# The history of sentence negation in the Gulf of Guinea Creoles[1]

Tom Güldemann
Humboldt University Berlin/Max Planck Institute for the Science of Human History Jena
&
Tjerk Hagemeijer
Universidade de Lisboa

We discuss the emergence of the cross-linguistically marked discontinuous/final negation pattern in the four Gulf of Guinea Creoles by taking into account the different linguistic strata and their structural profiles that contributed to the formation of the protolanguage, in particular southern Nigerian and western Bantu languages. While the phonetic source of the final negation marker (*fa/f/wa~va*) in the creoles remains unclear, we argue that its syntax and functions, which also include emphasis, show a strong parallel with utterance-final markers in the contributing African languages. Although the trigger of these patterns should be sought in the earliest African contribution from Nigeria, their entrenchment and full grammaticalization can be attributed to heavy secondary contact with languages of the Kongo Bantu cluster.

**Keywords**: Gulf of Guinea Creoles, sentence negation, substrate influence, Benue-Congo languages, areal typology.

## 1. Introduction

Sentence negation that exhibits a discontinuous pattern with two negation markers or an exclusive final marker are among the most salient features of the four Portuguese-related Gulf of Guinea Creoles (henceforth GGCs). As SVO languages, where negation tends to be preverbal (see, e.g. Dryer 1989, 2009; Kahrel 1996), this feature constitutes a typologically marked pattern. In contact languages, these patterns are also generally rare but can be observed in Berbice

Dutch, Palenquero, Afrikaans and in a few cases that are less related to European languages, such as Media Lengua and Sango (Michaelis *et al.* 2013).

Here we address how the bipartite and final negation patterns developed in the family, tracing the phenomenon from the ancestor language, proto-GGC, to the four contemporary languages, Angolar, Fa d'Ambô, Lung'Ie, and Santome, focusing particularly on how the different linguistic strata involved in the creolization process contributed to the emergence of the final marker. The paper is organized as follows. Section 2 discusses the patterns of sentence negation and emphasis in the four GGCs. Section 3 briefly addresses the typology of negation from an African areal perspective. In section 4 we analyze the contribution and interaction of the different strata involved in the formation and development of the GGCs. Our conclusions are presented in section 5.

## 2. Negation and emphasis in the Gulf of Guinea creole family

The examples in (1)-(4) show the standard sentence negation patterns in all four GGCs. Santome (ST), Fa d'Ambô (FA) and Angolar (AN) exhibit a standard bipartite pattern, whereas Lung'Ie (LU) only exhibits a final marker. Most creole examples are from ST and remain unmarked, whereas all the other examples are followed by the abbreviations above.

(1)    *Tlaba*   ***na***   *ka*     *mata ngê*   ***fa***.

      work    NEG   HAB    kill    people    NEG

      'Work doesn't kill people.' (corpus data)[2]

(2)    *No*   ***na***   *tan*   *sebe=**f***.                        FA

      1P    NEG   IT     know=NEG

      'This is all we know.' (lit. we do not know more things)

      (Post 1997: 293)

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[2] The corpus data used in this paper are published at http://alfclul.clul.ul.pt/CQPweb/ and the corpora are described in Hagemeijer *et al.* (2014). Note that in some cases, especially for the Fa d'Ambô data, the orthographic transcription used in this paper may differ from the online data.

(3)  *Nê  ũa  no  **na**  thêka  bê  ôtô  **wa**.*      AN

Not  one  1P  NEG PROG  see  other  NEG

'No one of us sees the other.' (Maurer 1995: 131)

(4)  *Ê  we posan  ki  riman  sê  **fa**.*      LU

3S  go  town  with  sister  POSS  NEG

'She didn't go to town with her sister.' (Maurer 2009: 133)

The preverbal marker in AN, FA and ST typically occurs between the subject
and the TAM-complex; it has optional status in AN (Maurer 1995: 131). The
final marker in these languages typically occurs in clause or sentence final
position, depending on the syntactic structure. It always follows complements,
such as nouns and complement clauses, as well as most non-clausal adjuncts
and low clausal adjuncts, as shown by (5)-(8) from ST.

(5)  *Ê  **na**  ka  bila konsê  xitu ku  kwa sa nê  **fa**.*

3S  NEG  HAB turn  know  place REL  thing be  LOC.3S NEG

'He doesn't recognize the place where the thing is.'

(Hagemeijer 2011: 132)

(6)  *Ome  se  **na**  fla  kuma  ê  sa  kunhadu*

man  DEM  NEG  say  COMP 3S  be  brother-in-law

*bô  **fa**.*

POSS  NEG

'That man didn't say he's your brother-in-law.'

(Hagemeijer 2007: 178)

(7)  *A  **na**  mêsê  pa  bô  be  **fa**.*

3P  NEG  want  COMP 2S  go  NEG

'They don't want you to go.' (Hagemeijer 2009: 146)

(8)  *Zon* **na** *kume plumê zo* *pa* *bêbê* **fa**.

PN   NEG   eat   first   then   for   drink   NEG

'Zon didn't eat first to drink next.' (Hagemeijer 2009: 149)

Since the final marker does not negate the content expressed in embedded clauses, negation of these domains requires an additional preverbal negation marker, but still only one final marker, as illustrated in (9).

(9)  *Ome* *se* **na** *fla kuma* *ê* **na** *sa* *kunhadu*

man   DEM   NEG say   COMP 3S   NEG be   brother-in-law

*bô* **fa**.

POSS  NEG

'That man didn't say he's not your brother-in-law.'

(Hagemeijer 2007: 178)

With sentence-level adjunct clauses, on the other hand, the occurrence of the final marker is restricted to the same clausal domain the preverbal marker occurs in (10-11).

(10)  *Mina* **na** *ka pô kaza ku pobli* **fa**, *punda* *pobli*

girl   NEG   HAB can marry with poor   NEG because   poor

*sa* *pobli*.

be   poor

'The girl cannot marry a poor guy, because a poor guy is a poor guy.

(Hagemeijer 2009: 150)

(11)  *Xi* *ê* **na** *bê faka* **fa**, *ê* **na** *bêbê vin* **fa**.

if   3S   NEG   see knife   NEG 3S   NEG   drink wine NEG

'If he doesn't find the knife, he won't drink wine.'

(Hagemeijer 2009: 150)

In addition to the bipartite/final patterns, the GGCs also exhibit cases of exclusive preverbal negation, which is exemplified in (12-15). This pattern also occurs in LU, which otherwise lacks a preverbal negation marker for default negation patterns.

(12) *Ê lôkê    kwa bisi rê,    pa    ê    **na**  nana.*    AN

3S clean.up thing dress POSS    PURP    3S    NEG spoil

'He cleaned up his clothes, so they wouldn't spoil.'

(Maurer 1995: 132)

(13) *A    têê    kha    bixê    baanku,  pa    **na***

3P    also    MOD    dress.3S    white    PURP    NEG

*de    ôô    têndê.*

give.3S eye    understand                    FA

'They should also dress him in white, so that he wouldn't understand [what they are going to do].' (corpus data)

(14) *Soku    n    sa    tlaxi    san    ku    sustu,    pa    san*

So    1S    be    behind    lady    with fear    for    lady

***na***    *da    mu    sôtxi.*

NEG    give    1S    beating

'So I stood frightened behind the lady, so she wouldn't hit me.'

(Hagemeijer 2015: 306)

(15) *Txi fisa poto pa    txi **na** kudi    mi.*    LU

2SG close door PURP    2S    NEG answer    1SG

'You closed the door, so you didn't have to answer me.'

(Maurer 2009: 210)

The data from FA and ST further show that the exclusive preverbal pattern also occurs in other semantically and pragmatically marked constructions, which share with purpose clauses the lack of the direct assertion of negation, as shown in ST and FA examples (16-19).

(16)  *Milhon   pa      bô **na**   b'êlê.*

better    COMP    2S  NEG   see-3S

'You better don't see him.' (Hagemeijer 2009: 151)

(17)  *Kloson **na**    ka     dwê    sun    an?*

heart  NEG  HAB  hurt   you    INT

'Doesn't your heart ache?' (Hagemeijer 2009: 152)

(18)  *Kê    kwa!?  N    **na**    fada   nansê  kwa    se!*

what   thing  1S     NEG   tell    2P       thing   DEM

'What!? Didn't I tell you so! ' (Hagemeijer 2009: 153)

(19)  *Pintxu    **ban**[3]      tan    da       kulu-kulu   bo vaa*

beware    2S.NEG     REP   get.up   early-early  2S fly

*fo        khai.*

come.from  home                                              FA

'Don't you dare get up very early and escape from home!'

(corpus data)

In his chapter on ST, which is among the oldest documents describing aspects of the language, Negreiros (1895) represents the final negation marker most commonly with a nasal ending, *fã, fan* or *fãn*, and, less commonly, without a

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[3] *Ban* results from the contraction of 2SG *bo* and the preverbal negation marker *na*.

nasal ending, *fa* or *fá*, as shown in examples (20-22) and the respective adaptations of the orthography:[4]

(20) *Mina muála*    *cu*    ***náchi***    *bôa*    ***fa***,    ***ná***    *cá*

*Mina-mwala*    *ku*    *naxi*    *bwa*    *fa*    *na*    *ka*

girl      REL    not.yet    be.mature    NEG    NEG    HAB

*tandji*    *homê*    *ni*    *liba*    *pêma*    *fã.*

*tanji*    *ome*    *ni*    *liba*    *pema*    *fa.*

touch    man    LOC    top    palm tree    NEG

'A girl who isn't a woman yet does not entertain a man who climbs palm trees.' (Negreiros 1895: 340)

(21) *Plôcu*    ***ná***    *piá*    *ó sé*    ***fan***,    *pundá*    *ê*    *çá*    *zudê.*

*Plôkô*    *na*    *pya*    *ose*    *fa,*    *punda*    *ê*    *sa*    *zudê.*

pig      NEG    look    sky    NEG    because    3S    be    Jew

'The pig doesn't see heaven, because he is Jewish.'
(ST, Negreiros 1895: 336)

(22) *Nêũa*      ***ná***    *scá*    *iên*      ***fãn***.

*Nê*    *ũa*    *na*    *xka*    *yê*      *mu*    *fa.*

not      one    NEG    PROG    please    1S    NEG

'Not one [of the women] pleases me.' (Negreiros 1895: 348)

In our data of contemporary ST, we found a few occurrences of *fan*, instead of *fa*, in negative imperative sentences, most of which were produced in 1997 by a highly fluent, elderly ST speaker and storyteller.[5]

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[4] Negreiros also provides a sentence with final marker *fô*, which results from the contraction of *fa* and the final particle *ô*, yielding a more emphatic negation that still occurs in contemporary ST and also in AN.

[5] In contemporary ST, negative imperatives typically exhibit the discontinuous negation pattern, i.e. we are not dealing with cases of preverbal negation followed by a final emphatic marker.

(23)  *Nansê*  ***na***  *pont'e*  *palaxu*  ***fan!***

2P    NEG  indicate:3S  palace    NEG

'Don't you indicate the palace to him!' (corpus data)

(24)  *Sun Alê,*  *kidalê,*  ***na***  *mata padjin*  *mu*  ***fan***  *ê!*

Mr. King  please  NEG kill  godfather  POSS  NEG  EMPH

'Mr. King, please, don't kill my godfather!' (corpus data)

Example (23) was produced during the narration of a folk story, whereas (24) occurred during a part of the story that is traditionally sung within the story line. While such forms are not attested in sources for the other GGCs, they raise several questions. First of all, it should be noted that the language samples and word list in Negreiros' (1895) chapter suggest that we are dealing with a reliable source, since ST grammar of the late 19th century does not seem to be substantially different from the contemporary language, although, understandably, the orthography used shows influence from Portuguese.

A few instances of the preverbal negation marker are also marked with a nasal diacritic as *nã*. Despite the lack of occurrences of *nã* in modern standard negation[6] in any of the contemporary GGCs, ST possesses a commonly used complex preverbal negation marker *nanta~nantan* 'not anymore', which is possibly derived from the contraction of Portuguese *não* 'not' + *torna(r)* 'return' (cf. also FA *natan~n'tan* and AN *na tô*) and where the initial segment is nasalized. This suggests that in older stages a nasalized preverbal form may have existed. In any case, even if Negreiros' use of *nã* was influenced by Portuguese *não*, this argument fails to apply to the final nasalized marker, which seems to be unrelated to Portuguese.

Interestingly, however, the use of nasalized *fã* in Negreiros (1895) is not limited to negative sentences. Example (25) occurs in a context of (positive) emphasis, an imperative clause. In fact, this use of *fan* is still commonly attested in contemporary ST (cf. 26-28).[7] Note that the nasality of emphatic *fan* is sometimes hardly perceptible or absent in the contemporary language.

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[6] FA, however, exhibits a form *nan* [nã] in contexts of absolute negation, in addition to *no* and *na* (Zamora 2009: 89).

[7] The standard marker of affirmation in ST is *efan* 'yes', which appears to be the contraction of *e*, which may occur on its own, and *fan*.

(25) *Subi    péma    longu, piá chi ventu 'ndá cu   ê   **fã**:...*

      *Subli   pema    lôngô, pya xi ventu nda ku   ê   fan:...*

      climb  palm tree high   look if  wind   walk with 3S  EMPH

      'Climb the high palm tree, but be careful with the wind…'
      (Negreiros 1895: 340)

(26) *Ba  non **fa**.*[8]

      go   we  EMPH

      'Please let us go.' / 'Shall we go?' (Ferraz 1979: 118)

(27) *Aglasa mu     sa   Ernestino  **fa**.*

      name    POSS   be    Ernestino  EMPH

      'My name is Ernestino!' (corpus data)

(28) *Fô        wê   mu     **fan**!*

      get.out   eye  POSS   EMPH

      'Get out of my sight!' (Hagemeijer 2007: 263)

Like other final particles, such as *ô* in (29), which occurs with an emphatic function in all four GGCs, *fan* is also able to follow the negation marker (30), which means they do synchronically not compete for the same syntactic slot.

(29) *Sun   **na**   tôlô   **fa**    ô!*

      3S    NEG  silly   NEG  EMPH

      'He's no fool!' (Hagemeijer 2009: 146)

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[8] Ferraz (1979) refers to *fa* in this example as a respectful morpheme.

(30) *Kyê    avo,     punda  dêsu  avo,    **na***

EXCL grandma because God    grandma NEG

*da  mu  **fa    fan**!*

hit  1S    NEG EMPH

'Oh, please grandma, don't beat me!' (Hagemeijer 2009: 147)

A final marker similar to ST *fan~fa* is also found in contemporary FA, where it takes on the form *fa* or *wa* (*f* being the standard final negation marker), as shown in (31). Final *wa* in FA, whose form is reminiscent of the AN final negation marker *wa*, also exhibits a function of insistence which goes beyond the imperative domain, as illustrated in (32), where it follows the final negation marker.[9]

(31) *Khôlê   **fa/wa**!*                                    FA

   run     EMPH

   'Come on, run!' (corpus data)

(32) *Man     pêêndê mêdji   **f    wa**.*                    FA

   1S.NEG catch    month    NEG EMPH

   'I'm not pregnant indeed.' (corpus data)

Among the particles in AN and LU which bear some phonetic resemblance to the ST and FA emphatic markers above, we find *a* and *ŭa*, as illustrated in (33-34). The AN item is a sentence final marker similar to the ST and FA markers above (Maurer 199: 151), whereas the scope of LU emphatic *ŭa*, also meaning 'one', is restricted to nouns, verbs, and adjectives in exclamative sentences (Maurer 2009: 151).

(33) *Pema    e     futaru **a**!*                          AN

   palm tree DEM stolen    EMPH

   'This palm tree was stolen.' (Maurer 1995: 151)

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[9] Although we did not find evidence of the emphatic use of *wa~va*, AN exhibits several emphatic particles, one of which is *a* (cf. Maurer (1995: 151) for an example).

(34)    *Ufaka   sê      sa      kota    **ũa***!                                LU

       knife   DEM    be      cut     EMPH

       'This knife cuts badly!' (Maurer 2009: 151)

Table 1 sums up the standard negation patterns and the patterns found in contexts of non-asserted negation, as well as certain sentence final markers which we broadly label emphatic markers. Note that other final markers, such as *ô* or *ê*, can be found as well.

**Table 1: Negation patterns in the GGCs**

| Language | Standard sentence negation | Negation in purpose clauses, etc. | Emphasis |
|---|---|---|---|
| ST | *na…fa* | *na…* | *fa~fan* |
| FA | *na…f* | *na…* | *fa, wa* |
| LU | *…fa* | *na…* | *(ũa)* |
| AN | *(a~na)…va~wa* | *na…* | *a* |
| Proto-GGC | *na/nã…fa/fã | *na/nã… | *fã |

The patterns described above make it possible to reconstruct, besides simple preverbal negation in marked environments, a default discontinuous negation pattern. While Hagemeijer (2007, 2015) proposes *[na...fa] as the reconstructed pattern and forms, including the additional data from the 19th century data, emphatic markers, and complex preverbal markers (cf. Table 2) gives rise to the hypothesis that the pattern in the common ancestor, the proto-GGC, may have been *[na...fã] or *[nã...fã]. While the four daughter languages drifted apart, additional effects of the so-called "Jespersen's cycle"[10] are visible across the family in the sense that the preverbal markers have become optional in AN, whereas LU almost fully lost it. Irrespective of the proposed reconstructions, there are two possible paths for the development of the final negation marker. Either it started out as a genuine negation marker or, alternatively, as a discourse particle for more general but pragmatically marked contexts that subsequently started specializing for negation and simultaneously maintained an emphatic function in at least ST and FA. These two diachronic hypotheses are intrinsically related to the etymology of the final negation marker and its syntactic distribution, which will be addressed in the following sections. Finally, a

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[10] We conceive here of Jespersen's cycle in a broader sense as negation renewal (and associated subsequent processes) by means of postverbal elements without reference to any specific lexical source.

possible connection between the emphatic markers *ũa* in LU and *wa* in FA, on the one hand, and negation marker *va~wa* in AN, on the other hand, deserves further research.

## 3. Clause-final negation from a typological and African areal perspective

In the cross-linguistic surveys of the position of negative morphemes by Dryer (e.g., 1989, 2013), it is observed that there is a universal preference to place them before the verb, irrespective of a language's basic word order type. Since this trend is even stronger in verb-medial languages, the GGCs display a typologically rare pattern.

From a geographical perspective, however, the feature of the GGCs is far less remarkable, as they are located close to the African Atlantic coast from Nigeria down to Angola and have been in historical contact with various languages of this area. As shown by Dryer (2009) and Idiatov (2010, 2012, 2018), clause-final negation is an areal trait of a large zone of linguistic convergence called Macro-Sudan belt (cf. Güldemann 2008, 2010, 2018). This excludes most of Narrow Bantu but comprises the languages of the northern coast of the Gulf of Guinea. Idiatov and Van de Velde (2015) propose that this clause-final marking, itself emerging recurrently from negation renewal, may be related to a particular conversational strategy manifesting itself more widely by series of utterance-final, pragmatically oriented "(inter)subjective" markers. This means that such negative elements should be seen in a synchronic paradigmatic and possibly also diachronic relationship to non-negative attitude markers.

Outside of the Macro-Sudan belt, numerous Bantu languages, whose inherited negation pattern is preverbal (cf. Westphal 1958; Kamba Muzenga 1981; Güldemann 1996, 1999), display recurrent structural innovations in line with Jespersen's cycle leading to clause-final or immediately post-verbal negation marking (cf. Westphal 1958: 301f; Güldemann 1996: 256-8; Devos & van der Auwera 2013).

(35)    ***Ki*-*bá*-*kú*-*já*-*há.***                                                                Nkoya (L62)

       NEG-3P-FUT-eat-NEG

       'They will not eat (today).' (Yukawa 1987: 145)

(36)   a.   ***Ha**-tú-vi.mbandà=**kó**.*                 Umbundu (R11)

            NEG:1P-8.doctor=NEG

            'We are not doctors.' (Schadeberg 1990: 54)

     b.   ***Ka**-tu-a-kokele    ukolo     **ko**.*

            NEG-1P-PST-pull  rope       NEG

            'We did not pull the rope.' (Westphal 1958: 300)

(37)   ***Si**-da-mu-'ona     **tayu**.*               Sena (N44)

            NEG:1S-PST-3S-see  NEG

            'I did not see him.' (Torrend 1900: 162)

(38)   ***Hi**-tu-ku-zata     mudimu **ku**.*         Lunda (L52)

            NEG-1P-FUT-?do  work     NEG

            'We will not do this work.' (Westphal 1958: 300)

(39)   *U-yenda **lili**.*                  Matumbi (P13)

            2S-go    NEG

            'You don't go.' (Krumm 1912: 37)

(40)   *A-ki-tola     ngöndi  **yë**.*         Ndendeule (N101)

            3S-PST-take beans    NEG

            'He didn't take beans.' (TG field notes)

The recurrent reinforcement of negation by markers after the verb is exemplified by (35)-(40). In some cases, the new elements co-occur with the old prefixes, as in (35) from Nkoya, (36) from Umbundu, (37) from Sena, and (38) from Lunda, while in others no preverbal prefixes occur, as in (39) from Matumbi and in (40) from Ndendeule. One can also observe variation across Bantu in terms of the markers' syntactic position and morphological status, namely between clause-final and postverbal, and between particle, verbal enclitic, and verbal suffix. All these data justify the conclusion that Jespersen's cycle is a latent phenomenon

in Narrow Bantu languages. The data in Westphal (1958) and Kamba Muzenga (1981) already point to larger geographical patterns regarding the distribution of different negation strategies in the family whereby final negation has a geographical hotbed in the west-central Bantu area that includes the Atlantic coast.

In summary, while the GGCs display a cross-linguistically marked pattern of negative marking, there are several potential sources for it in African languages both in the Macro-Sudan belt and in western Bantu further south. Accordingly, a more fine-grained evaluation of the history of GGC negation is a worthwhile undertaking to be pursued in the following section.

## 4. The origins of the negation system in the Gulf of Guinea Creole family

The origin of the modern negation patterns in the GGCs can be elucidated fruitfully by taking into account the extensive knowledge about the demographic as well as the related linguistic history of the islands (e.g. Ferraz 1979; Hagemeijer 2011). That is, there is substantial evidence for the following chronological layering of linguistic populations on the islands where the GGCs are spoken:

1.      Portuguese (Portugal)
2.      Edoid and other geographically close languages (Niger Delta, Nigeria)
3.      Kongo complex (Bantu H10, H30, H40, B40; Congo Brazzaville, DRC, Angola)
4.      Mbundu (Bantu H20; Angola)

The first layer is Portuguese - the 'superstrate' of the GGCs, going back to the permanent settlement of São Tome in 1493. Linguistic and historical evidence strongly suggests an early founder effect for the formation of the proto-GGC by language contact between Portuguese and an African substrate that comprised languages spoken by slaves from the Niger Delta, which correlated with the so-called *société d'habitation*. Since the Benin Kingdom was the principal mediator of trade, the languages belonged in particular to the Edoid cluster of the Benue-Kwa pool of Niger-Congo. After 1505~1510, the slave trade to São Tomé started shifting to the area of the Kongo Kingdom so that this subsequent adstrate event occurred at the onset of the shift towards the sugar-based *société de plantation*. Indeed, according to Ferraz (1979), varieties of the Kongo cluster, belonging to the Bantu subgroup of Benue-Kwa (see de Schryver *et al.* 2015),

left a significant lexical imprint on ST. The slave trade from Angola further south took place predominantly in the area of the Bantu language Mbundu and started when the shift towards a plantation economy on São Tomé was already complete. The linguistic impact of the Mbundu adstrate is mostly restricted to Angolar (Maurer 1992), arguably because of the absorption of great numbers of Mbundu speakers by a previously formed maroon society during the plantation stage and the subsequent relexification of the founder creole (Lorenzino 1998). In general, Portuguese and Southern Nigerian languages, in particular from Edoid, would be expected to be the main contributors to the negation patterns observed in the GGCs.

It is uncontroversial that the preverbal negative *na* in the GGCs is related to Portuguese *não*.[11] However, the syntax of clause-final *f(a)/va/wa* is not reminiscent of Portuguese, although the oldest proposal as to its origins does entertain the superstrate. Schuchardt (1882: 9154) briefly suggested that it could have originated from *fava* 'fava bean', possibly in view of minimizing elements that commonly reinforce negation in other Romance languages (e.g. French *pas* or Italian *mica*) - a hypothesis predating Jespersen (1917). Schuchardt's idea is compatible with explaining AN *va~wa*, through retention of the second – but unstressed – syllable of this Portuguese item.[12] There are several known contemporary and historical minimizers in Portuguese (Martins 2016; Pinto 2015, 2018), some of which, such as *nemigalha (*or its non-contracted form *nem migalha*), may have grammaticalized to some extent (Pinto 2018).[13] Example (41), taken from a 16th century theatre play, illustrates this item.

(41)  ***Não***    *vale*    *isso*  ***nem***    ***migalha***.

     NEG    is.worth   this   not.even   crumb

     'This ain't worth a crumb.' (Gil Vicente, *Farsa dos Almocreves*, 1527)

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[11] Another link between the superstrate and the creole is arguably so-called 'negative concord' with indefinites (cf. (3) and (22) for examples in the GGC) (cf. Hagemeijer 2007). This feature also characterizes Middle Portuguese, a stage which lasted until approximately the mid-16th century, and was abandoned in later stages of the language (e.g. Martins 2001, 2016: 23). Note, however, that the situation is equivocal because most creole languages exhibit strict negative concord (Michaelis *et al.* 2013: 406-409; Deprez 1999).

[12] Schuchardt did not have any knowledge of AN, because the oldest descriptions of this language date back to the second half of the 20th century.

[13] Interestingly, ST still exhibits a form derived from minimizer *nem migalha*, namely *nê minge* 'not a crumb.'

Example (42) is a rare occurrence of a plural form of *fava* in the role of minimizer in yet another theatre play by Gil Vicente.[14]

(42)  *Nem  fico      a dever duas **favas**      /  nem  um  <u>preto</u>*

nor    remain.1S  to owe  two  fava beans    nor  a    negro

*por    pagar.*

to      pay

'Nor do I owe anything at all.' (Gil Vicente, *Auto da Barca do Purgatório*, 1528)

Given the existence of several other, more common minimizers found in middle/classic Portuguese, *fava* is an unlikely etymological candidate for the final negation marker and would require an explanation as to how the (object) noun *fava* developed into a final marker. An additional argument against *fava* is that Portuguese-related creoles and varieties of Portuguese did not develop a standard negation pattern involving minimizers, even if these elements are sometimes attested in the diachrony of Portuguese.

Given the insufficient evidence for a Portuguese source for *fa/va/wa*, the search has to turn to African languages. Conspicuously, several (south)eastern and western Ijoid languages (e.g., Ibani, Kalabari, Kirike, Kolokuma, Nembe) exhibit a form *fa* which functions as a negative element in final position or as an item meaning 'finish, get lost'. In his (2008) Kalabari dictionary, Blench lists *fa(a)* as a noun which exhibits nominal and verbal meanings, such as 'loss, end, finish, be nonexistent, come to an end, be lost', as well as suffix *-fa* with the meaning 'devoid of', as in (43). Kaliai's (1964) Nembe dictionary exhibits similar meanings and further includes a verbal and particle use of *fa*, as in (44).

(43)  *minji-**fa***                                             Kalabari

water-PRIV

'waterless' (Blench 2008: 115)

(44)  *warí  gho̩   **fá***                                       Nembe

house  in      NEG

'not in the house' (Kaliai 1964: 81)

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[14] We are grateful to Clara Pinto [p.c.] for bringing this to our attention.

In addition to these forms, Ijoid languages also exhibit completive/resultative items, as *famɔ* 'up' in (45) from Nembe and *fámā* 'finish, complete' in (46) from Kalabari.[15]

(45)  *fɪ famɔ́*                                          Nembe

 'Eat up!' (Kaliai 1964: 82)

(46)  *ɓo   kɔrɪ   fámā*                              Kalabari

 come   work   finish

 'come finish the work' (Blench 2008: 115)

While the Ijoid items above are certainly interesting from an etymological perspective, the evidence of an Ijoid substrate in the formation of proto-GGC is currently relatively thin (cf. Hagemeijer 2011: 134-136) and needs to be assessed more thoroughly.

 The Edoid languages, on the other hand, can be argued more safely to have been crucial in the formation of the proto-language. Concerning negation, there are indeed interesting parallels. Thus, Edo and ST share the semantics in a tripartite preverbal negation paradigm, as shown in Table 2 and (47)-(50).

**Table 2: Preverbal negatives in Edo and Santome**

| Language | 'not' | 'not yet' | 'not anymore/no longer' |
|---|---|---|---|
| Edo | *ma* (past), *i* (non-past) | *ma he* | *i ghi* |
| ST | *Na* | *naxi* | *nanta~nantan* |
| NA | *na* | *na si* | *na tô* |
| FA | *na* | *na (sa)?* | *na tan~n'tan* |

(47)  *Òzó  í      rì    èvàré.*                          Edo

 PN    NEG   eat   food

 'Ozo does not eat food.' / 'Ozo will not eat food.' (Agheyisi 1991: 14)

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[15]  For the record, Berbice Dutch, with a strong Ijoid substrate, took over *fama* 'to finish' from Kalabari, using it in completive constructions (Kouwenberg 1994, 2012).

(48)  *Òzó **má** rì èvàré.*                                          Edo

      PN   NEG.PST   eat    food

      'Ozo did not eat food.' (Agheyisi 1991: 14)

(49)  *E **i** **ghi** yo ugbo eghe hia.*                                Edo

      3S  NEG anymore  go   farm    time  all

      'He does not go to the farm at all time anymore.' (Agheyisi 1986: 58)

(50)  *I **ma** **he** kpao.*                                          Edo

      1S    NEG.PST   yet  leave

      'I haven't left yet.' (Agheyisi 1986: 59)

However, while the impact of Edoid seems to explain certain facts about preverbal negation in the GGCs, it fails to fully explain the existence of the final marker *fa/va/wa*, insofar as (exclusive) preverbal negative marking, as just illustrated, is the predominant pattern in this family (e.g. Omoruyi 1989, Agheyisi 1991).

      This does not mean, though, that Edoid cannot have contributed to final negation in the GGCs. For one thing, there are some cases of postverbal negation, for example, an enclitic in the imperative (see Kari (2004: 131-2) for Degema) and, more saliently, a clause-final particle in Isoko, as shown in (51).

(51)  *mè dúkó **hòó**.*                                    Isoko

      1S  buy:cup  NEG

      'I did not buy a cup.' (Ben Elugbe, p.c.)

The situation in Isoko may also be responsible historically for the tonal negative marking in closely related Urhobo in the form of an added clause-final low-high sequence, as documented by Welmers (1969: 91) and Blanc (1986: 77-82). Last but not least, negative sentences are known to be reinforced in some languages by clause-final non-negative particles. For example, this is the case in Urhobo, where *káká* and *níní* in conjunction with the final tonal morpheme convey emphatic negation (Blanc 1986: 52).

Against the background of the areal Macro-Sudan feature of attitude particles and their possible contribution to final negation (see section 3 above), it is conceivable that such elements in the founder substrate may have given the first impetus for developing this feature. There are indeed some parallels between Edo and ST with respect to final attitude particles, so that further research on this issue is a necessary undertaking in the future.

Turning to the later contact languages of the GGCs, Western Bantu languages, in particular of the Kongo cluster, frequently exhibit discontinuous and/or final negation with strong similarities to the GGCs patterns, although the final element, most often *ko*, is phonetically unrelated to the marker in the creoles.[16] Already the oldest sources on Kongo from the 17th century attest to double negation, as shown in (52a-d) (see Guinness (1882: 46-50, 58) for more data).

(52)   a.   *Quifuene*       *curiaco*.                          Solongo (H16a)

           ***ki**-fwene*     *ku-ria=**ko***.

           NEG:1S-can     INF-eat=NEG

           'I cannot eat.' (Guinness 1882: 48)

       b.   *Cuendi*         *bhumaco*.

           ***ku**-endi*      *v-uma=**ko***.

           NEG:2S-go       16-place=NEG

           'Do not go elsewhere.' (Guinness 1882: 50)

       c.   *Queri*          *quiumaco*.

           ***ki**-ri*        *ki-uma=**ko***.

           NEG:1S-eat     7-thing=NEG

           'I eat nothing.' (Guinness 1882: 50)

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[16] While we did search for possible Bantu sources for the phonetic origins of GGC *fa* and could cite rather vague etymological candidates, we refrain from listing them, because there is a general caveat casting strong doubt on this hypothesis. That is, any Bantu etymon begs the question why LU would have a salient marker with Bantu origin, while lacking any other notable Bantu influence.

d. *Ongue   cucuzitissa        n Petele**co**.*

*ongwe   **ku**-ku-zitissa        Npetele=**ko**.*

you       NEG:2S-FUT-love   PN=NEG

'Thou shalt not love Peter.' (Guinness 1882: 85)

The same situation with an obligatory clause-final particle is observed in the modern languages, as shown in (53) and (54). Hulstaert (1950: 57f) observed that this is opposed to other languages in the wider area of the Congo River where such an element is facultative.

(53)   ***Ka**   n-zébia   lâri   **ko**.*                    Laadi (H16f)

NEG 1S-know  Laadi  NEG

'Je ne comprends pas le lâri [I do not understand Laadi].' (Nsondé 1999: 62)

(54)   *Be   **si**-é        kwènde   **kuvè/ ko***                Vili (H12)

3P   NEG-PST   go        NEG

'Ils ne sont pas parties [They did not leave].' (Loëmbe 2005: 75)

There are also syntactic similarities between negation in the GGCs and Kongo languages. For example, like in ST, there is no final negative doubling in case of two joined negative clauses (compare (55) with (9) above) but on the other hand possible "stacking" of different final particles (compare (56) and (57)b. with (24), (29), (30), and (32) above).

(55)   ***Ku**-m-pangi        diau adimosi ne **k**i      mfumu   eno   **ko**.*

NEG:2S-1S-treat   like              NEG:1S chief    POSS  NEG

'Do not treat me as if I were not your chief.' San Salvador (H16a)

(Bentley 1895: 774)

(56)   ***Kw**-endi      **kwe**.*   (< *ko + e* ~ interrogative)   San Salvador (H16a)

NEG:2S-go   NEG

'Are you not going?' / 'Do not go!' (Bentley 1887: 146)

(57)  a.  ***Ku**-yiba*      ***pe***.                               Yombe (H16c)

NEG:2S-steal  NEG

'Tu ne voleras pas [You should not steal].'

b.  ***Ku**-iza*       ***pe.ko***!

NEG:2S-come  NEG

'(Tu) ne viens pas (encore) [Do not come yet]!' (Troesch 1953: 135)

Across the Kongo cluster, there are several signs of further grammaticalization of the discontinuous negation pattern. First of all, there is the latent loss of the inherited preverbal negation. Thus, Soret (1959: 29) observes: "Le signe négatif le plus fréquent est *ka...ko* ... Dans les langues de l'Ouest et en Bembe, la particule *ko* est employée seule [The most frequent negative sign is *ka...ko* ... In the western languages and Bembe, the particle *ko* is used on its own]." Moreover, in some varieties, *ko* assimilates tonally to preceding material, behaving like an enclitic, and can be integrated in the clause by occurring earlier and thus non-finally (Carter 1974: 33-8).

The origin of the final negative markers in the Kongo cluster is likely to be sought outside negative marking per se, because they also occur in the same position with a different non-negative function, notably as intensifying and focus particles, as shown in (58) for *pe* and (59) for *ko*.

(58)  *Mi*      ***pe***      *i*      *be*      *mona.*                 Yombe (H16c)

1S.PRO ADD.F  1S  PERF  see

'Moi aussi j'ai vu [I have also seen].' (Troesch 1953: 135)

(59)  a.  *Iza*       ***ko***                           Koki-Cabinda (H16)

come     EMPH

'Viens donc [Come]!'

b.  *minu*     ***ko***.

1S.PRO EMPH

'moi meme [I myself]' (Troesch 1953: 135)

Laman's (1936: 298) treatment of *kó* as an adverb with the French meanings *mais, bien, ne (pas) pas, ainsi, si, tenement, tant, certainement, c'est ainsi* is overall compatible with this idea. Devos and van der Auwera's (2013) recent general discussion of the grammaticalization of final negatives in Bantu suggests in a similar vein that Kongo *ko* developed from an emphatic or insistence particle that evolved into a negative marker. Thus they observe that "the post-verbal negative marker *ko* also occurs in combination with affirmative imperatives but with the effect of making them more forceful and less polite", as shown in (60).[17]

(60)   *Tuula    má-lóonga   vá-méeza          **kó**          Manyanga (H16b)

       put:IMP 6-plate       16LOC-9.table    EMPH

       'Just put the plates on the table!' (Devos & van der Auwera 2013: 243)

The similarities to the GGCs at issue here are straightforward. For example, imperative *fan* in ST can also be described as a less polite insistence marker, whereas the final particle *ô* forms polite imperatives, as shown by the contrast between (61) and (62).[18]

(61)   *Kume **fan**!*                              ST

       eat      EMPH

       'Eat up!' (e.g. hurry up, you're taking too long) (TH field notes)

(62)   *Kume **ô**.*                                ST

       eat      POLITE

       'Please eat.' (TH field notes)

As for Kongo *ko*, this particle ultimately derives most probably from the pronominal *ko* pertaining to the general locative class 17, which incorporates the so-called morpheme *o* conveying previous reference. Our hypothesis has been confirmed recently by Devos and van der Auwera (2013) for Bantu in

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[17] Note, however, that they (ibid.: 244) also ponder the possibility that "the use of *ko* in impolite commands is derived from its use as a negative marker."

[18] However, the semantic and pragmatic range of *ô* is much broader than that of *fan*, since it may occur in greetings, yes/no questions, exclamatives, etc. (Hagemeijer 2010).

general. The formal identity of the two relevant elements is shown in (63), where they co-occur.

(63)  ***Ki**-ele*          ***ko***   *kwame*   ***ko***   San Salvador (H16a)

NEG:1S-stay:PST  there   1S:EMPH  NEG

'I have not been there.' (Bentley 1887: 598)

While Kongo varieties provide a considerable amount of evidence for having influenced negation in the GGCs, the historically later contact language of Mbundu (H21) did not have such an impact. Although there is postverbal negation, it does not occur clause-finally, as shown in (64).

(64)  *Muene*   ***kana***   *ka-ri-**ê***          *xitu.*  Mbundu (H21)

1:DEM   NEG   3S:PST-eat-3S:NEG   meat

'Ela não comia carne [She didn't eat meat].' (Chatelain 1888-1889: 147)

Moreover, the concrete morphological encoding is complex and thus an unlikely target for contact interference in that the final negative is in fact a verb suffix paradigm that co-varies with the subject referent - a feature also shared by neighboring languages (cf. Atkins (1954: 157f) for Hungu (H33)).

(65)  ***(ki)***   *ngi*   *-bang*   ***-ami***   I do not make        Mbundu (H21)

***(ki)***   *ku*   *-bang*   ***-é***   thou dost not make

***(ki)***   *ka*   *-bang*   ***-ê***   he does not make

***(ki)***   *tu*   *-bang*   ***-etu***   we do not make

***(ki)***   *nu*   *-bang*   ***-enu***   you do not make

***(ki)***   *ka*   *-bang*   ***-â***   they do not make

NEG   SC   -make   -NEG        (Chatelain 1888-1889: 57)

Summarizing the above information, we can give a relatively specific account of how the different components of the negative marking system emerged in proto-GGC. Portuguese contributed at least the preverbal marker *na*. Nigerian languages are likely to have had an influence on the semantic tripartite sub-

specification of this preverbal negation component as well as the employment of clause-final particles that generally interact recurrently with negation. In any case, the final major impact for the syntactic entrenchment and full-fledged grammaticalization of dedicated clause-final negation should be attributed to the subsequent contact with Bantu languages of the Kongo cluster. The structures resulting from this linguistic interference were not altered much by the slightly later contact with Mbundu.


## 5. Conclusions

The languages of the GGC family display a typologically marked negation pattern in the form of a final negative marker, which, together with a preverbal negative, suggests the early existence of a discontinuous pattern *[na/nã...fa/fã] in the proto-creole spoken on the island of São Tomé.

While the preverbal negation marker *na/nã can be straightforwardly related to Portuguese, the syntax and phonetic shape of the final negative *fa/fã is not reminiscent of the superstrate. Accordingly, its origin has to be sought in African languages. In so doing, two aspects of the phenomenon need to be distinguished, namely the morpho-syntactic emergence of the modern negation patterns and the etymology of the element involved. Our findings draw a complex picture in this respect.

With respect to the second matter of etymological origin, the results remain quite uncertain. The main GGC substrate, the Edoid family, does not provide a likely candidate. The same holds for Bantu languages, compounded by the fact that an origin in these later contact events would be hard to reconcile with the existence of *fa* in LU, which remained largely unaffected by Bantu interference. While an origin in Ijoid languages of the Niger Delta is tempting, their impact on the formation of the GGCs remains understudied. The uncertain etymology also restrains the possibility to answer the question whether the original function of *fa/fã was already negative or whether it encoded general emphasis and only later specialized for negation.

The emergence of the syntactic phenomenon of postverbal/final negation in an early GGC stage is at first glance a yet more complex issue - this time because there is now more than one possible contributing contact trigger.

From the outset, it seems clear that the founder impact of the Niger Delta languages does not plausibly explain the full picture regarding the modern reflexes of *fa/fã. Instead, the negation patterns across most current GGCs resemble yet more closely those found in Kongo languages, which were

secondary contact partners. In this respect, the GGCs would differ from other similar languages with final negation where the feature traces back directly to the primary African contact language (cf. Den Besten (1986) on Afrikaans and Khoekhoe, Schwegler (1991, 2006) and Dieck (2000) on Palenquero and Kongo, and Kouwenberg (1994) on Berbice Dutch and Ijoid).

However, the substantial transfer of negation patterns from Kongo must not be dissociated from developments that are likely to have taken place already in the early formation of the founder creole. Final attitude particles are widespread in languages of the Niger Delta, as part of the larger Macro-Sudan Belt, and these may have served as triggers for the employment of emphasizing and intensifying particles in negative utterances of the emerging creole. It must remain open, and is arguably of secondary importance from a more general perspective, whether concrete elements, for example, such resultative/completive markers as Kalabari *fámā*, Edo *fo*, and the like should be identified as the direct source of GGC *fa/fã.

We thus assume that the most likely scenario is that the early GGC possessed clause-final particles, among them the predecessor of *fa/fã, presumably in both negative and positive expressions. At this stage, the element was less grammaticalized as a negative marker, if not even still incipient in this function. When large numbers of speakers from the Kongo area joined the speech community as L2 learners of the early creole, they presumably targeted this element against the background of clause-final negation in their L1 in a process of calquing and thereby provided the crucial contribution to the development of *fa/fã toward a fully grown negative marker. This hypothesis is also compatible with the particular status of *fa* in ST (and FA) within a larger system of clause-final particles in which *fa/fã also came to mark certain emphatic affirmative expressions. We thus do not consider two opposing hypotheses but rather a complex process of multiple causation in which features and forms of different languages converged in a chronological order toward a final unitary solution in a newly born and expanding contact language.

Apart from the findings concerning the concrete history of negation in the GGCs, there are a couple of conclusions regarding areal linguistics in Africa and the general theory of creole history. With respect to the former, we have argued in Güldemann & Hagemeijer (2015) that the emergence of the GGCs can be modeled as a process in which Portuguese expanded into the area of the Macro-Sudan belt and entered a superstrate-substrate relationship in the Gulf of Guinea zone with Edoid and nearby languages. The ultimate result was the GGC family - a linguistic lineage that is not only new itself but also new in this African macro-area, yet has come to display most of its defining features.

Moreover, insofar as the ultimate cause of the negation pattern may be the broader phenomenon of clause-final particles, the GGC case may lend further support to the idea by Idiatov and Van de Velde (2015) that the areal feature needs to be looked at from a perspective that transcends negative marking in the narrow sense.

With respect to a general theory for the genesis and history of creole languages, our hypothesis that the discontinuous/final negation patterns in the GGCs are the result of contact between an early founder creole and Kongo suggests a more nuanced approach to the nature of the diverse languages that enter in contact with a lexifier or 'superstrate'. We would advance that the different timing of the Edo and Kongo contribution to the GGC family makes them qualitatively distinct. While the former can be modeled as a 'substrate' in the canonical sense, this should no longer apply to Kongo. Rather than being a substrate in the formative process of the GGCs, Kongo (as Mbundu for that matter) is best viewed as an 'adstrate', in other words, a quite conventional contact partner of an existing language, which achieved demographic dominance over time. Such a scenario deserves to be tested also in other cases where creoles appear to have more than one major non-superstrate contribution.

**Abbreviations**

**ADD.F**=Additive Focus; **DEM**=Demonstrative; **COMP**=Complementizer; **DEM**=Demonstrative; **EMPH**=Emphatic; **EXCL**=Exclamation; **FUT**=Future; **HAB**=Habitual; **IMP**=Imperative; **INF**=Infinitive; **INT**=Interrogative; **IT**=Iterative; **LOC**=Locative; **MOD**=Modality; **NEG**=Negative; **PERF**=Perfective; **P**=Plural; **PN**=Personal name; **POSS**=Possessive; **PRIV**=Privative; **PRO**=Pronoun; **PROG**=Progressive; **PST**=Past tense; **PURP**=Purpose; **REL**=Relative; **REP**=Repetitive; **S**=Singular; **1, 2, 3**=Person

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