

Indexed definiteness without demonstratives in Guébie¹

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Abstract. In this article we describe the semantic distribution of the Guébie definite enclitic =*a*, which occurs in a subset of unique definite contexts as well as in anaphoric contexts. We further show that Guébie completely lacks an exophoric demonstrative, the only known counterexample to the proposed universal that every language has demonstratives. We analyze =*a* as an indexed unique definite, a novel category of definiteness, and bare nouns are inherently indefinite. The Guébie facts suggest that while demonstratives are not universal, indexed definiteness is.

1 Introduction

In this paper we provide a description and first analysis of definiteness marking in Guébie (Kru). The central novel observations that we report on are as follows:

The first finding we report on is that there are two morphosyntactic forms which occur in definite contexts in Guébie, i.e. in contexts involving uniqueness and/or anaphoricity. The first form is an enclitic definite article =*a*, which is used in many anaphoric contexts, but which differs in meaning and distribution from standard familiarity definite articles discussed in Schwarz (2009). The second form is a bare NP, which shows up in some unique definite contexts, though not in others. We will analyse such bare NPs as underlyingly indefinite, i.e. non-indexed and non-unique, despite their occurrence in some uniqueness contexts.

Our second central finding is that Guébie lacks an exophoric demonstrative entirely, thereby constituting the first known exception to the proposed absolute universal: “All languages have demonstratives. . .” (Diessel, 1999, p.1).

Crucial to the finding that =*a* is not a demonstrative is the observation that it occurs in (some) uniqueness contexts where demonstratives are infelicitous, and that it is infelicitous in contexts licensing (pointing) demonstratives. In response to this, we will propose a new analysis that features a novel type of definite determiner. We will argue that Guébie =*a* is felicitous in contexts that independently satisfy the following two conditions: (i.) direct (anaphoric or exophoric) reference to a contextually salient individual, and (ii.) situational uniqueness. This is formalised in (1):

$$(1) \quad \llbracket = a_y \rrbracket^g = \lambda s. \lambda P_{\langle s, et \rangle}: \exists! x [P(x)(s)] \wedge \iota x [P(x)(s)] = g(y). \iota x [P(x)(s)]$$

According to (1), the Guébie definite marker =*a* is an *indexed unique definite*, combining components of unique and indexed DEFs. It comes with two presuppositions: (i.) that there be just

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one individual with the NP-property P in the evaluation situation (*UNIQueness*); and (ii.) that this unique individual be identical to some contextually provided individual $g(y)$ (*INDEXicality*). The two presuppositions combined make indexed $=a$ semantically stronger than plain uniqueness definites, which denote a unique NP-instance irrespective of indexicality, on the one hand, and familiarity definites à la Schwarz (2009), which denote the unique prementioned NP-instance, on the other. These stronger semantics correlate with a more constrained distribution of $=a$ compared to plain uniqueness or anaphoric DEFs. In contrast, bare NPs are always indefinite and used when neither of the context conditions *UNIQU* or *INDEX* is met. Finally, the different behavior of Guébie $=a$ in situation-based covariation and donkey sentences may constitute a novel empirical argument for a dynamic DRT-type analysis of donkey sentences à la Kamp (1981).

The article is structured as follows. Section 2 provides some background on unique and anaphoric definite markers. Section 3 introduces the relevant empirical data on how Guébie divides the semantic task of expressing uniqueness and anaphoricity between bare NPs and definite NPs with $=a$. We also show that $=a$ is not a demonstrative marker, and that there are no other demonstratives in the language. Section 4 presents the formal analysis of $=a$ and bare NPs in Guébie. Section 5 concludes.

2 Some Background: Anaphoric vs unique definites

The literature offers ample discussion of two subtypes of definites, viz. *uniqueness* definites and *anaphoric* definites. For instance, overt definite markers have been argued to code anaphoricity, rather than uniqueness in the West African languages Hausa (e.g., Newman, 2000, Zimmermann, 2008) and Akan (Arkoh and Matthewson, 2013, Owusu, 2022; pace Bombi, 2018). There are two analyses of anaphoric (aka familiar, strong) definites, here exemplified for the Akan DEF-marker *nó*. In both theories, there are special mechanisms for weakening or avoiding a uniqueness presupposition. The first account was originally proposed in Schwarz (2009) and takes anaphoric definites to presuppose uniqueness relative to some index (Arkoh and Matthewson, 2013):

$$(2) \quad \llbracket n\acute{o}_y \rrbracket^g = \lambda s. \lambda P_{\langle s, et \rangle}: \exists! x [P(x)(s) \wedge x = g(y)]. \iota x [P(x)(s) \wedge x = g(y)]$$

According to (2), *nó*-NPs can be used if the context is such that there is exactly one individual with property P that is identical to some established discourse referent $g(y)$. Such *nó*-NPs then refer to this unique indexed individual, thereby weakening the uniqueness requirement.

Owusu (2022, p. 48), in turn, takes up an idea for demonstratives by Dayal and Jiang (2022) and treats the Akan DEF-marker *nó* as an adnominal modifier encoding familiarity and non-uniqueness of the NP-restriction:

$$(3) \quad \llbracket n_y \rrbracket^g = \lambda P_{\langle s, et \rangle}. \lambda x. \lambda s: x = g(y) \wedge \exists s' [s \leq s' \wedge |\{x: P(x)(s')\}| \geq 1]. P(x)(s)$$

According to (3), *nó* can be used in a context where there is a discourse referent in a situation s , which is itself part of an extended super-situation s' containing more than one individual with property P . This directly rules out the use of *nó* in plain uniqueness contexts.²

²The formulation in (3) poses an immediate problem: Without additional restrictions on the super-situation it seems to over-generate the distribution of *nó*: Since there is almost always a super-situation containing more than

Both of these analyses avoid making the uniqueness component of the anaphoric definite too strong, as definites and demonstratives often occur in contexts where absolute uniqueness is not met. In contrast, we will show below that Guébie =*a* only occurs in contexts where uniqueness is met in an absolute sense, relative to some situation *s*, calling for the analysis in (1).

3 The expression of definiteness in Guébie

Guébie (Eastern Kru) is spoken by about 7000 speakers in the Gagnoa prefecture of Côte d’Ivoire; see Sande (2020) for a language snapshot and references. The basic word order is SVO and SAuxOV, and it has a 4-height tone system. All of the primary data come from face-to-face and online elicitations with our co-author, Badiba Olivier Agodio, a 40-year-old male native Guébie speaker. The data were subsequently checked with two other male speakers, one older and one younger, who confirmed the original judgments with minimal variation. In addition, we examined several texts to ensure that the elicitation-based generalizations are sound. All of the examples use the IPA for transcription, so, e.g., [j] is a palatal glide and [c] is a voiceless palatal stop. They also use Leipzig glossing. The data are available in the Guébie collection of the California Language Archive (Agodio et al., 2014).

In what follows, we will first look at the realisation of NPs in typical unique definiteness contexts, before turning to the realisation of NPs in typical anaphoric contexts. We will see that Guébie sometimes uses bare NPs and sometimes NPs DEF-marked with =*a*, but that the distribution of bare NPs and DEF-marked NPs is different from that of other languages. Finally, we will report on the infelicity of =*a* in demonstrative (pointing) contexts, which violate situational uniqueness.

3.1 Unique definiteness contexts: Bare NPs vs. NP=*a*

Following Hawkins (1978), Schwarz (2009), Jenks (2018), i.a., we look at the formal realisation of NPs in four typical unique definiteness contexts: larger situations; immediate situations; situational covariation; and part-whole bridging. In languages that have them, these contexts typically require a plain uniqueness DEF-marker.

With cases of *larger situation uniqueness* (e.g. *sun, moon, president*), Guébie speakers prefer bare NPs, cf. (4-a), as is the case in many other bare noun languages, such as, e.g., Mandarin (Jenks, 2018) or Babanki (Akumbu and Jenks, 2023). However, such larger situation unique definite NPs can also be marked by DEF =*a*, as long as they (i) have a salient exophoric discourse referent (Barlew, 2014), or (ii) are anaphoric, cf. (4-b):

- (4) a. jiro-je^{2.3.1} pɔ¹ (only unique: bare)
 sun-SG shine
 ‘The sun is shining.’
 b. jiro-je=**a**^{2.3.1.1} pɔ¹ (unique & indexed: =a)
 sun-SG=DEF shine
 ‘The sun (that we were waiting for) is shining.’

one individual satisfying the NP-predication, the occurrence of *nó* should be almost vacuously licensed. Given the multitude of suns in the universe, *nó* should then freely occur in (4-a) below, contrary to fact.

Out of the blue, the overt definiteness marker =*a* was dispreferred in (4). The example was first given without an overt definite. When asked if the example with =*a* was okay, the speakers accepted (and repeated) it, but they offered extra context to make the DEF-marker felicitous. The addition in parentheses in the paraphrase of (4-b) suggests that the unique sun is prementioned or otherwise indexically accessible in the discourse. As there is an established discourse referent, =*a* is felicitous. The same holds for examples with *moon*, not shown here. The following example in (5) tests specifically for the felicity of =*a* in a context aimed at making the sun not perceptually accessible, and hence non-indexed. The speaker's comment is telling, as it shows that the invisible sun must be accommodated as a discourse referent, here by its effect on the room's temperature. Again, this shows that =*a* is indexed and in need of an accessible discourse referent to refer to.

(5) Context: We're in a dark room with no windows and no lights and someone says:

jiro-je=**a**^{2.3.1.1} tɛ(-a)^{3.2} me³
 sun=DEF be.strong-PST PART
 'The sun is/was strong.'

Speaker's comment: 'Well, in that case it would be really really hot in the room...'

NPs in *immediate situation contexts* show a similar effect. If the intended unique referent is unfamiliar or new to the conversation, the bare noun is used. This is shown in (6-a) with the NP *dirɛtɛ* 'headmaster', for which the bare NP was offered as the original translation. Adding the DEF-marker =*a* is only felicitous to distinguish between different schools or directors of different schools. In this case, speakers seem to be accommodating an anaphoric interpretation of =*a*.³

(6) Context: A father is visiting a new school for his son, and someone says:

- a. dirɛtɛ(=**a**)^{4.1.1.1} ɔ³ lɔpɛ^{2.1} ɓɔ³
 director.FR=DEF 3SG.NOM speak.IPFV finish
 'The director will speak to you after (whatever he's doing now).'
- b. sukulu-masi^{1.1.3.4.1} ɔ³ ji³ mɛ-sale=**a**^{4.2.3.2} kɔ³ ji³
 school-master 3SG.NOM FUT PART-talk=*a* place.NMLZ to come
 'the/a teacher will come to talk to you.'

Crucially, (6-a) differs from (6-b) with *sukulu-masi* 'teacher' in that the latter is infelicitous with =*a* if there is more than one teacher, thereby violating uniqueness, or if there has been no talk about a specific teacher, thereby violating indexicality.

At the same time, the fact that =*a* is often available in uniqueness contexts with additional implications about contextual relevance or salience is surprising from the perspective of anaphoric definites in, e.g., Mandarin or Thai, where anaphoric demonstratives are awkward with unique referents (Jenks, 2015; Jenks, 2018). This suggests that =*a* is not a demonstrative as in Dayal and Jiang (2022), a point to which we will return in sub-section 3.3. The contrast extends to instances of exophoric reference in immediate contexts with a salient unique discourse referent (cf. Barlew, 2014), which require =*a* for felicity.

(7) Context: Djatchi goes to Gnadja's house, and, as he comes in, he notices a dog lying in the

³Alternatively, this might be an instance of part-whole-bridging from 'school' to 'director'; see main text below.

corner sleeping. He says:
 goji=#(a)^{3.1.1} ɔ³ nanɛ^{3.3}
 dog=DEF 3SG.NOM be.good
 ‘The dog is nice.’

In (7), there is no larger situation in which the dog is not unique. The context supports only the existence of a single unique dog, who is also present in the situation. Such contexts typically support exophoric uses of demonstratives (regardless of whether the referent is contextually unique), but they do not support dedicated anaphoric demonstratives, cf., e.g., Akumbu and Jenks (2023).

The remaining two typical unique definite contexts show that =a requires indexed AND unique referents. Firstly, in part-whole bridging, =a is preferred because the bridging context makes the situationally unique referent anaphorically accessible. Example (8), from a narrative, illustrates:

(8) Context: Description of how to build a house. Previous sentences describe pouring concrete for the floor and lower walls. There has been no mention of the ‘top’.

ɔ³ ka³ jɛ³ nɛ² wa³ nɔ² wɔli=a^{3.1.1}
 3SG.NOM IRR dry REL 3PL.NOM do.IPFV top=DEF
 ‘When it’s dry, they do the top.’

Source: House-building text, spoken by Badiba Olivier Agodio on 8/11/2016

The fact that =a is used in such contexts licensing uniqueness definites in other languages (e.g., bare nouns, weak articles in German), strongly suggests that it is compatible with uniqueness, and that it does not require previous mention in the literal sense. Nevertheless, it refers to a contextually-accessible discourse referent in such contexts, presumably via accommodation.

Finally, contexts with situation-based covariation trigger the use of unique definite NPs in many languages (Schwarz, 2009). In Guébie, though, we find that both =a and bare (singular) NPs are infelicitous in such contexts, which require a bare plural NP instead. The consultant’s comment suggests that =a is impossible because there is no specific **unique** discourse referent for NP=a to refer to (and that situation-binding of =a’s individual index variable is impossible).

(9) Context: In every church we visited, we spoke with the priest.

lagɔ^{3.1} bitə^{2.2} mɛ³ tu⁴¹ la² mɔ² e⁴ jeralɪ^{3.2.2} anɛ^{2.2} e=a^{4.1} mɔna^{2.2}
 god house in all of place 1SG.NOM visit REL 1SG.NOM=PST ?
 (lagɔ-ɲw-a^{3.12}) gali^{3.1} lɔpɛ^{3.1}
 god-AGT-PL elder.PL speak

‘In every church I visited I spoke with the priests/elders.’

Comment: ‘=a is okay on ‘elder’ only if you visited one church and spoke to one elder/priest there, and it’s someone you know about or have been talking about already.’

Summarising our findings for the realisation of NPs in unique definite contexts in Table 1, we see that the pattern of Guébie DEF-marking clearly differs from the Mandarin one. In particular, the distribution of the Guébie DEF-marker =a extends to several unique definite contexts. In contrast, Mandarin only allows bare nouns in these contexts, never demonstratives. Secondly, the unavailability of bare SG NPs in both part-whole bridging and situation-based covariation contexts suggests that bare SG NPs in Guébie differ semantically from their Mandarin counterparts, which

are commonly assumed to type-shift via iota (Dayal, 2004; Jiang, 2012; Jiang, 2020; Jenks, 2018).

Context	Guébie	Mandarin
Larger situation	Bare NP, (=a)	Bare NP
Immediate situation	Bare NP, (=a)	Bare NP
Situation binding	Bare PL NP	Bare NP
Part-Whole	=a	Bare NP

Table 1: NPs in uniqueness definite contexts

3.2 Anaphoric contexts: $NP=a$

In Guébie, the use of $=a$ is obligatory in most anaphoric definite environments. To begin with narrative sequences, which constitute the canonical uses of anaphoric definites, the DEF-marker $=a$ is obligatory, as shown in (10-ab). Crucially, $=a$ is strange at the first mention of ‘president’ in (10-a), but it is strongly preferred once the discourse referent is established in (10-b). This highlights once more the indexed meaning component. Moreover, the felicity of $=a$ on the uniquely referring singleton-NP ‘president’ shows once more that the DEF-marker is compatible with contexts where uniqueness presuppositions are satisfied.

- (10) Context: There was a ceremony in the village yesterday, and I say:
- a. kuβə^{2.31} ane^{4.2} cifi-ɲɔ^{4.1.2} ɔ³ la=a^{31.2} anɛ-du^{2.3.3} galɪa^{2.3.1}
yesterday REL chief-AGT 3SG.NOM call.PFV=PST 1PL.POSS-village great
la² ka-ma-nɪ=ɛ-ɲɔ^{2.2.2.2.2} (#=a)
ASSOC have-become-APPL=3SG.ACC-AGT=DEF
‘the village chief invited the president to the ceremony.’
- b. ka-ma-nɪ=ɛ-ɲɔ=a^{2.2.2.2.2} ɔ³ ko² mɛ³
have-become-APPL=3SG.ACC-AGT=DEF 3SG.NOM be.LOC DEM.PRO.PLACE
anɛ-truli^{2.3.3.1} la² da²
1PL.POSS-play ASSOC place
‘The president attended the ceremony.’

Importantly, anaphoric reference to the referent of uniquely-denoting NPs such as ‘sun’ also requires $=a$, (11-b). Again, such uses are deviant or at least pragmatically odd with demonstratives.

- (11) a. e⁴ ni⁴ jiro^{3.3} bala^{2.2} ɛja^{3.1} coje^{3.1} i³ ʝe² pɛ⁴
1SG.NOM see.PFV sun diminish.PFV and moon 3PL.NOM while sleep.PFV
jaanɛ^{2.3.1}
today
‘I saw the sun and moon go down today.’
- b. jiro-ji#(=a)=a^{2.3.1.1.1} jalia^{2.2.2} titi^{4.4}
sun-SG=DEF=PST be.red very
‘The sun was very red.’

In donkey anaphora, which typically license anaphoric definites over unique definites, =*a* is obligatory, at least with animate referents as in (12):⁴

- (12) ɲɔkpɔ^{3.1} ɲɔkpɔ^{3.1} k^wala^{2.2} goji^{3.1} ne² li-ɔ^{2.2} goji=**a**^{3.1.1}
 person person take.care dog REL eat.IPFV-CAUS dog=DEF
 ‘Every person who has a dog feeds the dog.’

The diagnostic of donkey anaphora is a bit problematic when applied to Guébie though. This is because bare NPs turn out to be possible in such contexts, too, as illustrated in (13). We propose that (13) is felicitous on an indefinite construal of the bare NP, which is compatible with the context in (13). We will return to the indefinite status of bare NPs in section 4.3.

- (13) kɔkɔ^{4.4} mɛ³ e⁴ ka³ ɓabɛɛ^{3.3.3} ɛja^{3.1} wɔli^{4.4} dabara^{4.4.4} kɔ³ ʝɔkɔ-ni-ni^{2.3.4.2}
 everyday in 1SG.NOM IRR sheep and goat market at PART-see-APPL
 wɔli(=**a**)^{4.4} e^{1.4} ɲja^{3.1} (=a optional)
 goat=DEF 1SG.NOM buy
 ‘Every time I see a sheep and a goat at the market, it’s **a/the** goat that I buy.’

A final surprise comes with producer-product bridging, which typically licenses anaphoric definites in other languages (cf. Schwarz, 2009). We would therefore expect Guébie =*a* to be licit in these contexts if it were a run-off-the-mill anaphoric DEF-marker. However, it turns out that =*a* is impossible in Guébie in such contexts. When presented with the Guébie sentence in (14), the consultants did not like the sentence and removed the =*a*. When prompted again if the sentence would be okay with =*a* on ‘author’, they said ‘no’.

- (14) ʝaci^{23.1} ɲja³¹ bagɔ^{3.2} la² lilelu^{3.3.1} ɔ³ wa² cɛli-ɲɔ(#=**a**)^{3.3.2.2} ʝa³¹
 Djatchi buy.PFV book GEN new 3SG.NOM like write-AGT=DEF because
 ‘Djatchi bought a new book because he likes the author.’

Our main results from this and the preceding section are summarised in Table 2 on p. 8. Once again, we see that the distribution of Guébie =*a* is different from that of demonstratives in Mandarin. Generally speaking, Guébie =*a* is used in all contexts with explicit reference to a contextually specified, i.e. indexically accessible individual. Crucially, and unlike with anaphoric definites in many other languages, this extends to contexts in which that individual is unique. Moreover, the use of =*a* in donkey anaphora is similar to anaphoric definites in other languages. As for bare SG NPs, these are felicitous in fewer contexts than in Mandarin. In particular, they are unavailable for situation binding and part-whole bridging, suggesting that such NPs do not denote uniqueness definites in Guébie. Finally, the unavailability of =*a* in producer-product bridging is unexpected and requires further investigation.

⁴The data situation is somewhat complicated by the fact that it is also possible, and maybe even preferred, to use the SG pronoun ‘it’ or the plural NP ‘dogs’ in clause-final position. The co-author also definitely prefers ‘Every person feeds his dog(s)’, with a possessive, to any of the above. In addition, there seems to be some speaker variability regarding the choice of =*a* with inanimate (non-human) NPs, such as, e.g., ‘machete’. Whereas the co-author found =*a* infelicitous or optional with such NPs, the other speakers consulted regularly provided and accepted =*a* with animate and inanimate NPs alike.

Context	Guébie	Mandarin
Anaphoric sequences	=a	DEM
Donkey anaphora	=a	DEM
Product-Producer	Bare NP	DEM
Larger situation	Bare NP, (=a)	Bare NP
Immediate situation	Bare NP, (=a)	Bare NP
Situation binding	Bare PL NP	Bare NP
Part-Whole	=a	Bare NP

Table 2: NPs in uniqueness and anaphoric definite contexts

3.3 On the absence of demonstratives in Guébie

We now turn to a typologically notable claim: Guébie seems to have no demonstratives, thereby constituting an apparent exception to the absolute universal by Diessel (1999, p. 1) that “All languages have demonstratives. . . .” For illustration consider the context in (15), which reliably triggers demonstrative markers in languages that have them. In contrast, there appears to be no way to discriminate between type-identical individuals using an exophoric determiner in Guébie. Speakers give lots of alternatives to avoid the demonstratives in the direct translation, including ‘Which dish do you want?’, or they resort to pragmatic resolution. One speaker commented that “You could say ‘Do you want dish=a?’ (holding one dish up). Then if she says ‘no’ you know she wants the other one.” When presented with the sentence ‘Do you want dish=a or dish=a’ in Guébie, speakers did not accept it, but offered (15) with a semantically enriched relativised NP instead:⁵

- (15) Context: Edwige asks you for a dish, but there are two on the table, so you ask ‘Do you want this dish or this dish?’
 ʃɛ^{3.1} ɔ³ kɔ² ʃa²/da³ nɛ² o ʃɛ^{3.1} ɔ³ kɔ² da³ nɛ²
 dish 3SG.NOM be.LOC here/there REL or dish 3SG.NOM be.LOC there REL
 ‘the dish that is here/there or the dish that is there’

Its failure in the consistency test (Löbner, 1985) constitutes further evidence that =a is not a demonstrative, despite its underlying indexed nature. (16) is judged as deviant “unless a single dog is sleeping while making noise and we already know which dog we’re talking about.” This comment nicely brings out the double nature of =a as an indexed unique definite.

- (16) #goji=a^{3.1.1} ŋɔŋɔ^{2.2} nɛ⁴ goji=a^{3.1.1} sa³ kpəli³
 dog=DEF sleep.IPFV and dog=DEF make.IPFV noise
intended: ‘This dog sleeps and that dog makes noise.’

These facts suggest that =a cannot serve the discriminating function of demonstratives. On this, it patterns with the Akan DEF-marker *nó*, which likewise cannot serve the discriminating function

⁵Two other Guébie speakers likewise had trouble translating these examples, but they resorted to a different rescue strategy, namely to borrow demonstratives from another Kru language (*ne* ‘this’ and *kɔ* ‘that’). This pattern resembles the Akan strategy in (17-c) below.

of demonstratives on its own, cf. Bombi (2018, p. 152) and Owusu (2022, 21ff.). This holds even when the DEF-markers are accompanied by a pointing gesture (Ebert et al., 2020), as illustrated in (17-ab). For the discriminating function to succeed, the second instance of *nó* must either be replaced by the distal marker *yi*, cf. (17-c), or else *nó* must be accompanied by the additional demonstrative marker *saa*, cf. (18):

- (17) a. #Abofra **nó** nim adeɛ paa ɛna abofra **nó** abɔn. [Akan]
 child DEF know thing INT CONJ child DEF not.smart
intended: ‘This child is smart, and that child is not smart.’ (Owusu 2022: 22, ex.28)
- b. #Me-pɛ car **nó** n-yɛ car **nó**
 1PL-want car DEF NEG-COP car DEF
 ‘I like that car [pointing at Audi] but not this car [pointing at Renault].’
- c. Me-pɛ car **nó** n-yɛ car **yi**
 1PL-want car DEM NEG-COP car DEM
 ‘I like that car [pointing at Audi] but not this car [pointing at Renault].’
- (18) **Saa** abofra **nó** nim adeɛ paa ɛna **saa** abofra **nó** abɔn. [Akan]
 DEM child DEF know thing INT CONJ DEM child DEF not.smart
 ‘This child is smart, and that child is not smart.’ (Owusu 2022: 22, ex.28)

Summing up, it appears neither Akan *nó* nor Guébie =*a* can (easily) serve as the linguistic support of accompanying pointing gestures on their own, but this is one of the defining properties of demonstratives (Lyons, 1999, Ahn, 2022). One could formally model this by specifying that =*a/no* do not have a semantic argument slot for the pointing argument, cf. Ahn (2022). Alternatively, one could also assume that =*a/no* alone cannot function as semantic dimension shifters that would shift the not-at issue meaning of the pointing gesture to the at-issue content (Ebert et al., 2020). In Akan, this would then be the function of the additional marker *saa*, whereas Guébie would lack a dimension shifter altogether for reasons unknown to us at present.

4 Analysis

This section first presents in subsection 4.1 our analysis of Guébie =*a* as an *indexed unique DEF-marker*. This makes =*a* a novel type of DEF-marker that has not been discussed in the previous literature on DEF-marking in natural language. Subsection 4.2 lays out how the analysis accounts for the data and presents some further correct predictions. Subsection 4.3 briefly looks at the meaning of Guébie bare SG NPs. It argues that such NPs in Guébie are indefinite, unlike their unique-definite bare NP counterparts in better studied languages, such as Mandarin. Subsection 5 then concludes by discussing some more general implications of our analysis for the treatment of (indexed) definites and bare NPs in natural language.

4.1 Guébie =*a* as an indexed uniqueness DEF-marker

In the literature, Schwarz (2009)-style analyses of definites assume that there are two types of definite NPs: (i.) those with uniqueness presuppositions (unique definites) in (19-a); and (ii.)

those with indices, such as, e.g., anaphoric definites, in (19-b).

- (19) a. Unique definites (*the dog*): $\iota x[\text{dog}(x)]$ ‘the unique x s.t. x is a dog’
 b. Indexed definites (*that₁ dog*): $\iota x[\text{dog}(x) \ \& \ x = g(1)]$ ‘the unique x s.t. x is a dog and $x = \text{that}_1$ ’

Jenks and Konate (2022) moreover argue that anaphoric definites are part of a larger category of indexed definites. This larger category includes demonstratives as well as pronominal definites of the ‘we linguists’ variety.⁶

Generally, indexed definites as in (19-b) are used whenever there is a need to point back to a particular individual in the discourse, such as with anaphoric definites, to discriminate between different individuals in a context, such as with exophoric definites, or to bind that index variable, as with donkey anaphora.

Given this, we have seen very good evidence that Guébie $=a$ is an indexed definite as well: (i.) the marker is always used in anaphoric contexts, cf. (10-b); (ii.) it can be used to refer to contextually salient exophoric individuals, as long as they are unique, cf. (7); (iii.) it is always referential, and resists situation-based covarying readings, cf. (9); and (iv.) it is required in donkey sentences, cf. (12).

At the same time, $=a$ differs from typical demonstratives, which likewise have an indexical meaning component, in still including a uniqueness requirement. In particular, it cannot discriminate different individuals in a particular context, cf. (16). And it occurs in a number of contexts where uniqueness holds, even in extended situation or global situations, cf. (4)-(5), and with anaphoric uses of immediate situation definites, cf. (6-a).

As for the formal analysis, recall from section 2 that previous analyses of familiarity-indexed definites explicitly weaken the uniqueness requirement of definites. In Schwarz (2009) and Jenks (2018), uniqueness is evaluated relative to the unique individual denoted by the index, making it essentially vacuous, cf. (2) above. In contrast, Dayal and Jiang (2022) and Owusu (2022) argue that demonstratives/familiar definites explicitly encode anti-uniqueness relative to some larger context of utterance, cf. (3). These treatments cannot account for the distribution of Guébie $=a$, which seems to come with an absolute uniqueness requirement.

We propose that the meaning of $=a$ includes the following two semantic components: (i.) a contentful uniqueness presupposition, which is NOT relativized to the index, and which accounts for the absence of discriminating, demonstrative-like uses; and (ii.) an index, which will force the $=a$ -marked DP to refer, to be anaphoric, or to be dynamically bound. The meaning of $=a$ is repeated in (20) from (1) above. The first conjunct in the presupposition formalises the uniqueness condition, the second one the indexicality condition on the felicitous use of $=a$.

$$(20) \quad \llbracket = a_y \rrbracket^g = \lambda s. \lambda P_{\langle s, et \rangle}: \exists! x [P(x)(s)] \wedge \iota x [P(x)(s)] = g(y). \iota x [P(x)(s)]$$

⁶Guebié has an additional DEF-marking strategy involving a combination of NP and pronoun, which is illustrated in (i), and the distribution and function of which we do not yet understand:

- (i) $e^4 \text{ ji}^3 \text{ [butike}^{2.3.2} \text{ e}^3] \text{ me}^3 \text{ me}^2$
 1SG will store 3SG to go
 ‘I will go to the store.’

According to (20), if there is exactly one x that has property P in situation s , and if this x is also identical to some anaphorically or exophorically accessible discourse referent, then $NP=a$ will pick out this indexed and unique individual.

The intuition behind our analysis seems quite similar to the notion of salience in Barlew (2014), even though in his specific formal implementation of the meaning of the Buli DEF-marker $=te$, uniqueness is again relativized, and thereby weakened, to some salient individual in the context. For Barlew, $sal(x,c)$ in (21) requires that both the speaker and addressee are paying attention to x , where x is a weakly familiar DR in the context at utterance time. Salience and uniqueness condition in (21) are presuppositions for the felicitous utterance of $=te$ in context c .

$$(21) \quad \llbracket =te \rrbracket^c = \lambda P_{\langle e,t \rangle} : \exists ! i \in D_c [P(i) \wedge sal(i,c) \wedge \forall j \in D_c [P(j) \wedge sal(j,c) \rightarrow j = i]]. i$$

Reference to a unique and salient individual would also account for the Guébie cases involving anaphoric or exophoric reference discussed so far. When applied to the part-whole bridging example in (8), this would entail that the top of the concrete is made salient by the overall discourse structure, e.g., in terms of relevant QUDs: Since the preceding discourse chunks in (8) are about the foundation and the lower walls and the concrete, they would make the surface of the concrete salient and hence a suitable referent for $NP=a$. Alternatively, reference to salient individuals may just be a frequently attested subcase of indexed reference, as salience is a sufficient condition for this type of reference. We will leave a more detailed formal comparison of our analysis and a salience-based approach to another occasion.

4.2 Accounting for the data and some further predictions

We have already seen how the analysis accounts for standard instances of anaphoric or exophoric reference when the indexed individual is unique in the evaluation situation. The strongest evidence for the analysis in (20), however, comes from the fact that $=a$ -marking is found on anaphoric singleton-denoting NPs, such as ‘president’ in (10-b) and ‘sun’ in (11), and also with the topic-situationally unique ‘director’ in (6-a). In particular, the licit occurrence of $=a$ on singleton-denoting NPs differentiates Guébie $=a$ from Akan *nó*, and motivates its analysis as an indexed unique definite.

Moreover, as the uniqueness prediction must hold in absolute terms, against the evaluation situation, we make an additional prediction. Anaphoric reference to NPs with (prototypical) non-singleton reference, such as, e.g., ‘man’ should be infelicitous because of a violation of uniqueness. This prediction seems borne out as can be seen from the infelicity of (22) in the following context:

(22) We were previously talking about a man among other men.

#jaci^{23.14} le² ɲokpo(=a)^{3.1.1}
 Djatchi.NEG be person=DEF
intended: ‘Djatchi is not (the) man.’

The consultants judged (22) as weird both with and without $=a$ in this context. Instead, the preferred option is a different sentence like ‘It’s not Djatchi’ that does not provide an opportunity for placing the DEF-marker. Interestingly, (22) is possible with $=a$ in a different context where we are looking for someone, but Djatchi is not this person. We contend that this is a case of

accommodation of an immediate search-situation containing just a single man.

Finally, $=a$ is ruled out in the following context in (23) because of uniqueness and its non-demonstrative nature.

- (23) Context: There are ten identical cats. I point to one and say ‘I want that cat’.
#e⁴ jira^{2,3} sɛpi=**a**^{2,4,4}
1 SG.NOM ask cat=DEF
‘I want the/that cat’

Again, the consultant’s comments in (23-a) with $=a$ are telling. While not the first option given, the sentence is judged to be okay in a slightly changed situation where there are 10 identical cats and you point to one and say ‘I want this cat’, as long as you are picking up the one cat or making very clear which one it is. This also seems to involve a uniqueness-driven accommodation of a sufficiently small immediate situation containing just one cat. The bare NP ‘cat’ is not an option in this context because it is not necessarily clear which cat you want. Again, this is compatible with an analysis of bare SG NPs in Guébie as indefinites.

4.3 Bare NPs are indefinite NPs

Turning to the semantics of bare SG NPs in Guébie, a natural solution given their default occurrence in larger and immediate situation uniqueness contexts, cf. (4), (10-b) and (6-a) would be to treat them as unique definites with a covert iota-operator, on a par with bare NPs in Mandarin and Thai (Jenks, 2015; Jenks, 2018), and in line with the analyses of definite bare nouns proposed in earlier work, such as Dayal (2004). A problem with this approach, however, is that the distribution of bare NPs in Guébie differs from that of bare NPs in Mandarin and Thai, cf. Tables 1 and 2 above. In particular, bare SG NPs in Guébie are infelicitous with part-whole bridging or situation-based covariation, unlike in Mandarin/Thai with covert iota-NPs. Conversely, bare SG NPs are licit with producer-product bridging in Guébie, unlike in Mandarin or Thai, where the indexed demonstrative is sometimes required.

Given these distributional differences, we conclude that bare SG NPs in Guébie are not unique definite NPs. Instead, and following up on an analysis in Philipp (2022) for bare NPs in Akan, we will analyse Guébie bare NPs as indefinite NPs that make a rather weak semantic claim on the existence of an individual with the NP-property in question. Crucially, this existence claim is also satisfied with uniquely referring singleton-NPs such as ‘sun’ or ‘president’. In the absence of a plain uniqueness DEF-marker in Guébie, bare indefinite NPs are not blocked from referring to unique referents by an anti-presupposition of non-uniqueness, unlike their indefinite counterparts in English or German, cf. Heim (1991). There is, however, another anti-presupposition triggered by the existence of the overt indexed unique DEF-marker $=a$. This anti-presupposition requires that the referent of the bare NP be non-indexed, i.e. unfamiliar or novel in the context. This directly accounts for the infelicity of Guébie bare SG NPs in anaphoric contexts, perhaps with the exception of the open product-producer puzzle. There hence remain two subcases of the felicitous use of a bare SG NP in Guébie, shown in (24-ab).

- (24) a. non-indexed + singleton NP-restriction ('sun', 'director', ...): uniqueness DEF
 b. non-indexed + non-singleton NP-restriction ('dog', 'table'): non-specific INDEF

Firstly, bare NPs can be used with novel instances of singleton-referring NPs, as in (4) and (6-a). In such cases, they are surface-equivalent to bona fide uniqueness DEFs even though they come with a different underlying semantics. Secondly, they can be used with novel instances of NPs with non-singleton reference, in which case they receive the default interpretation of a non-specific indefinite NP, also familiar from the discussion of bare NPs in Akan in Philipp (2022). The following example illustrates the use of bare NPs as non-specific indefinites:

- (25) e² ka² no³ gba¹ e² ka³ na-briki^{24.4.1} **fitə**^{2.3} sra² ne²
 2SG.NOM IRR do that 2SG.NOM IRR 2SG.POSS-brick.FR house build REL
 'If you want to build **a house** with bricks.
 Source: House-building text, spoken by Badiba Olivier Agodio on 8/11/2016

If our analysis is on the right track, it suggests that Guébie lacks access to an ι type-shift altogether.

5 Conclusion

With the lexical entry for the Guébie DEF-marker =*a* in (20), we offer support for the idea that there is a family of indexed definite expressions (Jenks and Konate, 2022), which =*a* is a novel instance of. This conclusion necessitates a revision of the commonly accepted tripartition in (26), based on Ahn (2017), where anaphoric DEFs and demonstratives form the subclass of indexed definites, to the new typology in Table 3. Here, the novel type of DEF-marker is situated with traditional anaphoric DEFs and demonstratives.

- (26) uniqueness DEFs – anaphoric DEFs – Demonstratives

Unique Definites	Indexed Definites		
ι	Anaphoric DEF	Indexed Unique DEF	Demonstratives

Table 3: Definite Expression

Of course, this revision in the typology of DEF-marking has repercussions for cross-linguistic semantic research in definiteness phenomena. Specifically, it necessitates a widening of the empirical search space and the corresponding diagnostic tools.

The difference in =*a*-marking with donkey anaphora in (12), as opposed to the absence of such =*a*-marking with situation-based covariation in (9), furthermore has implications for the formal analysis of donkey anaphora. In particular, Elbourne (2005) argues that donkey anaphora should be analysed on a par with situation-based covariation, namely by a process of situation-binding. In contrast, Schwarz (2009) argues for a different treatment of situation-based covariation, on the one hand, and donkey anaphora, on the other. The different marking patterns observed with situation-based covariation and donkey anaphora in Guébie seem to provide an argument for Schwarz's

non-unified account, at least as far as Guébie is concerned: The Guébie data suggest that donkey anaphora should receive a dynamic semantic analysis in terms of a DRT-style binding of $=a$'s individual index by some discourse-accessible individual discourse referent (Kamp, 1981, Heim, 1982); cf. Schlenker (2011) and Jenks (2018) for similar conclusions from ASL and Mandarin. The unavailability of bare SG NPs in situation-based covariation moreover provides additional support for our analysis of Guébie bare SG NPs as semantically indefinite. Being indefinite, they do not seem to contribute a (covert) definite determiner with a situation variable to be bound. This would however be required for ensuring uniqueness of the NP-denotation relative to the individual situations quantified over.⁷

Next, the curious absence of demonstratives in Guébie also raises some important questions. In view of the analysis of demonstratives as dimension shifters in Ebert et al. (2020), there is for instance the question of whether Guébie has other indexical elements that could accompany pointing or other manual gestures, such as, e.g., ‘such’, ‘this way’, ‘so’ etc. At the same time, it is well-known from diachronic work that DEF-articles develop from deictic demonstratives via the intermediate step of non-deictic demonstratives, cf. Lyons’s (1999, p. 331) *definiteness cycle*. Relatedly, Simonenko and Carrier (2022) show that the pointing-function of demonstratives is one of the first functions to disappear on the developmental path from demonstratives to definites (cf. also Ahn, 2022). If so, $=a$ may well be in the first stage of its diachronic path from a full-blown demonstrative to a definite determiner, namely at the stage of a *neutral demonstrative* in Lyons’ terminology. A final question is why there is no other functional element in Guébie to take over the lost deictic pointing function of demonstratives, on a par with Akan *saa* in (18), for instance.

Finally, what are we to make of the apparent violation of Diessel’s (1999, p. 1) absolute universal that all languages have demonstratives? In view of the fact that demonstratives constitute a subtype of indexed definite, we propose to maintain a slightly weaker but more precise version of Diessel’s original claim, cf. (27):

(27) All languages have indexed definite NPs.

This version of Diessel’s universal suggests that all languages share the ability to use logical variables in definite expressions to guarantee reference to contextually salient individuals.

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⁷The use of a bare PL NP with situation-based covariation in (9) remains puzzling to us at present. One possibility would be that such cases in Guébie do not involve situation-binding at all, and that the pairing of churches and priests is achieved by a process of PL-based cumulativity.

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