Towards a model of language contact and change in the English-lexifier creoles of Africa and the Caribbean

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The Afro-Caribbean English-lexifier Creoles (AECs) exhibit fascinating combinations of disparate typological characteristics. I present a model of post-formative ("post-creolization") contact and change and provide a comprehensive inventory of contact constellations in Africa and the Caribbean. I conduct a comparative analysis of causative constructions in seven African and Caribbean AECs, argue for the notional separation of the traditional creolist terms "superstrate", "lexifier", "substrate" and "adstrate", and account for the linguistic-structural relevance of these distinctions. The model can explain the typological diversity within and across the AECs, help elucidate their genealogical and areal differentiation, and contribute to our understanding of the processes and outcomes of language contact and change in multilingual ecologies.

Keywords: Creole, Africa, Caribbean, lexifier, superstrate, substrate, adstrate, areal, typology, causative

1. Introduction

Afro-Caribbean English-lexifier Creoles and Pidgin-Creoles (AECs) are spoken from Cameroon to Costa Rica. Taken together, they constitute one of the largest lectal continua of the Western hemisphere in speaker numbers and geographical reach.[1] Much of the work on language contact and change in the AECs is founded on the situation in linguistically exceptionally homogenous Caribbean

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1. Total speaker numbers amount to well over 100 million. This can be extrapolated from speak-er numbers in the largest AEC-speaking countries, e.g. Nigeria ~80 million (Ihemere 2006), Ghana ~5 million (Huber 2012); Sierra Leone ~5 million (Finney 2011); Jamaica ~3 million (Farquharson, p.c., November 2013).

societies like Jamaica or Guyana, featuring contact between English and a creole (see Winford 1997 for an overview). The bilingual scenario rests on theoretical constructs such as the "creole continuum", a collective of overlapping varieties, and "decreolization", the gradual convergence of a creole with its lexifier (e.g., DeCamp 1971; Bickerton 1973; Rickford 1987). These approaches do not, however, account for contact processes in linguistic ecologies where English is absent, e.g. Suriname. They are equally unsatisfactory for understanding language contact, variation and change in the African AEC-speaking ecologies (Agheyisi 1971; Deuber 2005; pace Todd 1994: 3181), which are highly multilingual often featuring hundreds of languages and society-wide multilingualism (e.g. Nigeria with over 500 languages).

Only more recently have such African-type scenarios begun to be recognised as a default locus of language contact and change (see Lim and Ansaldo 2015; Yakpo 2015). In creole linguistics, the structural-linguistic ramifications of dif-ferences in contact scenarios have not yet been systematically framed within the context of typologies of contact processes and outcomes.

I will present a model of post-formative areal contact and convergence that in-cludes the multilingual ecologies of West Africa as well as countries where English is not spoken alongside the creole (e.g. Suriname and Equatorial Guinea). I pro-pose two hypotheses regarding post-formative change in the AECs. Hypothesis 1 suggests that contact with the lexifier superstrate English will lead to more struc-tural and lexical transfer of English features to an AEC than equally intense contact with non-lexifier superstrates like Spanish and Dutch. Hypothesis 2 suggests that contact with African adstrates will reinforce and expand existing African substrate features in an AEC, while the absence of contact with African adstrates will lead to a weakening of substrate features. I will use the formal-functional differentiation of causative formation across AECs in Africa and the Caribbean to exemplify the explanatory power of the model proposed here.

This paper is structured as follows: In Section 3, I discuss distinctions between different linguistic strata. Section 4 contains a detailed analysis of causative for-mation in the AECs based on field data, first looking at typological differences between causative in the lexifier English and in West African substrate and ad-strate languages in Section 4.1, then turning to African AECs in Section 4.3 and to Caribbean AECs in Section 4.4. The findings are compared in Section 4.5. In Section 5, I present a model of post-formative contact outcomes based on a com-prehensive inventory of contact ecologies.

2. Methods and data

The analysis presented in this article is based on three sets of corpora consist-ing of primary data. The Pichi corpus consists of about 40,000 words collected during field research in Equatorial Guinea between 2003 and 2007 (Yakpo 2009). The Sranan corpus contains about 60,000 words gathered with the ERC-funded "Traces of Contact" project, conducted by me and Stanley Hanenberg in Suriname between 2010 and 2012. About half of these two corpora is made up of elicited data, the other half of naturalistic data. We carried out elicitations with the aid of video clips and parallel texts (e.g., Mayer 1969) as well as director-matcher and translation tasks. A selection of the Pichi data is available in Yakpo (2009: 552–634). The Sranan corpus has been archived at the Language Archive of the Max Planck Institute for Psycholinguistics in Nijmegen.[2] The third corpus contains primary data of about 15,000 words that I collected specifically for the present article and consists of elicited data from five AECs gathered in the Caribbean and in West Africa in 2011–2014 (Tobagonian Creole, Trinidadian Creole, Ghanaian Pidgin English, Krio, Nigerian Pidgin). The third corpus also consists of control data from West African languages collected during the same period and will be made available online in due course. All unreferenced examples in this article stem from field data.

3. Contact strata and creole evolution

Present definitions of "superstrate", "lexifier", "substrate" and "adstrate" in creole linguistics do not capture the full range of external (societal) and internal (structural-linguistic) forces at work in the contact scenarios that AECs are found in. In order to fill the gaps in existing models, I suggest a notional separation of the four terms "superstrate", "lexifier", "substrate" and "adstrate", and show the system-internal relevance of the distinction in subsequent sections.

I distinguish between the two terms "substrate" and "adstrate" in a strictly dia-chronic sense, reserving the term "substrate" for the now defunct African languag-es spoken by the creators of the Caribbean AECs during their formative period. I employ the term "adstrate" for languages other than the superstrate that are **synchronically** exerting influence on the creoles without a completed society-wide language shift.[3] The term therefore typically applies to African languages spoken

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2. The website of the MPI Language Archive is <http://tla.mpi.nl>.

3. In this, I follow established practice in historical and comparative linguistics where substrate research is typically geared towards uncovering etymologies and typological features in a given

alongside AECs in West African ecologies like Sierra Leone or Nigeria. In this I diverge from common definitions of these terms in creole linguistics.[4] The distinction between substrates and adstrates also terminologically entrenches the fact that the African AECs are synchronically in contact with those very languages that constituted substrates to the Caribbean creoles. This encourages us to address possible linguistic-structural differences between substratal transfer in a situation of language shift, as it held in the Caribbean (even if temporally extended), and staggered, gradual and cumulative adstratal transfer in a situation of language maintenance and stable multilingualism in West Africa (see e.g., Corum 2015).

Definitions of the terms "superstrate" and "lexifier" in creole linguistics show similar shortcomings, mainly because the two strata they designate are seen as coterminous, rare exceptions notwithstanding (e.g., Snow 2002; Selbach 2008).[5] Use of the term "superstrate" suggests contact with a (colonial) high domain language (whether lexifier or not) in the setting that typifies the linguistic ecologies in which the AECs are spoken. But the term does not on its own allow distinguishing between structural effects that contact with English can have on an **English-lexifier** creole and those incurred through contact with a superstrate **unrelated** to the creole. Along a continuum of contact phenomena, contact between an AEC and English is more akin to contact between genealogically closely related languages, including dialects. In contrast, contact between a creole and a non-lexifier superstrate likens contact between typologically less similar and genealogically distant or unrelated languages. This is significant because there is some evidence

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language of a sparsely documented precursor language **after a language shift or replacement** (e.g., Witzel 1999; Ferrer 2011). The term "substrate" is used indiscriminately in creole lin-guistics to designate African languages **historically** spoken in the formative period as well as African languages **presently** spoken alongside creoles and pidgins in West Africa (e.g., Singler 1988, for Liberian Pidgin Englishes; Huber 1999: 165, for Ghanaian Pidgin; Deuber 2005: 24, for Nigerian Pidgin).

4. Kouwenberg and Singler (2008: 11) summarize the creolist main stream definitions: "[sub-strates are] the first languages of the socially and economically subordinate populations", and adstrates "have either had a peripheral presence […] or came on the scene after pidgin and creole genesis. In either case, it is assumed that the pertinent languages were not in a position to make significant contributions to the grammar". Distinguishing the relative import of African languages in the early contact scenarios of the Caribbean in terms of significance or anteriority is dificult due to the lack of data, prompting Smith (2015a: 36–41), for example, to refer to all African languages present in 17th-century Suriname as **adstrates** rather than substrates.

5. According to Kouwenberg and Singler (2008: 11), "'superstrate' ordinarily refers to the language of the socially and economically dominant group […]. It typically provides the basis for the lexicon for the emergent pidgin or creole. When it does so, it is also referred to as the 'lexifier language'".

for differences with respect to processes and outcomes between the two contact constellations (e.g., Haig 2001).

Firstly, the formal-lexical similarity between the creole and the lexifier provides ample opportunity for interlingual identification of individual items. This facilitates change of phonologically similar creole words in the direction of their English etymons (e.g., Smith 2015b for phonological evidence), including the development of multiple variants and hybrid forms (for the AEC Pichi, see Yakpo 2013), a phenomenon well-known from dialect contact (e.g., Gaetano 2005). Existing overlaps in form or substance also make the creole amenable to faster semantic change toward the lexifier, by inducing semantic shifts in shared etymons and a more rapid development of shared polysemy, polyfunctionality, and idiomatics than documented for linguistic areas involving unrelated or distantly related languages (e.g., Hayward 1991; François 2011).

Secondly, there will generally be more areas of structural-functional overlap of the creole with the lexifier-superstrate than with a non-lexifier superstrate due to shared genealogy. These overlaps may manifest themselves in syntagmatic and paradigmatic isomorphism, and functional similarity and inter-changeability of grammatical elements even in more tightly organized areas of the grammar (see e.g., Dawson 2003; Yakubovich 2010; Law 2013).[6] This provides additional cognitive links for the transfer of "combinatorial" (distributional, selectional and other grammatical properties) and "frequential patterns" (Johanson 2002).

The analyses in this article recognize the genealogical continuity of creoles with contributing linguistic systems (pace Taylor 1956; Thomason and Kaufman 1988) and endorse the validity of approaches in which ecological metaphors and competition and selection accounts of features are combined (Croft 2000; Mufwene 2001, 2005). The route taken here espouses views that see creole grammars as being shaped by general mechanisms of change within the margins imposed by the "typological matrix" of a specific linguistic ecology (Ansaldo 2009; Aboh 2015). Processes of areal convergence and divergence therefore play a central role in shaping the evolution of AEC grammars through time. Due to historical accident, AEC contact ecologies unite more distant or unrelated lineages and more disparate typological characteristics than less heterogeneous ecologies, thus rendering the AECs and many other creoles generally more hybrid than their input systems (Aboh 2015; see also van Sluijs, van den Berg and Muysken 2016, on the concept of "genealogical blend" applied to creoles). When the linguistic diversity of an ecology decreases through time, the forces of areal convergence may, however,

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6. To name just a few structural overlaps between English and the AECs: SVO word order, modifier-noun order in the NP, preverbal (rather than post-verbal) TMA particles, auxiliary-verb order, case inflection in personal pronouns and (largely) absence of case inflection with full nouns.

drive this internal diversity closer to an areal norm, as in the Caribbean, where the AECs are generally more Indo-European-like, and in West Africa, where they are generally more Atlantic-Congo-like. To gain a full appreciation of the evolution of creole grammars, a more granular and accurate analysis of specific linguistic sub-systems and their contributing languages is required, reflective of their dual Indo-European and Atlantic-Congo heritage, in the sense of a "multivariate typology" (see Bickel 2015 for an overview; see also Aboh 2016, for a critique of current practice in creole linguistics).

4. Stratal contact dynamics: Causative formation in the AECs

Causative formation in the AECs can be placed along a continuum of structures ranging from more English- to more (West) African-like. I argue that the intensity of contact of an individual AEC with the lexifier superstrate English on the one hand and West African adstrates on the other is a good predictor of the direction and outcome of language change in the creole, notwithstanding a fair degree of micro-variation between individual AECs.

4.1 Typological aspects of English, AEC, and West African causatives

A causative construction is a valency adjustment that serves to increase the number of participants in an event by one: an agent (the causer) brings about a proto-typically transitive event (the predicate of effect) to a patient argument (the causee) (e.g., Nedyalkov and Silnitsky 1973; Comrie 1976; Song 1996; Næss 2007). English and West African causatives are analytic (or periphrastic). They are both biclausal, and involve the use of clausal syntax. In English and the AECs, factitive causatives (i.e. involving the causative verb make) are the most frequent and least specialized structures among various alternative constructions (for English, see Gilquin 2012; for the AEC Pichi, see Yakpo 2009: 450–454).

English causatives involve "deranked" (Cristofaro 2003) or "reduced" (Lehmann 1988) structures and argument sharing. The causee NP is the syntactic object of the main predicate and simultaneously the notional subject of the subordinate clause predicate (the predicate of effect). The causative construction is biclausal but the subordinate clause is **non-finite**; there is no TMA or person marking. Compare (1), to which the function labels have been added:

(1)   he   **made**   **me**
       (SUBJECT) CAUSER   CAUSATIVE (MAIN) VERB   (OBJECT) CAUSEE
       leave.
       (SUBORDINATE) VERB OF EFFECT

Deranking as in (1) is a common strategy of causative formation in related and unrelated languages of Europe (cf., Leino and von Waldenfels 2012). In contrast to English, the most common West African strategy of analytic causative formation involves the use of equally biclausal but "balanced" (the opposite of "deranked") structures. The causative event is expressed in two **finite** clauses rather than in a main clause and non-finite subordinate clause **cum** argument sharing. Compare (2) from Ga, spoken in Ghana:[7]

(2) mì-**há**   è-yá   shíà.[8]
    1SG.SBJ-cause   3SG.SBJ-go   home
    CAUSER-CAUSATIVE VERB   CAUSEE-VERB OF EFFECT
    'I made him/her go home'. Lit. 'I made that s/he go home'.   (Ga)

The Ga structure (2) above constitutes the most common pattern of causative formation across unrelated and (distantly) related West African languages in my sample. This falls in line with the findings of the World Atlas of Language Structures (WALS), which shows the "sequential" (i.e. balanced) pattern as the most common one in West Africa (Song 2013).[9] In contrast to Ga, Tobagonian Creole (TobC) has two causative constructions. The structure in (3) is isomorphic with the Ga structure in (2) above, the other in (4) with that of the English structure in (1) above:

(3) mii   meek **ii**   goo hoom   oorli.
    1SG.SBJ   make 3SG.SBJ go   home   early
    'I made him/her go home early'.   (TobC)

(4) mii   meek   **am**   goo hoom   oorli.
     1SG.SBJ   make   3SG.OBJ go   home   early
     'I made him/her go home early'.   (TobC)

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7. Fifteen West African languages were sampled from three top-level families and eleven sub-families. These are (from West to East): Susu (Mande, Eastern), Samogo (Mande, Western), Temne (Atlantic-Congo, Mel), Baule, Asante Twi, Fanti (Atlantic-Congo, Kwa, Nyo, Akan), Ga (Atlantic-Congo, Kwa, Ga-Dangme), Ewe, Fon, Gun (Atlantic-Congo, Kwa, Gbe), Kabiye (Atlantic-Congo, Gur), Hausa (Afro-Asiatic, Chadic), Yoruba (Atlantic-Congo, Benue-Congo, Defoid), Igbo (Atlantic-Congo, Benue-Congo, Igboid), Bafut (Atlantic Congo, Benue-Congo, Bantoid, Grassfields).

8. Languages bearing acute or grave accents are tone languages. The following conventions hold for the transcription of tones: acute accent /á/ = high tone (H), grave accent /à/ = low tone (L), no accent /a/ = mid tone (M).

9. WALSdoes not distinguish degrees of clausal integration. English deranked **and** West African balanced periphrastic causatives therefore both appear as exponents of the "sequential" type.

West African (balanced) **and** English (deranked) causatives are found in almost all AECs that I surveyed. Causatives involving balanced structures are therefore not only typical of African AECs, which are geographically coterminous with West African languages, but they also extend to the Caribbean, thereby providing further evidence for the areal-typological links of the AECs within West Africa (see Faraclas 1988; Yakpo 2012) and between West Africa and the Americas (see Muysken and Smith 2015). The AECs therefore show a dual "European" and "West African" areal-typological profile with respect to causative formation, reflective of their multiple genealogical heritages and the areal forces that have shaped individual creoles on both sides of the Atlantic.

4.2 Causative formation in West African languages

In this section, I provide examples from a sample of unrelated and distantly related West African languages in order to show the formal-functional unity of causative constructions across West Africa. This will serve as a baseline for the analysis of causatives in the African and Caribbean AECs in Sections 4.3 and 4.4.

The Gbe languages form a continuum of related but diverse lects spoken in Ghana, Togo, and Benin (Capo 1993; Kluge 2006). They are considered the most significant substrates of various Caribbean creoles, including Sranan (e.g., Migge 2003; Winford and Migge 2007) and Haitian Creole (Sylvain 1936). The Gbe languages share a similar template of causative formation, even if the form of the causative verb may differ and even if there is variation in clause linkage strategies between lects (for Ewe, see Westermann 1907: 100–101; Ameka 2005; for Fongbe, see Lambert-Brétière 2005, ch. 4). In the following, I provide data from Ewe (Ghana). Ewe employs the causative verb *ná*, diachronically related to the homophonous lexical verb *ná* ('give'), thus reflecting a cross-linguistic grammaticalization path known from other language families (e.g. Slavic, see von Waldenfels 2012). The Ewe causative construction in (5) is biclausal and balanced. The causee is instantiated as the subject of a finite subordinate clause of effect, shown by the presence of the optional complementizer, the quotative marker *bé*, and the subject pronoun *wò*. The argument sharing pattern of English is ungrammatical in Ewe, cf. (6).

(5) mè-**ná**   (bé)   wò-vá   àfì.
    1SG.SBJ-cause   QUOT   3SG.SBJ-come here
    'I made him/her come here'.   (Ewe)

(6) *mè-**nɛ̂**   vá   àfì.
     1SG.SBJ-cause.3SG.OBJ   come here
     'I made him/her come here'.   (Ewe)

Akan is a cluster of closely related lects spoken in present-day Ghana and Côte d'Ivoire comprising Asante Twi and Fante among others. Akan is the principal ad-strate of Ghanaian Pidgin English and is seen as a substrate of various Caribbean AECs (e.g. Jamaican, see Farquharson 2012; Alleyne 1980). Akan has three types of analytic causative constructions featuring the causative verb *mà* ('cause') with differing distributions and subtle semantic differences across lects (Agyekum 2004). The causative verb màis also homophonous with, and diachronically related to the verb *mà* ('give') in Akan. In all lects of Akan we find the balanced structure already seen in Ewe, in which the causee is coded as the subject of the subordinate clause of effect, as shown in (7):

(7) ɔ́-**mà**-à   ɔ́-kɔ̀-ɔ̀   fíé.
     3SG.SBJ-cause-COMPL 3SG.SBJ-go-COMPL home
     'S/he made him/her go home'. Lit. 'S/he made s/he go home'.   (Asante Twi)

A second possibility not found in Ewe but encountered in Asante Twi features a deranked subordinate clause. The causee is realized as a shared (pronominal) argu-ment (*nó*, 3SG.OBJ). This structure parallels the deranked causatives of English and implies a more direct form of causation in Asante Twi than the balanced structure in (7) above (Duah 2013: 232):

(8) ɔ́-**mà**-à   **nó**   kɔ̀-ɔ̀   fíé.
     3SG.SBJ-cause-COMPL 3SG.OBJ go-COMPL   home
     'S/he made him/her go home'.   (Asante Twi)

A third possibility attested in the Fante lect of Akan involves the co-occurrence of the causative verb and the complementizer mà, which instantiates subjunctive mood (9). Hence we find homophony and a diachronic relationship between 'give', 'cause' and the SBJV complementizer in Akan. Such causatives are classified as the "purposive" type by WALS (Song 2013), in this case signalled by the presence of subjunctive mood with its purposive or goal semantics:

(9) ɔ́-**má**-à   **mà**   ɔ́-kɔ́-ɔ̀.
     3SG.SBJ-cause-COMPL   SBJV   3SG.SBJ-go-COMPL
     'S/he made him/her go'. Lit. 'S/he made that s/he go'.   (Fante)

In Akan, Ewe, and most of the West African languages surveyed, forms functionally equivalent to the Akan SBJV complementizer in (9) introduce the subordinate clauses of deontic modality inducing main verbs ranging from weak to strong in force, and are also found in directive main clauses.[10] For example, the Akan indi-

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10. The complete range of deontic and neighbouring modalities investigated for the present purpose is (1) indicative factual: I know that he'll leave; (2) deontic: imperative/jussive; indirect

rect imperative featuring a speech verb like *kyèré* ('tell [to]', see [10]), and the Ewe deontic verb *dí* ('want', see [11]) both take clausal complements marked for subjunctive mood by the modal complementizer *má* (Akan) and *né* (Ewe) respectively. The near-homophony of Ewe *ná* ('give; cause') and *né* (SBJV) suggests the same diachronic links between these senses as between those of Akan *má*.

(10) mè-**kyèrɛ́-ɛ̀**   nò   (sɛ́ɛ̀) **má** ɔ́-n-kɔ́   fié.
     1SG-tell-COMPL 3SG.OBJ QUOT SBJV 3SG.SBJ-OPT-go   home
     'I told him/her to go home'.   (Akan)

(11) mè-**dí**   bé   **né**-vá   àfî.
     1SG.SBJ-want   QUOT SBJV.3SG.SBJ-come   here
     'I want him/her to come here'.   (Ewe)

Directive main clauses (1SG/PL and 3SG/PL jussives, cohortatives and 2PL imperatives) are also routinely marked for subjunctive mood, as in (12) and (13):

(12) **má**   yɛ́-n-kɔ́!
     SBJV   1PL-OPT-go
     'Let's go!'   (Akan)

(13) **né**   wó-vá!
     SBJV   3PL.SBJ-come
     'Let them come!'   (Ewe)

The formal unity of the use of subjunctive for the expression of deontic force across genealogically diverse languages in West African languages is remarkable. However, the use of subjunctive mood does not extend to causative constructions in all languages. Contrary to Fante (cf. [9] above), there is no co-occurrence of the causative verb and the (near-)homophonous SBJV marker in Ewe (14):

(14) mè-**ná**   (***né**) wò-vá   àfî.
     1SG.SBJ-cause SBJV   3SG.SBJ-come here
     'I made him/her come here'.   (Ewe)

The co-occurrence restriction is probably a residual effect of the grammaticalization process from 'give', via 'cause' to SBJV and the operation of an "Obligatory Contour Principle" (OCP), which disallows the appearance of two segmentally similar forms beside each other (Leben 1973). Yoruba (Nigeria) is a major adstrate of the south western variety of Nigerian Pidgin and had a substantial influence on Krio (Hancock 1971), and its offshoot

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imperatives, complements of want; causatives; complements of verbs expressing preference/ aversion/fear; purpose clauses; temporal limit clauses; and (3) epistemic possibility: It is possible that he leaves tomorrow.

Pichi. Yoruba shows a familiar pattern: the causee is expressed as the subject of a finite subordinate clause, shown by the presence of the 3SG subject pronoun in the clause of effect in (15). Contrary to Ewe, but as in Fante, Yoruba shows no co-occurrence restriction of the SBJV complementizer and the causative verb *mú*. The clause of effect is introduced by the SBJV complementizer *kí*, which is, however, not homophonous with the causative verb (for an overview of the functions of *kí*, see Bamgbose 1966: 149–150). Yoruba therefore also features the purposive type of causative formation:

(15) mo   **mú kí ó**   lọ.
      1SG.SBJ   cause SBJV 3SG.SBJ go
      'I made him/her go'.   (Yoruba)

The Yoruba SBJV complementizer is also found across the entire range of deontic modality inducing contexts, e.g. in the clausal complements of *fẹ* ('want', see [16]), in indirect imperatives involving speech verbs like *sọ* ('say, tell'), and in directives (17). In this respect, Yoruba, Ewe and Akan structures are again identical:

(16) mo   **fẹ kí** ó   wá.
      1SG.SBJ want SBJV 3SG.SBJ come
      'I want him/her to come.'   (Yoruba)

(17) **kí**   ó   lọ!
      SBJV   3SG.SBJ go
      'Let him/her go!'   (Yoruba)

Given the size of the linguistic area, micro-variation within an otherwise remarkably unitary pattern is to be expected. Hence in Bafut (Cameroon), we find the usual balanced structure in causatives, but the general complementizer (*mə*) and the SBJV complementizer (*tá*) commonly co-occur. As in Yoruba, the causative verb (*yìrí*) is not homophonous with the SBJV complementizer:

(18) má   kì   yìrí   **mə́** **tá** à   ɣɛ̀ɛ́ wùsáá.
      1SG.SBJ PST make   COMP SBJV 3SG.SBJ go   town
      'I made him/her go to town'.   (Bafut)

In sum, we find three types of analytic causative constructions in the West African languages discussed above, shown in Table 1. Type 1 involves a deranked structure, as in English. Type 2 causatives involve balanced structures. Type 2 can be further subdivided into Type 2a, "sequential" structures without subjunctive marking (Balanced, −SBJV), and Type 2b, "purposive" structures with subjunctive marking (Balanced, +SBJV). The feature "Deontic SBJV" refers to the presence of subjunctive marking across the deontic modality domain, irrespective of use with

causatives; "SBJV COMP = CAUS V" means that the SBJVcomplementizer is formally identical (homophonous) with the causative verb.

Table 1. Comparison of analytic causative formation in English and in West African languages

Type	Feature	English	Akan	Ewe	Ga	Yoruba	Bafut
1	Deranked	✓	✓				
2a	Balanced, −SBJV		✓	✓	✓	✓	✓
2b	Balanced, +SBJV		✓			✓	✓
	Deontic SBJV		✓	✓	✓		
	SBJV COMP = CAUS V		✓	✓	✓		

The following observations can be made with respect to the distribution of features across the languages in Table 1:

a. Type 1, the canonical structure in English, is rare in the West African languages sampled and limited to one lect of Akan.
b. Balanced causatives (Types 2a/2b), unknown in English, are the most widespread structure across the West African languages.
c. Type 2a is limited to languages in which the causative verb and the SBJV complementizer are homophonous (most lects of Akan, as well as Ewe and Ga). Type 2b is found in languages in which the causative verb and the SBJV complementizer are not homophonous (Yoruba, Bafut), and it is found as a minor pattern in (the Fante lect of) Akan. This distribution seems to suggest the operation of an OCP-related co-occurrence restriction in languages using Type 2a.

I conclude that balanced causatives (Types 2a/2b) are an areal trait in West Africa. The micro-variation in balanced causatives encountered across West African languages can help to pinpoint particular substratal and adstratal influences in the occurrence of African-style causatives in the AECs, to which I turn in Section 4.3. When balanced structures are absent in an AEC and we instead find deranked causatives, it is, by contrast, useful to appeal to English as the most likely source.

4.3 Causative formation in the African AECs

I now analyse patterns of causative formation in four West African AECs. I conclude that the causative formation strategies found in the African AECs (all of which are in contact with African adstrates) reflect the intensity of contact that the creole has (had) with English.

Krio (Sierra Leone) has had unbroken contact with English since its formation in the early 19th century. Krio's offshoot Pichi is, by contrast, the only African AEC not to have been in direct contact with English since at least 1857, when Equatorial Guinea was claimed as a colony by Spain. The presence and absence of contact with English are reflected in differential strategies of causative formation in the two creoles. Consider (19):

(19) è   **mék**   **mék** à   lɛ́f.
      3SG.SBJ   make   SBJV 1SG.SBJ   leave
      'S/he made me leave'.   (Pichi/Krio)

Example (19) contains the ingredients of Type 2b causatives already seen in Section 4.1: (i) the causation event is expressed in two finite clauses, evidenced by subject case assignment of the causee; (ii) the construction is of the purposive type, i.e. the clause of effect is introduced by the SBJV complementizer *mék*; (iii) the SBJV complementizer is homophonous with, and diachronically related to, the causative verb *mék*. The possibility of co-occurrence in some AECs but not in others will be discussed in this section and in subsequent ones.

As in the West African languages covered in the preceding section (cf. [12], [13]), the subjunctive marker *mék* also occurs in other deontic modality inducing contexts, e.g. in directives like the jussive in (20):

(20) **mék**   è   nó   gó   nà   hós!
      SBJV   3SG.SBJ NEG   go   LOC   house
      'Don't let him/her go home!'   (Krio/Pichi)

Subjunctive marking is also found in the complements of deontic verbs like *tɛ́l* ('tell [to]'), *fɔ́s* and *wánt* as in (21) and (22). The quotative maker *sé* (QUOT) may often optionally co-occur with the SBJV complementizer (cf. [10]):

(21) dɛ̀n **tɛ́l/fɔ́s**   àm   (sé)   **mék** è   gó.
      3PL tell/force   3SG.OBJ   QUOT   SBJV 3SG.SBJ go
      'They told/forced him/her to go'.   (Krio/Pichi)

(22) ús-sáy   yù   **wánt**   (sé)   **mék** è   gó?
      which-side   2SG   want   QUOT SBJV 3SG.SBJ go
      'Where do you want him/her to go?'   (Krio/Pichi)

Pichi and Krio however also show micro-variational differences. Firstly, the Type 2a sequential pattern of causative formation is attested in Krio (23), but not in Pichi:

(23) à   gò   **mék** ì   lɛ́f   Àmɛ́rìkà   kám.
      1SG.SBJ   POT   make 3SG.SBJ leave USA   come
      'I will make him/her leave the USA (and) come (back)'.   (Krio)

A second possibility found in Krio but **no longer** found in Pichi is the Type 1 English-style deranked causative. In my Pichi corpus there is only a single instance of a Type 1 causative, uttered by a speaker above 80 years of age. Younger Pichi speakers reject Type 1 causatives like (24) as ungrammatical:

(24) à   mék **àm**   gó   Àmɛ́rìkà.
     1SG.SBJ make 3SG.OBJ go   USA
     'I made him/her go to the USA'.   (Krio)

Ghanaian Pidgin English (GhaP) also makes use of Type 2a balanced causatives (25). Type 2b causatives featuring the homophonous causative verb and the SBJV complementizer as in (19) above are not attested however. I hypothesize that GhaP features the same co-occurrence restriction as the Ghanian adstrates Ewe and Akan:

(25) à   gò   **mék** (*mék) **ì**   bríng mí   dè   glás.
     1SG.SBJ POT   make SBJV   3SG.SBJ bring 1SG.OBJ DEF   glass
     'I'll make him bring me the glass'.   (GhaP)

GhaP also features deranking common to both English and Akan (26).

(26) à   **mék àm**   bríng mí   dè glás.
     1SG.SBJ make 3SG.OBJ bring 1SG.OBJ DEF glass
     'I made him bring me the glass'.   (GhaP)

Nigerian Pidgin (NigP) patterns along the lines of Krio and allows Type 1 (27), 2a and 2b (28) causatives:

(27) à   **mék àm**   báy dís klɔ́t   fɔ̀   mí.
     1SG.SBJ make 3SG.OBJ buy this cloth   PREP 1SG.OBJ
     'I made him/her buy this cloth for me'.   (NigP)

(28) à   **mék (mék)** ìm   báy   dís   klɔ́t fɔ̀   mí.
     1SG.SBJ make SBJV   3SG.SBJ buy   this   cloth PREP 1SG.OBJ
     'I made him/her buy this cloth for me'.   (NigP)

Pichi therefore stands out from the other African AECs in that it only features Type 2b causatives. It is noteworthy that Pichi has not retained or developed the Type 1 causative in spite of intense contact with Spanish for over 150 years and deranking as the default option in Spanish causatives, cf. (29):

(29) **lo**   **hizo**   salir   de   la   oficina.
     3SG.M.OBJ make.PFV.3SG leave.INF from DEF.F   office
     '(S/he) made him leave the ofice'.   (Spanish)

In the Caribbean AECs, we also find reflexes of West African causative formation. However, the English-style deranked construction appears to be more central.

4.4 Causative formation in the Caribbean AECs

The Caribbean AECs also feature balanced and deranked causatives and make use of subjunctive mood in the deontic domain. Balanced causatives are, however, always of Type 2a, hence never involve the co-occurrence of the causative verb and the SBJV complementizer. Deranked causatives are also limited to those Caribbean AECs that have been in continuous contact with English since their emergence. In the Caribbean, contact with English coupled with the absence of African adstrates, has led to greater "advergence" (i.e. unilateral convergence, Mattheier 1996: 34) with English than in the African AECs in contact with English.

I have already shown that TobC features Type 1 and Type 2a causatives (see [3] and [4] above). The Type 2b causative is not attested, cf. (30):

(30) mii   **meek** (***meek**) ii   goo hoom   oorli.
      1SG.SBJ make   SBJV   3SG.SBJ go   home   early
      'I made him/her go home early'.   (TobC)

In areas of the deontic domain other than causative, TobC optionally follows the West African pattern. The *want* complement in (31) is introduced by *meek*, the ubiquitous reflex of 'make'. The resulting structure is balanced, and involves two finite clauses:

(31)   mii   **want meek** ii   kom   hoom.
       1SG.SBJ want SBJV   3SG.SBJ come home
       'I want him/her to come home'.   (TobC)

It is, however, more common that deontic main verbs like *want* or *foos* take deranked non-finite complements introduced by the complementizer *fo*, as in (32). This construction parallels the corresponding English structure, which also involves deranking, cf. the translation of (32):

(32)   mii   **want/foos am**   **fo**   kom   hoom.
       1SG   want/tell 3SG.OBJ COMP   come   home
       'I want/forced him/her to come home'.   (TobC)

In the African AECs, main verbs like *want* appear in balanced constructions with subjunctive mood (see [22] above) and deranked structures like (32) are ungrammatical. TobC is therefore more English-like in this respect. The same can be said of TrnC. Example (33) features a Type 1 deranked causative, in which the causee is expressed as a (masculine gender) pronominal object (*im*):

(33) a   **meek   im**   bay   mii   a   kaa.
      1SG.SBJ   make   3SG.OBJ.M buy   1SG.OBJ INDF car
      'I made him buy me a car'.   (TrnC)

In example (34), the case-neutral masculine gender pronoun *hii* is used instead. Contrary to English he, TrnC *hii* is morphologically invariant and can appear in the object position (e.g. *hii sii hii* ['he saw him']). Evidence from the other Caribbean AECs however suggests that the presence of *hii* in the causee/object position in (34) implies a Type 2a balanced (sequential) structure:

(34) a   **meek   hii**   bay   mii   a   kaa.
      1SG.SBJ make   3SG.M   buy   1SG.OBJ INDF   car
      'I made him buy me a car'.   (TrnC)

Beyond causative, TrnC is the only AEC in my corpus in which a SBJV complementizer based on a reflex of English make does not occur at all. TrnC therefore exhibits the largest degree of advergence with English (cf. Winford 1993: 1).

In contrast, Sranan (Suriname) is the least anglicized of the three Caribbean AECs. Sranan has been insulated from direct English influence since the late 17th century and the non-lexifier superstrate Dutch has remained the official language of Suriname until today. The only pattern of causative formation accepted by my informants is Type 2a (35):

(35) a   **meki a**   go   na   oso   baka.
      3SG.SBJ make 3SG.SBJ go   LOC   house back
      'S/he made him/her go back home'.   (Sranan)

In Sranan, neither Type 1 nor Type 2b is attested:

(36) *a   **meki   en**   go na   oso   baka.
      3SG.SBJ make   3SG.OBJ go LOC   house   back
      'S/he made him/her go back home'.   (Sranan)

Sranan nevertheless features the use of the SBJV complementizer *meki*, the reflex of make, in the usual deontic modality inducing contexts. Among them is the use of the SBJV complementizer in clausal complements of want, as shown in (37). A deranked *want* complement as in TobC (32) is not attested. Sranan therefore behaves like the African AECs in this regard (cf. Krio/Pichi [22]):

(37) mi   **wani meki**   a   go   na   oso   baka.
      1SG   want SBJV   3SG.SBJ go   LOC   house back
      'I want him/her to go back home'.   (Sranan)

The causative/permissive construction of Sranan's non-lexifier superstrate Dutch involving the causative verbs *laten* ('let, make') or *doen* ('do', inanimate causer), is also Type 1, hence English-like, cf. (38):

(38) ik   **liet**   **hem**   terug naar huis   gaa-n.
      1SG.SBJ   leave.SG.PST   3SG.M.OBJ   back to   house   go-INF
      'I let/made him go back home'.   (Dutch)

Therefore, neither of the two Dutch causative verbs nor their semantic or combinatorial features have been transferred to Sranan. *Laten* is, for example, used in both causatives and permissives. The African-style Type 2a has remained the only permissible structure.

4.5 Comparison

Table 2 below summarizes the types and features of causative formation in the African and Caribbean AECs covered in Sections 4.3 and 4.4. The last row indicates the presence or absence of contact strata for each language, indicated via the plus or minus sign.

Table 2. Comparison of causative formation in the AECs

Type	Feature	Engl	Pichi	Krio	NigP	GhaP	Sranan	TobC	TrnC
1	Deranked	✓		✓	✓	✓		✓	✓
2a	Balanced, −SBJV			✓	✓	✓	✓	✓	✓
2b	Balanced, +SBJV		✓	✓	✓				
	Deontic SBJV		✓	✓	✓	✓	✓	✓	
	Stratal contact constellation		−Engl +ad-strates	+Engl +ad-strates	+Engl +ad-strates	+Engl +ad-strates	−Engl −ad-strates	+Engl −ad-strates	+Engl −ad-strates

The following observations can be made with respect to the distribution of features in Table 2:

a. Type 1, the canonical structure in English, is only found in AECs in contact with English. English is therefore the source of Type 1 causatives in the AECs.
b. Balanced causatives (Types 2a/2b), unknown in English, are found in all AECs of the sample.
c. Type 2a is the most widespread structure in the AECs and across African adstrates (and substrates) (see Table 1). West African languages are therefore the source of balanced causatives in the AECs.

d. Type 1 in GhaP may be the result of the convergent influence of the adstrate Akan and the lexifier-superstrate English (cf. Section 4.2).
e. Type 2b is only found in AECs that are in contact with Yoruba (NigP), or were in contact with Yoruba (Krio and Pichi). Type 2b causatives are therefore most likely to be of Yoruba origin.
f. Pichi and Sranan are the only AECs without Type 1 causatives. This is due to the absence of (recent) contact with English.
g. TrnC is the only language without subjunctive marking in the deontic domain. This is due to more intense contact with English, compared to the other AECs in the corpus.

The observations in (a) to (g) support the two interdependent hypotheses made in Section 1. Hypothesis 1 suggests that the likelihood of transfer to an AEC from the lexifier superstrate English is higher than from a non-lexifier superstrate, and effectively, Type 1 constitutes the dominant pattern in the Caribbean and an alternative pattern in West Africa. In AECs not in contact with the lexifier superstrate English, Type 2a/2b West African causatives constitute the only pattern.

The transfer or retention of Type 1 causatives in AECs in contact with English can rely on congruencies with English with respect to form, meaning, combinatorics, and frequency: English make and the AEC reflexes are (near-)homophonous, high-frequency generic verbs and both occur in transitive clauses that form the cognitive schema for causatives. In contrast, in AECs in contact with non-lexifier superstrates (Pichi, Sranan) there is no such congruity: no formal similarity between the non-lexifier and the AEC causative verb exists, e.g. (29), and Spanish even features OV word order with pronominal objects, cf. (38). Consequently, causative structures from the non-lexifier superstrates have not been transferred to Sranan and Pichi. This is despite several centuries of intense contact with Dutch and Spanish respectively, and the use of deranked causatives similar to English ones in both superstrates.

Hypothesis 2 suggests that contact with African adstrates will ensure the retention and the expansion of African substrate features in an AEC. Effectively, African-style 2a/2b causatives are the central type in all African AECs. In the Caribbean, only Sranan has escaped advergence with English due to absence of contact with English. In TobC and TrnC, the absence of African adstrates has led to the contraction of Type 2a/b and, in interaction with lexifier contact, led to the dominance of Type 1.

The intensity and duration of contact with English, non-lexifier superstrates and with African adstrates is therefore a good predictor of patterns to be found in individual AECs. This allows us to model contact outcomes and diachronic change in the AECs on the basis of stratal-areal influences.

5. Towards a model of stratal language contact in the AECs

Based on the results of the analyses I propose a model of post-formative contact outcomes in the AECs. This model incorporates a comprehensive inventory of contact constellations in Africa and the Caribbean, and can be expanded to accommodate additional constellations and contact strata where relevant. Table 3 lists the major AEC contact ecologies in the Atlantic Basin. AECs discussed in this article are in bold, other AECs in the same constellation are in regular font. "Stratal contact constellation" indicates the presence (+) or absence (−) of contact with the three relevant strata. Hypotheses on contact outcomes are provided in the rightmost column.

Table 3. Stratal contact constellations and contact outcomes in theAECs

No	Languages	Stratal contact constellation	Predicted contact outcomes
1	**Pichi**	−contact with English +contact with non-lexifier superstrate +contact with African adstrates	• transfer from non-lexifier superstrate Spanish • no transfer from English and weakening of lexifier features • transfer from African adstrates and strengthening of adstrate and substrate features
2	**Krio, NigP, CamP, GhaP**, Aku (Gambia)	+contact with English −contact with non-lexifier superstrate +contact with African adstrates	• transfer from English and strengthening of lexifier features • transfer from African adstrates and strengthening of adstrate and substrate features
3	**Sranan**, Eastern Maroon Creole, Saramaccan (Suriname); AECs of the Caribbean coast of Central America	−contact with English +contact with non-lexifier superstrate −contact with African adstrates	• transfer from non-lexifier superstrate Dutch • no transfer from English and weakening of lexifier features • no transfer from African adstrates and but less weakening of substrate features
4	**TobC, TrnC,** JamC, GuyC, Belizian Creole, all lesser Antilles AECs, African-American Vernacular English	+contact with English −contact with non-lexifier superstrate −contact with African adstrates	• transfer from English and strengthening of lexifier features • no transfer from African adstrates and weakening of substrate features

Constellations 1 and 4 represent the West African and the English endpoints of the typological continuum of AEC structures. In 1, represented by Pichi alone, the AEC is no longer in contact with the lexifier English and has a non-lexifier superstrate (in this case Spanish). The AEC is spoken in a multilingual ecology alongside African adstrates. The predicted outcomes of this stratal constellation are: (i) features from the non-lexifier superstrate will be transferred into the AEC; inherited English-like features will be weakened; and (ii) features inherited from the African substrates will be strengthened through contact with typologically similar African adstrates. On the whole, the AEC appears less English-like and more West African-like.

AECs in constellation 4, represented by TobC and TrnC and the majority of Caribbean creoles, are spoken in largely bilingual ecologies alongside the lexifier superstrate English. There is no contact with African adstrates. The predicted outcomes are: (i) features from English will be transferred into the AEC or strengthened; and (ii) the absence of African adstrates will lead to a weakening of features inherited from African substrates. All in all, these AECs appear more English-like than AECs in all other contact ecologies.

Constellation 2, the largest in speaker numbers, features most African AECs and is characterized by multilingualism and contact with the lexifier superstrate English and African adstrates. The latter show extensive areal-typological over-laps with the historical AEC substrates or are identical with them. The predicted outcomes are: (i) features from English will be transferred into the AEC; and (ii) features will be transferred from African adstrates. On the whole, these AECs will show English influence while maintaining and expanding African typological features inherited from substrates.

AECs in constellation 3 align with AECs in constellation 1 in terms of the absence of contact with English, and with AECs in constellation 4 in terms of the absence of contact with African adstrates. The creoles of Suriname (including Sranan), however, differ from those of Central America in the duration of contact with English. The latter AECs either only arrived in Spanish-speaking Central America in the 19th century, or were never completely cut off from English influence (see Holm 1983). These AECs are therefore more English-like than the Surinamese group with its longer insulation from English.

Potential constellations 5 and 6 are not listed in Table 3 because their specificity in terms of contact outcomes is not (yet) certain: in Cameroon, Cameroon Pidgin is in contact with the non-lexifier superstrate French in addition to English and African adstrates, and in Belize, Belizean Creole is in contact with the non-lexifier superstrate Spanish in addition to English. In the absence of suficient data, I make the preliminary assumption that the characteristics of constellations 2 and 4 hold for most speakers in Cameroon and Belize, respectively.

Likewise, the model in Table 3 does not list "non-African adstrate" as a fourth stratum in the Caribbean. Existing studies primarily suggest lexical and phonological influences from the Asian diaspora languages (e.g., Yakpo and Muysken 2014), indigenous languages and French-lexifier creoles on Caribbean AECs (e.g., Leung 2012 for TrnC). The absence of significant structural transfer may suggest a strong founder effect (Mufwene 1996), and also provides indirect evidence that (English) superstrate influence is disproportionately important. It may also suggest that African adstratal transfer to African AECs can count on existing typological correspondences that the Asian diaspora languages, for example, do not share with the AECs. In any case, non-African adstratal influence on the AECs deserves further investigation.

A final aspect transpires from Table 3. All Caribbean and African AECs listed coexist with (lexifier or non-lexifier) superstrates, suggesting that none of these creoles has a high sociolinguistic prestige, even if there are significant gradations in the status quo of individual AECs (cf., Yakpo 2016: 224–227).[11]

6. Conclusion

The remarkable typological diversity within and across individual AECs reflects the linguistic diversity of their ecologies. The model I present invokes different language strata as primary linguistic forces of change. The model takes the neglected reality into account that the largest AECs are today spoken in West Africa alongside African adstrates, and that a sizeable number of AECs have not been spoken alongside their lexifier English for centuries.

I argue for a greater relevance of lexifier superstrate (English) contact than of non-lexifier contact (e.g. Spanish and Dutch) for the extent, and possibly the speed, of contact-induced change in the AECs. Besides the well-known socio-economic and ideological causes of English dominance, there are system-internal, linguistic reasons: the formal, semantic, combinatorial and frequential similarities between the AECs and English can make the transfer of English features into an AEC occur in more seamless and seeping ways than is the case with non-lexifier superstrates. In a similar vein, the presence or absence of contact with African adstrates is decisive for the retention and expansion, or contraction, of West African typological features in the AECs.

I do not, however, make any eschatological claims about the direction of change in the AECs, i.e. inevitably from more African- to more English-like and, via "decreolization", to language death. For all that we know about the socio-historical

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11. I am grateful to a reviewer for pointing this important aspect out to me.

complexity of the colonial period in the Caribbean, many Caribbean "creoles" could well have been more similar to English at earlier stages. They may therefore be reconverging with English (see Mufwene 2001: 38–39, regarding Barbados; Chaudenson 1992), or have remained relatively stable for long periods, and might continue to do so for some time to come. In contrast, the dynamics in GhaP for example, favour convergence towards Kwa-like, from previously more English-like, structures (Corum 2015).

Further research will allow a refinement of the model of change proposed here. One direction of research is to analyse further sub-systems of the AECs in depth and with diligence, and based on field data. The variation in the composition of influences from the various strata that we are likely to encounter between different sub-systems could tell us something about the role of typological factors for the borrowability and stability of specific features within the margins set by the sociolinguistic setting. The fate of particular features across these languages can also provide fascinating insights into the general mechanisms of genealogical differentiation and areal convergence in multilingual linguistic ecologies.

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Appendix. Abbreviations

CAUS	Causative		OCP	Obligatory Contour Principle
COMP	Complementizer		OPT	Optative mood
COMPL	Completive aspect		PL	Plural number
DAT	Dative case		POSS	Possessive
DEF	Definite article		POT	Potential mood
F	Feminine gender		PRF	Perfect tense/aspect
GHAP	Ghanaian Pidgin English		PROX	Proximate demonstrative
INDF	Indefinite article		PRS	Present tense
INF	Infinitive		PST	Past tense
IPFV	Imperfective aspect		QUOT	Quotative marker
LOC	Locative preposition		SG	Singular number
M	Masculine gender		SBJ	Subject case
MOD	Modal element		SBJV	Subjunctive mood complementizer
NEG	Negator		TOBC	Tobagonian Creole
NIGP	Nigerian Pidgin		TRNC	Trinidadian Creole
OBJ	Object case		V	Verb

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