

The Ijo-derived lexicon of Berbice Dutch Creole: an a-typical case of African lexical influence

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NOTES FOR TYPESETTING:

- \$ is to be replaced by epsilon throughout!!!
- there are five occurrences of @ in the Appendix which are to be replaced by Schwa
- there are three occurrences of % in the Appendix which are to be replaced by a velar nasal
- Underlined vowels and consonants in Ijo forms throughout the text and footnotes really ought to have underdots; if it is possible to change the underlines to underdots, the remark about underline in the Appendix should be changed to underdots

1. Introduction

That Berbice Dutch (BD) constitutes an a-typical case of African lexical influence was first established by Smith, Robertson & Williamson (1987), where it was shown that a significant number of BD words is easily traceable to a single West African source, and that many of these words are found in what is considered to be “basic” lexicon. In contrast, words in other Caribbean Creole languages inherited from substrate languages are usually found in culturally specialized lexicon, are frequently difficult to trace to any specific source language, having undergone formal or semantic changes, and are not restricted to a single substrate language.

We will explore all this in more detail below. The appendix provides the full list of known BD words of Eastern Ijo provenance. The BD and Eastern Ijo forms listed there are drawn from Smith et al. (1987), Kouwenberg (1994), and unpublished field notes from fieldwork which I carried out in Kalabari speaking communities during 1994.¹

2. The sources of BD lexicon

BD was once the vernacular of the Dutch-owned Berbice and Canje plantation areas of what is now Guyana (South America). It arose in a situation involving contact between an indigenous Arawak population, Dutch colonizers (including planters, administrators, clerks, military personnel etc), and African slaves. In addition, throughout the history of this Dutch colony, planters from other European countries formed a minor presence. After the final cessation of the colony to the British in 1814, English gradually became the sole official language of the colony, after a period of co-existence with Dutch. English-lexifier Guyanese Creole (GC) spread quickly throughout most of British Guyana, encompassing the former Essequibo, Demerara and Berbice colonies. Dutch Creole survived into the 20th century in both Essequibo (Skepi Dutch (SD)) and Berbice (Berbice Dutch), but not into the 21st century. While the Guyanese linguist Ian Robertson succeeded in locating speakers of BD in the mid-1970s, only “remembers” were found for SD (see Robertson 1989). My work with the last speakers of BD took place in the late 1980s. To my knowledge, no speakers of BD survive today.

BD wears its history on its sleeve, so to speak: its known lexicon contains significant numbers of words of Dutch (c600), Arawak (c180), and African derivation (c185), thus faithfully representing the three parties involved in its genesis. While our focus here is on the African component, it is useful to point out that the Arawak contribution is by and large found in the

¹ I have profited much from discussions with Kay Williamson, who passed away early in 2005, and Norval Smith over the years that I have been involved in research on the provenance of BD lexicon. I wish also to thank Otelemate Harry and the audience at the SCL 2000 Westminster Session on the African lexicon of Atlantic Creoles, in particular Philip Baker, for useful comments. I wish, finally, to thank the Netherlands Foundation for the Advancement of Tropical Research (WOTRO), which funded my research on Berbice Dutch and on Kalabari, and speakers of these languages who graciously gave of their time.

semantic domains of non-domestic flora & fauna and other elements of the natural environment, but is not restricted to these. It includes contributions to the domains of tools and implements, kinship terms, body parts, the spiritual world, verbs relating to hunting and food processing activities, and several adverbs. Surprisingly, *kika* 'cassava bread' of African (Eastern Ijo) derivation rather than Arawak *kalí* is used in BD to designate the traditional Arawak staple.

What is striking about the African component is that it derives from a single source language: generally speaking, BD words which are neither Dutch-derived nor Arawak-derived are traceable to the Eastern dialect cluster of Ijo (Ijoid, Niger Congo). Inasmuch as BD has a few non-Eastern Ijo (EI) derived words of West African provenance, we find that these are shared with Guyanese Creole (GC). We assume, therefore, that these words do not constitute independent survivals in BD, but have entered via GC, a language with which it has been in contact for nearly two centuries. This is further supported by the fact that BD speakers tended to identify these words as "English," i.e. GC. They include: *baku* 'evil spirit' (source language unidentified), *butu* 'to bend down' (Twi), *dopi* 'jumbie' (Kikongo), *ganda* 'yard' (Kikongo), *gurma* ~ *gruma* 'okra' (Bantu), *kokob* 'leprosy' (Manding), *mut\$* 'elongated woven basket' (Kikongo).

3. The a-typicality of the BD case

Compared with other Caribbean Creole (CC) languages, the BD case of African lexical influence may be considered a-typical both in terms of its source, its place in the BD lexicon, and its internal composition.

3.1 The a-typicality of the African source

Generally, the fewer the forms for which we suspect an African derivation, the harder it is to pinpoint their exact source, and the wider the range of possible source languages. Aub-Buscher's (1989) work on Trinidad French Creole clearly illustrates this: she points out that only 150 forms out of a corpus of c 4,000 words have any likelihood of being of African derivation; the number with clear African affiliations is smaller still (p1). Moreover, proposed source languages for this relatively small number exceed a dozen different languages, between them covering most of coastal West Africa and areas further inland.

In contrast, the Suriname Creole languages constitute a case where West African-derived words abound. Hundreds of words have been attributed to substrate sources, and if the lexicon of these languages is ever described exhaustively, we are likely to find that the number easily exceeds a thousand words. Moreover, the forms are almost without exception clearly traceable to their sources. These include three dialect clusters: Gbe, Kikongo, and Twi (see, for instance, Huttar 1985, 1986, Daeleman 1972, Smith this volume). Historically, these three sources correspond to different periods of slave arrivals in Suriname (Arends 1995).

The a-typicality of the BD case lies in the *single* dominant source of African-derived lexicon. Not that a single lexical substrate source has not been claimed for other CC languages: thus, Twi (Akan) has been proposed as the single dominant source in the formation of Jamaican Creole (Cassidy 1961, Cassidy & LePage 1980). However, many of the etymologies proposed by Cassidy & LePage (1980) suffer from methodological problems. The overwhelming evidence for the Gbe, Kikongo and Twi contributions to the Suriname Creoles, and for the EI contribution to BD, sets a benchmark for other cases, such that anything short of large numbers of words traceable to a source with good formal and semantic matches is less than convincing. As it turns out, the Jamaican Creole case falls short on several counts: proposed source forms frequently differ considerably in form and/or meaning; in many cases, multiple West African source forms are or could be proposed; and also in quite a few cases, "probably African" provides the only etymological identification (Kouwenberg forthcoming a). It appears that the Twi contribution to Jamaican Creole assumed by many scholars is not as firmly established as we would like it to be.

It is worthy of note that Ijo is not known to have contributed more than one or two words to any other CC languages: *beke* 'white man' in the French-lexifier Creoles, *fon* 'to beat' in the

Suriname Creoles. This is likely to be related to the role of Eastern Ijò speaking communities in the slave trade: during the earlier period of slave trade, communities in the delta area where EI lects are spoken competed with each other, and there are accounts of raids being carried out on neighbouring villages. But these communities were forced to unite to safeguard their access to the in-land markets, at which point their slave trading activities became restricted to non-EI slaves, mainly from the Igbo area. Clearly, the Berbice must have been the only colony in the New World to receive a significant number of EI-speaking slaves during the earlier period.

3.2 The place of the EI component in the BD lexicon

The BD case is considered a-typical also in that the African contribution occurs in basic rather than peripheral lexicon. While any one interpretation of what constitutes “basic” lexicon can be criticized as subjective and culturally biased, EI-derived words can be found in BD in areas which can be considered basic for more than one reason: they abound in the BD Swadesh 100 word lists; they also abound among the words that describe every-day type activities and objects; finally, they abound in semantic areas that could be considered important in interaction between overseers or planters and slaves in the plantation context in which BD originated.

Considering the Swadesh 100 word list, the following division between the source languages of BD can be noted:²

	Dutch	Eastern Ijò	Arawak	Guyanese Creole	no equivalent	etymology unknown
Swadesh 100 word list	57%	38%	1%	1%	2%	1%

With respect to common, every-day type activities and objects, we find activities such as “eat,” “take,” “walk,” “give,” “speak,” “know,” objects such as “house,” “cloth,” “water,” “rain,” other common terms such as “child,” “head,” “small,” “long,” and abstract concepts such as “exist / not exist” denoted by EI-derived forms. And perhaps most suprising, we find a large number of EI-derived words for items and activities that would have been central to the daily operation of the plantations (see below for examples).

In most lexical domains, EI and Dutch are both present as lexical sources (Kouwenberg 1996a). These findings run counter to expectations based on work carried out on other CC languages. Thus, Huttar’s findings for Ndyuka formed the basis for the following rule of thumb (1985:48):

European etyma likely: aspects of everyday plantation life known by both slaves and masters and spoken about between the two groups; generic terms for items of the natural environment of the plantations; and items of European cultural origin.

Amerindian etyma likely: items of material culture borrowed from Indians, either directly or through contact with Indian wares bought by plantation owners and specific terms for some items of the natural environment of the interior.

African etyma likely: items of social, religious and material culture retained from Africa or developing within the nascent black societies; specific terms for some items of the natural environment of the plantations and of the interior; and aspects of everyday life that slaves wished to keep at least partly secret from Europeans.

In other words: the further removed from “everyday plantation life,” the more likely a non-European etymology. The sociohistorical context in which CC languages emerged is thus thought to have played a decisive role in the process of language formation. By and large, where there is

² Percentages rather than absolute numbers are used, as several entries in the Swadesh 100 word list are translatable by more than one BD form.

an identifiable substrate component, CC languages conform to this rule of thumb. BD, however, displays quite the opposite pattern:

(i) Dutch (D) is dominant in few, and mostly peripheral semantic domains of BD vocabulary: items of (European) clothing, numerals and other quantifiers, days of the week, internal organs of the body and genitals, perception verbs. EI dominates in motion verbs, crucial in any conversation.

(ii) EI words include ethnic denominators (*b\$ks* 'white person,' *muni* 'black person'), the title *ala* 'boss,' and other words of importance in "everyday plantation life," such as *kori* 'work,' *jungwa* 'sugarcane,' *pundi* 'squeeze (cane),' *mingi* 'water,' *soko* 'dig' etc.

(iii) Words of D and EI derivation are mixed quite freely, as can be seen in the existence of (a) near-synonyms of D and EI sources, e.g. *pot\$* 'old' [\pm human] < EI vs *hau* 'ancient' [-human] < D, *pakra* 'worn' [-human] < EI, *grotu* 'old' [+human] < D; (b) etymologically contrastive pairs, e.g. *j\$ma* 'woman' < EI vs *man* 'man' < D, *gu* 'big' < D vs *kali* 'small' < EI; (c) etymological contrast in general vs specific terms, e.g. *bwa* 'foot, leg' < EI vs *bautu* 'upper leg, thigh,' *kuiti* 'calf (of leg),' *kini* 'knee' < D, *danširi* 'shin' < Arawak; and (d) the side-by-side existence of D- and EI-derived words in domains of special grammatical relevance, e.g. first and second person pronouns < D, third person pronouns < EI.

Attesting to the broad range of the EI contribution to BD lexicon is the fact that verbs of EI origin include psychological verbs (e.g. *bionto* 'remember, believe'), verbs with affected objects (e.g. *pari* 'peel'), motion verbs (e.g. *wengi* 'walk'), speech verbs (e.g. *pama* 'tell'), and miscellaneous event verbs (e.g. *deki* 'take'). Nouns of EI origin are found in domains pertaining to domestic buildings, utensils and animals (e.g. *wari* 'house,' *aboko* 'hen'), culture (e.g. *ari* 'witchcraft'), body parts and bodily functions (e.g. *bara* 'arm, hand'), the natural environment (e.g. *\$n\$* 'rain'), aspects of social structure and family structure (e.g. *ala* 'boss,' *dauru* 'sister-in-law'). Adjectives of EI derivation include colour terms (e.g. *krukru* 'black'), physical attributes (e.g. *kali* 'small,' *loko* 'soft') and miscellaneous attributes (e.g. *bam* 'nice, pretty').

3.3 The internal composition of the EI component

It follows from the centrality of the EI contribution that it includes words of all classes: as can be seen below, nouns, verbs, adjectives, and functional morphemes (including bound morphemes) are all well-represented. In this respect, too, BD presents us with an atypical case. For instance, Huttar's (1985) list of c.150 Kwa and Bantu-derived Ndyuka words contains mostly nouns, not surprising seeing that they mainly denote items of social, religious and material culture. Similar African-derived concepts are not part of the cultural context in which BD survived into the 20th century. Cassidy & LePage (1968) contains dozens of Jamaican Creole words descriptive of personality traits and human behaviour which are (presumed to be) of African derivation. In BD, we find such terms more among the Dutch-derived adjectives.

Among the EI-derived words and morphemes, the single largest class is that of verbs, an entirely unexpected result. For comparison, Huttar's (1985) list contains 16 verbs, representing just about 10% of items in the list. Within the class of functional morphemes, bound morphemes are exclusively EI-derived. Whereas substratists assume a West African core of grammatical distinctions in CC grammars, we do not usually find that the forms that express these distinctions are of West African derivation.³ As seen below, although Eastern Ijo and Arawak have made about equal contributions to BD lexicon, the contrast between them could not be greater:

³ But see Smith (1996) for discussion of the Fon-derivation of the Saramaccan focus marker *w\$*, which until that time had been wrongly assigned to the English-derived lexicon of Saramaccan. It is possible of course that other such cases of unrecognized African-derived function words exist in CC languages. In fact, in Kouwenberg 1994, I tentatively assigned two function words to Dutch etyma, which—based on my fieldwork experience in Kalabari—I now believe have EI etyma instead; these are the resultative auxiliary *kon* and the focus marker *so*.

	Dutch	Eastern Ijo ⁴	Arawak	Total
Nouns	281 (48%)	65 (37%)	164 (91%)	510
Verbs	162 (28%)	82 (46%)	10 (5%)	254
Adjectives ⁵	75 (13%)	14 (9%)	1	90
Adverbs, Adpositions ⁶	46 (7%)	1	6 (4%)	53
Conjunctions, interrogatives	13 (2%)	0	0	13
Functional morphemes ⁷	12 (2%)	15 (8%)	0	27
Total	589 (100%) (63% overall)	177 (100%) (18% overall)	181 (100%) (19% overall)	947 (100%)

4. The significance of the EI lexical contribution beyond lexicon

Smith et al. (1987) point out that EI influence can be seen outside of the BD lexicon, in areas of grammar. Indeed, one important reason that creolists are interested in African lexical sources is precisely the fact that their identification may assist in identifying the sources of what are considered to be substrate properties of Creole grammars. In the BD case, particularly good candidates for EI influence are some properties that are more typical of SOV languages (such as the Ijo languages) than of SVO languages (such as CC languages, including BD). These include clause-final negation, suffixed aspectual markers, and postpositions. However, on further inspection it turns out that none of these properties of BD match those of the EI languages quite as closely as we would like (see also Kouwenberg, 1992).

4.1 Clause-final negation

BD standard negation employs a clause-final negator which appears in a long form *kan\$* or, much more frequently, in a short form *ka*:

- (1) *ju koki o kan\$*
2s cook 3s NEG 'You are not supposed to cook it.'
- (2) *\$k\$ timi wengi boši ababa ka*
1s be able walk bush anymore NEG 'I cannot walk in the bush anymore.'

The EI varieties similarly employ a clause-final negator. Nevertheless, the derivation which I propose for BD *kan\$* is based on the fact that the long form *kan\$* combines *ka* with Dutch-derived **n\$* < "nee" 'no!' (the independent negator; it is [nej] in Dutch pronunciation). In clause-final position, the most likely Dutch usage of "nee" is emphatic tag negation, a highly salient use. I propose that *kan\$* combines a similarly salient EI negative tag *oká?* (< *okó-á* [thus-NEG]) 'isn't it so?!' or negative exclamation *okáa!* (< *okó-áa*) 'it isn't so!' with the Dutch tag negator "nee." This derivation would mean that BD clause-final negation does not constitute the survival of an EI

⁴ Not included in the count (although included in the appended word list) are some forms which, although containing EI-derived subparts, constitute independent formations in BD. These include the verbs *s\$ř\$ma* 'hurt', *swama* 'wear, put in' and *šima* 'move,' the adverbs *danga* 'there' and *wanga* 'where' and the preverbal marker *ma* 'irrealis'; in each case, the stem from which these were formed exists also in BD, and is counted among the EI-derived forms. On the other hand, the verb *tama* 'pick' and the noun *databu* 'mother-in-law,' which similarly (appear to) constitute BD innovations, were counted among the EI derived forms on the basis that no subpart of these forms would otherwise be included in the count.

⁵ In Kouwenberg (1994: 250-260; 1996) I argue that adjectives constitute a class distinct from the class of verbs in BD. There are, however, a number of adjectives which function as verbs, too. The classification here relies on what I consider to be the primary category of the items in question. It should be noted that EI does not have a class of adjectives, but that several EI descriptive verbs have been inherited as adjectives in BD (as can be seen in table 3 in the Appendix).

⁶ Some BD adpositions are basically nouns (e.g. *atri* 'back' as well as 'behind'). These are counted in the class of nouns, not of adpositions.

⁷ These include pronouns, determiners, demonstratives, tense/aspect markers, plural and nominal markers.

negative construction, but developed independently in the contact situation between Dutch and EI. At best, in this scenario, the BD negator constitutes a reinterpretation along the lines of an EI pattern of clause-final negation rather than a straightforward case of transfer.

Smith et al. (1987) propose to derive *ka* from the EI clitic clause-final negator. The first problem with that derivation is that this negator appears without an initial velar stop in most lects, e.g. Kalabari *-áā*. However, it appears as *-ya*, with an initial velar, in Nembe and Kolokuma; moreover, the fact that *-ya* is used in the Kalabari drum language suggests that the initial velar represents an older form and once more widespread form. Unfortunately, BD usually preserves the voice specification of consonants in EI-derived forms, which means that the expected derivation is **-ya > *ga*, not **-ya > ka*. Smith et al. (1987:85) also point to the existence of *-ka* in Okrika. At first blush, this seems the perfect source for the BD form. However, it turns out that *-ka* is the “question” form, with *-áā* the standard negator, and *-kē* a “statement” form. Okrika grammar remains largely undescribed, and any pronouncements here remain speculative, but I suggest that Okrika *-ka* is in fact a tag negator, like Kalabari *oká?*⁸ In other words, whether the proposed source is Okrika or Kalabari, in either case the BD form derives from a tag negator rather than from the standard negator.

4.2 Bound morphology

BD bound morphology consists of a perfective suffix *-t\$*, an imperfective suffix *-ar\$* or its short form *-a*, and a plural suffix *-apu*. Additionally, there is an enclitic nominalizer *j\$*. (See Kouwenberg 1994 for detailed descriptions of all these morphemes.) All these forms derive from the substrate. We need to caution, however, against explanations which simply call upon substrate continuity for these forms, as they represent only a subset of a much richer system in the substrate (see Arends, Kouwenberg & Smith 1995 for a similar point). Not only was that system not adopted into BD, but in the case of *-apu* and *j\$*, the BD forms have undergone considerable reanalysis compared to their EI counterparts: *-apu* derives from a pronominal with plural human reference in EI, where it contrasts with a pronominal with singular human reference. BD *j\$* derives from a pronominal with singular non-human reference, which, in EI, contrasts with a plural form. The distinctions of the EI system are not replicated in BD, where *-apu* has lost its human reference, while *j\$* has lost its non-human reference. Moreover, BD *-apu* is phonologically dependent, and *j\$* has only semi-independent status. In sum:

- (3) EI *apu* pronominal, human, plural > BD *-apu* suffix, plural
 EI *yé* pronominal, non-human, singular > BD *j\$* clitic, nominalizer

As a result of the reanalysis of these forms, BD *-apu* can pluralize *j\$*, as in *di gu-gu-j\$-apu* [the big-big-NOM-PL] ‘the big ones,’ and *j\$* can nominalize a formation containing *-apu*, as in *di gu-gu-j\$-apu-j\$* [the big-big-NOM-PL-NOM] ‘that which belongs to the big ones.’

The aspectual suffixes, although they too only represent a subset of the EI system of verb suffixes, have remained truer to their EI functions. Particularly remarkable is the partial retention of an EI constraint which prohibits the occurrence of most verb suffixes in negative contexts, where out of the full array of TMA markers, only a suppletive form of the modal suffix is acceptable. BD displays such a constraint for the perfective suffix, which may not appear in the scope of negation. On the other hand, the BD imperfective suffix is acceptable in a negative environment, as are the BD preverbal tense and mood markers. A further difference may be seen in the fact that the EI system constrains the verb inflections to one; in BD, where other TMA distinctions are marked by preverbal material, complex tenses can be formed by the combination of preverbal material with suffixes (see Kouwenberg 1994:63-4, forthcoming b).

⁸ Sika ([1995] 2005) provides the following forms: *ká* ‘not, expressed interrogatively,’ and *kē* ‘not, expressed assertively.’ The standard negator is not cited in Sika’s word list.

4.3 Postpositions

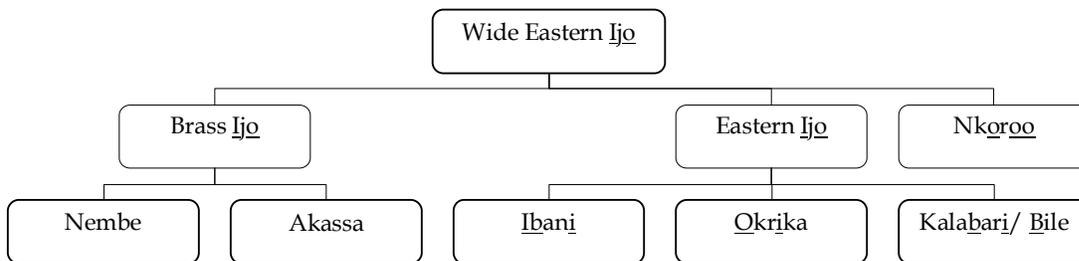
BD has a mixed adpositional system, using both prepositions and postpositions; some of the latter can function dually, as both postpositions and prepositions, but not all (see Kouwenberg 1994:191-227 for detailed discussion). Dutch is predominantly prepositional, but it has some forms which, in directional contexts, are postpositional instead. Most BD postpositions are in fact locational nouns; in their postpositional use, their interpretation may be locational or directional. Postpositions are considered more typical of head-final than of head-initial languages, but they do occur in both. Among CC languages, BD shares this property with the Suriname Creole languages, which display no other OV-type properties (see Muysken 1987).

BD shares with EI the noun status of its postpositions, thus pointing to the possibility of a substrate source. But the situation is, again, not clear-cut. An important difference is seen in the fact that the EI postpositions may be used to denote abstract locations, which the BD forms may not. Moreover, in contrast with the properties discussed above, which involve the use of EI-derived forms, the BD postpositions derive from Dutch nouns, adverbs, and prepositions. There is one exception: *anga*, a general locative or directional postposition, derives from an EI noun. Ironically, it is the only BD postposition which does not exist as an independent noun. Unfortunately, again, for a substratist position, the EI source form for BD *anga* is not a postposition. Its adoption into BD has involved semantic bleaching and a change from an independent noun to a dependent functional item.

In conclusion, the notions of “substrate transfer” or “continuity” do not appear adequate to describe the relationship between BD and EI. Despite the presence of a significant EI-derived component in the BD lexicon, including both content words and function words, even bound morphemes, we do not also see the straightforward presence of EI properties of grammar. To the extent that BD displays some measure of similarity with EI, it appears to be partial, and to be concomitant with loss, restructuring and reinterpretation.

5. The substrate language

Ijoid is a branch of Niger-Congo of uncertain status within the family tree, with few obvious cognates with any other branches of Niger-Congo (cf Williamson’s 1989 discussion). It denotes a small cluster of languages spoken in part of the Niger delta, and distinguishes itself from surrounding languages by its word order: SOV in contrast with surrounding SVO languages. The internal classification distinguishes a Wide Eastern from a Central branch. The languages or dialects relevant to us are found within the Wide Eastern branch:



(after Jenewari 1989:108).

The evidence, as per Smith et al. (1987), is for a close relation between BD and the (narrow) Eastern Ijoid lects. We want to keep in mind that modern dialects are not always direct continuations of older stages, and that restructuring of the political constellations in the delta since at least the time of European contact has involved considerable population movement, with presumably linguistic consequences. In the case of Kalabari, the changes have mainly involved unification of what were previously rival communities, and redistribution of Kalabari speakers through the expansion of

territory. It is likely, therefore, that Kalabari as it was spoken during the period relevant for the formation of BD, showed more internal variation than it does today. There is, unfortunately, no useful documentation for that period.

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Appendix: The data

The following tables provide BD forms which are fully or partially derivable from EI etyma. Kalabari (KA) vocabulary is better documented than that of other (Eastern) Ijo lects. For that reason and because Smith et al. (1987) identify KA as possibly the major source of the EI element in BD vocabulary, I primarily provide KA cognates, drawn from Owiye (1986-87) and from my field notes. Other lects are cited only where a form is known to exist which appears to provide a much closer cognate with a BD form; these are drawn from an unpublished database made available by Kay Williamson. In a few cases, a Proto Ijo form is provided, as evidence that the BD form is cognate with an older form, one that is not in current use. A translation is provided for the KA form only where it differs from the BD form.

A few BD forms are attested in early sources, by Dutch authors in the case of Groen [1794] (published in Robertson 1992) and Swaving (1827), by an English author in the case of Dance (1881); these attestations are quoted in the comments column, in their original orthography.

BD complex forms which contain EI-derived subparts are included only where these provide evidence for productivity of morphological processes at an early stage of the development of BD (e.g. *s\$ma*). Not included are independently formed BD compounds containing EI subparts, as the pertinent subparts are separately provided in the list.

EI has ATR harmony. Underlined vowels in EI forms are [-ATR], unmarked vowels are [+ATR]. Underlined stops are implosive. Low tones are unmarked, high and downstepped high are marked in the usual manner. EI orthographic j represents [dʒ], y represents [j], whereas BD j represents [j].

In the tables below, BD forms of whole or partial EI derivation are provided by category: Table 1 lists BD verbs of EI origin, table 2 lists nouns, table 3 adjectives, table 4 miscellaneous lexical forms, table 5 lists function words, including bound morphemes.

Table 1. *BD verbs of EI origin*

Berbice Dutch	Kalabari	Comments
1. ba 'to kill'	<u>b</u> á	
2. bain 'to cover'	gbá <u>in</u>	
3. baku 'to beat'	<u>b</u> ák <u>ú</u>	
4. bana 'to run aground'	gbaná	
5. bia 'to cook (until done)'	<u>b</u> íá 'to be/get cooked, ripe, mature, bright'	
6. bi, bifi 'to say, speak'	<u>b</u> í <u>b</u> í fíé [language speak] 'to speak'	The KA phrase is reduced to <u>b</u> í fíé in connected speech. Compare also KA <u>b</u> í 'to ask, greet,' <u>b</u> e 'to say'. Groen [1794] (in Robertson 1992) has <i>bifi</i> 'to speak'
7. bila 'to make water, sink, flood'	<u>b</u> ile 'to disappear below surface, capsize, overturn'	
8. bima 'to extinguish (a light, a fire)'	binmá	The KA form is the causative of bin 'to be extinguished'

9. bionto 'to remember, believe'	<u>bíó tōn</u> [inside arrange] 'to think in one's mind'	KA <u>bíó</u> 'inside' is frequently used with reference to mental activity, feelings, moods, etc
10. bokro, boklo 'to board (a boat)'	<u>búkóló</u> , <u>búkúló</u>	r~l alternations are limited to a few BD forms, including Dutch-derived <i>rupu~lupu</i> 'to call'. In most cases, r and l are stable, and phonemic contrast is seen for instance in <i>ruku</i> 'smell' vs <i>luku</i> 'jaw'
11. bolo, bloro 'to lie down'	<u>bololó</u>	BD <i>bolo</i> is more usual; see also comments with item 10
12. boro 'to pass'	<u>bóró</u> , <u>búró</u>	
13. bu 'to drink, a drink'	<u>bú</u> 'to drink'	Groen [1794] (in Robertson 1992) has <i>bou</i> 'to drink' (presumably employing a french-style spelling)
14. buin 'to hide'	<u>boi</u>	
15. buma 'to discard, throw away'	<u>Ibani</u> : <u>búmá</u>	
16. deki 'to take'	<u>dóki</u> , <u>dógi</u> 'to carry' <u>Okrika</u> : <u>déki</u> 'to take, carry'	Proto <u>Ijo</u> : <u>dékin</u> Dance (1881:51) has <i>dake</i> 'take' (employing an English spelling)
17. doko 'to paddle'	<u>doku</u>	
18. fama 'to finish'	<u>fámā</u>	The KA form is the causative of <u>fā</u> 'to be finished'
19. fangla 'to embrace, to wrap'	<u>fángalá</u> 'to twist,' <u>fangalá</u> 'to be twisted'	Groen [1794] (in Robertson 1992) has <i>fangles</i> 'to embrace'
20. findi 'to open'	<u>finjí</u>	KA /j/ corresponds systematically to BD /d/
21. firi 'to leak'	<u>firi</u>	
22. furu 'to steal'	<u>fúru</u>	
23. gain 'to vex, annoy'	<u>igani</u>	
24. gjofu, gefu 'to cuff'	<u>kofí</u> , <u>kofu</u> 'to cuff,' <u>gofi</u> 'cuff sound'	
25. gungu 'to sieve'	<u>gúgū</u>	
26. gwama 'to mix'	<u>guamá</u>	The KA form is the causative of <u>guá</u> , <u>guó</u> 'to be mixed'
27. jefi 'to eat, food'	<u>yé fí</u> [thing eat] 'to eat (something)'	KA <u>yé</u> 'thing' acts as dummy complement; Groen [1794] (in Robertson 1992) has <i>jeffi</i> 'to eat'
28. kain 'to pick (from a tree)'	<u>kaín</u>	
29. kara 'to suffice, be enough'	<u>Ibani</u> : <u>káará</u> 'complete' (ATTRIBUTE)	
30. kaši 'to shut, close'	<u>íkásí</u> 'to lock'	
31. kjama 'to build/put up (a house), to put (a pot over fire)'	<u>gaíma sé</u> [upright stand] 'to stand perpendicularly, upright, erect'	
32. koli 'to light (a fire, candle, lamp)'	<u>korí</u> 'to ignite'	
33. koro 'to descend, to fall (of rain)'	<u>kúró</u> , <u>kóró</u> 'to go down'	
34. koroma 'to put/lay down, lay (eggs)'	<u>kúró-mā</u> , <u>kóró-mā</u>	The KA form is the causative of 33
35. koso 'to cough'	<u>Bile</u> : <u>kosó</u> 'to cough' (for small children)	

36. ku 'to catch'	kun	
37. kubri 'to gather'	kóbírí, kobírí	
38. kuma 'to remain'	koón	This causative was formed independently in BD: KA koón is the intransitive form of kōn 'to have, acquire' (see 179)
39. kunu 'to smell bad'	kúnū 'to be or smell sour (of food)'	Groen [1794] (in Robertson 1992) has <i>coene</i> 'to smell' (Dutch orthographic "oe" represents /u/)
40. la 'to reach, arrive'	lāā	
41. mangi 'to run'	mangī	Groen [1794] (in Robertson 1992) has <i>manje</i> , translated as 'to walk'; compare 84
42. mini 'to swallow'	menī Okrīka, Nembe: minī	
43. mja, mj\$, me, m\$ 'to do, make, CAUSATIVE	mīe 'to do, make, undertake'	BD <i>mja</i> possibly < lexicalized mj\$a [do-IMPERFECTIVE]; see 169 for -a
44. mono 'to sleep'	mónō	Groen [1794] (in Robertson 1992) has <i>monne</i> 'to sleep'
45. mu 'to go'	mú	
46. nimi 'to attain knowledge, get to know'	nímí	
47. nunu 'to pull'	núnú	
48. pain 'to tear'	páín, panyí 'to break off, be broken into pieces'	
49. paka 'to emerge, come out, exit'	páká	
50. paki 'to stack, pile up'	pákí 'to gather one's belongings'	Possibly also related to D <i>pakken</i> [pak@] 'to take, pick up, pack up'
51. pama 'to tell'	ékúén páká-ma [speech come.out-CAUSE], duko páká-ma [tell come.out-CAUSE] 'to speak out'	The KA form páká-ma is the causative of 49; BD <i>pama</i> 'to tell' presumably developed via reinterpretation of the EI phrase as [speech tell] and reduction of the causative form, which was possibly no longer recognized as causative when causative formation ceased to be productive in BD
52. pari 'to spin, weave'	pári	
53. p\$1\$ 'to cut through'	pélé	
54. p\$mb\$ 'to hatch (of eggs)'	kpemgbé 'peel, remove outer crust'	
55. pi 'to give'	piri	The KA form is frequently reduced to pri in connected speech. Compare also BD -a < -ar\$ (169), and possibly also o < ori (181,182) which similarly show reduction through loss of a final syllable of the form /ri/
56. pine 'to peel'	pínī	
57. poko 'to like'	pokō tārī [throat thirst/hunger] 'to feel like, long for'	Groen [1794] (in Robertson 1992) has <i>pokke</i> 'love'
58. poši 'to squeeze'	Nembe: posí 'to wring, squeeze'	
59. pu 'to split, burst'	pú 'to split, slice'	

60. pundi 'to squeeze'	ponji Nembe: pondí	See comments with item 20
61. saba 'to cross'	sábá, sáwá	
62. sara 'to drop, to pour'	sara, sira	
63. seima 'to damage, injure'	simá 'to spoil, damage'	Causative of 163
64. s\$ma 'to hurt'		Causative of Dutch-derived s\$r\$ 'pain, to hurt,' showing productivity of the EI causative suffix during the formative stages of BD
65. skiri 'to scrub'	síkiri 'to wash (pots)'	
66. soko 'to dig'	sókú	
67. swa 'to enter'	só < earlier súó	Possibly from a still earlier *súá, with assimilation of -a to -o following <u>u</u> ; the modern KA form is a recent development
68. swama 'to wear (clothes), to put in'		Causative of 67, formed independently in BD; like 64, this is evidence of productivity of the EI causative suffix in the formative stages of BD
69. ši 'to remove'	sin, siín 'to remove, undress'	
70. šigi 'to shake'	sékí 'to dance'	
71. šima 'to move'		Causative of 69, formed independently in BD; same comments as for 64, 68
72. taba 'to lick'	tábā	
73. tabu 'to soak, immerse'	tabu	
74. tama 'to pick (up)'		Causative of EI tán 'to pick (up),' formed independently in BD; cf 64, 68, 71
75. tandi 'to climb'	tanji	See comments with item 20
76. tembi, t\$mb\$, temi 'to sting, stab, prick'	témí	
77. t\$ma 'to repair'	téléma	
78. timi 'can, to be able'	Nembe: timí 'could'	BD also has timeši 'perhaps,' which possibly combines timi with otherwise unattested *ši < ?Dutch <i>zijn</i> 'to be'
79. tondi 'to light (a fire, candle, lamp)'	tonji 'to light,' tonjí 'to be lighted'	See comments with item 20
80. tulu 'to pierce'	tólú Ibani: túlú	
81. tumbi 'to visit, see (a person)'	tom-bó bi [person greet] 'to greet (a person)'	Groen [1794] (in Robertson 1992) has <i>tombi</i> 'to see'
82. twa 'to put'	súá 'to put (in)'	Proto Ijò túa'
83. wasa 'to scatter'	wásáma	BD <i>wasá</i> is a back-formation of the causative form, providing further evidence for the productivity of the causative suffix in the early stages; cf cf 64, 68, 71, 74
84. wengi 'to walk'	ménjí Okrika: wéngí	Proto Ijò wángí, wándí Groen [1794] (in Robertson 1992) has <i>winje</i> 'to go,' similar to his <i>manje</i> for <i>mangi</i> (41) – in both cases, his medial j corresponds to g, possibly representing the optional suppression of g attested in modern pronunciations, yielding [ma%i] and [we%i]

85. wiri 'to curse, use abusive language'	wori, worí <u>Ibani</u> : wirí	
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Table 2. *BD nouns of EI origin*

Berbice Dutch	Kalabari	Comments
86. abadi, abari 'God'	abaji 'ocean, the domain of the essential spirits of the water'	Swaving (1827) has BD <i>abadi</i> referring to a non-Christian supreme deity, showing that it retained its etymological meaning at least up to that time. He also has <i>abadi landi</i> [abadi country] 'Holland' and <i>abadi tobbeke</i> [abadi child] 'child of a Dutch father'; compare KA abaji piri bó [ocean give person] 'albino' or 'He, who is sacrificed to the ocean god,' which may explain the association between <i>abadi</i> and whiteness. See also comments with item 20.
87. aboko, oboko 'hen'	obókō	
88. aka 'tooth'	áká	Groen [1794] (in Robertson 1992) has <i>acca</i> 'the teeth'
89. akalu 'moon, month'	akalú	
90. ala 'boss, chief, leader'	ála bó [chief person] 'chief' (N), álá 'chief' (ATTRIBUTE)	Swaving (1827: 183) has <i>alla</i> 'Mr' and <i>alerma</i> (< *ala-erema; see 121) 'Mrs'
91. ama 'settlement, home'	ámá 'town'	Swaving (1827:207) has <i>Balk-Amma</i> 'Balk's land,' the name given to a particular plantation (named after its owner)
92. apa 'shoulder'	apana Nkoroó ápá	Groen [1794] (in Robertson 1992) has <i>appa</i> 'the shoulders'
93. apara 'skin, bark, etc'	ápára	
94. apori 'beard'	mpórí, ípórí	
95. ari 'obeah, witchcraft'	arí	
96. baba 'hollowed calabash'	baba	
97. bara 'hand, arm'	bárā, brā	Groen [1794] (in Robertson 1992) has <i>bara</i> 'arms, hands'; BD <i>nabara</i> 'elbow' (cited by one speaker only) has no EI model
98. baratwa 'ring'	bára sūá yé [hand put thing] 'ring'	See 97, 82; cf also 100, 144
99. beri 'ear'	berí	Groen [1794] (in Robertson 1992) has <i>bere</i> 'the ears'
100. beritwa 'earring'	berí sua yé [ear put thing] 'earring'	See 99, 82; cf also 98, 144
101. b\$ks\$ 'white (person)' (N, A)	bekín bo [European person] 'white person, European'	
102. b\$rs\$ 'story, affair'	béré 'affair, dispute,' egberi 'story'	
103. biaka 'corn'	imbjaká, mbjaká	
104. bibi 'mouth'	bíbi	Groen [1794] (in Robertson 1992) has <i>bibi</i> 'the mouth'
105. bita 'cloth, clothes'	bité 'cloth'	Final -a in the BD form is perhaps attributable to reinterpretation of plural bitapu 'cloths' Groen [1794] (in Robertson 1992) cites plural <i>bitappe</i> 'clothes or linen'

106. boki 'money'	igbiki, igbigi Bile: igboki	
107. bolo 'belly'	<u>bu</u> lō (archaic form; cf modern fūrō)	Groen [1794] (in Robertson 1992) has <i>bolle</i> 'the belly'
108. bwa 'foot, leg'	<u>bú</u> ó	Groen [1794] (in Robertson 1992) has <i>boi</i> 'the leg' (presumably employing a french-style spelling)
109. databu '(mother-) in-law'	tabo 'wife,' <u>dá</u> a 'father'	A compound of the KA forms similar to the BD form is not known in modern KA, but seeing that neither of the subparts exist in BD it seems unlikely that this formation arose independently
110. dauru 'sister-in-law'	<u>ád</u> ō <u>l</u> bani: ádōáró, ádō	
111. dondo 'breast (N), to suck (V)'	índó dō [breast suck] 'to suck breast'	Groen [1794] (in Robertson 1992) has <i>dondo</i> 'the breasts'
112. duei 'spirit (of deceased)'	<u>dú</u> éin 'corpse, spirit (of deceased)'	
113. \$n\$ 'rain'	énē	
114. feni 'bird'	féní	
115. fila 'saliva'	fíla, fúlā	
116. fini 'fire'	fíni	
117. fungru 'mouse, rat'	ofúnguru	
118. gono 'upstairs' (N)	ogonó 'top, up, above'	
119. inga 'thorn'	iga	
120. jana 'sexual intercourse'	yana 'to have, own' Kolokuma: naná 'to marry'	Cognates outside EI also mean 'to marry' Groen [1794] (in Robertson 1992) has <i>janne</i> 'to marry,' but modern BD <i>jana</i> appears restricted to the collocation <i>suku kali jana</i> 'to want some sex,' whereas 'to marry' is expressed as <i>deki j\$рма</i> or <i>deki man</i> , literally 'take woman' or 'take man'
121. j\$рма 'woman'	éré-me 'women'	The KA form is the irregular plural of <u>éré-bó</u> [woman-person] 'woman' Swaving (1827: 183) has <i>alerma</i> 'Mrs' < *ala-erema (see 90), suggesting that initial j is a late development (see also 122-124)
122. juku 'louse'	íkú, ikū, igū	Initial j in BD <i>juku</i> appears to be a late development; cf 123, 124
123. jumbu 'navel'	ómbú <u>Ok</u> rika: ímbú	Proto <u>l</u> jō: ímbú Groen [1794] (in Robertson 1992) has <i>imboe</i> 'the navel'; initial j in <i>jumbu</i> appears to be a late development; cf 122, 124
124. jungwa 'sugarcane'	íngu <u>o</u> , níngu <u>o</u>	Initial j appears to be a late development; cf 121-123
125. k\$n\$ 'person'	kíní 'somebody, person'	
126. kika 'cassava bread'	íkíká 'biscuit'	Groen [1794] (in Robertson 1992) has <i>kika</i> 'bread'
127. kiri 'ground'	kírí	
128. kolo 'buttocks' (obscene)	okolo 'base, bottom part, vagina, anus'	Groen [1794] (in Robertson 1992) has <i>colle</i> 'the buttocks'
129. kori 'work, to work'	korí namá 'errand, work,' namá kórí 'to work'	

130. kundu 'buttocks, bottom, rear'	konju 'waist, hips'	Groen [1794] (in Robertson 1992) has <i>coende</i> 'the hips,' showing the semantic change to the present meaning to post-date his writing, possibly resulting from specialization of <i>kolo</i> 'buttocks' (128) to an obscene term; see comments with item 20
131. kuta 'bead, string of beads'	íkúta 'beads'	
132. luku 'jaw, cheeks'	Okrika: lokü, Ibanj: luu 'cheek'	The KA form is not cognate Groen [1794] (in Robertson 1992) has <i>louko</i> 'the cheek'
133. lukuba 'fable'	ílúkú gba [story tell] 'to tell a story'	Groen [1794] (in Robertson 1992) has <i>lukeba</i> 'to tell,' suggesting that the original event meaning was retained for some time
134. mangiapu 'run-away (slave)'	mangi <u>bo</u> 'escaped person,' mangi apu 'escaped persons'; mangi omoni <u>bo</u> 'run-away slave'	The BD form is interpreted as singular by modern speakers; cf 41, 172
135. m\$ñ\$ 'flesh'	meni	Also attested: BD am\$ñ\$, amina
136. mingi 'water'	minji Ibanj: mingi	Groen [1794] (in Robertson 1992) has <i>migne</i> 'water,' probably using a French-style spelling to represent [mi%i], a commonly occurring pronunciation in modern BD
137. muni 'black person'	ómóní 'slave' (ATTRIBUTE), ómóní <u>bo</u> [slave person] 'slave'	
138. nama 'meat, animal'	námá	
139. namblu 'horse'	nambúlo 'cow'	
140. nini 'nose'	níní	Groen [1794] (in Robertson 1992) has <i>nini</i> 'the nose'
141. opropo 'pig'	óporópo, óprōpo	The KA form derives from Portuguese 'o porco'
142. pamba 'wing'	pamba	
143. poko 'neck'	poko 'throat, voice'	Groen [1794] (in Robertson 1992) has <i>pokke</i> 'the neck'
144. pokotwa 'necklace'	poko sua yé [throat put thing] 'necklace'	
145. sani 'pepper'	sani	BD <i>sampoto</i> 'pepperpot' (indigenous dish of Guyana) < <i>sani poto</i> , where reduction resulted in the present form; <i>poto</i> < Dutch
146. tibi 'head'	síbí Okrika, Kolokuma: <u>tibí</u> Nembe: <u>tibi</u>	Proto Ijo: <u>tíbí</u> Groen [1794] (in Robertson 1992) has <i>tibi</i> 'the head'
147. toko 'child'	tubo	Proto Ijo *to-bo-ku; KA drum language <i>tuboku</i> represents the archaic form Swaving (1827: 212) has <i>tobbekes</i> 'children' (where -s presumably represents his own Dutch-style plural)
148. toro 'eye, face'	tórú 'face'	Proto Ijo <u>tórú</u> 'eye'; BD <i>toro</i> 'eye, face' seems to represent a stage where the semantic change 'eye' > 'face' was still in progress Groen [1794] (in Robertson 1992) has <i>torre</i> 'the eyes'

149. tuku 'root'	súkú 'base, foundation, bottom, reason' Okrika: tšúkú Nembe: tugu	
150. wari 'house'	wári	

Table 3. *BD adjectives of EI origin*

Berbice Dutch	Kalabari	Comments
151. aku 'bitter'	akū 'to be bitter'	
152. bam 'nice, pretty'	gbám 'to be nice or special in an unassuming manner'	
153. b\$1\$ 'sweet, nice-tasting'	belé 'to be sweet, nice-tasting'	
154. bi\$bi\$, bebia 'yellow, red, light-coloured, ripe'	biabiá 'light coloured'	cf 5
155. fiku 'deceased'	fī 'to die, death,' fī kōn [death RESULT] 'dead, having died'	cf 179
156. kali 'small'	kála-yē 'small thing'	The normal pronunciation of KA kála-yē is káliē, which may have been reinterpreted as kali-j\$ in the formative period of BD (cf 175)
157. kiba 'short (A), piece (N)'	íkíbá 'half, short (person), dwarfish'	
158. kururu, krukru 'black'	kúrukúró, krúkrú 'to be black'	
159. loko 'soft,' also 'tired'	lókō 'to be soft, weak'	
160. nangwa 'long, tall'	nángúó	
161. pakra 'worn, waste' (A)	pákírí 'part, half (N)'	
162. pot\$ 'old,' also 'ripe'	kpó-te	The KA form is the perfective form of kpó, kpóō 'to be old, mature.' Perfectivity is not inherent in the meaning of the BD form, and despite the fact that the perfective suffix was also retained separately (cf 184), this form is not transparent for modern speakers. This is also seen in the fact that BD <i>pot\$</i> can take the perfective suffix -t\$
163. sei 'ugly, damaged, spoilt, to damage, to spoil'	si 'to be bad, ugly, nasty, unwell, evil'	
164. tarki 'strong, hard'	tóru kūró, tórú kro [eye hard] 'to be fierce, ruthless'	Possibly influenced also by Dutch <i>sterk</i> 'strong' (with loss of initial s applying to some s-stop clusters)

Table 4. *BD miscellaneous content vocabulary of EI origin*

Berbice Dutch	Kalabari	Comments
165. akai 'ouch!'	ákááa Ibani ákái	
166. danga 'there'		< * <i>da anga</i> [there LOC], of which Dutch-derived <i>da</i> (< <i>daar</i> 'there') survives also in <i>j\$nda</i> 'to be there, exist' and <i>furda</i> (174) 'to not be there, not exist'; cf <i>anga</i> 171

167. waboka 'a little while later / earlier'	obuko(má) 'afterwards, later'	The BD form derives from Arawak <i>waboka</i> 'already, just now' (De Goeje 1928) with past temporal reference; the use of the BD form with both past and future temporal reference may represent influence from the similar EI form
168. wanga 'where'		< * <i>wa anga</i> [where LOC], * <i>wa</i> of Dutch derivation (< <i>waar</i> 'where'), not attested in any other BD form; cf 166, 171

Table 5. *BD function words of EI origin*

Berbice Dutch	Kalabari	Comments
169. -a, -ar\$ IMPERFECTIVE	-ári	BD <i>-a</i> < <i>-ar\$</i> similar to <i>pi</i> < * <i>piri</i> (cf 55) and possibly also <i>o</i> < <i>ori</i> (181,182)
170. a 3SG	á 3SG.FEMININE	Modern BD <i>a</i> is a variant of <i>o</i> (see 181), but it is conceivable that it derives from an earlier form independently retained from the substrate
171. anga LOCATIVE POSTPOSITION	ángá 'side' (N)	The original nominal status of <i>anga</i> is still seen in its ability to appear in a possessed form in BD: <i>ori anga</i> [3s LOC] 'to/at her,him,it'
172. -apu PLURAL	apu 'persons,' [+human, +plural] NOMINALIZER	
173. eni, ini 3p	ini, n Nembe: ení, eín	BD <i>eni</i> is the more common form
174. furi, furda NEGATIVE LOCATIVE COPULA 'to not be there, not exist'	ófórí	BD <i>furda</i> contains a dummy locative complement * <i>da</i> (Dutch-derived; see 166)
175. j\$ NOMINALIZER	yé 'thing,' [-human, -plural] NOMINALIZER	Retention of the EI form in BD may have been influenced by similarity to Dutch <i>-@</i> , which forms deadjectival nouns, and has a (substandard) variant <i>-j@</i> in some forms
176. j\$n(da) LOCATIVE COPULA 'to be there, exist'	émí	BD <i>j\$nda</i> < * <i>emi-da</i> ; * <i>da</i> 'there' (of Dutch derivation) is a dummy complement (cf 166, 174 where it occurs also). The proposed derivation involves reduction to * <i>en-da</i> (< * <i>em-da</i> ; note that nasal place assimilation is near-obligatory in BD); this reduction achieves a preferred trochaic foot. It further involves insertion of initial <i>j</i> , which appears to have been a fairly widespread development (see also 121-124), and lowering of <i>e</i> to <i>\$</i> (as also seen in 121)
177. ka, kan\$ NEGATOR	óká < oko-á [thus-NEG] 'isn't it so?' (question tag) ókáá 'it isn't so!' (exclamative)	BD <i>kan\$</i> combines EI-derived <i>ka</i> with Dutch-derived * <i>n\$</i> 'no'. Negatives in Swaving (1827:267) and Dance (1881:51) contain the short form <i>ka</i> . Note that the standard negator is <i>-áá</i> in Kalabari, <i>-ya</i> in Nembe and Kolokuma (also attested in Kalabari drum language, hence also the archaic Kalabari form). The <i>-ka</i> form cited for Okrika in Smith et al. (1987: 85) probably represents the tag negator (see comments in section 4.1)
178. k\$k\$ 'like, similar to, as if,' COMPARATIVE	kíká 'to resemble'	BD comparative <i>k\$k\$</i> may have developed from serial use, e.g. <i>o befu k\$k\$ blaru</i> [3s tremble like leaf] 'he trembled like a leaf' < * <i>he trembled resemble a leaf</i>
179. kon RESULTATIVE AUXILIARY	kon 'to have, acquire'	The KA form is used with resultative meaning, e.g. <i>anije í kon ni werari?</i> [that-thing 2s RESULT know STATE] 'Did you know that?'
180. ma IRREALIS		It is likely that this form developed independently in BD from <i>mu-a(r\$)</i> [go-IMPERFECTIVE] 'going'; see 45, 169

181. o 3s	o, o 3s.MASCULINE	Alternants of the KA clitic form are conditioned by vowel harmony. BD <i>o</i> is gender neutral; its restricted distribution is reminiscent of its clitic status in EI, although an independent development <i>o</i> < <i>ori</i> (182) is also possible; cf 55, 169 for similar developments
182. ori 3s	ori 3s.MASCULINE	Independent form, in EI as in BD; cf 181
183. so FOCUS MARKER	so	KA <i>so</i> is usually translated as 'also,' but it functions as a focus identifier
184. -t\$ PERFECTIVE	-téē	Retention possibly supported by similarity to Dutch PAST IMPERFECTIVE inflection <i>-de/-te</i> [-d@/-t@]