye giaa yele.
		Omar 1SG-SUBJ word the LOG with	speak said came
		'Omar _i came in order for me to talk wit	th him _{i} about the problem.'
		(Culy 1994a:1084) ex. 45a.	(Donno So): [-CONTROL, +LOG]
	b.	Omar pezu wu/*inyeme mõ donnon?	' giaa boli.
		Omar sheep 3SG/LOG POSS selling	said left
		'Omar _i left in order to sell $his_{i/k}$ sheep.	,
		(Culy 1994a:1084) ex. 45b.	(Donno So): [+CONTROL, -LOG]

Culy (1994a)'s argument therefore, seems to suggest that no such mutuality can be established between logophoric pronouns and null forms like PRO. On the other hand, Satuk (2019:3) proposes that in the Aŋlɔ dialect of Ewe, the control phenomenon is made phonetically overt⁴, in both realis and irrealis contexts. The pronoun $y\acute{e}+a$ (he calls it irrealis $y\acute{e}$)

⁴Grano & Lotven (2018) notes that the logophoric pronoun *je* in Genbge, is controlled in the subject position of an irrealis (*lá*) embedded clause. According to them, when the verb d_{3i} 'want' embeds the irrealis mood marker *lá*, the logophoric pronoun obligatorily co-refers with the subject of the immediate higher clause (the hallmark of obligatory control in the sense of Landau (1999)).

⁽i) Aku₁ be Kofi₂ be Ama₃ dzi be $\mathbf{je}_{*1/*2/3/*4} \mathbf{l}\mathbf{a}$ du nu. Aku say Kofi say Ama want COMP LOG IRR eat thing Aku said that Kofi said that Ama wants to eat.'

is seen when a control relation is established and nowhere else; see (32). He remarks that the logophoric $y\acute{e}$ (he calls it realis $y\acute{e}$) is not a logophoric pronoun; it is instead just a pronoun that has to be bound at the left-periphery of the embedded clause, regardless of whether or not the predicate that embeds the clause is attitudinal (ibid., 2).

(32) Agbe_i dze-agbagba /ŋɔble /dʒi /võ /wɔ-súsú /dʒi /súsú be Agbe IC-make.effort /forget /want /be.afraid /make-mind /like /intend COMP yè_i-a dzó. LOG-POT leave 'Agbe tried/forgot/wanted/is afraid/decided/likes/intends PRO_i to leave. (Satık 2019:10)

Notice that Satık (2019) treats y e + a as one form (32). If this were so, they should be inseperable. However, see (33). This proves that y e is independent of a. It is not the case that Satık (2019)'s y e + a and the logophoric y e are different. The marker a is only required when the sentence has a future orientation. Hence, its use as a potential marker (not tense) see section 5.2.2 for details. In this regard, in the rest of the chapter, I will seperate y e from a as y e a.

(33) **Kofi**_{*i*} be $y \hat{e}_{i/*j}$ fe agbale **a** va do egbea. Kofi say LOG POSS book POT come arrive today 'Kofi said (that) his letter will arrive today

I present a summary of Satik (2019:3)'s difference between these two forms in comparison to PRO in Table 5.3; c.f. (Satik 2019:4), which is supposed to show that $y\acute{e} a$, not $y\acute{e}$ is overt PRO.

PROPERTY	yé	yé a	PRO	
Must be c-commanded	\checkmark	✓	\checkmark	
Must be read <i>de se</i>	X	✓	\checkmark	
Long-distance antecedent	1	×	X	
Bound variable	1	✓	\checkmark	
Inanimate control possible	X	✓	\checkmark	
Sloppy reading only	X	✓	\checkmark	
Partial control possible	1	✓	\checkmark	
Split control possible	1	✓	1	

Table 5.3: Satik's differences between *yé*, *yé a* and PRO

Contrary to Culy (1994a), in contexts known to present the subject control relation, logophoric marking also pertains in Ewe. However, in agreement with Satık (2019), in order to achieve subject control, all control predicates, with the exception of *claim*, require the irrealis or potential marker, -a (34). The omission of -a results in illictness.

⁽Grano & Lotven 2018:484), ex. 8

- (34) a. Kofi_i tried/wants/claimed **PRO**_{i/*j} to do well in school. (English)
 - b. Kofi_i dzeagbagba be $(*ye) / ye_{i/*j}$ a wo do nyuie le sukuu. Kofi IC-make.effort COMP LOG / LOG POT do work well in school 'Kofi tried to do well in school.' (Ewe)
 - c. Kofi_{*i*} di be (*ye) / ye_{*i*/**j*} a wo do nyuie le sukuu. Kofi want COMP LOG / LOG POT do work well in school 'Kofi wants to do well in school.'
 - d. Kofi_{*i*} gblb be **ye** / **ye**_{*i*/**j*} a wb db nyuie le sukuu. Kofi say COMP LOG / LOG POT do work well in school 'Kofi claimed that he had done well in school/ Kofi claimed to do well in school.'

The question of the role of -a is due. What is it's function? I present this in the next section.

5.2.2 The role of *a*

The affix *a* has a future-tense flavour (for events that has not yet occured). Inasmuch as this reads surprising, tense in many Kwa languages including Ewe is not overtly marked. According to Essegbey (2008), who takes up this debate, *a* does not have temporal deixis as its primary function. As such, he proposes that *a* be treated as a modal morpheme which marks potentiality, glossed as (POT)⁵. By so doing, the distributional pattern of modal morphemes in the language is aligned. Essegbey (2008) goes on to clarify that to say that a language is tenseless does not mean that it does not express time. *a* does not serve the primary deictic purpose of locating a state of affairs in a time posterior to the moment of speech. The function of *a* is to express a claim about the possibility of an event occuring as shown in (35b).

(35)	a.	Kofi _{<i>i</i>} gblb be $\mathbf{y} \hat{\mathbf{e}}_{i/*j} \mathrm{dz} \varepsilon \mathrm{db}$.
		Kofi say COMP LOG fall ill
		'Kofi claimed to be ill.'
	b.	Kofi _{<i>i</i>} gblo be yè a _{<i>i</i>/*<i>j</i>} dz ε do.
		Kofi say COMP LOG POT fall ill
		'Kofi claimed (that) he (Kofi) will be ill.' (e.g. if he stays in the rain)

It also has an epistemic modal reading similar to *will* in English (36).

(36) a. Kofi a no afeme fifie. Kofi will be home.LOC now 'Kofi will be at home by now.'
b. Kofi a do Ge fifie. Kofi will reach Accra now

⁵Clements (1972) labelled a as a future-tense marker yet, he argued that there is little semantic basis for a tense-aspect distinction in Ewe and that there are no forms which could be properly called tense in the language.

'Kofi would have reached Accra by now.'(If Kofi informed you of his travel to Accra and you estimate his arrival)

a is obligatory with predicates that are known as control predicates in English (*try, want, demand, decide*, etc) but optional with predicates like *claim* in Ewe. Compare (37a) to (37b). The point is, if yea were PRO, we shouldn't get optionality or restriction between PRO-taking predicates. It is not person restricted (the occurence of *a* is not unique to the logophoric pronoun) but we can observe that it is really restricted to control predicates (*claim* vs. *want*).

- (37) a. Kofi dzeagbagba / di / wosusu be (*yè) / yè a du nu. Kofi IC-make.effort / want / make.mind COMP LOG / LOG POT eat thing 'Kofi tried/ wanted/ decided to eat.'
 - b. Kofi gblo be yè / yè a du nu.
 Kofi say COMP LOG / LOG POT eat thing
 'Kofi claimed to have eaten / Kofi said that he will eat'
- (38) a. me gblo be **me a** dzó. 1SG say COMP 1SG POT leave 'I claimed to leave.'
 - b. me gblo be **me** dzó 1SG say COMP 1SG leave 'I said (that) I left.'
- (39) a. me dí be **me a** dzó. 1SG want COMP 1SG-POT leave 'I want to leave.'
 - b. *me dí be **me** dzó. 1SG want COMP 1SG POT leave 'I want to leave.' (intended)

We saw previously that $y\dot{e}$, used in isolation is not PRO. Now, we have also seen the function of the affix *a*. Yet, we lack the knowledge of it's contribution to $y\dot{e} a$. Why is *a* obligatory with control predicates? As observed by Stirling (1994:260), the set of logophoric contexts includes a verb in the subjunctive form marked by *a* which implies future possibility. This is not surprising since it is common for verbs in a logophoric context to require subjunctive mood and subjunctive mood indicates indirect speech (Stirling 1994:260). Granted this is the case, does *a* then contribute the feature [*local*] in von Stechow (2004)'s distribution? In the next section, I argue, contrary to Satık (2019) that his so-called irrealis $y\dot{e}$ ($y\dot{e} a$) is not overt PRO; evidence comes from strict readings of $y\dot{e} a$ under *only* with the predicate *want*, as well as non-locality [*-local*] of irrealis $y\dot{e}$ ($y\dot{e} a$).

5.2.3 Irrealis yé (yé a) is not PRO

We saw from Table 5.3 the differences between $y\acute{e}$, $y\acute{e}$ a and PRO. I show in this section that $y\acute{e}$ a, is not overt PRO; it can be long-distance bound, shown in (40).

(40) Kofi_i súsú be Koku_j gblo be $\mathbf{y}\mathbf{\hat{e}}_{i/j}$ **a** de Ama_x. Kofi think COMP Koku say COMP LOG IRR marry Ama 'Kofi thinks that Koku said that he will marry Ama.' $\mathbf{y}\mathbf{\hat{e}}_{i/j}$ **a** = Kofi or Koku.

In other words, given a modified version of von Stechow (2004)'s distribution (repeated in (41)) of PRO, $y\acute{e} a$ is [-local]. This means that -a does not contribute the feature locality to ensuring that $y\acute{e} a$ is PRO. Secondly, $y\acute{e} a$ can have strict readings under want as illustrated in (42).

- (41) a. Properties of PRO = [log + local]
 b. Properties of yè a = [log + a]
- (42) Scenario: Kofi is already quite rich. He has plans for a huge investement. His friends, however, are worried about him and think that if he gets any richer, they might lose him as a friend.
 - a. Kofi ko yé di be yè a kpp ga sugbp.
 Kofi only FOC want COMP LOG IRR see money plenty
 'Only Kofi wants to be richer.' (lit. to get more money)
 - b. 'Kofi wants that Kofi is richer and ...
 ... for all x, if x ≠ Kofi, then ¬(x wants that Kofi is richer).' strict reading (Bimpeh & Sode 2021: 3)

I provide an updated summary of Satik (2019)'s differences between $y\acute{e}$, $y\acute{e}$ a and PRO in Table 5.4.

PROPERTY	yé	yé a	PRO	
Must be c-commanded	1	 ✓ 	\checkmark	
Must be read <i>de se</i>	X	?	\checkmark	
Long-distance antecedent	1	✓	X	
Bound variable	1	1	\checkmark	
Inanimate control possible	X	 ✓ 	\checkmark	
Sloppy reading only	X	×	\checkmark	
Partial control possible	1	1	\checkmark	
Split control possible	1	\checkmark	\checkmark	

Table 5.4: Differences between yé, yé a and PRO

From Table 5.4, we can immediately notice that y e a and PRO are not alike. The only two properties left to account for are (a) the inanimate reading of y e a illustrated in (43a) and (b) the *de se* reading, shown in (44a). In terms of the inanimate reading, my informants and myself reject the construction in (43a) hence the question mark sign(?) We prefer (43b) or (43c) which is without y e a if we want to include the verb *begin*. Aspectual predicates like begin, finish, stop, to mention a few, do not occur with yé a. This does not mean that yè a is incompatible with inanimates; (43d) shows that it does. However, the reading in (43d) is metaphoric. As mentioned in chapter 3, yé a in no way communicates the attitude of the tree or the rain. Such meanings are derrived (Clements 1975). In any case, the subject of animacy varies cross-linguistically. While in some languages a simple animate and inanimate binary is easy to determine; for other languages, a hierarchical general animacy scale that ranks animacy as a "matter of gradience" is employed (humans above animals, then plants, natural forces, concrete objects, and abstract objects, in that order). Yet in other languages like Japanese, nouns are not marked for animacy. Similarly, the notion is also quite tricky in languages like Ewe. There is no clear cut distinction between what counts as animate or not: it's not a matter of a binary +/-human nor +/- living things. Interestingly, some entities fall within the animate category without obvious reason. Celestial bodies, unique entities or natural forces, things that can change state such as metals or even machines (e.g., computers, engines) could be animate as long as it goes through a process. Therefore, inanimate reading of yé a is not inconsistent with the Ewe facts. Satik (2019) would have to explain how else yé a could be overt PRO. As far as my argument goes, and as I have shown independently, strict readings and non-local binding is possible with yé a.

- (43)Ati-a dzegome be ?vè a /***vè** ne. a. Tree-DEF begin COMP LOG POT / LOG break 'The tree began to break.' (Satık 2019:2) b. Ati-a be yè a /*yè ŋe. Tree-DEF COMP LOG POT LOG break 'The tree is about to break.' \neq The tree said that it will break
 - c. Ati-a dze ŋeŋe gome. Tree-DEF begin break.REDU IC 'The tree began breaking.'
 - d. Tsi be yèa /*yè dza.
 water COMP LOG POT LOG fall.
 'It is about to rain.' ≠ The rain said that it will fall

Regarding the *de se* reading of $y\acute{e} a$, I assume the possibility of an additional *de re* reading under predicates such as *believe* (44b) and *claim* (44c) since *a* is optional with such predicates. In the absence of field work, I leave this for future investigation.

(44) Scenario: Kofi is a war hero who suffers from amnesia and remembers nothing of his wartime ex- periences. Suppose this person sees a TV program describing his own exploits, and is impressed with the courage exhibited by that person, who he does not know is himself. Kofi comes to believe that the hero will win a medal (Satık 2019).

a.	#Kofi _i emo kpom be $y \hat{e}_i a$ ho kplu.	
	Kofi expect comp LOG POT cop medal #'Kofi _i expects PRO_i to get a medal.'	False de se
	(Satık 2019:11)	
b.	Kofi _i xose be $y\hat{e}_i a$ ho kplu. Kofi believe comp LOG POT cop medal 'Kofi believes that he will get a medal'	Truc da ra
c.	Kofi _i gblo be $\mathbf{y}\hat{\mathbf{e}}_i \mathbf{a}$ ho kplu.	ITue <i>ae re</i>
	#'Kofi _i claims PRO_i to get a medal.'	True de re

The question we are faced with once again is, why does yé-a, under the predicate *expect*, not have the ability to be read *de re*, according to Satık (2019)? If we suppose both yé and yé-a to be the same pronominal form but one has the additional *-a* marker and one doesn't, it would be surprising that the *de se* and *de re* ability is connected to *-a*. How can yé-a be ambiguous between the *de re* and *de se* readings under the predicates *believe* and *say* on one hand, but restricted to *de se* under the predicate *expect* on the other hand? If Satık (2019) is right and there is indeed this contrast between these two pronouns, it cannot be because of the pronoun yé by itself, the affix *-a* by itself or the combination yé-a. Stirling (1994:260)'s observation that the set of logophoric contexts include an *-a* marked predicates. A similar observation has been made by Landau (2013) who suggests that

"It seems that an obligatory *de se* reading is a lexical property of many OC verbs (i.e., those implicating the controller's mental state), but not all of them. This observation undermines theories of OC, semantic and syntactic alike, which derive both the very effect of OC and the *de se* interpretation from a common source" Landau (2013:34).

Crosslinguistic research is needed on the conceptual constraints accompanying these class of *a*-marked predicates. I present a table of predicates that fall within this category in Ewe (Table 5.5). Predicates in Table 5.5 were classified based on Landau (1999) who breaks down the domain of infinitival complements into these classes, according to their semantic properties. According to him, the partition is universal, although membership in each class is subject to language particular factors. He cites instances of propositional infinitives being quite common in Romance but in English they are only found with the verb claim

(and maybe pretend). In the same vein, many aspectual and factive verbs in English appear with gerundive complements, although their control properties are unaffected. In addition to Landau (1999)'s examples of each verb class, other examples were borrowed from Pesetsky (1991) who discussed extensively, different classes of verbs.

PREDICATES	Obligatory with <i>a</i>	Optional with <i>a</i>	No a
Desirative	di 'want / prefer', didi 'yearn', dzra do 'arrange / prepare', mɔkpɔkpɔ 'hope / expect / aspire', gbe 'refuse', wɔ dodo 'plan', wɔ súsú 'intend / resolve', nɔ didi 'be eager', wɔ klado 'be ready'	võ 'be afraid', <i>lõ</i> 'agree'	
Directive / ma- nipulative	<i>bia</i> 'request', <i>xe mɔ</i> 'prevent / forbid', <i>ŋɔdzi</i> <i>dodo</i> 'threaten'	gblə 'tell'	<i>ble nu</i> 'pursuade', <i>na</i> 'make / cause', <i>dzi zizi</i> 'force', <i>de</i> <i>gbe</i> 'command / or- der'
Implicative/ achievement	<i>dzagbagba</i> 'try', <i>gbe nu</i> 'avoid', <i>gbe</i> 'decline'	do nku 'remember'	<i>dzagbagba</i> 'man- age', <i>katsɛ</i> 'dare'
Factive / com- mentative / Experiencer- subject	tri 'hate' / 'loathe'	<i>te dedzi</i> 'regret / be sorry', <i>kpɔ dzidzɔ</i> 'be glad', <i>wɔ nuku</i> 'be shocked'	
Experiencer- object		<i>do dzidɔ</i> 'thrill / amuse / cheer', <i>di fo</i> 'satisfy', <i>le blanui</i> 'sadden'	
Phrasal / aspec- tual			<i>dzegome</i> 'begin / start', <i>yi dzi</i> 'continue', <i>wu nu</i> 'finish', <i>tɔ</i> 'stop / cease'
Modals			<i>hia</i> 'need', <i>teŋu</i> 'able' / 'can', <i>edze</i> <i>be</i> 'ought /should / be obliged /must'
Perception predi- cates		<i>kpɔ</i> 'see / watch', <i>se</i> 'hear / feel /sense', <i>vẽ</i> 'smell'	
Propositional		gblɔ 'claim / assert', xɔse 'believe', bu tame 'think/suppose'	
Interrogative	<i>bia</i> 'ask / find out / in- terrogate'		

Table 5.5: Control predicates with obligatory, optional *a* and no marking in Ewe

Having seen a general picture of verbs that are obligatory with *a*-marking, I present other constraints that come with these sub-class of predicates.

5.2.4 *a* taking predicates are subject sensitive

Verbs that obligatorily take *a* marking shown in Table 5.5, are sensitive to the subject position. Whenever reference is made to a non-subject, *a* does not accompany the logophoric pronoun (45). In other instances, both *a* and the logophoric pronoun do not occur at all (46b). Consider the following examples.

(45)	a.	Kofi de s Kofi remove r 'Kofi planned	sùsú be mind COM l to take a c	yè P LOC driver	a F POT 's lice	xo collect nce.'	vukula-wo driver-PL	ó fe POSS	agbalẽ. book	
	b.	Kofi de s Kofi remove i 'Kofi planned	sùsú be mind COM l for his da	yè P LOG ughter	vi child r to ta	nyonu l girl ke a dr	na xɔ to collect iver's licer	vukula driver- nce.'	-wó fe PL POSS	agbalẽ. book
(46)	a.	Dzifa dzrado Dzifa prepare 'Dzifa prepar	be yè e COMP LO red to trave	a 9G POT 1.'	zə r wall	mõ. k path				
	b.	Dzifa dzrado Dzifa prepare 'Dzifa prepar	na Kofi f for Kofi F ed for Kof	e r POSS t i's trav	nəzəz ravel. vel.'	э. NOM				

What is more, with the exception of the verb *want*, only sloppy readings are allowed with obligatory a marked predicates in subject position under *only* while in object position, both readings are available. Consider (47) and (48).

(47)	Ama koyédzeagbagbabekofi nenayènunana.Ama only FOC IC-make.effort COMP Kofi should give LOG gift.'Only Ama tried for Kofi to give her a gift.'Non-subject referent
	 a Others didn't try for Kofi to give them a gift [Sloppy reading: √] b Others didn't try for Kofi to give her a gift [Strict reading: √]
(48)	Ama koyédzeagbagbabeyèayi sukuu.Ama only FOC IC-make.effort COMP LOG POT go sukuu'Only Ama tried to go to school.'Subject referent

- a. ... Others didn't try to go to school [Sloppy reading: \checkmark]
- b. ... Others didn't try for Ama to go to school [Strict reading: X]

5.2.5 A possible PRO in SVCs?

In a Serial Verb Construction (SVC), two or more verbs function together like a single predicate and are conceived of as describing a single action (Dixon 2010:406). According to Ameka (2006:128), SVCs in Ewe consists of the following properties: (a) the VPs in sequence are construed as occurring within the same temporal frame; (b) the VPs share the same mood (e.g. imperative); (c) the VPs can be formally marked for diVerent aspect and modality categories; (d) the individual verbs can function as independent verbs in simple clauses (in the same form); (e) same syntactic subject for all VPs in the series but expressed only once before the first VP1. Examples of SVCs in Ewe is demonstrated in (49).

- (49) a. Nyonu la dzeagbagba to dzò ø dudo la ndi sia woman DEF IC-make.effort light fire rubish DEF morning this 'The woman managed to burn the rubish this morning.'
 - b. Koku katsɛ fifi ø le asime.Koku dare steal at market'Koku dared to steal at the market.'

As is typical of SVCs, we see that (49a) and (49b) have a subject *woman*, and *Koku* respectively as well as a series of verbs *manage*, *burn* and, *dare*, *steal* which together function as one predicate. We can also observe that (49) lacks the complementizer *be*, and crucially, I propose that SVCs have an empty subject (indicated by ø). I make this proposal based on the following reasons: (a) SVCs share arguments either external (Collins 1997), or internal (Agbedor 1993). This means (50a) translates to (50b).

- (50) a. John_i dzagbagba ϕ_i dzò. John IC-make.effort jump 'John try jump.' (lit:John tried to jump)
 - b. John_i dzagbagba John_i dzò.
 John IC-make.effort John jump
 'John try John jump.' (John = tryer, John = jumper)

Second, in order to posit an empty subject, the language must allow empty elements⁶. For instance, in (51), the second NP conjunct can be ellided.

(51) vu gbã to kple vu eve lia va dó. car first one and car second one come arrive 'The first car and the second has arrived.'

Finally, SVCs have only one subject. Thus, the addition of a lower subject results in ungrammaticality which is the case in subject control infinitives in English.

- (52) John_i tried (*Bill) to jump.
- (53) John_i dzagbagba (*Ama) dzò. John IC-make.effort Ama jump 'John try Ama jump.'

⁶I thank Katharina Hartmann for the idea.

Now, since I entertain the idea that SVCs have an empty subject (lets call it SVC-PRO). In the subsequent sections, I'll apply the two OC tests (only sloppy and *de se* reading). I'll skip the other properties because of the difficulty in testing them. Others such as long-distance antecedence is redundant for the sake of SVCs having only one subject. Further embedding requires an additional referent and this is an impossible feature of SVCs.

5.2.5.1 Strict reading of SVC-PRO is impossible

I assess this property with 'ellipsis' and 'only.' As shown in (54) and (55), SVC-PRO only has strict readings under 'ellipsis' and 'only'

Ellipsis'

- (54) Daavi_i dzeagbagba da SVC-PRO_i molu ze deka. Mormi_j tse. Daavi IC-make.effort cook rice pot one. Mormi too 'Daavi tried to cook one pot of rice. Mormi too.'
 - a. *Daavi tried to cook one pot of rice and Mormi tried for Daavi to cook one pot of rice too. Strict reading
 - b. Daavi tried to cook one pot of rice and Mormi tried to cook one pot of rice too. **Sloppy reading**

Only

- (55) Daavi_i ko yé dzeagbagba da $SVC-PRO_i$ molu ze deka. Daavi only FOC IC-make.effort cook rice pot one 'Only Daavi tried to cook one pot of rice.'
 - a. *Only Daavi tried to cook one pot of rice and no one else tried for Daavi to cook one pot of rice. **Strict reading**
 - b. Only Daavi tried to cook one pot of rice and no one else tried to cook one pot of rice. Sloppy reading

5.2.5.2 *De re* reading of SVC-PRO is unavailable

Coming up with a *de re* scenario is quite tricky since an appropriate test sentence has to communicate the mental state of an attitude holder. This is difficult with this kind of construction. However, given the 'mistaken' identity scenario in (56), it is impossible for (56a) to describe the mental state of the thief since he did not recognize himself. Hence, the *de re* reading of (56a) is unavailable.

(56) A thief who once broke out of prison did not recognise himself when a footage of his act was shown to him. He agreed that the person in the footage (who is himself)

exhibited courage during the prison break.

a. #Fiafitɔ_{*i*} la tsɔ dzidefo lɔ̃ de SVC-PRO_{*i*} sisi dzi. thief DEF take courage agree to running top 'The thief courageously agreed to escaping.'

5.2.5.3 Putting things together

I have shown firstly, that the logophoric pronoun $y\dot{e}$ is not the overt form of PRO in English. In addition, it is not the case that when the predicate requires the potential marker a, this is necessarily an instance of overt PRO. These two facts does not disqualify the existence of overt PROs in languages. As mentioned earlier Madigan (2008) argues that overt material can be controlled in Korean. I repeat the examples.

- (57) a. Jwuhi₁-ka Inho₂-eykey caki/casin_{1/*2}-i cip.ey ka-Ikela-ko J-NOM I-DAT self-NOM home-LOC go-FUT-C yaksok-ha-yess-ta. promise-do-PST-DC 'Jwuhi promised Inho that she would go home.' (Korean) (Madigan 2008:36) ex.4c
 - b. Na-nun Inho-eykey ney-ka cip-ey ka-keyss-ta-ko yaksok-ha-yess-ta.
 1-TOP 1-DAT 1-NOM home-LOC go-VOL-DC-C promise-do-PST-DC 'I promised Inho that I would go home'

(Madigan 2008:248) ex.16a

c. Ne-nun Inho-eykey ni-ka ilccik ttena-keyss-ta-ko kocip-ha-yess-ta.
2-TOP 1-DAT 2-NOM early leave-VOL-DC-C insist-do-PST-DC 'You insisted to Inho that you would leave early'.
(Madigan 2008:248) ex.16b

Grano & Lotven (2018) also suggests that in Gengbe, the logophoric je can be controlled.

(58) Aku₁ be Kofi₂ be Ama₃ dʒi be $\mathbf{je}_{*1/*2/3/*4} \mathbf{l} \mathbf{a}$ du nu. Aku say Kofi say Ama want COMP LOG IRR eat thing Aku said that Kofi said that Ama wants to eat.' (Gengbe) (Grano & Lotven 2018:484) ex. 8

An interesting question is why the Gengbe logophor can be controlled and the Ewe logophor cannot? The answer is not straightforward. It may be an issue of dialectal variation between the Ewe spoken in Ghana and the one in Togo. For instance while (58) is possible in Gengbe, a replica in Ghana Ewe shows that $y\acute{e}$ picks long distance antecedents under *want* (59). Otherwise, further quantitative research would have to probe into this issue.

(59) Aku₁ be Kofi₂ be Ama₃ d₃i be $\mathbf{y} \hat{\mathbf{e}}_{1/2/3/*4} \mathbf{a}$ du nu. Aku say Kofi say Ama want COMP LOG IRR eat thing

	Ak (<mark>G</mark> 1	u said that Kofi said that Ama wants to eat.' ano & Lotven 2018:484) ex. 8, my translation	(Ewe, Ghana)
Also, co prefers	ompa the r	are (60) to (61) where Gengbe allows the <i>jen</i> ε sequence but Ewe reverse contruction in b) to refer to the non-local antecedent.	e does not (Ewe
(60)	Ak Ak Ak (Gi	u ₁ be Kofi ₂ be Ama ₃ d ₃ i be $\mathbf{je}_{1/2/*3/*4} \mathbf{n} \mathbf{\epsilon}$ du nu. u say Kofi say Ama want COMP LOG JUSS eat thing u said that Kofi said that Ama wants him/her to eat.' cano & Lotven 2018:484) ex. 9	(Gengbe)
(61)	a.	*Aku ₁ be Kofi ₂ be Ama ₃ dʒi be $y \hat{e}_{1/2/*3/*4}$ ne du nu. Aku say Kofi say Ama want COMP LOG JUSS eat thing Aku said that Kofi said that Ama wants him/her to eat.' (intend Ghana)	g ed) (Ewe,
	b.	Aku ₁ be Kofi ₂ be Ama ₃ dʒi be ne $y \dot{e}_{1/2/*3/*4}$ du nu. Aku say Kofi say Ama want COMP JUSS LOG eat thing Aku said that Kofi said that Ama wants him/ her to eat.' (Grano & Lotven 2018:484) ex. 9, my translation	y

What about other logophoric pronouns? I would like to point out that the logophor in Jula cannot be controlled. Although according to Kiemtoré (2022), *ale* has an obligatory *de se* reading as well as permits only sloppy readings, the logophoric pronoun is long distance bound. Additionally, the language has an infinitive and in such contructions, Kiemtoré (2022) argues for a null subject like the English PRO. Bassi et al. (2022) speculate the existence of PRO in Yoruba and Igbo which also have infinitives. They however, report a murky data subject to further investigations. To this end, since it has not been shown that other logophors can be controlled, it is in order to posit that because Jula, Yoruba and Igbo have infinitives in their respective languages to obtain control, there is no need to fall on logophors.

(62)	Awa _i be a fe [kà PRO _i bon lɔ.] Awa COP 3SG at INF PRO house build 'Awa wants to build a house.'	Jula
	(Kiemtoré 2022:96) ex.10a	
(63)	Ézè _i kwè-rè ńkwà PRO _{i/*k} í-lụ Àdá. Eze promise-PST promise INF-marry Ada 'Eze promised to marry Ada.'	Igbo
(64)	Adé _i se ìlérí PRO _{$i/*k$} láti fé Olá. Ade make promise to marry Ola	
	'Ade promised to marry Ola.'	Yoruba

Second, I also showed that there's some sort of empty subject (SVC-PRO) in serial verb constructions in Ewe. Two tests i.e., only sloppy reading and only *de se* reading revealed that SVC-PRO appears to be like PRO in English infinitives. Putting things together, the data basically tells us that Ewe does not like overt control, and in the environments where *a* shows up, the semantics of the predicate plays a role as well as whether the construction has a future orientation. Maybe there really is PRO in Ewe but in SVCs. However, I may not be right. Something entirely different may be the case for this kind of constructions. For instance, the empty subject could be a trace or perhaps (pro). Digging further goes beyond the scope of this study. I'll leave this for future research.

5.3 Theoretical considerations

5.3.1 Spelling out the problems

How can *yè*, in the environment of these verbs which obligatorily require *a* be analysed? So far, no existing theory, to the best of my knowledge, can account for this finding. To begin with, previous *de se* accounts cannot accomodate the strict readings of *yè* as discussed in Bimpeh & Sode (2021). Recall from chapter 3 that both *yè* and PRO are analysed as bound in the left periphery of the clause by an abstractor. In this framework, independent of Pearson (2015)'s findings (*yè* has a *de re* interpretation), strict readings pose a problem for the theory of *de se* binding by verbs. PRO cannot have a strict interpretation; c.f Landau (1999). I repeat the relevant examples.

(65)	Only Kofi wants PRO to do his homework.					
	 aOthers don't want to do their homework [Sloppy reading: √] bOthers don't want Kofi to do his homework [Strict reading: X] 					
(66)	Kofi ko yé di be yè-a wo yè-fe do. Kofi only FOC want COMP LOG-POT do LOG-POSS work 'Only kofi wants to do is home work.'	Ewe				
	 a Others don't want to do their homework [Sloppy reading: √] b Others don't want Kofi to do his homework [Strict reading: √] 					

The sentence in (65), is true of *Kofi* and no other salient individual. While (66) accommodates other individuals who do not want *Kofi* to do his homework. As explained by Bimpeh & Sode (2021), to get a strict interpretation for *yè*, and in this case for *yè-a*, one has to keep the reference of the pronoun fixed for all the alternatives (individuals other than Kofi) quantified over by the *only*-DP. *De se*-binding doesn't allow for that since the *de se*-pronoun, for example, PRO in (67), has to be bound by the attitude verb and therefore cannot be coreferent with the DP within the only-DP, Kofi in (67); a necessary condition for the strict interpretation.

(67) [only Kofi] ... wants $\lambda_2 \dots$ PRO₂ ... (Bimpeh & Sode 2021:10)

I spell out the details of the problem starting with how *only* is analysed⁷. Following Heim & Kratzer (1998), DPs have to move at LF (= Quantifier Raising (QR)). A binder index is generated during QR that binds the trace of the moved DP. Depending on the choice of binder index, the pronoun is either co-bound with the moved DP to get the sloppy reading or not co-bound with the trace to arrive at the strict reading shown in (68). Note that this version is a simplified (and in the extensional framework of Heim & Kratzer (1998)):

- (68) Only Kofi_{*i*} did his_{*i*} homework.
 - a. [only Kofi₁] [λ_3 [t_3 did his₃ homework]] λ_3 binds his₃ \rightarrow sloppy reading
 - b. [only Kofi₁] [λ_3 [t_3 did his₁ homework]] λ_3 doesn't bind his₁ \rightarrow strict reading

(69) a.
$$\llbracket [\lambda_3 [t_3 \text{ did his}_3 \text{ homework }]] \rrbracket^{g[1 \mapsto \text{Kofi}]} = \lambda x. x \text{ did } x$$
's homework

b. $\llbracket [\lambda_3 [t_3 \text{ did his}_1 \text{ homework }]] \rrbracket^{g[1 \mapsto \text{Kofi}]} = \lambda x. x \text{ did } g[1 \mapsto \text{Kofi}](1)$'s homework

= λx . x did Kofi's homework

Assuming the meaning of *only* in (70), we get the interpretations in (71) for the LFs in (68).

- (70) $[[only]] = \lambda x_e. \ \lambda f_{\langle e,t \rangle}. \ \{y: f(y) = 1\} = \{x\}$ (Heim 2008: 44)
- (71) a. $[(68a)]^g = 1$ iff $\{x: x \text{ did } x\text{'s homework}\} = \{\text{Kofi}\}$ \rightarrow sloppy reading b. $[(68b)]^g = 1$ iff $\{x: x \text{ did Kofi's homework}\} = \{\text{Kofi}\}$ \rightarrow strict reading

Against the background of these assumptions, the relevant difference between a strict and a sloppy interpretation of the pronoun can be traced back to a difference at LF: While for a sloppy interpretation the pronoun has to be bound by the binder index of the *only*-DP, for a strict interpretation the pronoun has to be coreferent with the DP within the *only*-DP.

(72) a. ... [only
$$DP_i$$
] λ_j x_j -pro ... sloppy
b. ... [only DP_i] x_i -pro ... strict; no intervening binder!

⁷Note that there are two types of proposals for the interpretation of *only*-DPs in the literature: (a) *only* as a focus sensitive operator, cf. Rooth (1992); (b) *only* as a quantifier that takes an individual as argument. c.f Heim (2008). The difference between the two readings by both theories are accounted for by a difference in their LFs. Bimpeh & Sode (2021) illustrated the point with Heim (2008)'s account.

The problem for *de se*-LFs can now be formulated as follows: As we have seen, for a strict interpretation the pronoun has to be coreferent with the DP inside the *only*-DP, i.e., we need a syntactically represented referential pronoun. Bimpeh & Sode (2021) label this pronoun a "strictly referential pronoun". This condition can only be satisfied if the pronoun isn't bound by any intervening operator, as in (72b). As discussed in chapter 3, according to von Stechow (2004), the licensing conditions for a [log]-marked logophoric pronoun on the other hand require that the pronoun be bound by an operator, more precisely, an attitude verb with a corresponding [LOG]-feature, as in (73a). If there isn't such a binding attitude verb, the logophoric pronoun is not licensed due to the fact that its [log]-feature cannot be checked, as in (73b). The sentence becomes ungrammatical. The requirements for a strict reading (no intervening operator) and the requirement for [log]-licensing (bound by an attitude) are in conflict and cannot both be satisfied at the same time. Therefore, *de se*-LFs generally exclude a strict interpretation for the logophoric pronoun.

(73) a. √ ... [only DP_i] ... attitude [LOG] λ_j ... x_j-pro[log] ... [log] licensed, but not strict
b. *... [only DP_i] ... attitude [LOG] λ_j ... x_j-pro[log] ...

strict, but not licensed

A recent talk by Bassi et al. (2022) which proposes that logophors in Ewe, Yoruba and Igbo have obligatory *de se* readings have also been puzzled about the problem posed by strict readings in Ewe⁸. They propose that although logophoric pronouns are bound variables, λ -binding is not enforced at LF. Also, the feature checking operation of LOG which is responsible for the *de se* coreference requirement can also be ignored. Instead, *de se* requirement can be enforced through its semantic denotation. In the end, strict readings are possible because LOG's semantic contribution can be suspended when computing focus and ellipsis (similar to what is done with other pronominal features; see (Sauerland 2013; Bassi 2021)). However, since this dissertation shows that *de re* readings are possible in Ewe. A solution will be towards accommodating both *de re* and strict facts.

We have seen that *de se*-LFs do not help the situation with strict readings. How about *de re*-LFs? Firstly, Pearson (2015) does not discuss $y\dot{e}$ relative to strict and sloppy readings eventhough she considers cases like (74).

(74) a. John, Mary, Sue, and Bill have all been reading old papers of theirs from when they were in college (John reads a paper John wrote, Mary reads a paper Mary wrote, etc.) Each of them is impressed by the paper and takes it as a sign that its author is clever. However, only John is aware that he is the author of the paper

⁸Data on strict readings in Yoruba and Igbo is still murky at this point.

that he read—everyone else fails to recognize their own work. So John says, "I am clever," and Mary, Sue and Bill each say, "Whoever wrote this paper is clever".

- b. Only John said that he was clever.
- c. John deka yé be yè le cleva. John one FOC COMP LOG COP clever 'Only John said that he was clever.' (Pearson 2015:101-102) ex. 64

The sentences in (74b) and (74c) are true since according to the scenario (74a), no other individual said that he was clever. This corresponds to the sloppy interpretation. Following Percus & Sauerland (2003), Pearson (2015) concludes that (74b) and (74c) have a dedicated de se-LF. The reason is that to assume a de re-LF the property expressed by the verb phrase (being clever) would be true of any individual that bears some acquaintance relation R to herself. In short, Pearson (2015)'s system makes it possible for one to bear an attitude de se towards a property just in case that property is self-ascribed and, at the same time, allows for *de re* interpretations (for yè) relative to the acquaintance relation of identity. Pearson (2015)'s account does not predict strict readings. Moreover, it is also committed to underlying de se-LFs (despite the concept generator), so it, too, excludes strict interpretations for the logophoric pronoun due to the *de se*-binding requirement at LF. Now assuming yè a is obligatorily read de se, Pearson (2015)'s as well as all de se-LF based accounts can handle the Ewe facts. However, as we saw in 5.2.3, yè a, under the verb want, may have a strict reading. Also, an obligatorily read *de se* read pronoun (e.g. PRO) should be locally bound and as observed in \$5.2.3, yè a lacks this property. Once again, these facts are problematic for all the aforementioned reasons.

Satik (2019) proposes a mechanisim that tries to account for *y*è *a*.



Figure 5.1: (Satık 2019:19)

Since he treats the logophoric $y\dot{e}$ and the pronoun in control constructions $y\dot{e}$ a as different, he argues for a unified account of the two pronouns. According to him, $y\dot{e}$ has the same phonetic form in different contexts because it is the phonetic form that arises when it is bound by an operator in the left-periphery of the embedded clause. Sattk (2019) proposes the structures in Figure 5.1 above. In both structures, $y\dot{e}$, or overt PRO is a variable bound by the complementizer *be*. According to Sattk (2019), the only difference between the two $y\dot{e}$ is that in irrealis embedded clauses $y\dot{e}$ lacks a perspectival center, and this leads to it being semantically interpreted as a plain anaphor (perhaps because irrealis clauses are less complex). By contrast, because the realis embedded clause is more independent and more complex, it has a perspectival center, and this requires that it be semantically interpreted as an exempt anaphor. He goes on to give (75) as the semantics of both kinds of $y\dot{e}$.

(75) $[CP] = \lambda w \lambda x. x \text{ is clever in } w$

Satik (2019) admits that although his proposal makes the right predictions about ye a it also makes the wrong prediction since his proposal for the LogP follows Charnavel (2017) who also predicts only *de se*-readings. Satik (2019) would have to assume something like concept generators in Pearson (2015)'s sense. But then, this does not help either because Pearson (2015) does not predict strict readings with *only*-DPs. Secondly, if Satik (2019)'s theory was right about ye a being PRO then all facts about PRO should apply to ye a. On the contrary, this is not the case as shown in § 5.2.3. In the end, one can observe that Satik (2019)'s theory is also not an improvement on existing theories since it cannot handle potential problems and also, he does not spell out the semantic details of his theory.

5.3.2 A way to go

The problem previous theories faced had to do with dealing with strict readings of the logophoric pronoun. I follow Bimpeh & Sode (2021)'s proposal which accounts for the strict readings of $y\dot{e}$. The proposal is as follows: Bimpeh & Sode (2021) assume that $y\dot{e}$ licensing attitude verbs are always attitude verbs that have a *de re* interpretation associated with a silent reflexive *res* argument. I remind the reader that *res*, is the unrecognised self found in *de re* contexts with 'mistaken' identity reports. This way, the silent reflexive *res* argument is equivalent to [DP V *of himself* P].

- (76) a. Kofi_{*i*} think be $y\dot{e}_i$ smart.
 - b. Kofi₂ [[think_{$DeRe} himself_2$] [Op_1 be yè₁ smart]]</sub>
 - c. Kofi λ_2 [t_2 [[think $_{DeRe}$ himself $_2$] [λ_1 yè $_1$ smart]]] (Bimpeh & Sode 2021:12)
- (77) LEXICAL ENTRY DE RE *think*

 $\llbracket \mathbf{think}_{DeRe} \rrbracket^{\mathsf{w}}(\mathsf{y})(\mathsf{P}_{\langle e, \langle s, t \rangle \rangle})(\mathsf{x}) = 1 \text{ iff there is an acquaintance relation } R \text{ such that } x \text{ uniquely bears } R \text{ to } y \text{ in } w \text{ and for all doxastic alternatives } \langle \mathsf{z}, \mathsf{w}' \rangle \text{ of } x \text{ in } w, z \text{ uniquely bears } R \text{ in } w' \text{ to an individual satisfying } P \text{ in } w', \text{ where } R \text{ is a contextually given acquaintance relation.} \qquad \text{cf. Heim (1998)}$

A *de se* interpretation on this account would be a special case of a *de re* interpretation, one where the relevant acquaintance relation is identity, see Lewis (1979) for a discussion. After formulating a *de re* interpretation associated with a silent reflexive *res* argument, we now combine this interpretation with the assumptions about *only*-LFs as we saw previously.

- (78) Only Kofi_{*i*} think be $y\dot{e}_i$ smart.
- (79) **Only Kofi**₂ think himself₂ [Op_1 be yè₁ smart]
 - a. [only Kofi] λ_2 [t_2 [[think_{DeRe} himself₂] [λ_1 yè₁ smart]]] LF for sloppy reading
 - b. [only Kofi₂] λ_3 [t_3 [[think_{DeRe} himself₂] [λ_1 yè₁ smart]]] LF for strict reading

The LFs in (79), gets us both the strict and the sloppy interpretation. With respect to the binding of *himself*, we have in principle the same constellations as in (80), (shown in (68), repeated here).

- (80) Only Kofi_{*i*} did his_{*i*} homework.
 - a. [only Kofi₁] [λ_3 [t_3 did his₃ homework]] λ_3 binds his₃ \rightarrow sloppy reading
 - b. [only Kofi₁] [λ_3 [t_3 did his₁ homework]] λ_3 doesn't bind his₁ \rightsquigarrow strict reading

Now that we have a theory that takes care of strict readings, how does Bimpeh & Sode (2021) help? Considering the special class of *a*-marked predicates, Bimpeh & Sode (2021) found that the predicate *want* gives us a strict reading and we predict that *yè-a* should also give us *de re* readings with predicates like *believe*. As a result, Bimpeh & Sode (2021)'s mechanism to arrive at strict readings, cannot be applied to the subject position of the corresponding subclass of the obligatorily *a*-marking predicates. It is not clear how to handle this gap. Since, it is about the semantic properties of the *a*-marked predicates and not about the LFs of the complements. One needs a way to constrain this. Two ways to do this are: (a) block the distribution of concept generators in a way that they cannot be used in subject position of the subclass of the obligatorily *a*-marking predicates; or (b) constrain the concept generators in subject position of the subclass of the obligatorily *a*-marking predicates; or (b) constrain the concept generators in subject position of the subclass of the obligatorily *a*-marking predicates to only generate *de se* concepts (i.e. exclude *de re* concepts). Either way, I leave it for future research.

5.4 Chapter summary

In this chapter, I examined the relation between $y\hat{e}$ and PRO on one hand, and that of $y\hat{e}$ *a* and PRO. Exploring the syntactic and semantic distribution of both pronouns as well as PRO, it was concluded that $y\hat{e}$ individually, is not the overt counterpart of PRO neither is $y\hat{e}$ *a*, a combination of the logophoric pronoun and the potential marker. Following Satik (2019)'s argument that $y\hat{e}$ *a* gives rise to an obligatory *de se* interpretation, we noticed that the obligatory *de se* interpretation, if at all exists in Ewe, does not come from the pronoun $y\hat{e}$ or $y\hat{e}$ *a* or from the contribution of *a*. Rather, from the class of verbs that required this *a*-marking. Verbs in Ewe were categorised based on whether they were obligatory with *a*, optional or incompatible with *a*. An empty subject found in Serial verb contructions was also explored. It was however left for future research to determine whether or not this empty subject is PRO in the language. An attempt was made to accommodate Ewe facts investigated (*de re*+strict reading + *a*-marked predicates); however, I concluded that a formal account was not trivial and was left for future research.

Chapter 6

Concluding Remarks

The notion of logophoricity has been around for some time now. First noted by Hagège (1974), and later by Clements (1975), logophoric pronouns can be characterized in the following way: (a) yè must occur in indirect speech report; (b) there must be a matrix subject whose attitude is communicated; (c) yè must occur in the complement of an attitude verb; and (d), yè must occur in an embedded clause typically, the be-clause. Concerning the interpretation of logophoric pronouns such as yè, two assumptions which map to the same claim was made (a) that they are the natural language counterpart of Castañeda (1968)'s 'quasiindicators' (a first person indicator in reports) e.g. Schlenker (2003), (b) that they are bound by an operator in the left periphery of the embedded clause e.g. Heim (2002). This assumption thrived until Pearson (2012, 2015), which sparked the controversy on the subject. She discovered that the link between logophoric pronouns, $y\dot{e}$ in particular, and first person indicators (de se) is an illusion; yè has a de re reading. Due to this, the status of yè as a logophoric pronoun has been questioned. Satik (2019:2), for instance, claims that "yè is not a logophoric pronoun; it is instead just a pronoun that has to be bound at the left-periphery of the embedded clause, regardless of whether or not the predicate that embeds the clause is attitudinal". In view of this background, this dissertation employed empirical and semantic sources to assess the properties of yè. These are (a) restriction to intentional contexts; (b) ambiguity between *de se* and *de re* interpretation (Pearson 2015); (c) ambiguity between strict and sloppy readings (Culy 1994a; Bimpeh & Sode 2021) and (d) restriction to a sub-class of verbs which obligatorily required the potential morpheme a in subject position (Satik 2019; Bimpeh 2020).

6.1 Summary of chapters

In chapter 1, I gave an overview of the whole dissertation. Information on the language under study including information on data sources was provided. The dissertation chapters were also outlined locally.

In 2, I further introduced the reader to the pronoun system in Ewe, highlighting their basic distribution. Having done this, I zoomed in on the logophoric pronoun which was reported to have evolved from the independent first person pronoun, *nye* Heine & Reh (1984). Ameka (2004) also revealed that the logophoric pronoun originated from triadic communication (the art of communicating with another through a third party) which spread to all communicative settings and left its mark on grammatical structures; (1a) exemplifies logophoric marking. Logophoric *yè* has the ϕ -features, number and person. Concerning number, it can be combined with the regular plural marker, *wó* into *yè-wó* to indicate the attitude of plural attitude holders (1b). This plural form can be used to include a speaker even when the antecedent is singular (1c).

- (1) a. Kofi_i be $\mathbf{y}\mathbf{\hat{e}}_{i/\star j}$ dzó. Kofi say LOG leave 'Kofi said that he left.' (Clements 1975:142)
 - b. Kofi kple Ama_i be **yè-wó**_i dzó. Kofi and Ama say LOG-PL leave 'Kofi and Ama said that they left.'
 - c. Kofi_i be $y \hat{e} \cdot w \hat{o}_{i/j}$ dzó. Kofi say LOG-PL leave 'Kofi said that they left.'

Regarding person, $y\dot{e}$ can occur with the second person pronoun (2a) but not with the first (2b).

- (2) a. $\mathbf{\dot{e}}_i$ be $\mathbf{y}\mathbf{\dot{e}}_i$ -a va. 2SG say LOG-POT come 'You said you will come.'
 - b. * $\mathbf{m}\mathbf{\hat{e}}_i$ be $\mathbf{y}\mathbf{\hat{e}}_i$ -a va. 1SG say LOG-POT come 'I said I will come.' (Intended)

Apart from number and person, $y\dot{e}$ lacks the gender feature because gender is not marked in Ewe. $y\dot{e}$ can also occur with possessives and focus markers. It can not occur in the matrix clause since it always occurs in the embedded clause.

- (3) a. Kofi_i gblo *(be) $y\hat{e}_i$ -fe agbalẽ xo-asì. Kofi say COMP LOG-POSS book be-expensive 'Kofi said that his book is expensive.'
 - b. $Mary_i *(be) y \dot{e}_i y \acute{e} dz \acute{o}.$ Mary say LOG-AFOC leave 'Mary said it was she who left.'

Argument Focus

c.	Mary _i *(be) dè- yè _i dzó.	
	Mary say PFOC-LOG leave	
	'Mary said she did leave.' (and not stay)	Predicate Focus
d.	*yè dzó.	
	LOG leave	
	'He left.' (intended)	
	(Pearson 2015:78) ex. 2	

The overall picture of the logophoric phenomenon was reviewed. I compared $y\dot{e}$ with languages that employ forms other than a dedicated morphology such as East Asian languages e.g. Japanese that employ long distance reflexives (4a), Jula which employs the emphatic pronouns (4b) and lastly Ahmaric, which uses shifted indexicals (4c).

	a to kekkon-sita.	o nikunde-iru onna	John-wa zibun -	a.	(4)
(Japanese)	self ₁ ."	woman who hates s	'John ₁ married a		
		7) ex.17	(Huang 2002:217		
(Jula)	iyamu _j ye ale _{i/*j} nɛni. ^{cy} PFV LOG insult iim _i .'	lon ko Mariy k know COMP Mary at Mary _j insulted hir	Piy eri_i be a Peter PRS CORR 'Peter _i knows that	b.	
		5) ex. 8b	(Kiemtoré 2018:5		
	.m-PAST-say	alə . obey-1st.sg 3rd.sg.n	alə ttazzəzəññ 1st.sg-FUT-NEG-0	c.	
st person shift	(Amharic): Fi	l not obev me.'	'John _i said I _i will		

(Schlenker 1999:23)

Property	yè	LDRs	Emphatic	Shifted in-
			forms	dexicals
Long distance bound	✓	✓	✓	✓
Only sloppy reading	X	✓	NA	NA
Obligatory <i>de se</i> reading	X	✓	✓	✓
Coreference with one an-	X	✓	NA	NA
tecedent				
Contrastive focus use	X	NA	✓	NA
Object control	X	NA	✓	NA
Person shift	NA	NA	NA	✓
Occurs in matrix clauses	X	X	X	\checkmark

The table below summarises their differences:

The distributional differences between $y\dot{e}$ and these forms led to the claim that $y\dot{e}$ is a lophoric pronoun as decribed by Clements (1975) and that the fact that it allows readings (*de re* and strict) which is not associated with first person perspectival forms like it, does not make it non-logophoric. Also that, the 'prefer *de se*' (5) economy constraint applies in languages

without a 'pure' logophoirc pronoun.

(5) **Prefer** *de se*!

Whenever an element in an attitude report is coreferential with the attitude holder, prefer *de se* construal over *de re*, if the interpretation results in ungrammaticality. (Messick 2017:101) ex.24, modified.

In chapter 3, I explored environments in which *yè* occurs categorised under reportative and non-reportative. These are: indirect speech reports (Clements 1975); stretch of discourse (Clements 1975) and sentential adjuncts (Culy 1994a); These environments are illustrated in (6) - (8).

Direct speec		*(be) " me dzó." COMP 1SG leave d (that) I left.' (s 1975:142) ex. 2	Kofi gblə Kofi say 'Kofi said (Clements	<u>(</u> 6) a.	(6)
Indirect speec		$p^{*}(be)$ yè dzó. COMP LOG leave d (that) he left.' ts 1975:142) ex. 1	Kofi gblə Kofi say 'Kofi said (Clements	b.	
u. ody Purpose claus	fo-nu tso nyà la ŋu beat-mouth about matter DEF bo about the problem.	be yè -a me COMP LOG-PO ⁷ ime in order to talk	Omar va Omar con 'Omar car	7) a.	(7)
Causal claus	ma kpo yè. ma see LOG him.'	ela bena A e because COMP A because Ama saw	Kofi dzó Kofi leave 'Kofi left	b.	
Consequenc	Koku va yè gbɔ. Koku come LOG side to come to him.'	94a:1072) ex. 25 wɔ-m *(be) bU-do-PROG COMP rranging for Koku	(Culy 199 Kofi wɔ-v Kofi RED 'Kofi is aı	c.	
Speec	rty	lɔ *(be) yè _i fó đ i $^{\prime}$ COMP LOG be di d she is dirty.'	Ama _i gbl Ama say 'Ama said	(8) a.	(8)
Though	ì. irty .'	$s\hat{u}$ *(be) $y\hat{e}_i$ fo d nk COMP LOG be d nks that she is dirty	Ama _i sús Ama thin 'Ama thin	b.	
Knowledg). irty ?	$\mathbf{\dot{a}}$ *(be) $\mathbf{y}\mathbf{\dot{e}}_i$ for $\mathbf{\dot{e}}_i$ by COMP LOG be constructed by that she is dirty	Ama _i nyá Ama kno 'Ama kno	c.	
d. Kofi se koku wò-nɔ é /*yè dzu-m. Kofi hear Koku 3SG-be:PST 3SG /LOG insult-PROG 'Kofi heard Koku insulting him.' Perception (Clements 1975:157) ex. 40, cited in (Culy 1994a:1068)
e. Kofi gblɔ be yè se koku wò-nɔ yè dzu-m. Kofi say COMP LOG hear Koku 3SG-be:PST LOG insult-PROG 'Kofi said that he heard Koku insulting him.'

(Clements 1975:157) ex. 41, cited in (Culy 1994a:1068)

Among these contexts, I challenged the data on causal clauses, clauses of consequence only permitted in present tense and the lack of logophoric marking with perception predicate in Ewe. I provided the data from (9) - (11) to support my claims: logophoric marking is incompatible with causal clauses (9), *yè* can occur in clauses of consequence depicting past events (10) and, logophoric marking in Ewe is possible with verbs of perception (11); all of which contradicts Culy (1994a).

(9)	a.	a. Oedipus _i dze anyi elabena $\acute{e}_{i/*j}$ -fe dada _j hã dze anyi. Oedipus fall gound because 3SG-POSS mother also fall gound 'Oedipus fell because his mother (also) fell.'					
	b.						
(10)	Ko Ko 'Ko	fi _i no dza-dzra-m do *(be) Koku _j na va $\mathbf{y}\mathbf{\hat{e}}_i$ gbo. fi was prepare-REDU-PROG IC COMP Koku to come LOG side ofi was preparing for Koku to come to him.' Con	sequence, Past				

(11) Kofi_i se be $y\hat{e}_i$ le to dzi. Kofi hear COMP LOG is river on 'Kofi heard that he is on water.'

Perception

I also supplied three new contexts which the literature was silent about. These include *as-if* clauses (12a), benefactive *na* clauses (12b), and *alesi* 'how' clauses (12c) and, a variety of verbs in whose complement the occurrence of $y\dot{e}$ was permited.

(12)	a.	Yiyi wo *(abe) y	è le nu	nyá-m.			
		Spider do as-if L	As-if clause				
		'Spider behaved as if he is clever.' <i>Ananse</i> stories (tales of the spider), adapted					
	b.	Ama _i de wo-a	kpɔ ga	ne de	Kofi $_j$ tsə	sika va	na yè _i .

Ama PFOC 3SG-POT see money if PFOC Kofi take gold come give LOG 'Ama would have been rich if Kofi had brought her gold.' *na* clause c. Ama_i se **alesi** Kofi_j dzu $y \hat{e}_{i/*j/*k}$. Ama hear how Kofi insult LOG 'Ama heard how Kofi insulted her.'

alesi 'how' clause

Further in the chapter, I showed that the contexts in which $y\dot{e}$ is present are intentional. This label was necessary to cater for non-attitudinal contexts. I went on to demonstrate that logophoric marking was rather impossible in contexts without *be*. Hence, the status of *be* was investigated. It was shown that among possible candidates such as verb, verbal preposition, reportative evidential, logophoric complementizer and complementizer, it's function as a complementizer was the more likely one. Following Bimpeh & Sode (2021) who propose that $y\dot{e}$ is licensed by feature checking, the complementizer was analysed as the entity which bears the interpretable [*log*] feature and in turn, checks the uninterpretable [*log*] feature of $y\dot{e}$. In cases like the *alesi* 'how' clause, Chomsky & Lasnik (1977)'s doubly-filled-comp filter was employed to accomodate the facts.

The purpose of chapter 4 was to show that $y\dot{e}$ is ambiguous between a *de se* and *de re* construal. Two experimental studies (truth value judgment and binary forced choice tasks) were conducted and the results revealed that the *de se* reading (the use of $y\dot{e}$ in reported speech) was prefered to the *de re* (the use of $y\dot{e}$ in 'mistaken' identity scenarios). Bearing in mind that different researchers gave divergent accounts on the interpretation of the logophoric pronoun in their respective dialects of study, two dialects (Evedome and Aŋlɔ) and later, three dialects (Evedome, Tɔŋu and Aŋlɔ) were tested. All together, the studies showed that Evedome, Tɔŋu and Aŋlɔ speakers did not show variation in their use of $y\dot{e}$. The study also confirmed Pearson (2015)'s observation that the third person pronoun can be used in regular reported speech to refer to the attitude holder. Apart from refering to the attitude holder, the third person pronoun was possible in *de re* contexts which also confirms Bimpeh (2019); Bimpeh et al. (2022).

Chapter 5 examined the relation between ye and PRO on one hand, and on the other hand, that of ye a and PRO. The syntactic and semantic distribution of both pronouns as well as PRO were explored. Concerning syntactic distribution, locality, person restriction, position restriction and predicate restriction was reviewed. In connection with semantic distribution, the arbitrary, *de se* and sloppy interpretation was investigated. The chapter additionally, discussed the notion of control where we noted that ye a seemed to parallel PRO. However, it was concluded that ye individually, is not the overt counterpart of PRO neither is ye a, a combination of the logophoric pronoun and the potential marker. Following Sattk (2019)'s argument that ye a gives rise to an obligatory *de se* interpretation, we noticed that the obligatory *de se* interpretation, if at all exists in Ewe, does not come from the pronoun ye or ye a or from the contribution of *a*. Rather, from the class of verbs that required this *a*-marking. Verbs

in Ewe were categorised based on whether they were obligatory with *a*, optional or incmpatible with *a*. An empty subject found in Serial verb contructions was also explored. This empty subject went through the OC PRO diagnostics proposed by Landau (1999). However, the question of whether or not this empty subject is really PRO in the language was left for future research. Existing theories were surveyed and we observed that none of them could account for the gap associated with these *a*-marking predicates. An attempt was made to formalise this; however, we concluded that a formal account was not trivial and was left for future research.

6.2 Limitations of the study and future research

This dissertation was limited in the following ways: Firstly, in chapter 4, which empirically corroborated Pearson (2015), a statistical analysis was lacking in both experiments. The reason is that only twenty people participated in both studies which was not enough for a proper statistical analysis. For instance, a simple *t-test* comparing the different conditions between the dialects could have been carried out. Also fillers were not included in my experimental items because eight was considered enough. Moreover, 'mistaken' identity scenarios for instance, are known to be confusing which required a lot of time for participants to understand in order to give their judgments. As such, I didn't want to burden the participants with too many items. However, including them could have masked the critical items thereby distracting participants from having an idea about the experiment. Also, as mentioned by Pearson (2015), testing *de re* readings with children may be difficult since situations in which they occur are not part of everyday life. Nonetheless, it will be interesting to see how children respond to *de re* readings. Secondly, although chapter 5 speculated that the *de re* reading of yè a under believe and claim, for instance, was possible, this was not tested. Although, I have shown independently that yè a is not PRO, future research would have to test this to show whether the verb want is a special case in Ewe regarding strict readings. Finally, I showed that there are verbs that require an additional modal element with a future interpretation namely, a which shows the de se restrictions with yè, cases where yè behaves like PRO. However, in the chapter, the theory for the *a*-marked predicates was only a conjecture of what could be done. Although, no theory on the market could account for them, it is still not clear how to model these findings with such predicates. Future research would have to investigate this. For what is worth, theorizing is not only a problem for Ewe but for researchers working on attitude reports. It will also be interesting to see whether other languages have a restriction of this *a* marking on verbs or whether it is only peculiar to Ewe.

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Appendix A

Study 1: Test Items for TVJT

- (1) John went to the grocery store. He saw a trail of sugar going up and down the aisles and realised it must have been made by someone carrying a bag of sugar with a hole in it. He wondered who the shopper with the torn bag of sugar is, so that he can tell him. He thinks that that guy, whoever he is, is stupid. John, however, noticed that the guy with the torn bag of sugar is himself (Perry 1979). Test sentence: John sùsù be é nye abuneto.
 'John thought that he is stupid.'
 Yes [] No []
- (2) Efo Kosi and his family are relocating to a new house so most of their belongings have already been moved out. While cleaning the last bit of his study, he found an old report card which read: English language C, Biology D, Mathematics C+, Physics F. Efo Kosi saw his name on the report card and believed it was not a good example for his son, Kofi. This was definitely a bad performance.
 Test sentence: Efo Kosi xoese be yè me wo do nyuie le suku o.
 'Efo Kosi believed he performed badly in school.'
 Yes [] No []
- (3) An Asian woman was declared missing from a party touring mount Afaja in the Volta region of Ghana after getting off the party's bus to freshen up. She only hopped off the bus briefly, but had also changed her clothes. Her fellow travellers did not recognize her when she climbed back on again to continue the party's journey. When the details of the missing person were given, the woman reportedly didn't recognise her description and unwittingly joined the search party for the search (adapted from Daily mail article).

Test sentence: Asia nyonu ade sùsù be é bú.

'An Asian woman thought she was missing.'

Yes [] No []

(4) Yayra loves singing. The problem is that she is not convinced she can have a great singing career. Yayra's brother wanted to encourage her so he recorded her discreetly on his mobile phone as she was singing in the kitchen. He then sent her the recording with the following question: "She sings well, doesn't she?" Yayra listened to the recording, and answered her brother: "This girl sings beautifully". Unfortunately, Yayra did not realize that it is her own voice that she had just heard (adapted from (Kiemtoré 2018)).

Test sentence: Yayra gblə be yè dzi na ha nyuie ŋutə. 'Yayra said she sings very well.' Yes [] No []

(5) Mr. Kumi is unfaithful. His wife threatened to file for divorce since she couldn't bear his promiscuous life anymore. Mrs. Kumi insisted on transparency at that stage of their marriage, it was the first step to keeping an eye on her husband. Knowing how difficult it would be to mend his ways, Mr. Kumi then renamed the contacts of his many women on his phone, and that of his wife to 'sexy woman'. While Mr. Kumi had gone to take his shower, Mrs. Kumi went through the contacts on her husband's phone and saw 'sexy woman'. Noticing the digits of the contact, Mrs. Kumi thought 'sexy woman' was a cool name for a wife.

Test sentence: Mrs. Kumi sùsù be yè fe nko yeye la dze yè. 'Mrs. Kumi thought her new name suits her.' Yes [] No []

- (6) Ben has been stalking old school friends on facebook, looking through their photos and making fun of how transformed many of his colleagues are. Mawutor, who has been trolled several times for looking completely different decided to get back at Ben. Mawutor then found an old photo of Ben wearing dark shades and posted it on Ben's facebook wall. Ben, unknowingly, laughed at the boy in the photo and believed his dark shades looked funny (inspired by Laura).
 Test sentence: Ben xoeese be é fee gankui yiboe la di kokoe.
 'Ben believed that his dark shades looks funny.' Yes [] No []
- (7) Deladem went to a party and got completely drunk. Among other things, she had taken a picture of her pierced belly. The next morning, she received a photo of her pierced belly and not remembering the events of the night, she replied to the sender with "nice photo". Deladem did not realise that the photo she saw was hers (inspired by Laura).

Test sentence: Deladem gblo be yè fe nonometata la nya kpo

'Deladem said that her photo was nice.' Yes [] No []

(8) Pat went to visit her grandparents. While in their home, her grandparents brought old pictures of paintings Pat and her siblings had made when they were young. After a careful look at several pictures, Pat recognised one of the paintings she had made and remarked: "I was a good painter."

Test sentence: Pat gblo be è nye nutala nyuie ade.

'Pat said she was a good painter.'

Yes [] No []

Appendix B

Study 2: Test Items for BFCT

- (1) An Asian woman was declared missing from a party touring mount Afaja in the Volta region of Ghana after getting off the party's bus to freshen up. She only hopped off the bus briefly, but had also changed her clothes. Her fellow travellers did not recognize her when she climbed back on again to continue the party's journey. When the details of the missing person were given, the woman recognised her description and unwittingly joined the search party for the search (adapted from Daily mail article). Test sentence: Asia nyonu ade sùsù bebú.
 'An Asian woman thought she was missing.'
 a. é b. yè
- (2) Pat went to visit her grandparents. While in their home, her grandparents brought old pictures of paintings Pat and her siblings had made when they were young. After looking at several pictures, Pat didn't recognise one of the paintings she had made and remarked: "whoever painted this was a good painter." Test sentence: Pat gblo be nye nutala nyuie ade.
 'Pat said she was a good painter.'
 a. é b. yè
- (3) Deladem went to a party and got completely drunk. Among other things, she had taken a picture of her pierced belly. The next morning, she received a photo of her pierced belly and not remembering the events of the night, she replied to the sender with "nice photo". Deladem did not realise that the photo she saw was hers (inspired by Laura).

Test sentence: Deladem gblo be fe nonometata la nya kpo 'Deladem said that her photo was nice.' a. é b. yè

(4) Mr. Kumi is unfaithful. His wife threatened to file for divorce since she couldn't bear

his promiscuous life anymore. Mrs. Kumi insisted on transparency at that stage of their marriage, it was the first step to keeping an eye on her husband. Knowing how difficult it would be to mend his ways, Mr. Kumi then renamed the contacts of his many women on his phone, and that of his wife to 'sexy woman'. While Mr. Kumi had gone to take his shower, Mrs. Kumi went through the contacts on her husband's phone and saw 'sexy woman'. Noticing the digits of the contact, Mrs. Kumi thought 'sexy woman' was a cool name for a wife.

Test sentence: Mrs. Kumi sùsù be fe nko yeye la dze yè. 'Mrs. Kumi thought her new name suits her.' a. é b. yè

- (5) John went to the grocery store. He saw a trail of sugar going up and down the aisles and realised it must have been made by someone carrying a bag of sugar with a hole in it. He wondered who the shopper with the torn bag of sugar is, so that he can tell him. He thinks that that guy, whoever he is, is stupid. What he doesn't realise is that the guy with the torn bag of sugar is himself (Perry 1979). Test sentence: John sùsù be nye abuneto.
 'John thought that he is stupid.'
 a. é b. yè
- (6) Efo Kosi and his family are relocating to a new house so most of their belongings have already been moved out. While cleaning the last bit of his study, he found an old report card which read: English language C, Biology D, Mathematics C+, Physics F. Efo Kosi saw his name on the report card and believed it was not a good example for his son, Kofi. This was definitely a bad performance.
 Test sentence: Efo Kosi xoese be me wo do nyuie le suku o.
 'Efo Kosi believed he performed badly in school.'
 a. é b. yè
- (7) Yayra loves singing. The problem is that she is not convinced she can have a great singing career. Yayra's brother wanted to encourage her so he recorded her discreetly on his mobile phone as she was singing in the kitchen. He then sent her the recording with the following question: "She sings well, doesn't she?" Yayra listened to the recording, and answered her brother: "This girl sings beautifully". Unfortunately, Yayra did not realize that it is her own voice that she had just heard (adapted from (Kiemtoré 2018)).

Test sentence: Yayra gblo be dzi na ha nyuie ŋuto. 'Yayra said she sings very well.' a. é b. yè (8) Ben has been stalking old school friends on facebook, looking through their photos and making fun of how transformed many of his colleagues are. Mawutor, who has been trolled several times for looking completely different decided to get back at Ben. Mawutor then found an old photo of Ben wearing dark shades and posted it on Ben's facebook wall. Ben, who recognised himself couldn't bear the embarrassment, he thought his dark shades looked funny (inspired by Laura). Test sentence: Ben xoeese be fe gankui yiboe la di kokoe.
'Ben believed that his dark shades looks funny.' a. é b. yè