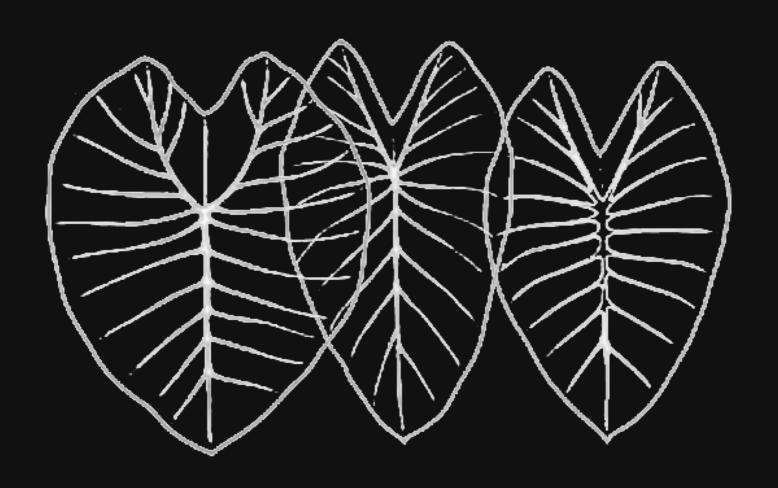
Proceedings of TripleA 3

Fieldwork Perspectives on the Semantics of African, Asian and Austronesian Languages



Ed. by Vera Hohaus & Wanda Rothe

Proceedings of TripleA 3:

Fieldwork Perspectives on the Semantics of African, Asian and Austronesian Languages

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Definiteness Marking on VPs/TPs in Ga and Ngamo¹

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Abstract. There is a growing body of cross-linguistic evidence that languages can mark events as definite (e.g. Baker and Travis 1997, Iatridou 2014, Larson 2003, Hole 2011, Onea 2011). We contribute to this discussion by presenting original data from Ga (Kwa) and Ngamo (West-Chadic). Although both languages exhibit overt definiteness marking on VPs/TPs which is, at first glance, very similar, we argue that whereas Ngamo marks the topic situation, the situation that the utterance is about, as definite, Ga marks the event indicated by the verb as definite.

1 The Phenomenon

In both Ga (Kwa) and Ngamo (West-Chadic), there is a dedicated definite determiner indicating familiarity: $l\varepsilon$ (Ga) and =i/ye (Ngamo), see (1)–(2). In focus constructions / clefts, the backgrounded material can receive the same marker (as already suggested in Schuh (2005) for Ngamo, and Dakubu (1992) for Ga), see (3)–(4).

(1) **Ga definite**

I read a book yesterday.

Wòló le è-ŋɔɔ́ wàà.

book DET 3SG-be.tasty very

'The book was very interesting.'

(3) Ga cleft

Kôfí nì sèlé **lɛ**. Kofi PRT swim DET 'It is Kofi who swam.' (2) Ngamo definite

A man entered. $Ng\partial=\hat{\imath}$ $im\hat{\imath}$ $l\hat{\imath}kd\hat{\imath}u$. person=DET do.1PL greet.NMLZ 'The man greeted us.'

(4) **Ngamo focus construction**

Làpkò=ì Hàwwâ. answer.PFV=DET Hawwa '**Hawwa** answered.'

This is interesting because many analyses of clefts and (some) marked focus constructions have analysed the backgrounded part as definite (e.g. Jespersen 1928, Akmajian 1970, Percus 1997, Hedberg 2000, Büring and Križ 2013 (English clefts), Szabolcsi 1994 (Hungarian marked focus)). The existence of overt definiteness marking on backgrounds thus seems, on the first glance, to corroborate this idea. However, we will present a range of empirical evidence that neither language behaves exactly as predicted by the definiteness accounts of clefts: in Ga, the definite determiner is optional, encoding familiarity and uniqueness of the event, as can be seen from interaction with aspect. In Ngamo, in contrast, the event is not marked as definite. Instead, the topic situation is marked as definite/familiar.

¹We would like to thank our language consultants, as well as the DFG for financial support as part of the SFB 632 "Information Structure". The following glosses were used in this paper: 1/2/3 = 1st/2nd/3rd person, DEF = definite, DEM = demonstrative, DET = determiner, F = feminine, FUT = future, HAB = habitual, IMPF = imperfective, LINK = linking morpheme, M = masculine, NEG = negation, NMLZ = nominalization, PFV = perfective, PL = plural, POSS = possessive, PRT = particle, REL = relative, SBJV = subjunctive, SG = singular, STAT = stative.

The outline of the paper is as follows: §2 provides a brief background to clefts and definiteness, §3 discusses this phenomenon in Ga and §4 discusses the Ngamo data. Section §5 concludes.

2 Clefts and Definiteness

In an *it*-cleft like (5), we refer to the constituent following the copula *was* as the *pivot*, whereas *who swam* is referred to as the *cleft clause*. In prosodic focus examples like (5), the part that is not in focus is called the background.

(5) It was $[AMY]_{pivot}$ [who swam]_{cleft clause}. (6) $[AMY]_{focus}$ [swam]_{background}.

In clefts, the pivot does not necessarily correspond to the focused part of the sentence. It was observed in the literature that sometimes, only part of the pivot is in focus (7) (Velleman et al. 2012), and that there are examples of clefts in which the pivot seems topical rather than focal (8) (Prince 1978, Hedberg 1990).

- (7) It was Amy's YOUNGER sister who swam.
- (8) ("What happened ten years ago?") It was ten years ago that Amy had first started swimming.

In the cleft examples discussed below, however, the pivot will correspond to the focused part of the sentence. Since the cleft clause corresponds to the backgrounded part in that case, we sometimes refer to the cleft clause as *cleft background*.

English clefts differ semantically from merely prosodically marked focus in that the existence and exhaustivity inferences induced by clefts are stronger. Consider (9) for an illustration of the existence and exhaustivity inferences in cleft and focus examples.

(9) It was AMY who swam. / AMY swam.

a. Somebody swam. (existence)b. Nobody else swam. (exhaustivity)

As an example that the existence inference is stronger in clefts than in prosodic focus examples, consider (10): The question in (10-a) still entails that somebody swam, whereas the question in (10-b) does not (see also Rooth 1999, Büring 2004, Kratzer 2004 for discussion, i.a.).

- (10) a. (Bill didn't swim.) Was it AMY who swam?
 - b. (Bill didn't swim.) Did AMY swim?

The exhaustivity inference is also stronger in clefts than in prosodic focus examples. (11) shows that it is a conversational implicature in the case of focus, and thus cancelable (11-a), whereas (11-b) is odd because the exhaustive inference of clefts is not cancelable.

- (11) (Who swam?)
 - a. AMY swam, and Bill swam, too.
 - b. #It was AMY who swam, and Bill swam, too.

This has lead to the *definiteness account of clefts* (Percus 1997, Büring and Križ 2013, Velleman et al. 2012, i.a.). According to this account, a cleft like (12-a) thus underlying means something like (12-b), with the cleft background *who swam* corresponding to a definite description.

- (12) a. It was Amy, Bill and Cem who swam.
 - b. The ones who swam were Amy, Bill and Cem.

This is an attractive account, since the exhaustivity and existence presupposition of clefts can thus be accounted for via the maximality/uniqueness presupposition of the definite description: The definite DP in (13) has the presuppositions in (13-a)–(13-b), which correspond to the existence and exhaustivity presuppositions found with clefts, respectively.

- (13) The swimmers ...
 - a. There are swimmers. (existence)
 - b. No other relevant person is a swimmer. (maximality/uniqueness)

Hole (2011) proposed for Chinese *shì* ... *de* clefts that they encode uniqueness and familiarity of *events*, instead of individuals (see also Onea 2011 for a similar proposal). According to this account, the cleft in (14-a) would thus underlyingly correspond to something like (14-b).

- (14) a. It was Amy, Bill and Cem who swam.
 - b. The event of somebody swimming was an event of Amy, Bill and Cem swimming.

This can also account for the existence and exhaustivity presuppositions found in these kinds of constructions, since the existence of an event of somebody swimming is presupposed, and the underlying DP in (14-b) picks out the maximal event of somebody swimming.

The languages Ga and Ngamo are interesting in this respect because they seem to overtly mark backgrounded material as definite. By that they contribute to the the still growing body of evidence that languages can mark as definite other categories than NPs. For example, mood prefixes in Mohawk were argued to mark the verbal equivalent of (in)definiteness (Baker and Travis 1997), final clausal definite determiners in Fon and Haitian Creole were analyzed as definite adverbs (Larson 2003), and the 'since' adverbial was claimed to be a singular definite description of an event (Iatridou 2014).

In this paper, we thus explore the semantics of the definite determiner in Ga and Ngamo and answer the question of whether these languages provide evidence for the definiteness account of clefts discussed in this section.

3 Ga

Ga (Kwa, Niger-Congo) is a Ghanaian language spoken in The Greater Accra Region by ca. 600,000 speakers. It is an SVO language with two tones: Low and High. All the data stem from the second author's original fieldwork with six Ga native speakers in Accra in 2014 and 2016 and one Ga native speaker in Berlin in 2015 (four women, two men).

3.1 Clefts in Ga

The particle ni introduces a mono-clausal cleft structure in which the exhaustively interpreted element (the pivot) is base generated in its left-peripheral position, as demonstrated in (15) and (16). Importantly, (15) and (16) show also that the backgrounded part can but does not have to be followed by the definite determiner $l\varepsilon$:

(15) Q: Who swam?
A: Kòfí nì sèlé lɛ.
Kofi swim PRT DET
'It is Kofi who swam.'

(16) Q: Who swam?
A: Kòfí nì sèlè.
Kofi PRT swim
'It is Kofi who swam.'

By contrast, $l\varepsilon$ cannot attach to VP without ni, i.e., outside of the cleft structure, as shown in (17):³

(17) #Kòfí sèlé lɛ.

Kofi swim DET intended: 'Kofi swam.'

Now, if the conjecture that the exhaustivity and existence of clefts is due to the fact that they trigger a definite description of events, we would expect that the exhaustivity and existence of Ga clefts is triggered by $l\varepsilon$. However, data in (18) and (19) show that is not the case. The exhaustive meaning of clefts is there even when the definite determiner $l\varepsilon$ is not attached to the backgrounded part. (18) shows that one cannot conjoin two cleft-sentences in Ga which differ in their pivot but not in their backgrounded part, which is predicted if clefts induce the exhaustive meaning.

(18) Bànkú **nì** Kòfí yè nyè. #Ní àmádàá hú Kòfí yè nyè.

Banku PRT Kofi eat yesterday and plantain also Kofi eat yesterday

'It was banku that Kofi ate yesterday. And he also ate plantain yesterday.'

Example (19), in turn, shows that clefts in Ga encode existence, also without the definite determiner $l\varepsilon$. 'Nobody' clashes with the existence presupposition that somebody read a book yesterday and therefore (19) is judged as unacceptable by Ga native speakers.

(19) ?? Jèèè mòkò mòkò nì káné wòlò nyè.

NEG somebody somebody PRT read book yesterday
'It was nobody who read a book yesterday.'

Now, the question that arises immediately is what meaning is encoded by the definite determiner $l\varepsilon$, if it encodes neither exhaustivity nor existence. The answer is given in the next subsection.

²For a discussion, see Renans (2016b,c).

³Note however, that $l\varepsilon$ is acceptable in some kind of temporal subordinate clauses as well as in antecedents of conditionals, see Renans (2016b) for discussion.

3.2 VP le

The definite determiner $l\varepsilon$ in Ga encodes the meaning that a discourse referent is both familiar and unique in bearing the property in question.⁴ The view that that $l\varepsilon$ encodes familiarity is empirically motivated by the minimal pair presented in (20) and (21). Whereas VP $l\varepsilon$ is acceptable in a context in which a swimming event was discussed before and hence is familiar, it is unacceptable in a context in which the swimming event was not previously discussed and hence is unfamiliar:

(20) We didn't talk about swimming before. Suddenly, I have decided to tell my friend who was swimming yesterday.

```
#Kòfí nì sèlé lε.
Kofi PRT swim DET
'It is Kofi who swam.'
```

(21) We talked about swimming. Suddenly, I have decided to tell my friend who swam yesterday. I say:

```
Kòfí nì sèlé lε.
Kofi PRT swim DET
'It is Kofi who swam.'
```

In order to check for uniqueness triggered by the definite determiner $l\varepsilon$ in the verbal domain, one should consider contexts in which the same agent performs either one activity or more than one activity of the given kind. It seems that habitual vs. progressive aspectual contexts form the desired type of contrast. It is predicted that VP $l\varepsilon$ should be unacceptable in habitual contexts in which, for example, Kofi swims regularly, i.e., there is no unique event in the VP denotation. This prediction is borne out, as demonstrated in (22):

(22) **habitual context:** Tom's two sons and daughters do not like swimming and they do not do it, but his oldest son, Kofi, loves swimming and he does it regularly.

```
Kòfí nì sèlè-5 (#lɛ).
Kofi PRT swim-IMPF DET intended: 'It is Kofi who swims.'
```

To sum up, the definite determiner $l\varepsilon$ encodes the information that a discourse referent, an event in the case of the definite determiner in the verbal domain, is both familiar and unique in bearing the property in question.

3.3 The Definite Determiner $l\varepsilon$ — Analysis

Following Elbourne (2005), I propose that the definite determiner $l\varepsilon$ takes two arguments: the NP and a pronominal index, which I formally analyze as a variable of type $e^{.5}$ The lexical entry for $l\varepsilon$ is given in (23):

⁴The definite determiner $l\varepsilon$ encodes familiarity and uniqueness in both the nominal and the verbal domain; in this paper however we concentrate on latter. For discussion, see (Renans 2016b,a).

 $^{^{5}}$ In this respect, I am following Schwarz's (2009) and Arkoh and Matthewson's 2013 analyses in which the pronominal index is also of type e.

(23)
$$[[le]] = \lambda \mathbf{y} \cdot \lambda P : \exists !x [P(x) \land \mathbf{x=y}] . \iota x [P(x) \land \mathbf{x=y}]$$

VP $l\varepsilon$ takes a property and says that there is a unique familiar event which has this property. For example, the structure of sele $l\varepsilon$ ('the swimming event') is given in (24) and its derivation in (25):

(24)
$$\begin{array}{c|c} VP \\ \hline \\ vP & D \\ \hline \\ \langle \epsilon, t \rangle & \langle \langle \epsilon, t \rangle, \epsilon \rangle \\ \hline \\ \hline \\ x_1 \text{ sele} & 3 & 1\epsilon \\ \hline \\ \epsilon & \langle \epsilon, \langle \langle \epsilon, t \rangle, \epsilon \rangle \rangle \end{array}$$

- (25) a. $[[1e]]^g = \lambda y.\lambda P.\iota eP(e) \wedge e = y$
 - b. $[[D]]^g = \lambda P.\iota e[P(e) \land e = g(3)]$
 - c. $[[vP]]^g = \lambda e.swim(e) \wedge Ag(e) = x_1$
 - d. $[[VP]]^g = \iota e[\operatorname{swim}(e) \land Ag(e) = x_1 \land e = g(3)]$ \approx the unique event e such that e is a swimming event, whose agent is x_1 and e is g(3)

Importantly, if the definite determiner $l\varepsilon$ indeed encodes familiarity and uniqueness in the verbal domain, it gives rise to clear, testable predictions which are discussed in the next subsection.

3.4 Predictions of the Analysis

Interaction with Aspect. Imperfective aspect, marked by the suffix -3 in Ga, entails the information that the topic time is included in the running time of the event. The lexical entry for -3, which is a modification of Kratzer's (1998) lexical entry for the imperfective aspect, is presented in (26):

(26) $[\![-\mathfrak{d}]\!] = \lambda P_{\langle \epsilon, t \rangle} \cdot \lambda t_i \cdot \exists e[t \subseteq \tau(e) \land P(e)]$ \approx there is such an event that the contextually given topic time is included in the running time of the event

Crucially, -3 is compatible with both the habitual and the progressive interpretation of the sentence, as is shown in (22) and (27). But, as seen in (27), only the progressive interpretation is available with VP $l\varepsilon$.

(27) **progressive context**: Tom and his family (wife, two sons, and two daughters) are on the beach. Tom and his wife can see a swimming child.

Kòfí nì sèlè-ó lɛ.

Kofi PRT swim-IMPF DET

'It is Kofi who is swimming.'

⁶The structure in (24) is unusual in that D takes vP as its argument and it does not project its properties. It might be that both NP $l\varepsilon$ and VP $l\varepsilon$ have the same semantics, but they are not of the same syntactic category. For presentational reasons, however, I am labeling VP $l\varepsilon$ and NP $l\varepsilon$ in a uniform way. A more detailed explication of this issue has to await future research.

(28) **habitual context**: Tom's two sons and daughters do not like swimming and they do not do it, but his oldest son, Kofi, loves swimming and he does it regularly.

```
#Kòfí nì sèlè-ό lε.
Kofi PRT swim-IMPF DET
'It is Kofi who is swimming.'
```

This is predicted by the analysis of $l\varepsilon$: Whereas the habitual requires plural events in the VP denotation, the progressive requires that there is a singular event in the VP denotation (Ferreira 2005). Since $l\varepsilon$ requires that there is only one unique event in the VP-denotation, sentences with VP $l\varepsilon$ are only compatible with progressive interpretation (see Renans (2016b)).

In addition, the interpretation of (28), due to the presence of $l\varepsilon$, among others, is restricted to the unique event which is ongoing at the topic time. Therefore, it is predicted to be unacceptable in contexts in which the event, even though it might be ongoing, is not actually instantiated at the topic time, and this prediction is borne out. Consider (29). It is unacceptable, because the event of reading *Harry Potter* by John is not an ongoing, actual event. The topic time, which in the case of (29) coincides with the utterance time, cannot be included in the running time of the event of John reading *Harry Potter*, because at the topic time of (29), John is not reading anything but jogging.

(29) Tom and John are jogging. They are talking about books. Tom asks John which books he is reading. John replies:

```
#'Harry Potter' nì mí kánè-ó lɛ. 
'Harry Potter' PRT 1.SG read-IMPF DET 
'It is 'Harry Potter' that I am reading.'
```

Evidentiality. The fact that the definite determiner $l\varepsilon$ encodes the information that a discourse referent, an event in the verbal domain, is not only unique in bearing the property in question but also familiar predicts VP $l\varepsilon$ to be only acceptable in contexts in which the speaker is familiar with the event. Now the question is when the speaker is familiar with the event which is actually ongoing at the time of speaking. In many cases it means that the speaker should have direct access to the event. And this predictions is borne out, as demonstrated in (30):

- (30) Kôfí nì sèlè-ó **l**ɛ. Kofi PRT swim-IMPF DET 'It is Kofi who is swimming.'
 - a. **direct evidence context**: Tom and his family (wife, two sons, and two daughters) are on the beach. Tom can see that his one son and two daughters are playing with sand and his oldest son, Kofi, is swimming.
 - \Rightarrow Tom can utter (30) in this context
 - b. **indirect evidence context**: The same as before but this time Tom cannot see his oldest son, but the younger one told him that Kofi was in the process of swimming.
 - \Rightarrow Tom <u>cannot</u> utter (30) in this context

To summarize, the definite determiner $l\varepsilon$ encodes the information that a discourse referent, an event when $l\varepsilon$ attaches to the VP, is both familiar and unique in bearing the property in question. As consequence, it interacts with the aspectual and evidential interpretation of the sentence.

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4 Ngamo

Ngamo is a West-Chadic language (Afroasiatic, West-Chadic A.2 subgroup (Newman 1977)) spoken by about 60,000 speakers in the Nigerian states Yobe and Gombe (Lewis 2009). It is an SVO language with two tones⁷. The data presented in this paper are from the Gudi dialect and stem from the first author's original fieldwork with two Ngamo native speakers in Nigeria.

4.1 Marked focus/background constructions in Ngamo

In Ngamo, the focus/background distinction can either remain unmarked, or is marked with a morphological marker =i, related to the definite determiner (Schuh 2005), and (optional) movement of the focused constituent to the right periphery, cf. (31)–(32): example (31) shows the canonical SVO word order found in information-structurally 'neutral' contexts. When the subject is focused, e.g. as an answer to "Who built a house?", it is inverted and preceded by =i (32).

(31) **all-new** (32) **subject focus** *Kúlè sàlkó bànò*. *Sàlkó bànò=ì Kúlè*.

Kule build.PFV house
'Kule built a house.' 'KULE built a house.'

It was noted above that in Ga, definiteness marking of the backgrounded VP is not responsible for its existence and exhaustivity presupposition, in contrast to the predictions of the definiteness account of clefts. The Ngamo examples in which the background is marked as definite (e.g. (32)) also behave different than expected: They have neither an exhaustive nor an existence presupposition. For example, as mentioned in §2, if the exhaustive inference were a presupposition, it would not be cancelable. As (33) shows, the exhaustive inference "Burba didn't buy anything else" caused by the first clause can be felicitously cancelled in the second clause "and she also bought a banana". It is thus merely a conversational implicature. In this respect, the marked focus/background construction in Ngamo behaves like intonational focus in English, and unlike English cleft constructions.

(33) **No exhaustive presupposition** (What did Burba buy in the village?) $K\grave{a}j\grave{a}=\grave{i}$ $f\acute{a}r\grave{i}$ $k\grave{i}$ $g\acute{a}rg\grave{u}$, $k\grave{e}$ $k\grave{a}j\grave{a}$ $\grave{a}y\grave{a}b\grave{a}$. buy.PFV=PRT watermelon at village also buy.PFV banana 'She bought a watermelon in the village, and she also bought a banana.'

The marked focus/background construction in Ngamo doesn't trigger an existence presupposition, either, see (34). In this test, a negative existential quantifier (e.g. *nobody*) is focused. If the backgrounded part gives rise to an existence presupposition "*Njelu called somebody*", this should clash with the assertion "*Njelu called nobody*". Since this is not the case in (34-a), it can be concluded that this construction does not give rise to an existence presupposition, in contrast to the pseudocleft in (34-b). Note that in Ngamo, there is no negative existential quantificational DP; instead, a combination of an indefinite and negation is used. Nevertheless, the test is valid, as can be seen when comparing (34-a) to (34-b).

⁷High tones will remain unmarked in the following examples, low tones are marked with a grave accent.

⁸Cf. Grubic (2015) and Grubic et al. (2016) for further tests and discussion.

- (34) **No existence presupposition** (compare with the pseudocleft in (34-b))
 - Q: Who did Njelu call yesterday?
 - a. **Èshá nzònò=ì** ngô bù. call.PFV yesterday=PRT person NEG 'He called NOBODY yesterday.'
 - b. #Ngò=ì yò Njèlù èshá nzònò=ì ngô bù.

 person=LINK REL Njelu call.PFV yesterday=PRT person NEG

 'The one that Njelu called was nobody.'

The correspondence between definite =i/ye-DPs and -i/ye-marked backgrounds predicted by the definiteness account of clefts could still be maintained if =i/ye-DPs in Ngamo happen to lack existence and maximality/uniqueness presuppositions, too (cf. von Fintel and Matthewson 2008, p.180, who propose this for definite DPs and clefts in St'át'imcets (Lillooet Salish)). However, as shown in (35)–(36), =i/ye-DPs have an existence and strong familiarity/salience presupposition: In this test, the language consultants are asked whether they can conclude anything from a fragment of a conversation that they are presented with about the questions in (35-a–c). This fragment involves a definite expression within the antecedent of a conditional. Their answers are listed in (35-a–c). Since the answers are the same as in the unembedded case (*The king's daughter needs my help*), this suggests that the existence and familiarity inferences are presuppositions.

(35) Nà ba't ma'ì = s ndàlo nè shàtè te=i, nè gò gàr if daughter.of king =DEF.DET.F want.PFV 1SG help.SBJV 3SG.F=I 1SG go.FUT village.of =mù sàtì=s sò isnô.

=1PL.POSS week=LINK REL come.STAT

'If the king's daughter needs my help, I need to go to my village next week.'

- a. Does the king have a daughter? (Existence) Yes
- b. Does the king have only one daughter? (Exhaustivity) I don't know.
- c. Did they talk about the daughter before? (Familiarity) Yes.

That =i/ye definites are used for salient referents is reflected in the fact that they are only used in contexts where the referent is prementioned or otherwise salient, never in contexts where the referent is unique but not salient, e.g. the Queen, the sun, the moon. This is not unusual, crosslinguistically there seem to be many languages with a definite determiner used only for strong familiarity (see Schwarz 2009, 2013, i.a.).

To sum up, in Ngamo, the backgrounded part does not trigger existence and exhaustivity presuppositions and is thus not a definite description of an individual or event. Further evidence that it is not a definite description of an event comes from the fact that =i/ye seems compatible with the habitual (36), in contrast with comparable Ga data in §3.2, in which $l\varepsilon$ was not compatible with the habitual. This was not tested systematically, and is thus only taken as preliminary evidence.

(36) Q: Who sells newspapers?

A: À bò'ytà járídà=ì ngô wòmmí'ì.

3SG.HAB sell.HAB newspaper=I man DEM
'THAT MAN sells newspapers.'

What we want to propose instead in the remainder of this section, following Grubic (2015), is that the background is a definite description of the *topic situation*, i.e. the situation that the sentence is about. First, topic situations will be introduced ($\S4.2$), then the following sections discuss the proposed account for =i/ye in DPs ($\S4.3$) and =i/ye in focus/background constructions ($\S4.3$).

4.2 Topic situations and QUDs

Each sentence is about a specific situation, its topic situation (Kratzer 2011). Kratzer exemplifies this using example (37) (from Barwise and Etchemendy 1987, p.122): here it is true in the actual world w_0 that Claire has the three of clubs, but we still perceive the sentence *Claire has the three of clubs* as false. The reason for this is that it is intuitively about a subpart of this world, namely about the situation of Game 1, at which it is false that Claire has the three of clubs. This example shows that situations, as subparts of worlds, play a role for our evaluation of the truth/falsity of sentences.

(37) (Max is playing cards with Emily & Sophie (Game 1), and somewhere else, Claire is playing cards with Dana (Game 2). Both Emily and Claire have the three of clubs.) Someone, watching Game 1, mistakes Emily for Claire & says:

Claire has the three of clubs.

According to Kratzer, the topic situation of a sentence can be derived from its *question under discussion*, the (possibly implicit) hearer-question that the sentence answers (Roberts 2012). Under the question under discussion account, every declarative utterance answers a question. An information-structurally neutral sentence like (38-b) answers a question "What happened?" (38-a), whereas narrow focus indicates a question in which the focus is replaced by a *wh*-element (39).

- (38) a. What happened? (all-new)
- (39) a. Who danced? $(Subj_F)$
- b. Amy and Ben danced.

b. AMY AND BEN danced.

The topic situation is introduced somewhere within the syntax as a covert topic situation pronoun. According to Schwarz (2009, p.143), it is derived as follows (adapted from Kratzer 2011, §89):

(40) $s_{topic} = \iota s[EX(question extension)(s) \& s \le w_0]$ \approx the actual situation that exemplifies the QUD extension

To give an example, the extension of the QUD "Who danced" in (39) would be a proposition such as (41) (according to Kratzer 2011's version of Groenendijk and Stokhof 1984's account).

(41) Extension of "Who danced?": $\lambda s[\lambda x.x \text{ danced in } s = \lambda x.x \text{ danced in } w_0]$ "The set of situations s such that the same set of individuals dance in s as in w_0 "

Exemplification is defined as follows (a simplified version of Kratzer 2011, §7):

- (42) Exemplification: A situation s exemplifies a proposition p iff p is true in s and
 - a. p is true in all substituations of s, or
 - b. there is no smaller substituation of s for which p is true

⁹Schwarz' approach differs from Kratzer's in that she assumes that a sentence can have several topic situations.

Assuming that the only individuals that danced in w_0 were Amy and Ben, then the topic situation of the answer, according to (41), is the minimal actual situation in which Amy and Ben danced.

Now, the proposal for the marked focus/background construction in Ngamo is that the particle =i/ye is an overt determiner for such a definite description, and the focus/background is used to identify the question under discussion (and thus the topic situation). When the question under discussion is maximally salient, it is preferably elided (43). It is only pronounced when the question under discussion is mid-salient, cf. (44).

(43) Who answered? (44) (Who answered?)

Hàwwâ.

Hawwa
'HAWWA.'

(44) (Who answered?)

Làpkò=ì Hàwwâ.

answer.PFV=DET Hawwa
'HAWWA answered.'

This is reminiscent of the difference in salience between pronouns and definite descriptions (Ariel 1988, Reinhart 1995, i.a.). It is therefore proposed, following Grubic (2015), that the topic situation is a pronoun in (43), but a full definite description in (44). This proposal will be outlined in §4.4, but before this can be done, §4.3 discusses the account assumed for definite DPs in Ngamo.

4.3 =i/ye in definite DPs

In $\S4.1$, some properties of =i/ye definites were mentioned: they trigger a strong familiarity/salience presupposition, i.e. they are be used when the referent is salient to a certain extent, e.g. because it is prementioned (45). When the referent is unique but not salient, a bare noun is used (46).

(45) Kule and I saw a woman and a man. (46) When Njelu woke up, late at night ... Kulè làkda màndù=s'è. ... mòiko tèrè (#=i'e).

Kule greet.PFV woman=DET.DEF.F see.PFV moon =DEF.DET.M

"Kule greeted the woman." "He saw the moon."

For =i/ye in the nominal domain, the proposal by Schwarz (2009) is adoped, cf. (47) (simplified¹⁰). In the most relevant aspects, it is like the proposal shown above for Ga: the familiarity requirement comes about via a covert individual pronoun, which is the second argument of =i/ye and which is equated with the referent of the DP. Since the referent of the pronoun has to be salient, due to the fact that only salient individuals are in the range of the assignment function g, a =i/ye-DP cannot refer to an individual that is merely unique but not prementioned (or otherwise salient).

(47)
$$[[=i/ye]] = \lambda P. \ \lambda y: \ \exists !x(P(x) \& x=y).\iota x \ [P(x) \& x=y]$$
 (49) DP

(48) $[[Ng\grave{o}=\grave{i} \ x_3]]^g = \iota x \ [man(x) \& x = g(3)]$

NP D

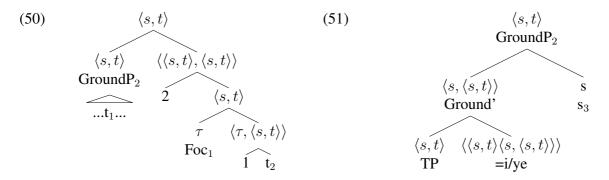
Ng $\grave{o} = \grave{i}/y\grave{e}$

In the following section, this proposal will be extended to =i/ye in focus/background constructions.

¹⁰See Grubic (2015, 2016) for a discussion of definiteness in Ngamo.

4.4 =i/ye in focus/background constructions

For =i/ye in marked focus/background constructions, a remnant movement account is assumed (50): the focus moves to a left-peripheral position, and the remnant TP (including the background marker =i/ye) moves to adjoin above it. The structure of the backgrounded part resembles a DP (51).



The proposal for =i/ye is as in (52): it introduces the presupposition that there is exactly one salient actual situation that exemplifies the question ?P derived from background P.

(52)
$$[[=i/y\grave{e}]]^{g,s} = \lambda P_{\langle s,t\rangle}.\lambda s'''.\lambda s'.P(s'),$$
 defined iff $\exists !s''[EX(?P)(s'') \& s'' < w_0 \& s'' = s''']$

For example, for example (4), repeated here as (53), this would yield the denotation in (54).

- (53) Làpkò=ì Hàwwâ. answer.PFV=DET Hawwa 'HAWWA answered.'
- (54) $[[t_1 \text{ lapko} = i \text{ s}_3]]^g = \lambda s'. \text{ g}(1) \text{ answered in } s', \text{ defined iff there exists exactly one } s'' \text{ which}$
 - (i) exemplifies $\lambda s.[\lambda u.u$ answered in $s=\lambda u.u$ answered in $w_0]$
 - (ii) is a substituation of w_0 , an actual situation
 - (iii) is g(3), i.e. is salient.

The assumption that =i/ye is a definiteness marker of situations has the following consequences: First, no exhaustive presupposition is expected, according to Kratzer (2011): The topic situation always exemplifies the QUD extension, but: A non-exhaustive answer like the first part of (55) is merely asserted to be true in its topic situation, whereas an exhaustive answer is in addition asserted to be exemplified by its topic situation.

(55) (What did Burba buy in the village?)

Kàjà=ì fárì kì gárgù, kè kàjà àyàbà.

buy.PFV=PRT watermelon at village also buy.PFV banana

'She bought a watermelon in the village, and she also bought a banana.'

Second, no existence presupposition is predicted: in (56), the topic situation is a specific situation which contains no event of Njelu calling anybody. It is thus not predicted by this account that (56)

should be odd.

(56) Who did Njelu call yesterday? **Èshá nzònò=ì** ngô bù.

call.PFV yesterday=PRT person NEG

'He called NOBODY yesterday.'

To sum up, this section proposed that the =i-marked background in Ngamo is a definite description of the topic situation, via the question under discussion. This relates the proposals (i) that the focus/background distinction indicates the QUD (Roberts 2012, i.a.), (ii) that the QUD can be used to derive the topic situation (Schwarz 2009, Kratzer 2011), and (iii) that focus/cleft backgrounds are underlyingly definite descriptions (Percus 1997, Hole 2011, i.a.).

5 Summary

In this paper, we showed that both Ga and Ngamo exhibit a definite determiner that can attach to VPs/TPs, i.e., $l\varepsilon$ in Ga and =i/ye in Ngamo. Interestingly, although $l\varepsilon$ and =i/ye show similar distribution, we argue that while $l\varepsilon$ marks an **event** as definite, =i/ye — marks the **topic situation** as definite. We based our claims on the following observations. First, whereas there is no exhaustivity/existence presupposition in sentences with =i/ye marker in Ngamo, clefts in Ga trigger both presuppositions. Second, $l\varepsilon$, unlike =i/ye, interacts with the aspectual information conveyed by the sentence. Therefore, our work point to previously unrevealed cross-linguistic variation in the semantics of definite determiners in the non-nominal domain.

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