Overworking morphology: the multiple uses of *-en/-n* in Chamba Daka

Raymond Boyd Laboratoire Ligérien de Linguistique

1. Introduction

1.1. Chamba-Daka morphology

Chamba-Daka (henceforth CD¹) is not a morphologically rich language, but the morphology it has is of a somewhat unusual nature.

This remark applies to those affixes which directly modify the meaning or function of the root and not to those which have independent meaning (as the pronominal system and the interrogative markers) or are utterance modifiers (clause- or utterance-final -i 'real') or mere demarcative morphemes (utterance-final -i).

Here are the major features of this morphology:

- Verbs are tonally inflected (whereby tone contrasts are neutralized) in some contexts (e.g., in relative clauses); nouns are not.
- Segmental affixes, whether inflectional or derivational, are all suffixes.
- There is an inflectional verb suffix $-\dot{o}$ used (together with an obligatory H-tone pattern on the root) for a 'factitive' form.
- There is a small set of verb derivational suffixes; one of these, the resultative, is pertinent to this paper and will be discussed in section 2.1.
- There are a small number of vestigial suffixes reflecting an earlier system of noun classification. These are synchronically undefinable because highly irregular singular/plural alternations occur only in five nouns.
- A few nouns which have a vestigial -*á* suffix can add a -*ná* suffix marking the plural. The unusual feature is this:

all other suffixes – and there are several – have the form $-\varepsilon n$ or -n in CDN with differing tones and differing effects on the tone of the root.

Where CDN and CDM have cognate suffixes, CDN -*en* corresponds to CDM -*an*. The main focus of this paper is the CDN dialect, which is the source of the examples presented here. 1.2. The canonical forms of CD lexemes

Before we turn to the individual $-\varepsilon n/-n$ morphemes themselves, it will be helpful to summarize the canonical forms of verbal and nominal lexemes in CDN.

1.2.1. Verbs

First, the verb forms:

¹ I am well acquainted with the Nnakenyaare koiné dialect (here CDN) and to a lesser extent with the Mapeo dialect (CDM).

- There are monosyllabic verbs of the form CVV and CVC ~ CVVC, the latter in complementary distribution according to final C. Their lexical tones are either H or L in CDN but CDM shows there must have been a small class of M-tone verbs, realized there as MB and merged with B in CDN.
- There are underived disyllabic CVC*i* verbs. Their tone pattern is always M-L in CDN, but CDM shows there must have been a separate B-B class there, merged with M-L in CDN.
- There are CVVC*i* and CVCC*i* verbs which may be considered the result of synchronic or diachronic derivation processes applying a -C*i* suffix to CVV and CVC ~ CVVC verbs respectively. Their tone patterns are identical with those of underived CVCi verbs.
- CVCCì verbs somtimes reduce to CVCì. The consonant which remains is the suffixed consonant, either -*k* 'pluractional' or -*s* 'causative'.
- Monosyllabic verbs may become disyllabic by suffixing -*èn* in CDN (CDM -*àn*). The same suffix may be used with disyllabic verbs to form new derived disyllables of the forms CV(V)C(C)*èn*. These verbs have the same tone patterns as other disyllabic verbs.

1.2.2. Nouns

The large mass of canonic forms of nouns are identical with those of verbs, but the tone patterns of nouns are far more numerous²: monosyllables have HM, HL, ML and LH in addition to the three level tones; disyllables have H-H, M-M and L-L in addition to H-M, H-L, HL-H, M-H, M-L, L-H and L-ML.

1.3. Morphophonological rules

Now we may mention a few general morphonological rules which apply to $-\varepsilon n$ suffixes. Some of these may not apply in certain cases. This will be stated in each individual case in the inventory below.

1.3.1. Rules of suffixation

(MR1) Roots ending in -V other than -*i* (including all CVV verbs and nouns):

(MR1a) -r- is generated between the final root vowel and the suffix vowel or

(MR1b) $-\varepsilon n > -n$

(MR2) Roots ending in -*i* (all disyllabic verbs are in this category):

The vowel sequence merges according to the following rule:

 $-i - \epsilon n > \epsilon n$ with a contour tone made up of the tone of the root-final vowel and the tone of the suffix.

(MR3) Suffixed morphemes ending in a vowel other than -i (this category includes verb roots with suffixed pronominal objects: the final vowel will be either -a or -u).

The vowel sequences merge according to the following rule:

 $-a - \varepsilon n > -an$

 $-u - \varepsilon n > - \Im n$

The resulting suffix has a contour tone made up of the tone of the morpheme-final vowel

² The range of both final vowels and final consonants in disyllablic nouns is greater than in verbs. Harmonic factors and factors of synchronic and diachronic suffixing come into play here, but these are not of direct bearing on the subject of this paper.

and the tone of the suffix 3 .

(MR4) A fourth rule applies to final consonants which become medial after suffixation:

p > b

t > r

Final -k is unaffected in CDN(unless followed by a nasal consonant > η) as are final nasals.

In CDM, -k is also affected: k > g.

(MR5) The application of a -n suffix to a morpheme with final C > the nasal consonant with the same point of articulation as C.

1.3.2. Tonal inflection of verbs

Finally, we may state the rules of tonal inflection of verbs. CD has two sorts of such inflection. Both involve total neutralization of lexical tone contrasts.

TN1 is a H tone pattern on the verb or verb group (root + object pronoun) associated with injunctive and virtual forms.

TN2 assigns a M tone to all monosyllabic CVV and CVC verbs, which will have either a H or a L lexical tone, while disyllabic CVC(C)V and CVC(C)VN verbs, which have a lexical ML pattern, become MH⁴.

1.4. Inventory

We now proceed to give an inventory of $-\varepsilon n/-n$ suffixes. Section 2 deals with the resultative suffix in the paradigm of verb derivation and those suffixes which conceivably have an etymological relationship with it. Section 3 discusses the verb suffix which focalizes the subj. Sections 4 to 7 describe conjugated forms of the verb. Section 4 presents the range of imperative/injunctive forms conjugated with an -n suffix while Section 5 covers the negatives of these forms. Section 6 examines -èn as a variant of -n. Then Section 7 describes verb pluralization. Section 8 turns to the modal marker $\epsilon \overline{\varepsilon n}$ which has suffixal status and can on occasion be integrated into the verb group. Section 9 discusses the curious use of $-(\overline{\varepsilon})n$ marking with the autobenefactive. Section 10 adds a couple of minor morphemes of the same form, and Section 11 sums up.

2. The resultative suffix and the nominalizing suffixes

2.1. The resultative suffix

We may begin our inventory of $-\epsilon n/-n$ morphemes with the resultative suffix mentioned in 1.1 above.

2.1.1. The origin of the resultative suffix

We begin with the resultative suffix⁵, which sometimes takes the form $-\dot{e}n$ and sometimes $-m\dot{e}n$ in CDN, because this morpheme is the only one to be discussed here which can be "traced" diachronically. It forms part of the system of derivational suffixes which I believe calque productive elements of late Bantu and Bantoid (see the classification in Hyman 2007:153). This is

³ If the resulting tone is HM, it will convert in most nonfinal contexts to H!H.

⁴ In Boyd (2004), I called this form the "tonally inflected absolute form".

⁵ The semantic import of this suffix is discussed in detail in Boyd (forthcoming b).

to say that I believe this system has been borrowed and that CD is not a Benue-Congo language (see all publications from Bennett 1983 through Bendor-Samuel 1989 to the current Ethnologue website and the proliferation of Wikipedia articles which copy it for the contrary opinion). As I have stated repeatedly and in some detail in Boyd (1996-7), the reclassification of CD is founded solely on the lexicostatistical study in Bennett 1983 which is skewed by the fact that the CD numeral system is also partly a BC loan.

There is a further factor which I have not previously mentioned in support of the continued exclusion of CD from BC as in GREENBERG (1966). This is a "feel for the language". Chadic specialists will be well aware of the sensation of recognition when features shared with quite distant members of the Afroasiatic family are evoked. Recent work on the Kru isolate, Seme, has given me the same sensation, intensifying the similarities already cited in Marchese.

In negative terms here: CD does *not* "feel like" a BC language. And no BC specialist has ever been able to say positively that it does. Rather it fits much better in "North Central Niger-Congo" with the rest of Adamawa and Gur. Even the verb derivation system cannot support an impression of likeness to BC, as such systems are widespread outside BC. CD happens to have BC suffixes, but a comparable system with another set of suffixes can be found in the Dii group (Adamawa branch), see Bohnhoff 2010.

Immediately hereafter, we will discuss two other $-\varepsilon n$ suffixes might conceivably have an etymological relationship with the resultative. If so, it will be necessary to determine whether one or the other of these functions is also represented by a comparable suffix in a BC language so that borrowing could again be hypothesized; or whether on the contrary, these could be independent developments of the resultative suffix within CD.

2.1.2. Formal description: -mèn

I derive the *-mèn* variant diachronically from a compounded suffix of the form *-am -an*. (cf. Guthrie 1967: III, 144).

Rule MR1 does not apply to the resultative. CVV verbs take the suffix -*mèn*. They thereby become disyllabic and take the tone pattern ML.

Originally, -men was used for CVV and CVC verbs. Now, however, some CV*t* verbs form their resultative as CV*ren*, i.e., as if the suffix were -en, rather than as CV*rmen*. Some CVV verbs also now apply MR1 and derive a resultative of the form CVV*ren* rather than as CVV*men*.

As is to be expected with a suffix which is no longer productive, semantic regularity has diminished. There are thus quite regular examples such as $k \dot{e} \dot{e}$ 'tear' > $k \bar{e} \bar{e} m \dot{e} n$ 'be torn' and $g \dot{u} t$ 'seize' > $g \bar{u} r m \dot{e} n$ 'be caught, trapped' alongside more elusive derivations such as $b \dot{o} \dot{o}$ 'snatch, wrest away' > $b \bar{o} \bar{o} m \dot{e} n$ 'slip (from the hands)'.

2.1.3. Formal description: - *èn*

The resultative of disyllabic verbs remains disyllabic as $-\dot{e}n$ replaces their final $-\dot{i}$ according to MR2.

Both underived and (nonresultative) derived verbs may have a resultative. If the derived verb is pluractional, the resultative is the reciprocal, e.g., $d\acute{a}t$ 'miss, err' > $d\bar{a}rk$ 'miss, err several

times' > $d\bar{a}rk\bar{e}n$ 'err mutually with respect to each other' as in $d\bar{a}rk\bar{e}n m \delta r i$ (miss + RCP day + EXT) 'miss a meeting (because neither party came on the appointed day)'.

2.2. The nominalizing suffix

Some verbs and some nouns can take a nominalizing suffix of the form $-\varepsilon n$ having the sense '(person or thing) having the property of ⁶. For reasons which cannot be deduced from the data at hand, this suffix has two forms in CDN: $-\varepsilon n$ and $-\varepsilon \overline{\varepsilon n}$. We may therefore speak of Derivation 1 (DR1) in $-\varepsilon n$ and Derivation 2 (DR2) in $-\varepsilon \overline{\varepsilon n}$.

As the examples show, MR1a applies to nominalizations.

2.2.1. Nominalization of verbs

For the two tone classes of CVV and CVC verbs in CDN, H and B, one finds both nominalizing derivations:

DR1:

H verb : Cýý-r- ϵn , CýC- ϵn

kpíí 'be early' > *kpíírén* 'early', *ką́t* 'bend' > *ką́rén* 'bent'

L verb : $Cvv-r-\epsilon n$, $CvC-\epsilon n$

gòò 'cut (down, off) > *gòòrén* 'divorced (man)', *lèng* 'lay flat' > *lèngén* 'horizontal' DR2:

H verb : Cýý-*r-éēn*, CýC-*éēn*

sáá 'ooze' > sááré $\bar{e}n$ 'damp, melted', gúún 'smell' > gúné $\bar{e}n$ ⁷'smelly'

L verb : Cvv-*r-éēn*, CvC-*éēn*

daa 'fall off, out' > $daar \epsilon \bar{\epsilon} n$ 'bare, bald', $nw \partial an$ 'be moist, rot' > $nw \partial n \epsilon \bar{\epsilon} n$ 'rotten' (class with very few members)

When either nominalization is applied to a derived verb, the result shows the tone of the base form, not the tone of the derivate. This is evident from CvC(C)i verbs derived from H-tone sources: nwóó 'be sharp' > nwoosi 'sharpen' > nwoosi 'sharpened, sharp', wát 'be cold' > $w\bar{a}tsi$ 'cool' > wasen '(harmattan) wind'. Although no comparable derivational series is yet attested for L-tone base verbs, derivations such as $t\bar{a}ksi$ 'begin' > $t\bar{a}ksen$ 'first, original' suggest a likely lost L-tone source (here $*t\bar{a}k$). Cf. cases of DR2: yep 'take (a pinch of mush' > $*y\bar{e}bri$ > yebreen 'broken (into pieces with the fingers', but *kong > kongli 'bend, curve' > kongleen 'bent, hooked'.

A few nominalizations of derived verbs seem to attest to the diachronic presence of M-tone verbs, e.g., $k\bar{a}k > k\bar{a}k$ 'split (firewood)' > $k\bar{a}gr\dot{i}$ 'leave (a door) ajar' > $k\bar{a}gr\acute{e}n$ 'cracked (pot, calabash).

Some CVC(C)*i* verbs also form a L-M nominalizing derivate (realized L-ML) for which there is no evident source: cf. *dii* 'burn, set fire to' > $*d\overline{n}si^8$ > diis $\overline{s}i$ 'burning', and *bung* 'cover', *bungsi* 'wrap (fruit to cause ripening)' > *bungs\overline{s}i* 'ripened'.

⁶ Remarkably, this suffix has a productive synonym of the form (-)bè (hence comparable to the Kanuri genitive), cf. gź!źn bè '(thing of) his own', pén tí!í bè 'thing of the head, hat, cap', or kú!sí bép !bè 'stick of iron, iron bar'.

⁷ The vowel of CVn lexemes is lengthened and there is no valid CVn/CVVn contrast. The lengthening disappears in nominalization.

⁸ There is a verb $d\overline{u}si$ 'sing' which may or may not be a derivate of dii 'burn'.

2.2.2. Nominalization of nouns

H-tone nouns are recorded only with DR1: $s\hat{q}\hat{q}$ 'earth, country' > $s\hat{q}\hat{q}r\hat{e}n$ 'traditional', yák 'knife' > yákén 'knife-bearing'.

L-tone nouns have both derivations, but no $C v v - r - \epsilon n$ are recorded: (*), t u k 'eye' > $t u k \epsilon n$ 'visionary' vs. g a a 'outside' > $g a a \epsilon \epsilon n$ 'exterior, illegitimate', d m 'behind' > $d m \epsilon \epsilon n$ 'past, rear'.

M-tone nouns have DR1: $g\bar{u}p$ 'thorn' > $g\bar{u}b\acute{e}n$ 'thorny', although there are not many nouns in this class. Remarkably, there are certain verbs which also take this pattern: $s\grave{e}n$ 'be greedy' > $s\bar{e}n\acute{e}n$ 'gluttonous', suggesting that this verb originally had a M tone⁹.

M-tone nouns may also have DR2: $j\bar{u}\bar{u}$ 'up, west' > $j\bar{u}\bar{u}r\epsilon\bar{e}n$ 'upper, westerly', $g\bar{a}\bar{a}m$ 'horn' > $g\bar{a}m\epsilon\bar{e}n$ 'horned'. No verb has this derivation, however, surely not solely because of the scarcity of diachronic M-tone verbs, but primarily on account of the fact that it is formally identical with the verbal noun of CV(V)C*i* verbs, discussed below.

HM (or H!H) nouns yield derivates with a H-M (or H-!H) pattern: $g \delta \bar{a} k$ 'war' > $g \delta k \bar{e} n$ 'warlike'¹⁰. Nevertheless, there is a variant CVV form where the root pattern spreads to the suffix after MR1a: $kp \delta \bar{a} \bar{q}$ 'crying' > $kp \delta \delta \delta \bar{c} \bar{e} n$ 'tearful. Unexpectedly, there is also a H-L variant pattern: $t \delta \bar{i} \bar{i}$ 'head' > $t \delta \bar{i} r \bar{e} n$ 'upper', $p \delta \bar{u} \bar{u} k$ 'territory, country' > $p \delta k \bar{e} n$ 'local, indigenous'.

Some H-tone verbs also behave in the same way: vin 'be ready, cooked' > $vin\bar{e}n$ 'ready, cooked'¹¹. There is also a single verb with the H-L variant pattern: wjp 'respect, obey' > wjben 'respectful, obedient'. It is entirely conceivable that these verbs originally had a HM pattern which has now merged with H. Yet the possibility that the nominalizing suffix -en could exceptionally take a L tone with a H-tone root should not be rejected out of hand, cf. siri 'spear grass' > siren 'made of spear grass'.

These examples practically exhaust the types of nominalizing derivates. An exception is the noun pattern HL, not matched by verbs, which takes DR1: $l\hat{q}\hat{q}$ 'tongue' > $l\hat{q}\hat{q}r\hat{e}n$ 'liar, betrayer', suum 'drought' > suum 'dry'.

2.3. The verbal noun

The suffix marking the verbal noun is $-\bar{e}n$ in CDN (CDM $-\bar{a}n$). In addition to its own M tone, it imposes the tone pattern defined above as TN2 on the verb root, hence $t\delta\delta m$ 'send' > verbal noun $t\bar{c}\delta m\bar{e}n$, $g\lambda t$ 'seize, catch' > verbal noun $g\bar{u}r\bar{e}n$, $m\bar{a}ks\lambda$ 'show' > verbal noun $m\bar{a}ks\epsilon\bar{e}n$ after assimilation by MR2.

MR1b applies to the verbal noun. Hence, the suffix $-\bar{e}n$ shortens to -n before final long vowels: $t\acute{e}$ 'take' > verbal noun $t\bar{e}\bar{e}n$, $w\dot{\partial}\dot{\partial}$ 'want' > verbal noun $w\bar{\sigma}\bar{\sigma}n$.

If the verb has a suffixed pronominal, $-\bar{e}n$ is suffixed to the verb group composed of the root + pronominal. In such case, the pronominal suffix has already neutralized the lexical tone of the verb; the verbonominal suffix therefore has no further effect in this sense. MR3 nevertheless applies to obtain the segmental outcome.

Since the ubiquitous CD verbal noun has been described in detail in a lengthy earlier paper

⁹ The cognate is not in my CDM data. This is, however, a "counterexample": *lúng* 'resemble' > *lūngén* 'similarity'.

¹⁰ There are various lexemes with an apparently nominalized shape of this kind but no extant source root.

¹¹ There is a single irregular derivation of HM from a L-tone verb: sèng 'desire (meat) > sēngén 'desirous of meat'.

(Boyd 2004), we need not expatiate on the subject here.

3. Focalization

We now turn to the marker of focalization whose etymological relationship with the preceding set of suffixes seems tenuous at best.

In CDN, marker of focalization is the suffix $-\bar{\epsilon}n$. Only the subject can be focalized, but the marker appears on the verb. This means, of course, that the subject of nominal utterances cannot be focalized.

Unlike the verbonominal suffix, the focalizer $-\bar{\epsilon}n$ has no effect on the tones of the verb group. It undergoes assimilation MR2 and MR3 just as the verbonominal does.

In the simplest kind of focalized proposition, there is thus only a subject and a verb.

(1) gàng sárēn

chief say + FOC

'it is the chief who decides/decided (the matter)', lit. 'it is the chief who speaks'

A short form, $-\vec{n}$, is also attested after final apical consonant¹².

(2) góōn sán sóbà

3sg say + FOC rather

'it was more likely he who said (that)'

In (2), the independent 3sG pronoun is focalized. The 3sG subject index pronoun is \emptyset and, although rare, focalizations of this index are possible, cf. the conversational exchange (3):

(3) A: Léén !míí kệệ déèn. B:Nyēnèēn jíí !gáàn dàrì wéréré.

copulate child 3sgPos DEM carry_to + FOC red LOC_DEM upon brightly

'A: He had relations with his daughter(-in-law). B: (Yes,) he was the one who brought sex into the matter.'

This also happens when the subject is topicalized:

(4) váàn dá!án gà, pòkēn lérùm

stone dem top sit + foc man

'as for the "stone" [in that expression], it stands for manliness'

Any interrogative nominal ('who?' 'what?' 'which one?') appearing in subject position is obligatorily focalized, cf. (5)-(7).

(5) máà gòkēn túm dìm nòkí?

who? grind + FOC food behind 1sG + EXT

'who is grinding (flour for) mush behind my back?' (from a children's game)

(6) gà nyá!á dāāmúm!én bé!énè?

so what? worry + LOGSG + FOC MOD2 + Q

'so what could ever bother me?'

¹² This is the sole form of the focalizer used all contexts in CDM.

(7) àán máà sāā vwàrēnè?

DEM who? net beat + FOC + Q

'who's net was it that brought (it) down?'

This is true even when interrogative nominals serve as universal choice quantifiers ('who-, whatever'):

(8) máà gèrēn éēn, bà wōōkòōn gà, ką̄ąkù gò

who? go + FOC MOD1 CNS want + 3sG + FOC TOP refuse + 3sG PERF

'whoever came and courted her, she refused him'

In general, a CN speaker, when presented with a situation with respect to which a given participant must be focalized, has no apparent difficulty in constructing sentences such that the term in question will appear in subject position. In other words, the impossibility of focalizing a term in any position other than subject does not hinder expression. At times, however, facility seems to lead to the use of topicalization superposed on focalization to fix on a participant in nonsubject position. Cf.

(9) èè, Kàám būū, á vītbó!ón gbāān méém bū dú

yes Bata NPL 1PL call+3PL+FOC officer children NPL indeed

'that's right, as for the Bachama (people), it is we who call them "children of chief's officers"

where the intention is clearly to say, 'it is the Bachama whom we call "children of chief's officers".

This, however, is perhaps a narrow interpretation of a wider phenomenon, namely, a tendency to use focalization as an operator on the proposition rather than on one of its participants. (10), which also includes the interrogative proposition marker, illustrates this:

(10) *n* lārùmēn tērá, *n* nyīī só; *i* nākùmēn nyá!árá, *n* nyīī só
3PL fear+1sg+FOC DUR+Q 1sg know NEG 3PL do+1sg+FOC what?+Q 1sg know NEG
'is it they who are they afraid of me? is it they who do this for me for whatever reason? I don't know'

The sense here is, '*is it (the fact) that* they are afraid of me? *is it (the fact) that* they do this for me for some reason or other of their own?'.

Another more explicit way of obtaining either result – focalization aimed at a non-subject or utterance focalization – is the use of gélén nàk $\bar{e}n$, 3IN do-FOC, 'that means', lit. 'that is what does, brings it about (that)'. Thus,

(11) tò, pén bàán, gé!én nàkēn nèé tàrì gà, gùt váàn
yes thing NPL + DEM 3sGIN do + FOC person shoot + REAL TOP seize stone
'so those are the beings such that, if someone kills one, he has "seized a stone" or alternatively 'so this means that, when someone has killed one of the beings [I have named],

he has "seized a stone""

4. The imperative/injunctive conjugation

4.1. The simple imperative

TN2 with no further segmental inflection corresponds to the simple imperative (with ϕ subject = 2sg and no enclitic object pronoun).

(12) [CVV: dòò 'listen'] $d\bar{o}\bar{o}$ $t\dot{a}\bar{a}$ lend + IMPT ear 'listen'

(13) [CVCV: *l5kì* 'speak'] *l5kí wèè pén*

say + impT 2sgABen thing

'go on with your story'

TN2 may, however, also receive additional segmental inflection.

Firstly, if in utterance-final position (or followed by certain proposition markers), a verb (or verb group) in the imperative will take a final $-\hat{n}$ suffix¹³. MR5 applies if the verb ends in a consonant:

(14) [CVC: sát 'speak'] sāàn

say + impT + inj

'speak, say what you have to say'

(15) [CVCV: jąkì 'add'] Àlájì nwúù, jąkîn

AlHaji wife add + IMPT + INJ

'Alhaji's wife, add (another = sing another one)'

4.2. The indexed imperative

The same suffix is used with the indexed imperative – the lexical form of the verb with L tone subject index – under identical conditions:

(16) [CVV: téé 'take'] à téèn

2sg + IMPPT take + INJ

'take [this]'

(17) [CVV: $p\hat{e}\hat{e}$ 'return'] \hat{a} $p\hat{e}\hat{e}n$

2sg + IMPPT return + INJ

'come/go back'

Given the semantic functions of reported speech in CD (Boyd forthcoming a), this form is

¹³ The *-n* suffixes are the only ones in CD which are invariably realized without a preceding vocalic segment. It must be remarked, however that nasals bear tones in CD, as for example in the first- and second-person singular subject pronouns. Furthermore, they are either associated with vowels (as the suffixed pronominals $-\dot{m}$ '1sg' and $-\dot{m}$ 'logsg' which generate a preceding -u-) or interchangeable with vowels (n = i). At the same time, given the wider prevalence of *-n* suffixes in CDM, it could be hypothesized that vowelless suffixes are being progressively eliminated in CDN, primarily by the insertion of a preceding $-\varepsilon$ -.

widely used this context:

(18) [CVCV: pīrì 'put back'] kù tāālì kù pīrìn
RSP2/3SG sew RSP2/3SG put_back + INJ
'(said,) [Please] sew [him] back together'

4.3. The injunctive 14

This suffix is also used with injunctive TN1 forms in similar conditions, again often in reported speech:

(19) [CVC: $s\delta p$ 'go down' + MR5] ϵn , $G \epsilon k u$ $s\delta m$ THAT Fly RSP2/3SG + INJHP go_down + INJT + INJ¹⁵ 'said, Fly, jump into the water!' (20) [CVCV: $s\overline{s}k v$ 'heil'] for k v

(20) [CVCV: $s\bar{a}k\hat{i}$ 'boil'] én, kú sákîn

That rsp2/3sg + injHP boil + injT + inj

'said, Cook [it]'

4.4. Use in nonfinal position

4.4.1. With pronominal subject

The $-\dot{n}$ suffix displays a tendency to spread to other contexts.

Firstly, the second-person plural subject of the indexed imperative (and the injunctive) may take the form \hat{n} . This form may suffix $-\hat{n}$; however, given the interchangeability of *i* and *n*, the result could be represented either as $\hat{n}n$ or as \hat{n} . In fact, the realization is sometimes $\hat{n}\hat{n}$. Examples of imperatives are given below in (21)-(23):

(21) $\hat{u}n$ sát méém $b\bar{u}$ é dìm gà

3PL+INJHLP say children NPL MOD1 behind PERF

'tell all your young people'

(22) $\hat{n}\hat{n}$ $p\partial k \hat{\epsilon}$ $b\bar{\epsilon}n$

3PL + INJHLP sit $PROX_LOC$ down

'wait here, you people (I'm coming back)'

(23) $\hat{n}n$ kāmèn gèt tē \bar{e}

3PL + INJHLP gather go DUR

'get together and go without fail'

Clearly, the HL tone pattern of the pronominal is identical to the one borne by verbs in the TN1 form when they take the $-\dot{n}$ suffix. It may therefore arise from analogical copying of the injunctive pattern onto the pronoun. This form then spreads to the indexed imperative. Similar phenomena are described below in connection with the autobenefactive.

¹⁴ I use the term "imperative" to designate conjugated forms which can only be used in the second person. I use "injunctive" for a conjugated paradigm which includes all grammatical persons.

¹⁵ The H tone marking of the injunctive is, of course, indiscernable with H-tone verbs.

4.4.2. With verbs taking TN1

Secondly, the TN1 form of injunctive verbs with final nasal – or in an otherwise nasal context – tend to take a HL pattern rather than the usual H, even when non-final:

(24) [CVN: jààm 'stand'] én, kù jáàm à $b\bar{e}n s\bar{n}$ THAT RSP2/3SG stand + INJT + INJ?? PROX_LOC down just 'said, (Please) just stop there'

(25) [CVV: $ny\hat{i}$ 'know'] $g\hat{a} r\hat{i}$ $ny\hat{i}(n)$ $ny\hat{a}!\hat{a}r\hat{e}?$ so 3PL + INJP know + INJT + INJ?? what? + Q

'but what are they supposed to know, what could they know?'

Nevertheless, attestations of this usage in non-nasal contexts exist, suggesting that any existing limitations are being overridden. Cf. (26):

(26) [CVC: $p \partial k$ 'sit'] m $p \partial \partial ng$ $g \partial ng s i$ k a $s \dot{\epsilon}$ LOGSG sit + INJT + INJ breath OBL first '(said,) Let me rest up a bit'

It should, however, be noted that this usage has been recorded primarily in Pola and may be restricted to certain dialects.

5. The negative forms of imperative and injunctive

The marker of negative imperatives and injunctives is $-\hat{e}n$.¹⁶ The verb must bear TN1 pattern and the proposition is marked by the negative *só*. Here are two examples of indexed imperatives in the negative:

(27) [CVC: *gèt* 'go'] *ì* dòò táā, ì sź gérèn 2PL + IMPPT lend ear 2PL + IMPPT go + IMP_NEG NEG 'listen, don't leave' (28) [CVC: gáám 'talk'] à mūm dīn bēn gáámèn sź 2sg + IMPPT talk + IMP_NEG talk other down NEG 'say nothing more' (29) and (30) are negations of the injunctive: (29) [CVCCV: dongsì 'shake'] én, ń dóngséèn kpéé míí sź THAT RSP2/3PL jostle + IMP_NEG blacksmith child NEG 'said, Don't jostle the blacksmith's child' (30) [CVC*èn: kāsèn* 'break off'] *wîi* àán kù kásénèn sź grass DEM FACT break + INJ_NEG NEG 'that stalk of grass must not break' This form is also prevalent in the factitive (31) although the normal $-\dot{\partial}$ inflection can also

16 This morpheme, like the focalizer, is represented by a vowelless morpheme $(-\dot{n})$ in CDM.

be found on the verb (32):

dìm kù ń péèn méém yét !bū só

(31) [CVV: péé 'press'] dìm kù ń péèn méém yét !bū só because FACT 3PL press + INJ_NEG children circumcision NPL NEG 'because people must not crowd around the initiates'
(32) [CVVCV: dāāmì 'worry'] Nèsáárá bū kù ń dáámíbúrò wéé-míí àán só

(52) [CVVCV: daaline worry] is worry worry worry + 3pl + FACT small-small DEM NEG 'so that the Whites would not bother them any more'

6. Use of $-\hat{\epsilon}n$ in positive forms

The $-\dot{e}n$ suffix appears as a variant of $-\dot{n}$, particularly when the verb root itself ends in -n. This may be a mere regularization of the vowelless suffix by the insertion of $-\dot{e}$ -, but it may also involve an analogical extension of negative $-\dot{e}n$ by reason of its association with imperatives/injunctives.

In (33), $-\dot{\epsilon}n$ replaces $-\dot{n}$ in the simple imperative of a resultative verb:

(33) [CVC èn: gbāsèn 'move away'] gbāsénèn

 $move_away + IMPT + INJ$

'get away (from there)'

MR1a applies with this suffix:

(34) [CVV: $b\acute{a}\acute{a}$ 'come'] $p\acute{e}n$ $d\bar{o}n$ $b\acute{a}\acute{a}ri$, i $b\acute{a}\acute{a}r\acute{e}n$ thing other come+REAL 2PL+IMPT come+INJ

'something has happened, come all!'¹⁷

(35) [CVC: nìm 'sing'] kù nīmbúrèn

RSP2/3SG sing + SPNT + LOGPL + INJ

'(said,) Sing for us'

In (36), $-\hat{\epsilon}n$ is suffixed to an injunctive form:

(36) [CVC: jààm 'stand'] n wòò kú jáámèn

1sg want 3sg stand + INJT + INJ

'I want him to stand (for election)'

There are attestations in nonfinal position, rather more than with $-\dot{n}$, but they seem to be limited to verbs which themselves end in -n. (37) is an indexed imperative example and (38) illustrates an injunctive.

(37) [CVC: gààn 'get'] én, ì gàànèn yírí THAT RSP2/3PL get+INJ guinea-corn 'said, Get some guinea-corn'

¹⁷ This is the utterance transmitted by the bààn tèngláng gong, used in Pola to announce an important event, as a death.

(38) [CVCC $\hat{e}n$: $t\bar{u}ns\hat{e}n$ 'come out + RCP'] \hat{n} $W\hat{\partial}\hat{\partial}$ $g\hat{\partial}!\hat{\partial}n$ $b\bar{u}$ \hat{i}

LOGSG Want RSP2/3SG NPL RSP2/3PL

túnsénèn éè dìíng bèè

 $come_out + INJT + INJ MOD1 + with leg RSP2/3PL$

'(said,) I want them to come out together and arrange themselves by clans'

A plausible explanation for these forms is that, rather than being an extension of the injunctive marker as such, they are truncated plurals obtained according to the process described in Section 7 below.

7. Verb pluralization

A reduplicated $-\hat{e}n$ suffix agrees with a plural subject and is generally associated with an imperative sense.

With the simple imperative, the ø subject receives a plural interpretation:

(39) [CVC: páng 'branch', pòk 'sit'] pāngènèn ī písà míí mūm. branch + IMPT + PL LOC door small mouthbā nyēnén p5kènèn gáà nyēm $CNS + IMPT go_in + IMPT sit + IMPT + PL LOC_DEM home$ 'you must all go off to the back door, then go in and sit there' The indexed imperative will have a plural subject: (40) [CVCV: *dīngì* 'answer'] *ì* dīngènèn wàà 2PL + IMPT answer + VPL with 'sing the response (to the song)' Nevertheless, this form seems to have spread to assertive contexts, cf. (41) and (42a). (41) [CVC: júm 'be many'] wóś á júmènèn έ háá nwàànéè 1PL be_many + VPL MOD1 until much 1pl 'there are a great many of us (in our family)' (42a) [CVCV: kāmì 'gather'] ínyéén á kāmènèn tí!írì wàà if 1PL gather + VPL head + REAL TOP 'if we work together' (42b) is the regularly formed negative of (42a): (42b) ńnyéén á kāméènèn tí!í sź wàà if 1PL gather + NEGT + VPL head NEG TOP 'if we don't work together' MR1b applies in verb pluralization as the indexed imperative for báá 'come' in (43) shows.

(43a) îin báànèn tēē, á sárènèn gáám dá!án

2PL + INJP come + VPL DUR 1PL say + VPL speech DEM

'you must come so that we can have a talk'

The short form resulting from MR1b is nevertheless often felt to be insufficient, as an additional -n- can be found inserted, as if the suffix had been tripled:

(43b) [CVV: $b\acute{a}\acute{a}$ 'come'] $b\ddot{a}\grave{a}n\grave{e}n > b\ddot{a}\grave{a}n\grave{e}n\grave{e}n$; [CVV: $t\acute{e}\acute{e}$ 'take'] $t\ddot{e}\grave{e}n\grave{e}n > t\ddot{e}\grave{e}n\grave{e}n\grave{e}n^{18}$

This tripling must be distinguished from the proper result of suffixing the plural to a resultative verb:

(44a) [CVCCèn: nyēnkèn 'see + RCP'] á nyēnkénènèn só
1PL know + RCP + NEGT + VPL NEG
'we don't get to know each other'
(44b) [CVCCèn: jāngsèn 'throw + RCP'] á jāngsènènèn pèsí béēn
1PL throw + RCP + VPL propriety MOD2

'we behave improperly to one another'

On the other hand, there are cases where a sequence of $-\varepsilon n$ suffixes is felt to be redundant and one of them is apparently dropped as in (45) where the conjugated verb is $g\bar{a}ps\epsilon n$ 'separate + RCP', not $g\bar{a}psi$ 'divide up'.

(45) dōn gà, á gāpsènènì gà

other TOP 1PL separate + PL + REAL TOP

'if perhaps we separate'

Another apocope may occur in contexts where the verb may be immediately followed by a L tone vowel with the sense 'proximate locative' or 'instrument':

(46) bùm déèn á pōkèn è wūū àán pát

place dem 1pl sit + relT + vpl prox_loc inside dem all

'the place where we are all sitting in here'

In (46), $p\bar{s}ken e$ must represent a truncation of $p\bar{s}kenen e^{19}$. The examples in (37) and (38) are other probable cases of such truncation where the context is definable only in terms of the final nasal consonant in the verb root.

8. The modality *Éen*

CD uses a basic contrast of optional epistemic modalites:

Modality 1: the speaker vouches for what he says, as either evident or indisputable²⁰; or

¹⁸ From this point on, many of the examples are chosen to show how -εn suffixes tend to cluster in utterances. This feature may have some areal significance. Indeed, Raimund Kastenholz reports a similar phenomenon in Adamawa Pere, which could have been subjected to some of the same Benue-Congo influences as CD, but Doris Löhr has found it in Chadic Malgwa (pc.s).

¹⁹ It may be noted that native speakers will not accept a resultative derivate of pok 'sit'. This interpretation is therefore not an option.

²⁰ This modality also has an orientative function with verbs of motion: the evidential is associated with oriented movement – either towards the speaker or away from a point of departure – while the absence of Modality 1 expresses movement independent of either speaker or starting point.

Modality 2: the speaker speaks tentatively or allows that the accuracy of his statements is not apparent and can be independently verified.

Modality 1 is marked by $\ell!\ell$, $r\ell!\ell$ (by MP1a) when following a vowel, or $(r)\ell!\ell n$ when final or followed by a vowel; modality 2 is marked by $b\ell!\ell$ or $b\ell!\ell n$ when final or followed by a vowel. These markers appear at the end of the phrase consisting of the verb and its direct objects and before any circumstantial phrase or proposition modifier²¹. A complete description of the functioning of the epistemic modalities would be too complex to undertake here. For our purposes, we need only note that Modality 1 (far more frequent in discourse than Modality 2) has affixal properties, as the applicability of MR1 shows.

In the following examples, Modality 1 is written separately for easy visibility. It is nevertheless indistinguishable from a suffix. Sequences of $-\varepsilon n$ morphemes can thus easily be formed with Modality 1, cf. the selection in (47)-(50):

• verbal noun + modality 1 in the future (auxiliary $m\dot{a}$ + verbal noun):

- (47) í bììn í mà sāā míí àán gūrēn éēn
 3PL chase 3PL FUT bird small DEM catch+INF MOD1
 'you must all chase the bird and catch it'
- (48) $m (n \bar{e} e n)$ $m \dot{a}$ $t \bar{e}$ $g \bar{o} n g$ $p \bar{i} r \dot{i} k \dot{o} \bar{o} n$ LOGSG-LOGSG FUT DUR VOMIT $do_a gain + rsp2/3sg + inf mod 1$

'(said,) I will be sure to vomit you back out'

- focalizer + modality 1
- (49) àán gé!én nyēnmènēn éēn

```
DEM 3sgIn be_seen + FOC MOD1
```

'it's the one that can be seen over there'

• grammatical lexemes with fossilized - *en* component + modality 1

(50) gàng míí màān tūné!nén nyìínēn éēn

chief small FUT + FOC go_out + INF now MOD1

'now it is the chief's son who comes out'

The affixal nature of Modality 1 is more evident in the case of injunctives marked by $-\dot{n}$, where it is integrated into the verb group as $-\dot{\epsilon}\dot{\epsilon}\dot{\epsilon} - \dot{n}$. In examples, Modality 1 is represented as a suffix:

(51) [CVC: kóp 'draw, fetch (water)'] kōbéèn

fetch + impT + mod1 + inj

sá?

'draw (some water)'

(52) [CVC: $l \not e p$ 'buy'] $b \overline{a} \overline{a}$ $l \overline{e} b \dot{a} ! r \not e \dot{e} n$

cns + impT buy + spnT + 1pl + mod1 + inj no?

21 In nominal utterances, Modality 1 may appear before an attribute and plays the role of a copula.

'buy some for us, won't you?'

Sequences of $-\varepsilon n$ suffixes appear when $-\varepsilon n$ is used with resultative derivates such as *gbāsèn* 'approach', *tēnèn* 'pass by' (53) and *kālèn* 'be carried (on the back)'(54).

(53) gbāsénéèn,

tēnénéèn

 $move \ away + \mathsf{IMP}T + \mathsf{MOD}1 + \mathsf{INJ} \ \ go_by + \mathsf{IMP}T + \mathsf{MOD}1 + \mathsf{INJ}$

'come closer, go on by'

(54) kù kōlènéèn

RSP2/3SG get_on_back + MOD1 + INJ

'(said,) Please climb on (my) back'

As mentioned in Section 4, $-\dot{n}$ can only be suffixed to the verb group in final position. It cannot be used when the verb takes any nominal direct object. Yet the $-\dot{\epsilon}\dot{\epsilon}n$ form has spread to such contexts, replacing or competing with $\dot{\epsilon}\bar{\epsilon}n$ in imperative/injunctive propositions:

(55) à yáá tím àán éèn, à bąkì nwúní éèn

2sg + IMPPT climb tree DEM MOD1 + INJ 2sg + IMPPT break wood MOD1 + INJ

'please climb this tree and cut firewood'

9. Marking of the autobenefactive by $-(\bar{\varepsilon})n$

Chamba has an autobenefactive copy pronoun discussed at length in Boyd (2010) and at even greater length in the internet version of that paper

(www.rblanguesdafrique.info/CDbenefNew2010.pdf). This pronoun may take an $-\bar{n}^{22}$ (sometimes attested as $-\hat{n}$) extension which, in most uses, seems to be copying a morphological element on the verb which it will normally follow: either the verbonominal suffix or the focalizing suffix, both $-\bar{\epsilon}n$.

• Copying the verbonominal in the future form:

(56) *m̀ mà bēdé!én mèēn bé kàán sīn*

1sg fut add + inf 1plABen + inf mod2 thus just

'I shall continue as follows.

• Copying the focalizer, here in reported speech:

(57) mínēén vētkòōn mèēn

LOGSG-LOGSG $leave + 3sg + foc \ logsgABen + foc$

'(said,) I am the one who left him'

It happens, however, that this paradigm is also attested in preverbonominal position where it "copies" a morpheme which now follows it.

(58) á à wòōn pén dōn sāāmēn só máá

1PL FUT 1PLABEN + INF thing other find + INF NEG TOP

22 Since the autobenefactives all end in a vowel, this suffix can also be given the form $-\bar{\epsilon}n$ with MR1b applying.

'(even) if we will not get anything'

The phenomenon illustrated by (56) to (58) seems rather different from the extended usages discussed heretofore, which exemplify analogy²³. Here we seem to be dealing with a kind of agreement. There is, however, another use of the autobenefactive paradigm where the $-\bar{n}$ suffix is perhaps an analogical extension of the above. This is use as pronominal modifier, apparently expressing ipseity. For whatever reason, this function seems to be limited to nominal predications. These are attributive in (59) and (60).

(59) mínēn mèēn nèé só

 $LOGSG \ LOGSGABEN + IPS \ person \ NEG$

'(said,) I myself am not a human being'

(60) í bèēn yí!lén pát

3PL 3PLABEN + IPS thief all

'they are all thieves'

But the predicate may be locative:

(61) wīī wèēn bé!é kààm wèè

2sg 2sgABen+ips mod2+loc village 2sgPos

'(suppose) you yourself are in your village'

Or it may be the progressive form:

(62) vớ!ón gà, í bèēn bé wàà sòòn dōbēn

2PL TOP 2PL 2PLABEN + IPS MOD2 with dance dance + INF

'meanwhile you yourselves are all dancing'

The modifier may also be detached from the modified pronoun under certain circumstances:

(63) mínēn mèēn sààmá, mèēn gàng dùrí nyík !míí

LOGSG LOGSGABEN + IPS even_before LOGSGABEN + IPS chief rain cloud small 'even before (you realized it), I myself was Raincloud's son'

Copying of the $-\bar{n}$ suffix also seems to involve other unrelated morphemes:

(64) mínēn gàān, m mèēn nèé số

LOGSG TOP + IPS LOGSG LOGSGABEN person NEG

'as for me, I am not a human being'

10. Other $-\varepsilon n/-n$ grammatical morphemes

There are other grammatical morphemes which contribute to the profusion of $-\varepsilon n/-n$ in discourse, yet are simple enough to be presented without elaboration or illustration.

²³ An exception is the copying of a HL verb pattern onto the subject pronoun (Section). This might also be considered a phenomenon of agreement.

1) The third person singular possessive is usually marked by $-\dot{n}$ when the possessor is inanimate ($k\dot{e}\dot{e} > k\dot{e}\dot{e}n$);

2) The opener of reported speech is identical in form to Modality 1: $\epsilon \bar{\epsilon} n^{24}$. This morpheme is represented in CDM by $\dot{n} \sim n \bar{n} n$.

In addition, the universal demonstrative²⁵ is $\dot{a}\dot{a}n$ in both CDN and CDM. This morpheme does not therefore reflect the CDN ϵ /CDM *a* correspondence observed for the resultative and related suffixes. In other dialects, it may appear as $\dot{n}\dot{n}$ in some contexts. In all dialects, it is suffixlike and MR1a applies when it has an initial vowel.

11. Concluding remarks

The situation described above raises a number of questions and provides very few answers. In CDN, we may hypothesize that a single segmental suffix, *-en*, is gaining ground at the expense of a simpler form, *-n*, still more widely prevalent in CDM. We have, however, no historical proof that one or both of these forms formerly had fewer functions than they now have. Such a hypothesis would require far more dialectal information than we currently have. We are therefore obliged to assume for the time being that the oldest CD ancestor we could reconstruct had *-en/-n* morphemes with all these functions. The questions we can reasonably ask therefore concern firstly the way in which this situation arose.

1) Has CD borrowed inflectional/derivational morphemes? I hold that borrowing of the resultative marker $-\hat{e}n$ from a BC language is the most likely hypothesis. If this is true, have other such morphemes been borrowed? If so, and if the source language is the same, a similar situation must prevail or have prevailed in at least one other language. In general, then, how many of the features described here can be put down to language contact?

2) CD shows clear signs of a tendency to allow $-\varepsilon n/-n$ morphemes to spread from one context to another. Is the use of $-\varepsilon n$ morphemes in the verbal noun and nominalized forms an ancient example of such spreading? Is there some general as yet undetected process of spreading that could provide a better explanation to the current situation than borrowing?

A final set of questions concerns the relevance of CD for general linguistics.

3) What is the impact on communication of this abundance of morphological homonymy, tone excluded, which leads to uncertainty in morphological interpretation (cf. the case of verb pluralization) and analogical formations (cf. the movement of $-\dot{n}$ out of final position in injunctives/imperatives)? No apparent need has yet been observed of replacing any of these morphemes in any of their functions with more easily distinguished ones, rather the contrary. Is the situation described here, while clearly peculiar, just one of the uncountable possibilities of human language requiring no explanation which would be proper to it alone?

The absence of clear answers to any of these questions is a measure of the degree of our continued ignorance of the languages of northeastern Nigeria.

²⁴ The opener is represented here with H tone only and a following comma; the first tone following the opener is automatically downstepped.

²⁵ CD distinguishes only two demonstrative nominal modifiers. The other, *dέεn* ~ *dá!án* (< *dέεn àán*), must designate something the speaker is already acquainted with.

Bibliographical references

BENDOR-SAMUEL, John (ed.), 1989, *The Niger-Congo languages*, Lanham/NewYork/London: University Press of America

BENNETT, Patrick R., 1983, Adamawa-Eastern: Problems and Prospects, in Ivan R. DIHOFF, ed., *Current Approaches to African Linguistics (vol. 1)*, Dordrecht/Cinnaminson: Foris, 23-47.

BOHNHOFF, Lee, 2010, *A description of Dii phonology, grammar, and discourse*, Ngaoundéré: Dii Literature Team.

(www.silcam.org/download.php?stid = &folder = documents&file = Dii_language_description.pdf)

BOYD, Raymond, 1996-1997. Chamba Daka and Bantoid : a further look at Chamba Daka classification, *Journal of West African Languages* 26(2): 29-43.

--, 2004. The syntax and semantics of the Chamba-Daka verbal noun, *Afrika und Übersee* 87: 193-288.

--, 2010, A "reflexive benefactive" in Chamba-Daka (Adamawa branch, Niger-Congo family, in Fernando Zúñiga and Seppo Kittilä, eds., *Benefactives and malefactives: Typological perspectives and case studies*, Amsterdam: John Benjamins, 331-350.

--, forthcoming a, La logophoricité en tchamba-daka (variante Nnakenyare), in Pascal BOYELDIEU, ed., Paris, Louvain: Peeters

--, forthcoming b, P-lability in Niger-Congo: a Central African perspective, in Seppo KITTILÄ and Leonid KULIKOV, eds., *Diachronic typology of voice and valency-changing categories*.

HYMAN, Larry M. 2007. Niger-Congo Verb Extensions: Overview and Discussion, in *Selected Proceedings of the 37th Annual Conference on African Linguistics*, ed. Doris L. PAYNE and Jaime PEÑA, 149-163. Somerville, MA: Cascadilla Proceedings Project.

(www.lingref.com/cpp/acal/37/paper1603.pdf, 29.11.2011

GREENBERG, Joseph H., 1966, The Languages of Africa, Bloomington: Indiana University.

GUTHRIE, Malcolm, 1967/71, Comparative Bantu, 4 vols., Farnborough: Gregg International.

Lewis, M. Paul, ed., 2009, *Ethnologue, languages of the world*, 16th edition, Dallas: SIL International. (<u>www.ethnologue.com/show_language.asp?code = ccg</u>, 29.11.2011)

Abbreviations

ABEN	autobenefactive pronominal
CDN	Nnakenyaare Chamba-Daka
CDM	Mapeo Chamba-Daka
CNS	consecutive auxiliary verb

DEM	demonstrative nominal modifier	àán, déèn, dáān
DUR	durative proposition marker	$t\bar{\epsilon}(\bar{\epsilon})$
EXT	proposition-final extension	-í
FACT	factitive	kù SP V-ò
FOC	focalizer	-ēn
FUT	future verb conjugation	SP mà V-ēn
IMP/INJ_NEG	negative imperative/injunctuve marking	H + èn
IMPPT	imperative pronominal subject tone	L
імрТ	imperative verb tone pattern (TN2)	M/MH
In	inanimate pronominal	
INF	infinitive suffix	-ēn
INJ	injunctive marker	-'n
INJHP	H injunctive marker of subject pronominal	Н
INJHLP	HL patttern of subject pronominal	HL/H-'n
плј	injunctive verb tone pattern (TN1)	Н
IPS	pronominal of ipseity	-ñ
LOC	locative head	ī
LOC_DEM	locative demonstrative	gáà(n)
LOGSG/PL	singular/plural logophoric pronominal	
мор1/2	modality1/modality2	$\epsilon \overline{\epsilon}(n)/b\epsilon \overline{\epsilon}(n)$
NEG	negative proposition marker	só
NEGT	negative (= imperative) verb tone pattern	M/MH
NPL	nominal plural	bū(ū)
OBL	obligatory proposition marker	ká

PERF	perfective proposition marker	gò
(1, 2, 3)PL	(1, 2, 3 person) plural pronominal	
(1, 2, 3 sg/pl)Pos	(1, 2, 3 person singular/plural) possessive pronominal	
PROX_LOC	proximate locative	è∼à
Q	interrogative suffix	-á/-è
RCP	reciprocal	-k/sèn
REAL	real proposition marker	-ì
relT	relative (= imperative) verb tone pattern	M/MH
rsp2/3(sg/pl)	non-emitter pronominal in reported speech	
(1, 2, 3)sg	(1, 2, 3 person) singular pronominal	
spnT	verb tone pattern with suffixed pronominal	M/ML/MH
THAT	opener of reported speech	éēn
ТОР	topicalizer	gà, wàà, máá
VPL	verb plural	-ènèn