

#04 juin 2018



# LILA

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## Linguistique et Langues Africaines

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- A selecção do vP cause em Nyungwe:  
Uma análise à luz de Pylkkänen
- Kuteb Verbal Extensions vs. Bezen  
Verbal Serialization - A Comparison
- A Note on the Present Tenses in some  
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et Langues  
Africaines



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## A Selecção do vCause em Nyungwe: Uma análise à luz de Pylkkänen (2002, 2008)<sup>1</sup>

Crisofia Cristovao LANGA DA CAMARA

Center for Arican Studies, Eduardo Mondlane University, Maputo

### **Resumo**

Desde Pylkkänen (2002, 2008) sabe-se que o complemento dos núcleos causativos varia de língua para língua e esta variação tem consequências na morfologia, sintaxe e semântica. Pylkkänen propõe três tipos de complementos dos núcleos causativos: uma raiz, um VP e um vP-fásico. A definição destes complementos é baseada em três diagnósticos: a posição da morfologia causativa em relação ao radical verbal, a interpretação de advérbios orientados para o agente e o escopo relativo dos argumentos aplicativos e causativos. Aplicados estes diagnósticos à língua Nyungwe, os resultados mostram que o núcleo Causativo seleciona um vP-fásico.

### **Palavras-chaves**

Línguas bantu, verbos, construções causativas, selecção do núcleo Causativo, modificação adverbial.

### **Sélection du vCause en nyungwe : une analyse fondée sur Pylkkänen (2002, 2008)**

### **Resumé**

Depuis Pylkkänen (2002, 2008) on sait que le complément des noyaux causatifs varie en fonction de la langue considérée et que ce type de variation a des conséquences aux niveaux morphologique, syntaxique et sémantique. Pylkkänen affirme l'existence de trois types de compléments

1. Agradeço aos dois falantes de Nyungwe que se predispuaram a responder o questionário cujos dados ajudaram na produção deste artigo. Agradeço igualmente aos revisores anônimos cujos comentários ajudaram imenso na discussão que fazemos neste artigo. Contudo, é a mim que deve ser imputada toda e qualquer deficiência que o artigo tiver.

des noyaux causatifs: racine, VP et vP-phasique. La définition de ces compléments se fonde sur trois critères: position des morphèmes causatifs par rapport au radical verbal, interprétation des adverbes orientés vers l'agent et portée relative des arguments applicatifs et causatifs. Quand on applique ces critères à la langue nyungwe, il apparaît que le noyau Causatif sélectionne un vP-phasique.

### **Mots-clés**

langues bantoues, verbes, constructions causatives, sélection du noyau causatif, modification adverbiale.

### **Cause Selecting in Nyungwe: An analysis following Pylkkänen's model (2002, 2008)**

#### **Abstract**

Since Pylkkänen (2008) it is known that there exists a certain degree of variation regarding the height of causativization, with consequences on morphology, syntax, and semantics. Pylkkänen proposes three types of causatives, based on the size of the complement they take: a root, a VP or a vP phase. These can be distinguished on the basis of three diagnostics: the position of causative morphology with respect to the verb stem, the interpretation of agent-oriented adverbs, and the relative scope of applicative and causative arguments. Applying these diagnostics to the Bantu language Nyungwe, the results show that in Nyungwe the Causative head selects a vP phase.

#### **Key-words**

Bantu languages, verbs, causative constructions, Cause selecting, adverb modification.

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### **1. Introdução**

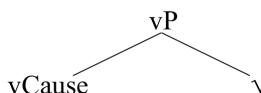
As construções causativas nas línguas bantu já foram amplamente estudadas (Baker 1988; Kari 1995; Lodhi 2002; Meeussen 1967; Meinhof 1915; Mchombo 1993; Matsinhe 1994; Rugemalira 1993; Waweru 2011). A partir destes estudos é possível inferir que o processo de causativização (obtido através da afixação de um morfema causativo) dá uma semântica causadora aos verbos derivados. O acréscimo deste morfema em bantu pode levar, entre outras coisas, à adição de um argumento sujeito causador à estrutura argumental do verbo causativo (Good 2005). Portanto, as construções causativas envolvem um argumento causador ausente na estrutura argumental do verbo não causativo. Vejamos os exemplos que se seguem:

- (1a) n'-tsikana a-ndza-thamang-a.  
CL1-menina PC1/2-FUT.DIST-correr-VF  
‘a menina correrá’
- (1b) mbwaya yi-ndza-thamang-is-a n'-tsikana.  
CL9-cão PC9-FUT.DIST-correr-CAUS-VF CL1-menina  
‘o cão fará a menina correr’

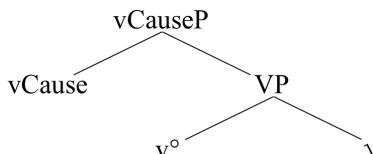
Em (1a), o verbo *-thamang-* ‘correr’ é intransitivo e selecciona um argumento externo com o papel temático de agente. Mas em (1b), apresentou-se à estrutura do verbo o morfema causativo *-is-*, o que conferiu a este não apenas a semântica causadora, mas também o tornou transitivo. Assim, este passou a seleccionar um agente causador *mbwaya* ‘cão’, ausente em (1a) e um agente afectado *ntsikana* ‘menina’.

Contrariamente ao que se pode pensar a partir do que dissemos até agora, os trabalhos de Cuervo (2015) e Pylkkänen (2002, 2008) mostram que a causativização nem sempre acrescenta o número de argumentos sintáticos do verbo, e, por isso, o que distingue os verbos causativos dos não-causativos é o evento da causação e o tipo de complemento que o verbo causativo pode seleccionar. Deste modo, para Pylkkänen (2002, 2008), todas as construções causativas envolvem um núcleo causativo que combinado com um predicado não-causativo acrescenta o evento causador à semântica deste último.

Sobre o tipo de complemento que o verbo causativo pode seleccionar, Pylkkänen (2002, 2008) defende igualmente que este varia de língua para língua. Assim, o vCause pode c-selecionar uma raiz (✓). Veja-se a árvore que se segue:

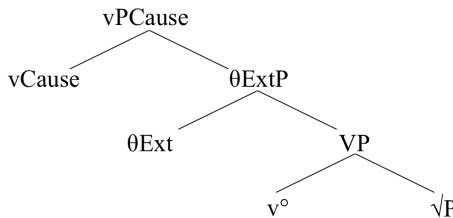


Nesta proposta teórica a raiz é o complemento menor do núcleo causativo. O núcleo causativo pode igualmente, em algumas línguas, seleccionar um VP. Veja-se a árvore abaixo:



A árvore acima mostra que em algumas línguas, o complemento do núcleo causativo pode ser maior do que uma raiz, isto é, um VP.

Para terminar, Pylkkänen (2002, 2008) refere que há línguas em que o núcleo causativo pode seleccionar um complemento maior do que um VP, ou seja um vP-fásico. A seguir, apresenta-se o diagrama correspondente:



Para Pylkkänen (2002, 2008) a variação paramétrica do complemento do vCause pode ser determinada através de três diagnósticos:

1. há restrição de ocorrência de morfologia verbal entre a raiz e o causativo?
2. a interpretação dos advérbios orientados para o agente é ambígua entre o causador e o agente?
3. o causativo pode ter escopo sobre o aplicativo alto?

A parametrização proposta por Pylkkänen (2002, 2008) foi testada em Shona por Wechsler (2016). De acordo com o autor, esta parametrização oferece intuições interessantes sobre a estrutura das construções causativas e aplicativas em Shona com consequência para a interface entre a morfologia, sintaxe e semântica. O comportamento das causativas em Shona assemelha-se, em parte, ao das causativas em Bemba. A diferença entre as duas línguas reside no facto de em Shona o morfema causativo poder co-ocorrer com o da morfologia do aplicativo alto, o que Pylkkänen (2002, 2008) considera impossível.

É com base nesta constatação que Wechsler propõe que a variação paramétrica das causativas nas línguas bantu esteja relacionada com as restrições e limitações na atribuição de caso em vez de requisitos de selecção inerentes (Wechsler 2016). Como se pode perceber, o estudo de Wechsler (2016) propõe uma abordagem teórica diferente da proposta por Pylkkänen (2002, 2008) para a análise das causativas em bantu. Todavia, olhando para o objetivo do presente artigo e o questionário usado para a recolha de dados, propomos ao leitor que deixemos esta discussão teórica para o próximo artigo e voltemos à nossa questão de pesquisa: qual é o complemento do núcleo causativo em Nyungwe? Para responder à esta pergunta, aplicamos as hipóteses de Pylkkänen (2002, 2008) para descrever os dados de que dispomos e estabelecer o complemento do vCause nesta língua.

O Nyungwe é uma língua bantu minoritária que de acordo com a classificação de Guthrie (1967-71), pertence ao grupo linguístico Nsenga-Sena (N40), com o código (N43). É falada em Moçambique nas províncias de Tete e Manica. Na província de Tete esta língua é falada na cidade de Tete e nos distritos de Moatize, Changara e Cahora Bassa e Marávia, por 457.292 pessoas de cinco ou mais anos de idade (INE, 2010). Em Manica, é falada em Guru.

O Nyungwe não tem uma variação dialectal de relevo daí que a variante de referência deve ser a falada na cidade de Tete e nos distritos de Moatize, Changara e Cahora Bassa, por sinal, zonas onde a língua é falada na província de Tete (Ngunga e Sitoé 2000; Ngunga e Faquir 2011).

Tendo em conta a limitação financeira, os dados analisados neste trabalho foram recolhidos exclusivamente com base em um questionário sintáctico administrado a dois falantes nativos de Nyungwe que se predispuaram a respondê-lo, residentes em Tete e Marara. O questionário foi enviado por correio electrónico dada a distância que separa a pesquisadora do campo de pesquisa. Nele, estavam escritas frases em Português e os consultores linguísticos forneceram-nos as traduções equivalentes em Nyungwe (ver anexo). Todas as perguntas subsequentes resultantes das respostas fornecidas pelos falantes foram igualmente feitas usando o Skype.

Depois desta breve introdução, na secção 2 apresentamos a parametrização da c-selecção do complemento do vCause de acordo com Pylkkänen (2002, 2008) e apresentamos os diagnósticos com mais detalhes; na secção 3 apresentamos e analisamos os dados; e, para terminar, na secção 4 apresentamos as conclusões do trabalho.

## 2. Selecção Paramétrica do complemento do vCause

Segundo Pylkkänen (2002, 2008), dependendo do parâmetro de cada língua o vCause pode c-selecionar um dos seguintes complementos: uma raiz, um VP e um vP-fásico. Estes complementos são determinados a partir de três diagnósticos, que explicamos em baixo.

O primeiro diagnóstico é a ocorrência ou não de morfologia verbal entre o núcleo causativo e a raiz, pois, se a ordem dos morfemas representa (até certo ponto) a organização hierárquica dos complementos, logo o vCause que selecciona uma raiz não pode ter nenhuma morfologia intervindo entre essa raiz e o morfema causativo. Isto foi o que distinguiu o núcleo causativo que selecciona uma raiz do núcleo causativo que selecciona um complemento maior. O que dissemos agora está summarizado na Tabela 1 e ilustrado em Bemba no exemplo (4a).

Complementos de vCause	Morfologia entre a raiz e o núcleo Causativo	Línguas testadas por Pylkkänen (2002, 2008)
Raiz	X	Inglês
VP	✓	Bemba
vP-fásico	✓	Luganda, Venda

Tabela 1.- Teste da ocorrência de morfologia entre a raiz e o núcleo causativo

Pylkkänen mostra que em Bemba, a morfologia da extensão estativa -*ek-* e da extensão recíproca -*an-* pode ocorrer entre a raiz do verbo (-tem-

em (5a), e de *-mon-* em (5b) e a extensão causativa *-(esh)y-*. Isto mostra que há espaço entre o núcleo causativo e a raiz e, portanto, que o núcleo Causativo não pode ser concatenado directamente com a raiz, mas acima desta.

Bemba (Pylkkänen 2008: 115)

- (5a) naa-tem-ek-eshy-a                               iciimuti  
1SG.PAST-cortar-EST-CAUS-VF pau  
'eu fiz com que o pau fosse cortado'
- (5b) naa-mon-an-y-a                               Mwape na Mutumba.  
1SG.PAS-ver-RCP-CAUS-VF Mwape e Mutumba  
'eu fiz com que Mwape e Mutumba se vissem mutuamente'

Tal como em Bemba, nas línguas Venda e Luganda é possível a ocorrência de vários morfemas de extensão verbal entre a raiz e o núcleo causativo, como ilustrado em (6-9), retirados de Pylkkänen (2008: 117-118):

#### Venda

##### Recíproco antes de causativo

- (6) -vhon-an-is-a  
ver-RCP-CAUS-VF  
'causar verem-se mutuamente'

##### Reversivo antes de causativo

- (7) -tib-ul-is-a  
remover-REV-CAUS-VF  
'causar a remoção de uma tampa'

#### Luganda

##### Recíproco antes de causativo

- (8) -laba-ga-z-a  
ver-RCP-CAUS-VF  
'causar verem-se mutuamente'
- (9) -lab-i-s-a  
ver-EST-CAUS-VF  
'tornar visível'

Para se distinguir os núcleos causativos que seleccionam um VP dos que seleccionam um vP-fásico, é preciso outros diagnósticos.

O segundo diagnóstico de Pylkkänen é a ambiguidade na interpretação dos advérbios orientados para o agente. De acordo com a autora, se o causador é introduzido em baixo do argumento externo, como no caso em que este selecciona uma raiz ou VP, então há só um agente (o causador). Portanto, o advérbio orientado para o agente só se pode referir a este agente. Pelo contrário, quando o causador é introduzido acima do agente, o advérbio orientado para o agente pode se referir tanto ao causado como ao agente/causador. Se uma língua mostrar ambiguidade, podemos

concluir que o núcleo causativo seleciona um vP. Pylkkänen ilustra isso com dados de Bemba, por um lado, e Venda e Luganda, por outro. Os resultados estão resumidos na Tabela 2.

Complementos de vCause	Escopo dos advérbios	Línguas testadas por Pylkkänen (2002, 2008)
Raiz	agente	Inglês
Verbo	agente	Bemba
vP-fásico	agente e causado	Luganda, Venda

Tabela 2.- Teste do escopo de advérbios

Em Bemba, os advérbios orientados para o agente não modificam o causado, mas somente o causador – ‘eu’ em (10) e (11), e não ‘ele’ ou ‘o rapaz’.

Bemba (Pylkkänen 2008: 115)

- (10) naa-mu-fuund-ishy-a uku-laanda  
 1SG.PAST-O3SG-aprender-CAUS-VF falar  
 iciBemba ku-mufulo  
 Bemba de propósito  
 ‘eu, *de propósito*, fiz ele aprender a falar Bemba’  
 \*‘eu fiz ele, *de propósito*, aprender a falar Bemba’
- (11) naa-butwiish-y-a umuana ukwiitemenwa  
 1SG.PAST-correr-CAUS-VF rapaz desejosamente  
 ‘eu, *desejosamente*, fiz o rapaz correr’  
 \*‘eu fiz o rapaz correr *desejosamente*’

Isto significa que o causado não é agente (não é um argumento de vP). Portanto, o complemento de vCause não pode ser vP, mas algo menor que isso, isto é, um VP.

Contrastamos os dados de Bemba acima apresentados com os de Venda e Luganda que se seguem abaixo:

Venda

- (12) Muunhambadzi o-reng-is-a Katonga  
 vendedor 3SG.MT-comprar-CAUS-VF Katonga  
 modoro nga dzangalelo.  
 carro com entusiasmo  
 ‘o vendedor fez Katonga comprar o carro com entusiasmo’

Luganda

- (13) Omusomesa ya-wand-is-a Katonga  
 professor 3SG.PAS-escrever-CAUS-VF katonga  
 ne obu nyikivu.  
 com a dedicação  
 ‘o professor fez Katonga escrever com dedicação’

Como podemos ver a partir dos exemplos (12) e (13), em Venda e em Luganda o agente e o causado podem ser modificados através de advérbios orientados para o agente. Deste modo, nestas línguas, o escopo dos advérbios *com entusiasmo* e *com dedicação* é ambíguo, pois, estes modificam o argumento introduzido por vP e quando tal acontece, de acordo com Pylkkänen (2008), o complemento de vCause é um vP com argumento externo, ou seja, uma fase. O terceiro diagnóstico que permite aferir o complemento de vCause é o escopo do aplicativo alto. A posição estrutural do aplicativo alto é em cima do VP. Por isso, quando o causativo tem escopo sobre um argumento introduzido pelo aplicativo, o causativo deve estar em cima deste, quer dizer, o complemento não é um VP mas um vP-fásico. Este diagnóstico também separa o Bemba (que selecciona um VP) do Venda e do Luganda (que seleccionam um vP-fásico), tal como se resume na Tabela 3:

Complementos de vCause	Escopo do aplicativo alto	Línguas testadas por Pylkkänen (2002, 2008)
Raiz	X	Inglês
VP	X	Bemba
vP-fásico		Luganda, Venda

Tabela 3.- Teste do escopo do aplicativo alto

Em Bemba, um verbo aplicativo (na ocorrência benefactivo), como o exemplo em (14) não pode ser causativizado, tal como se mostra em (16).

Bemba (Pylkkänen 2008: 116)

- (14) Mwape aa-boomb-**el-a** Mutumba.  
Mwape 3SG.PAS-trabalhar-BEN-VF Mutumba  
‘Mwape trabalhou para Mutumba’
- (15) Mwape aa-boomb-**eshy-a** Mutumba  
Mwape 3SG.PAS-trabalhar-CAUS-VF Mutumba  
(adaptação da autora)  
‘Mwape fez Mutumba trabalhar’
- (16) \*naa-tem-**en**-eshy-a Mwape Mutumba iciimuti.  
1SG.PAS-cortar-BEN-CAUS-VF mwape Mutumba pau  
‘Eu fiz Mwape cortar o pau por Mutumba’

O aspecto crucial nesta parametrização é que a agramaticalidade de (16) se deve ao facto de o aplicativo alto não poder ser acrescido como complemento de vCause pois, em Bemba, o complemento de vCause é um VP, ou seja é menor que um vP-fásico.

Contrariamente ao que vímos em Bemba (16), em Venda e Luganda (17-18) um verbo causativo pode ser derivado dum verbo já derivado com a morfologia do aplicativo alto. Isso mostra que o complemento do núcleo causativo é maior que um VP, ou seja deve ser um vP-fásico.

Venda (Pylkkänen 2008: 118)

- (17) -tshimbil-e-dz-a  
andar-APL-CAUS-VF  
'causar [andar por]'

Luganda (*ibid.*)

- (18) -tambul-i-z-a  
andar-APL-CAUS-VF  
'causar [andar por]'

Em suma, a diferença entre línguas em que o vCause selecciona um VP e as em que o vCause selecciona um vP-fásico reside em dois aspectos: no primeiro caso, os advérbios orientados para o agente não modificam o argumento de vP e um verbo aplicado não pode ser causativizado. Contrariamente, naquelas línguas em que o vCause selecciona um vP-fásico é possível que o advérbio orientado para o agente modifique o causado, e o argumento do aplicativo alto seja introduzido por um vP.

### 3. Apresentação de dados

Com este *background* podemos aplicar os diagnósticos propostos por Pylkkänen (2002, 2008) aos dados de Nyungwe, para responder à nossa questão, qual é o complemento do núcleo causativo em Nyungwe?

#### 3.1 Ocorrência de morfologia entre a raiz e o núcleo causativo

O primeiro diagnóstico mostra que é possível em Nyungwe a ocorrência de morfologia entre a raiz e o núcleo causativo. Os exemplos em (19a-d) mostram que é possível a ocorrência de outras morfologias entre a raiz e o núcleo causativo. Em (19a) entre o causativo e a raiz ocorre a extensão recíproca. No exemplo (19b), a extensão estativa. A seguir, no exemplo (19c), ocorre a extensão passiva e para terminar, no exemplo (19d), imediatamente a seguir a raiz ocorre a extensão reversiva e só depois a causativa.

- |   |                    |
|---|--------------------|
| (19a) Kapenu w-a-put- <b>an</b> -is-a                       | Fungulani na Maria |
| Kapenu PC1/2-PAS.REC-provocar-RCP-CAUS-VF                   | Fungulane e Maria  |
| 'o Kapenu fez com que o Fungulane e a Maria se provocassem' |                    |
|   |                    |
| (19b) Fungulani a-ndza-yim- <b>ik</b> -is-a                 | mi-tete            |
| Fungulane PC1/2-FUT.DIST-pôr.na.vertical-EST-CAUS-VF        | CL4-canizo         |
| 'o Fungulane fará pôr os caniços na posição vertical'       |                    |
|   |                    |
| (19c) mayi a-da-nemb- <b>edw</b> <sup>2</sup> -es-a         | na m-wana          |
| CL1.mãe PC1/2-PAS.DIST-escrever-PSV-CAUS-VF                 | pela CL1-criança   |
| 'a criança fez com que se escrevesse para a mãe'            |                    |

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2. Em Nyungwe, as formas canónicas dos morfemas das extensões passiva e causativa são *-idw-* e *-is-*, respectivamente. No entanto, a altura destas e de outras extensões verbais que ocorrem na língua, é determinada pela altura da última vogal do radical verbal. Portanto, no exemplo acima, porque a última vogal do radical é média, a altura das vogais das extensões passiva e causativa também baixou para média, cumprindo-se a regra de harmonia vocalica.

- (19d) Fungulani w-a-fung-**ul**-is-a n'-suwo  
 Fungulane PC1/2-PAS.REC-fechar-REV-CAUS-VF CL3-porta  
 ‘o Fungulane fez abrir a porta’

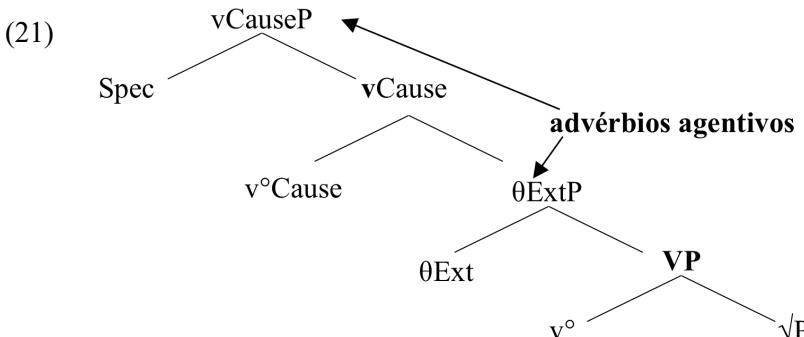
Com base nos dados apresentados acima podemos perceber que em Nyungwe, o complemento de vCause deve ser maior que uma raiz. No entanto, estes dados não nos dizem se este complemento é um VP ou um vP-fásico; por isso, a seguir apresentamos mais dados, testando o segundo diagnóstico.

### 3.2 Modificação adverbial através de advérbios orientados para o agente

De acordo com Pylkanen (2002, 2008), em línguas em que o vCause selecciona um vP-fásico é possível a modificação adverbial tanto do agente como do causado através de advérbios orientados para o agente. Isto significa que o escopo dos advérbios orientados para o agente é ambíguo.

Como mostram os dados em (19), através de um verbo transitivo (19a) e inergativo (19b), em Nyungwe, tal como acontece em Venda e Luganda, os advérbios orientados para o agente *mwa kufunisia* ‘entusiasmaticamente’ e *na untima* ‘com dedicação’ podem ter um escopo tanto sobre o sujeito do evento causado (mais baixo), como sobre o agente. Portanto, estes advérbios têm uma interpretação ambígua:

- (20a) a-kazi a-da-bis-is-a yavu  
 CL2-MULHERES PC1/2-PAS.DIST-ESCONDER-CAUS-VF CL1.AVÓ  
 bza-kudya mwa kufunisia  
 CL8-comida com muito querer  
 ‘as mulheres fizeram a avó esconder a comida *entusiasticamente*’  
 ‘as mulheres, *entusiasticamente*, fizeram a avó esconder a comida’
- (20b) baba a-ndza-mog-es-a Tsoka na mphambvu  
 CL1.pai PC1/2-FUT.DIST-saltar-CAUS-VF tsoka com CL3-força  
 ‘o pai fará a Tsoka saltar *com dedicação*’  
 ‘o pai, *com dedicação*, fará a Tsoka saltar’



Em outras palavras, em Nyungwe é possível a modificação agentiva do evento causado: isto significa que o sujeito inferior é licenciado como o especificador de VP. O diagrama (21) sistematiza o escopo dos advérbios agentivos acima. Ele mostra que os advérbios agentivos têm um escopo ambíguo, isto é, modificam tanto o agente causador como o causado e quando tal acontece, de acordo com Pylkkänen (2008), o complemento de vCause é um vP com argumento externo, ou seja, uma fase. Portanto, o *merge* ocorre acima do argumento externo de VP.

### 3.3 Escopo do núcleo causativo e aplicativo alto

Para terminar, apresentamos dados que testam o último diagnóstico: a possibilidade de formação de um verbo causativo a partir de um verbo aplicativo. Os exemplos que a seguir apresentamos mostram que em Nyungwe tal é possível.

- (22a) baba a-ndza-mog-es-a n'-tsikana  
CL1.pai PC1/2-FUT.DIST-saltar-CAUS-VF CL1-menina  
'o pai fará a menina saltar'
- (22b) n'-tsikana a-ndza-mog-er-a Tsoka  
CL1-menina PC1/2-FUT.DIST-saltar-APL-VF Tsoka  
'a menina saltará em benefício da Tsoka'
- (22c) baba a-ndza-mog-**er**-es-a Tsoka n'-tsikana  
CL1.pai 3SG-FUT.DIST-saltar-APL-CAUS-VF Tsoka CL1-menina  
'o pai fará a menina saltar pela Tsoka'
- (23a) mayi a-da-pas-is-a yavu m-wana  
CL1.mãe PC1/2-PAS.DIST-entregar-CAUS-VF CL1.avó CL1-criança  
'a mãe fez entregar a criança à avó'
- (23b) mayi a-da-pas-ir-a baba m-wana  
CL1.mãe PC1/2-PAS.DIST-entregar-APL-VF CL1.pai CL1-criança  
'a mãe entregou a criança pelo pai'<sup>3</sup>
- (23c) mayi a-da-pas-ir-is baba m-wana  
CL1.mãe PC1/2-PAS.DIST-entregar-APL-CAUS-VF CL1-pai CL1-criança  
'a mãe fez entregar a criança pelo pai'
- (23d) \*mayi a-da-pas-ir-is-a yavu  
CL1.mãe PC1/2-PAS.DIST-entregar-APL-CAUS-VF CL1-avó  
baba m-wana  
CL1.pai CL1-criança  
'Int: a mãe fez a avó entregar a criança em benefício do pai'

Ao usarmos o verbo inergativo acima, *kumoga* 'saltar', em (22a) pretendemos mostrar que estamos perante um aplicativo alto. Em (22c) podemos ver que a morfologia do aplicativo alto pode ocorrer entre a raiz e o morfema causativo e introduz um argumento externo, o NP Tsoka. A partir da interpretação fica igualmente claro que o escopo do causativo é acima do aplicativo e, por isso, deve ser maior.

---

3. Num contexto em que o pai, por indisponibilidade, pede à mãe que entregue a criança à tia. Então, a mãe fê-lo pelo pai.

Com o exemplo (23a-d) pretendemos mostrar que a morfologia do aplicativo alto pode ocorrer em verbos transitivos, o que é o caso de *-pas* ‘dar, entregar’, e igualmente introduz um argumento externo, o NP *baba* ‘pai’. Isto mostra que o sujeito do evento causado é argumento de vP. No entanto, através do exemplo (23d) interessa-nos mostrar que quando a morfologia do aplicativo alto ocorre num verbo transitivo, há uma restrição de realização fonológica do causado e do beneficiário. De acordo com um dos falantes com quem conversámos, o candidato eleito para ocupar a posição de objecto directo, tal como se pode ver no exemplo (23c), é apenas o objecto aplicado, ou seja o beneficiário. Portanto, o aplicativo alto, mesmo ocorrendo em verbos transitivos introduz um argumento externo que inibe a realização fonológica do causado. É por isso que para este falante, a construção (23d), onde o causado e o beneficiário estão fonologicamente realizados é agramatical<sup>4</sup>.

Em suma, em Nyungwe podemos ter a causativização do evento causado, mas esta fica expressa apenas por meio de morfologia verbal, sem a realização do causado, permitindo no entanto a realização do objecto aplicado. Isto mostra que o núcleo causativo é concatenado acima do núcleo aplicativo. Assim, o Nyungwe, tal como o Venda e o Luganda, tem no seu inventário de núcleos introdutores de argumentos, o núcleo causativo que seleciona um vP-fásico.

Os testes até aqui apresentados provam que em Nyungwe, o vCause selecciona um vP-fásico, como resumido na Tabela 4:

Diagnósticos de Seleção de vP-fásico
• Ocorrência de morfologia entre a raiz e o núcleo causativo .....
• Modificação adverbial do agente e do causado .....
• Morfologia de aplicativo alto entre a raiz e o núcleo causativo .....

Tabela 4.- Resumo dos diagnósticos testados em Nyungwe

#### 4. Conclusões

O objectivo deste trabalho era aplicar a hipótese de Pylkkänen (2002, 2008) para contribuir para a documentação da língua Nyungwe através da descrição do parâmetro de selecção do vCause. De acordo com Pylkkänen (2002, 2008), nas línguas naturais, o núcleo vCause pode c-selecionar uma raiz √, um vP e um v- fásico (com argumento externo). Foi com base nesta variação paramétrica que neste trabalho mostramos

4. Para o outro falante com quem falámos numa frase similar a (23c), apesar de o causado não estar fonologicamente realizado, continua disponível para interpretação semântica. Portanto, percebe-se que a mãe não realizou de forma directa a ação. Para ele, mesmo a ocorrência do causado não tornaria a frase agramatical, O verbo passaria a ter quatro argumentos. Estes falantes partilham a ideia de que é obrigatoria a ocorrência do beneficiário depois do verbo. É este pensamento que nos interessa para o presente artigo e deixamos de lado a discussão sobre a saturação de argumentos.

dados que nos levam a sugerir que o vCause (-is-) em Nyungwe c-seleciona como complemento um vP-fásico.

A nossa sugestão deriva do facto de (i) não haver restrição de ocorrência de morfologia verbal entre a raiz e o morfema causativo; (ii) haver ambiguidade na modificação adverbial através de advérbios orientados para o agente; e (iii) o causativo poder ter escopo sobre o aplicativo alto. Todos estes diagnósticos realizados mostram que o complemento de vCause em Nyungwe é um vP (vP-fásico). Todavia, chamamos a atenção do leitor para que considere este trabalho como sendo o princípio de uma discussão sobre construções causativas.

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### **Lista de abreviaturas**

√	Raiz
APL	Extensão aplicativa
BEN	Extensão benefactiva
CAUS	Extensão Causativa
CL1 x	Prefixo nominal da classe X1 (x=1 a 9)
EST	Extensão Estativa
FUT.DIST	Futuro distante
PAS.DIST	Passado distante
PAS.REC	Passado recente
PC1.PC2PCX	Prefixo de concordância da classe x1 e classe 2
PSV	Extensão passiva
RCP	Extensão recíproca
REV	Extensão reversiva
VF	Vogal final

### **Anexo**

Com vista a permitir novos estudos da língua, o anexo que a seguir apresentamos contém não apenas as perguntas colocadas aos falantes, mas também as respostas e os comentários da pesquisadora tendo em conta informação por estes dada.

Assim, depois de receber os dois questionários respondidos, a pesquisadora sistematizou as respostas destes num único questionário.

Os questionários para tradução foram enviados aos falantes por correio electrónico no dia 14 de Março de 2015 e a pesquisadora recebeu-os de volta no dia 13 de Maio de 2015. A sistematização dos dados fornecidos pelos dois falantes ocorreu no dia 2 de Junho de 2015. Portanto, as notas que compõem este anexo foram escritas a 2 de Junho de 2015.

**Universidade Eduardo Mondlane**  
**Centro de Estudos Africanos**  
**Questionário sobre as construções causativas em Nyungwe**

### **Introdução**

Caro consultor linguístico,

Este questionário destina-se à recolha de dados para a pesquisa intitulada: A Selecção do vCause em Nyungwe: Uma análise à luz de Pylkkänen (2002, 2008). Pretendemos, através dele, recolher dados que nos ajudem a descrever a língua. As frases modelo estão escritas em Português e pede-se que, por gentileza, depois de ler e perceber, nos forneça a tradução equivalente em Nyungwe. As suas respostas serão usadas neste estudo e na documentação da língua.

### **Dados pessoais do consultor linguístico**

#### **Biológicos**

Idade

Sexo

Local de nascimento

Local de crescimento

Residência actual

Nível académico

#### **Certificação**

Nome e assinatura da pesquisadora

Data

Nome e assinatura do consultor linguístico

Data ..... 13 de Maio de 2015

### **I. Pedimos que traduza para Nyungwe os seguintes advérbios:**

#### **Advérbios agentivos**

De propósito	mwa utowa
Com dedicação	mwa mphambvu
Com paciência	na mpfuwa ya kugwa
Com desejo / desejosamente	na cifundo
Entusiasticamente	mwa kufunisia

Egoisticamente na nkhusu

### **Advérbios de modo**

Rapidamente	mwa kankulumize
Lindamente	mwa kadekedwe
Lentamente	mwa pang'ono-pang'ono
Mal humorado	mwa kusaya n'tsangalazo

## **II. Morfologia entre a raiz e a extensão causativa**

Ku-put-an-is-a	‘provocarem-se’
ku-yim-ik-is-a	‘pôr na posição vertical’
ku-nemb-edw-es-a	‘fazer com que se escreva para’
ku-fung-ul-is-a	‘fazer abrir’

(1) O Kapenu fez com que o Fungulane e a Maria provocassem-se.

Trad. Kapenu w-a-put-**an**-is-a Fungulani na Maria  
 Kapenu PC1/2-PAS.REC-provocar-RCP-CAUS-VF Fungulane e Maria.

(2) Fungulane fará alguém pôr os caniços na posição vertical.

Trad. Fungulani a-ndza-yim-ik-is-a mi-tete.  
 Fungulane PC1/2-FUT.DIST-pôr.na.vertical-EST-CAUS-VF CL4-caniço

(3) A criança fez com que se escrevesse para a mãe.

Trad. mayi a-da-nemb-**edw**-es-a (na m-wana).  
 CL1.mãe PC1/2-PAS.DIST-escrever-PSV-CAUS-VF (PELA CL1-criança).

(4) O Fungulane fez abrir a porta.

Trad. Fungulane w-a-fung-**ul**-is-a n'-suwo.  
 Fungulane PC1/2- PAS.REC-fechar-REV-CAUS-VF CL3-porta

(5) Fez-se queimar a criança com fogo.

Trad. m-wana a-da-tenth-**edw**-es-a (na moto).  
 CL1-criança PC1/2- PAS.DIST-queimar-PSV-CAUS-VF (com CL3.fogo)

Nota: Para os dois falantes, pode ocorrer morfologia entre a raiz e a extensão causativa.

## **II. Teste do advérbio de modo**

(6a) O pai fará a menina correr lentamente.

Trad. baba a-ndza-thamang-is-a n-tsikana  
 CL1.pai PC1/2- FUT.DIST -correr-CAUS-VF CL1- menina  
 mwa pang'ono-pang'ono  
 lentamente.

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente o pai ou também a menina? Ou seja, é apenas o pai que fará a menina correr lentamente? Ou é a menina que correrá lentamente?

- ‘o pai, *lentamente*, fará a menina correr
- ‘o pai fará a menina correr *lentamente*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?  
Qual é a interpretação?

- (6b) mwa pang'ono-pang'ono baba  
 lentamente CL1.pai  
 a-ndza-thamang-is-a n-tsikana.  
 PC1/2-FUT.DIST-correr-CAUS-VF CL1-menina  
 ‘o pai, *lentamente*, fará a menina correr’  
 \*‘o pai fará a menina correr *lentamente*’

Nota: É o pai que, lentamente, fará a menina correr. Modifica apenas o agente.

- (7a) Samu w-a-gon-es-a Samaliya  
 Samu PC1/2-PAS.REC-dormir-CAUS-VF Samaliya  
 mwa kadekedwe.  
 de forma bonita  
 ‘O Samu fez dormir a Samaliya lindamente.’

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente o Samu ou também a Samaliya? Ou seja, é apenas o Samu que fez a menina dormir lindamente? Ou é a Samaliya que dormiu lindamente?

- ‘o Samu, *lindamente*, fez dormir a Samaliya’
- ‘o Samu fez dormir a Samaliya *lindamente*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?  
Qual é a interpretação?

- (7b) mwa kadekedwe Samu w-a-gon-es-a Samaliya  
 de forma bonita SAMU PC1/2-PAS.REC-dormir-CAUS-VF Samaliya  
 ‘o Samu, *lindamente*, fez dormir a Samaliya’  
 \*‘o Samu fez dormir a Samaliya *lindamente*’

Nota: modifica apenas o agente.

- (8a) ‘a menina fez a avó cozinar o caril mal humorada.’  
 n-tsikana a-ø-phik-is-a yavu  
 CL1-menina PC1/2-Ø PAS.REC-cozinhar-CAUS-VF CL1.avó  
 ci-sayi mwa kusaya n'tsangalazo  
 CL7-caril com zanga

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente a menina ou também a avó? Ou seja, é apenas a menina que fez a avó cozinhar mal humorada? Ou é a avó que cozinhou mal humorada?

- ‘a menina, *mal humorada*, fez a avó cozinhar o caril’
- ‘a menina fez a avó cozinhar o caril *mal humorada*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?

Qual é a interpretação?

- (8b) mwa kusaya n’tsangalazo n’-tsikana  
 com zanga CL1-menina  
 a-ø-phik-is-a yavu ci-sayi.  
 PC1/2-ØPAS.REC-cozinhar-CAUS-VF CL1.avó CL7-caril  
 ‘a menina, *mal humorada*, fez a avó cozinhar o caril’  
 \*‘a menina fez a avó cozinhar o caril *mal humorada*’

Nota: modifica apenas o agente.

### Advérbios agentivos

- (9a) A Santa fez o pai cortar as flores propositadamente.  
 Santa a-da-gwat-is-a baba ma-luwa  
 Santa PC1/2-PAS.DIST-cortar-CAUS-VF CL1.pai CL6-flores  
 mwa utowa.  
 propositadamente.

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente a Santa ou também o pai? Ou seja, é apenas a Santa que fez a menina cortar as flores propositadamente? Ou é a menina que cortou as flores propositadamente?

- ‘a Santa, *propositadamente*, fez o pai cortar as flores’
- ‘a Santa fez o pai cortar as flores *propositadamente*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?

Qual é a interpretação?

- (9b) mwa utowa Santa a-da-gwat-is-a  
 propositadamente Santa PC1/2-PAS.DIST-cortar-CAUS-VF  
 baba ma-luwa.  
 CL1.pai CL6-flores  
 ‘a Santa, *propositadamente*, fez o pai cortar as flores’  
 \*‘a Santa fez o pai cortar as flores *propositadamente*’

Nota: modifica apenas o agente.

- (10a) o pai fará a Tsoka saltar com dedicação  
 baba a-ndza-mog-es-a Tsoka na mphambvu  
 CL1.pai PC1/2-FUT.DIST-saltar-APL-CAUS-VF tsoka com CL9-força

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente o pai ou também a Tsoka? Ou seja, é apenas o pai que fará a Tsoka saltar com dedicação? Ou é a Tsoka que saltará com dedicação?

‘o pai, *com dedicação*, fará a Tsoka saltar’

‘o pai fará a Tsoka saltar *com dedicação*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?

Qual é a interpretação?

- (10b) na mphambvu baba a-ndza-mog-es-a Tsoka  
       com CL9-força CL1.pai PC1/2-FUT.DIST-saltar-CAUS-VF Tsoka  
       ‘o pai, *com dedicação*, fará a Tsoka saltar’  
       \*“o pai fará a Tsoka saltar *com dedicação*”

Nota: modifica apenas o agente.

- (11a) a mãe fez a criança assar a maçaroca com paciência  
       mayi a-da-wox-is-a m-wana  
       CL1.mãe PC1/2-PAS.DIST-assar-CAUS-VF CL1-criança  
       ci-manga na mpfuwa ya kugwa  
       CL7-maçaroca com paciência

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente a mãe ou também a criança? Ou seja, é apenas a mãe que fez a criança assar a maçaroca com paciência? Ou é a menina que assou a maçaroca com paciência?

‘a mãe, *com paciência*, fez a criança assar a maçaroca’

‘a mãe fez a criança assar a maçaroca *com paciência*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?

Qual é a interpretação?

- (11b) na mpfuwa ya kugwa mayi  
       com paciência CL1.mãe  
       a-da-wox-is-a m-wana ci-manga  
       PC1/2-PAS.DIST-assar-CAUS-VF CL1-criança CL7-maçaroca  
       ‘a mãe, *com paciência*, fez a criança assar a maçaroca’  
       \*“a mãe fez a criança assar a maçaroca *com paciência*”

Nota: modifica apenas o agente.

- (12a) a-kazi a-da-bis-is-a yavu  
       CL2-mulheres PC1/2-PAS.DIST-esconder-CAUS-VF CL1.avó  
       bza-kudya na nkhusu  
       CL8-comida egoisticamente

Será que em Nyungwe o advérbio orientado para o VP acima e na posição em que está modifica somente as mulheres ou também a avó? Ou seja, são apenas as mulheres que fizeram a avó esconder a comida egoisticamente? Ou é a avó que escondeu a comida egoisticamente?

‘as mulheres, *egoisticamente*, fizeram a avó esconder a comida’  
 ‘as mulheres fizeram a avó esconder a comida *egoisticamente*’

Nota: modifica o agente e o causado.

O que acontece quando o advérbio figura na posição inicial da frase?  
 Qual é a interpretação?

- (12b) *na nkhusu a-kazi*  
 egoisticamente CL2-mulheres  
*a-da-bis-is-a yavu bza-kudya*  
 PC1/2-PAS.DIST-esconder-CAUS-VF CL1.avó CL8-comida  
 ‘as mulheres, *egoisticamente*, fizeram a avó esconder a comida’  
 \*‘as mulheres fizeram a avó esconder a comida *egoisticamente*’

Nota: modifica apenas o agente.

### III. Teste do aplicativo alto entre a raiz e o causativo

- (13a) *baba a-ndza-mog-es-a n-tsikana*  
 CL1-pai PC1/2-FUT.DIST-saltar-CAUS-VF CL1-menina  
 ‘o pai fará a menina saltar’
- (13b) *ntsikana a-ndza-mog-er-a Tsoka*  
 CL1-menina PC1/2-FUT.DIST-saltar-APL-VF Tsoka  
 ‘a menina saltará em benefício da Tsoka’
- (13c) *baba a-ndza-mog-er-es-a Tsoka n-tsikana*  
 CL1.pai PC1/2-FUT.DIST-saltar-APL-CAUS-VF Tsoka CL1-menina  
 ‘o pai fará a menina saltar pela Tsoka’
- (14a) *mayi a-da-pas-is-a yavu m-wana*  
 CL1.mãe PC1/2-PAS.DIST-entregar-CAUS-VF 1-avó CL1-criança  
 ‘a mãe fez a avó entregar a criança’
- (14b) *mayi a-da-pas-ir-a baba m-wana*  
 CL1.mãe PC1/2-PAS.DIST-entregar-APL-VF CL1.pai CL1-criança  
 ‘a mãe entregou a criança pelo pai’
- (14c) *mayi a-da-pas-ir-is baba m-wana.*  
 CL1.mãe PC1/2-PAS.DIST-dar-APL-CAUS-VF 1.pai CL1-criança  
 ‘a mãe fez entregar a criança em benefício do pai’
- (14d) *\*mayi a-da-pas-ir-is-a yavu baba*  
 CL1.mãe PC1/2-PAS.DIST-dar-APL-CAUS-VF CL1.avó CL1.pai  
 m-wana  
 CL1-criança  
 ‘Int: a mãe fez a avó entregar a criança em benefício do pai’

Nota: os dados sugerem que o aplicativo é alto. Para os dois falantes o NP que ocorre depois do verbo derivado é beneficiário. O aplicativo consta do inventário de introdutores de argumento externo.

A diferença reside no facto de para um dos falantes (14d) ser agramatical (o causado e o beneficiário não podem co-ocorrer) enquanto para o outro falante é gramatical.

# Kuteb Verbal Extensions vs. Bezen Verbal Serialisation. A Comparison

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## **Abstract**

Kuteb and Bezen are both Southern-Jukunoid languages. Whereas the former language seems to have retained Proto-Niger Congo category-preserving verbal derivation and even developed new suffixes, the latter language lacks such devices completely. In the present paper I critically assess the status and origin of Kuteb derivative morphology on verbs by comparing the suffixes with parallel constructions in form of serial verbs in Bezen.

## **Keywords**

Southern Jukunoid, verb-extensions, verbal serialisation.

## **Résumé**

Le kuteb et le bezen sont deux langues jukunoïdes du Sud. Si le kuteb semble avoir maintenu le système de dérivation verbale intracatégorielle (verbe > verbe) hérité du proto-Niger-Congo et l'avoir même enrichi de nouveaux suffixes, le bezen a, par contre, entièrement perdu ce système. Dans cet article, je passe systématiquement en revue le statut morphologique et l'origine de plusieurs suffixes dérivatifs verbaux kuteb en m'appuyant sur une comparaison desdits suffixes avec les constructions sérielles de sens équivalent attestées en bezen.

## **Mots-clés**

jukunoïde du Sud, dérivation verbale, séries verbales.

## 1. Introduction<sup>1</sup>

Category-preserving derivational devices in form of suffixes which add a semantic specification to the verb are widely spread in Niger-Congo languages.<sup>2 3</sup> They are found in Narrow Bantu languages like Swahili (Racine 2015) and Kinyarwanda (Idiata 2003b) and in Grassfields Bantu languages such as Isu (Kießling 2011) and Obang (Asohsi 2015).<sup>4</sup> Beyond Benue-Congo they are also found in the Kwa language Likpe (Ameka 2009).

Voeltz (2004: 5 ff.) summarises the properties of verb extensions as bound morphemes which “change the meaning of the base verb in a predictable way”. They may reduce or increase the valence of their base verb. But apart from that, the “‘extended’ verb [...] behaves in all respects like an unextended verb”.

Reconstructions of Niger-Congo languages lead to the conclusion that verbal extensions have already been present at the Proto Niger-Congo level (Voeltz 1977). However, verbal extensions are not stable: they may be reduced phonologically and finally disappear completely. Serial verbs may functionally replace the lost extensions; and in the course of time, these verb series may grammaticalise to verbal extensions again (Voeltz 1977: 73 ff.). Thus, the emergence and reduction of verbal extensions is an ongoing cycle and we often find morphemes that are at an intermediary stage of development, in which they show both verbal properties and grammatical functions (see also Aikhenvald 2007: 40). Voeltz (2004: 8) argues that in languages, in which verbal extensions have developed recently, it is not possible to combine several extensions with one verbal root. The same holds true for languages which are losing their extensions.

Kuteb and Bezen are two of overall five confirmed members of the Southern Jukunoid grouping, which belongs to the Benue-Congo branch of the Niger-Congo phylum. Both Kuteb and Bezen are spoken in the border area between north-western Cameroon and east-central Nigeria.

1. I would like to thank the Bezen community for allowing our team to conduct research in their village. I am most grateful to the village head Jama Umah and his wife Francisca for their hospitality, likewise to Deborah and Ignatius Gideh. Special thanks goes to Robert Amah Shita and Arama Fidelis, who have supported us with their analytic skills since 2011. I am grateful to Roland Kießling, Nicolas Quint and an anonymous reviewer for helpful comments on an earlier version of this paper. All remaining mistakes are my own.

2. See Aikhenvald (2007: 36; 42) for the terminology of derivational processes.

3. In Africanist literature (Voeltz 1977; Voeltz 2004; Koops 2009; contributions in footnote 4 below), these category-preserving derivational devices attaching onto verbs are called verbal extensions, which is rather unspecific, since the term “extension” does not tell us yet, whether we are dealing with inflectional or derivational morphology. For the sake of simplicity, I will continue to use the term in the present paper.

4. Further Narrow Bantu languages that feature verbal extensions are Isangu, Havu and Duala. Bafut, Lamso, Kom, Njwe and Ngiembôon are Grassfields languages that also have verbal extensions (see Idiata & Mba 2003).

Whereas Kuteb has more than 50.000 speakers and is mainly spoken in the Takum Local Government Area in Nigeria, Bezen is restricted to two villages, Bezen I and Bezen II in the Furu-Awa subdivision of Cameroon, with merely 400 speakers (Koops 2009: 2).

Kuteb seems to have retained Proto-Niger-Congo suffixed verbal extensions but Bezen lacks this derivative device altogether.<sup>5</sup> Koops (2009: 73) relates some of the Kuteb extensions to Proto Niger-Congo forms but concludes that others must be innovations which have developed from verbal series. In the following, I would like to re-evaluate the Kuteb examples and compare them with equivalent constructions in form of serial verbs in Bezen. Cognate verbs in Bezen support the assumption of a verbal origin for some of the extensions.

### Data

The comparison is based on data from two different sources: Robert Koops' 2009 grammar of the Kuteb language and data on Bezen which has been collected during the BeLDoP and the LEMSOC projects, some of it already published in Kempf 2013 and 2017.<sup>6</sup>

The only other Southern Jukunoid language which has been analysed in depth is Yukuben, which does not make use of verbal extensions (Anyanwu 2013). All remaining Southern Jukunoid languages have not been documented yet: there are only short sketches of Akum (Akumbu & Brye 2002; Kempf & Prischnegg in preparation) and Bazim (Lovegren 2012). Kapya (and Bete and Lufu)<sup>7</sup> has not been described yet in detail, however, morphological data can be found in Prischnegg 2008 and 2010.

Kuteb and Bezen do not seem to be as closely related as Bezen and Yukuben (see also Prischnegg 2010: 99). They are both SVO languages, but whereas Kuteb rather tends to be isolating, with up to three morphemes per word (Koops 2009), Bezen can be classified as an agglutinative language with up to five additional prefixes attached to the verbal root.

The prototypical Kuteb verb is monosyllabic, with a CV or CVC pattern. More complex verbs of the form CVCV have “probably

5. There are three other (de)verbal derivative devices in Bezen. The speakers may reduplicate the verbal root post-verbally to indicate intensification or prolonged duration of an action. The other two derivative devices in Bezen are indicated by a tonal shift: it is possible to change the valency of a verb by changing its tonal pattern from HM to MH or from ML to HM. However, this device is restricted to only five verbs. The last device derives adverbs from verbs by assigning a HL tonal pattern to the initial vowel of the verb. This device is also restricted to a few verbs (Kempf 2017).

6. The BeLDoP project (Bezen Language Documentation Project), which was funded by the Volkswagen Foundation within the framework of the DoBeS program, took place between 2011 and 2015. It has been prolonged under the title LEMSOC (Language of Ethno-medical Discourse in Southern Jukunoid Communities) until 2019. The data is archived in the DoBeS archive at the MPI for Psycholinguistics in Nijmegen under <https://corpus1.mpi.nl>.

7. Bete and Lufu are two moribund languages which probably also belong to the Southern Jukunoid group (Prischnegg 2010).

compounded originally from simpler verbs” (Koops 2009: 64). Kuteb exhibits serial pronouns, such as in (3b) which do not exist in Bezen (and Yukuben). These morphemes, which are also called “verb-focus pronouns” occur in the form of suffixes and co-refer to the subject (Koops 2009: 240). Beyond the verb-focus pronouns only the derivational verbal extensions may be attached to the Kuteb verbal root (Koops 2009). Tone does not play a role in the inflectional morphology of Kuteb (Koops 2009).

Bezen verbal roots have the form CV, VC or CVC. However, the bare roots only occur in the imperative, in all other forms they carry an initial vowel of the form /a/, /e/ or /o/. The Bezen verbal morphology allows for a series of prefixes on the verb to indicate tense, aspect or negation. Some categories, such as the adhortative and the obligative are only indicated by a tonal change (Kempf 2017).

Both languages allow for verbal serialisation, which is defined as a chain of several verbs without coordinating or subordinating devices. These verbs typically describe a single event (Aikhenvald 2006: 1 f.).

*Table 1.- Overview of some syntactic and morphological properties of Kuteb and Bezen*

	Kuteb	Bezen
order of constituents in sentence		SVO
transparency of word-internal boundaries <sup>8</sup>	isolating	agglutinating
pronouns	copy-pronouns	—
syllable-structure of verbal roots	CV, CVC, CVCV	CV, VC, CVC
category-preserving derivation on verbs	suffixes	reduplication, tonal change
tense-aspect-modality	particles	prefixes, tonal change
syntax		serial verbs

## 2. An overview of Kuteb verbal extensions

Koops (2009: 73) lists altogether thirteen verbal extensions in Kuteb which have a similar syllable structure as verbs, CV or CVC. Some of the extensions, like the ablitative *-tù*<sup>9</sup>, the extensive *-fòb*, and the separative *-tā*, are identical with the verbs ‘find’, ‘reach’ and ‘shoot’, respectively (Koops 2009: 73f.). For others, such as the benefactive *nà* and the extension *mbéb* which conveys a notion of DAMAGE, a verbal origin is

8. Terminology from Aikhenvald (2007: 3).

9. Koops (2009) does not indicate the low tone in his orthography. I add it, however, for the sake of a unified and unambiguous presentation of the examples.

traceable (Koops 2009: 199). The author (Koops 2009) is aware of the problematic status of some of these extensions and concedes that they could be analysed either as “compound verbs [...] or as verb-plus-suffix or as a sequence of verbs” (Koops 2009: 66).

In Table 2, the Kuteb verbal extensions that have equivalents in form of serial verbs in Bezen are presented.<sup>10</sup> The equivalents are not necessarily cognates of the Kuteb extensions but may also be semantic equivalents, such as *ōrú* ‘reach’ and *āyī ókū* ‘do help’.

Table 2.- List of Kuteb verb extensions (Koops 2009: 73)

Meaning	Kuteb extension	Kuteb verb	Bezen verb
extensive, abilitative	-fòb	fòb ‘reach’	ōrú ‘reach’
resulting in closure	-cī	—	éśēk ‘cover’
resulting in separation	-tā	tā ‘shoot; hit’	ātī ‘shoot’
benefactive	-nà	ndà ‘give’	ānì ‘give’
resulting in damage	-mbéb	béb ‘be bad; spoil’	ābñb ‘be bad; spoil’
habitual	-kób	—	āyī ‘sit; live’
assistive	-yà	—	āyī ‘do’; <i>āyī ókū</i> ‘do help’

### 3. Comparison of Kuteb extensions and Bezen verbal serialisation

In this chapter, I discuss the above presented verbal extensions. For this, the Kuteb grammar is searched for possible verbal sources of the suffixes, some of which are already presented by Koops (2009) himself (see section 2). As a second step, the functions and occurrences of the morphemes are investigated. The status of a verbal extension will be refused in two cases:

1. If there is a homophonous, fully functional verb in Kuteb from which the proposed extension has most likely developed.
2. If the proposed extension can be separated from the main verb by another lexeme.

The second criterion cannot always be applied, since the author needs to rely on available data from both languages and cannot conduct further tests. Therefore there is no way to test whether it is possible to insert a pause between two morphemes (see Haspelmath & Sims 2010: 196).

As a third step, cognate verbs (and in two cases semantic equivalents)

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10. Furthermore, Koops (2009: 73) lists the extensive derivation *-fē*, the comitative *-té*, the extensive *-yé*, the repetitive *-cī*, and the derivation *-rā*, which denotes a quick or forceful execution of an activity.

from Bezen are presented. The cognate Bezen examples shall support the hypothesis that some of the Kuteb extensions are simply verbs or are derived from full verbs.

### Extensive/abilitative *fòb*

The morpheme *fòb* is one of the tentative candidates for a verbal extension in Kuteb. It has a verbal equivalent *fòb* with the lexical meaning ‘reach’. The verb can be used independently in a clause (1).

- (1) àmè rū yī rítúg tī m fòb àtāy  
1SG go to market REL 1SG reach there  
'I went to the market. When I got there...' (Koops 2009: 250)

In combination with other motion verbs in serial verb constructions, *fòb* may retain its original meaning ‘reach’ (2a and 2b) or bear the secondary meaning of ‘be able to do sth.’ (2c), i.e. ‘ability.’

- (2a) àwū tēr rū kà fòb ùwōg ínjā-wū  
3SG run move go reach place brother-3SG  
'He ran to his brother's place.' (Koops 2009: 193)
- (2b) àwū kún sī kùmbukùnn bá fòb wákùnùnn  
3SG crawl descend hill come reach home  
'He crawled down from the hill and [arrived at] home.' (Koops 2009: 193 [Kempf])
- (2c) ùtā mbér kùfxèn ú càn fòb-wū bē  
REL break leg FUT walk reach-3SG NEG  
'The one with the broken leg will not be able to walk.' (Koops 2009: 99)

With verbs that do not denote motion, the verb *fòb* encodes the meaning of ABILITY (3a and 3b). The annotation of the examples indicates that Koops (2009) himself is not sure of the status of the lexeme. Whereas in (3a), he writes *báéfòb* as one word and glosses it as ‘write-SUF’ (Koops 2009: 65), in (3b) and (2c) he separates *fòb* from the first verb and labels it with its lexical meaning ‘reach’. Since the author himself (Koops 2009) tends to interpret the morpheme as a verb and since it may occur independently in a clause (1), I conclude that *fòb* is simply the verb ‘reach’ whose meaning has been expanded to indicate ability. I adjust the annotation in (3a) according to that.

- (3a) àwū báé fòb irá  
3SG write reach word  
'He is able to write.' (Koops 2009: 65, 73)
- (3b) àtī ú ndè fòb-tī ìtsò ikén yinè bē  
1PL FUT do reach-1PL kind thing DEM NEG  
'We couldn't do anything like that.' (Koops 2009: 281)

### Evidence from Bezen

The Bezen verb *ōrú* ‘reach’ is formally distinct from the Kuteb verb *fòb*, however, in Bezen, too, there has been a semantic expansion from a spatial concept to ABILITY: The verb *ōrú* ‘reach’ occurs as the only verb in a clause

(4a and 4b) or in series with other verbs.<sup>11</sup>

- (4a) Bzna111125-2.025

<i>ūdūŋ</i>	<i>y-ák-ōrú</i>	<i>émi=ní</i>	<i>āyīr</i>	<i>ān-âtsì</i>
SG.chief	3SG-ADH.CFG-reach	there=DEF	3PL.start	NOM-insult
<i>ūdūŋ</i>	<i>àbì</i>	<i>ūtsì</i>		

SG.chief with abuse  
'As the chief arrived there, they started abusing him [the chief].' (Kempf 2017: 86)

- (4b) Bzna111130-6b.023

<i>isín=ní</i>	<i>āniŋ</i>	<i>órú</i>	<i>àbì</i>	<i>ūnū</i>
SG.fowl=DEF	who	SUB-reach	with	that

'The fowl, who brought it?'

In combination with verbs that denote motion, *ōrú* may have its lexical meaning 'reach' (5a and 5b) or denote ABILITY such as in (5c). In both cases, *ōrú* follows the other verb in series.

- (5a) Bzna120921-15.258

<i>éiyé</i>	<i>ák-ézém</i>	<i>ōrú</i>	<i>émi</i>	<i>kín</i>
no	3PL.FUT\NEG-FUT\cross	reach	there	NEG

'No, they will not cross and reach there.'

- (5b) Bzna120921-17.013

<i>w-āyāk</i>	<i>bázì</i>	<i>émi</i>	<i>w-ehīŋ</i>	<i>ōrú</i>	<i>émi</i>	<i>iyāb</i>	<i>ā</i>
2SG-OBL\put	PL.matters	there	2SG-FUT\go	reach	there	again	Q

'If you cause a problem there, will you go back there again?' (Kempf 2017: 121)

- (5c) *y-āwū*      *ōrú*      *á*      *kītſāŋ=ní*

3SG-come	reach	LOC	SG.house=DEF
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'He is able to come to the house.' (Kempf 2017: 91)

In combination with verbs that do not denote motion, the verb *ōrú* 'reach' is used to express ABILITY, as presented in (6).

- (6a) *m-égbén*      *ōrú*

1SG-FUT\read	reach
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'I will be able to read.' (Kempf 2017: 91)

- (6b) Bzna140903-1.135

<i>m-ákí-ēgbén</i>	<i>ōrú</i>	<i>bāŋī</i>	<i>iyì=kín</i>
1SG-FUT.NEG-call	reach	PL.people	3SG=NEG

'I will not be able to call his people.' (Kempf 2017: 91)

As shown above, there are syntactic and semantic parallels of the Kuteb verb *fòb* 'reach' and the Bezen *ōrú* 'reach'. In both languages, the verbs serve as coverbs in verbal serialisation, directly following the main verb. Considering the available examples, nothing can be inserted between V1

11. Most of the Bezen examples can be accessed electronically in full length in the DoBeS Bezen archive. The labels on top of the examples indicate the date of recording following the pattern: YYMMDD-running number of recordings.utterance number. Examples without a label are elicited and not archived.

and V2 in both languages. The audio data of the Bezen examples shows that when *ōrú* ‘reach’ occurs in second position of a verbal serialisation, the verbs are uttered without a break, which, however, does not mean that the second verb is grammaticalised to an extension, as verbs in series are often pronounced as one unit in Bezen.

In both languages, the meaning of the verbs *fòb* ‘reach’ and *ōrú* ‘reach’ has been expanded from a spatial concept to the meaning of ABILITY, respectively. Such a development has also been observed in Koranko (Mande) (Kastenholz, personal communication, cited in Heine & Kuteva 2002: 45) and Mandarin Chinese (Li and Thompson 1981: 66; Heine & Kuteva 2002: 45).

The existence of the fully functional homophonous verb *fòb* ‘reach’ in Kuteb and the comparative evidence of semantic expansion supports the assumption that *fòb* is not a derivative device but a verb.

#### ‘Resulting in closure’ -*cī*

The status of an extension can be confirmed for the suffix -*cī* with the meaning ‘resulting in closure’ (Koops 2009: 74). There is no formally similar verb in Kuteb from which this morpheme could have been developed.<sup>12</sup> Koops (2009) notes that the suffix -*cī* only occurs with verbs that already imply a closure (7):

- (7a)    *cwìnn-cī*  
close-CLOS  
‘close’ (Koops 2009: 74)<sup>13</sup>
- nji-cī*  
bury-CLOS  
‘bury’ (Koops 2009: 33; 74)
- bür-cī*  
cover-CLOS  
‘close by covering’ (Koops 2009: 74; 160)
- yīr-cī*  
tie-CLOS  
‘close by tying’ (Koops 2009: 74; 250)
- (7b)    *àmè cwìnn-cī iùfū*  
1SG close-CLOS door  
‘I closed the door’ (Koops 2009: 73)

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12. The possibility that -*cī*, has developed from *cī* ‘eat’ (Koops 2009: 45) is rather low. Koops (2009) does not mention a possible connection, either.

13. I have added a dash between the verbal root and the extension here and in the following examples, since -*cī* is a suffix. Koops (2009) separates the suffixes in his glossing, labelling them with the general abbreviation ‘SUF’. However, he does not separate the extensions in the transcription. I gloss -*cī* as CLOS for ‘closure’. There are no examples in Koops (2009) which show the verb *cwìnn* without the extension. I gloss it as ‘close’.

- (7c) *àtī bùr-cī kùtútòj*  
 1PL cover-CLOS pot  
 ‘We covered the pot.’ (Koops 2009: 73)

### Bezen evidence

Bezen has the verb *éṣēk* which denotes a complete covering of something with a cloth or with soil. The verb can be used in monoverbal clauses or in series. In (8), *éṣēk* is used as the predicate in monoverbal clauses.

- (8a) *m-éṣēk òjnī àmì=mí*  
 1SG-cover.completely SG.person 1SG=PFV  
 ‘I have buried my person [here: a relative].’
- (8b) *n-èṣēk ìyí*  
 2PL-OBL\cover.completely 3SG  
 ‘Bury him!’

This verb *éṣēk* is often used in combination with the verb *ékēb* ‘cover’ in V<sub>1</sub> position (9):

- (9a) Bzna111124-18.049  
*y-āk-èzē ùtar ū-wúy ékēb éṣēk émí*  
 3SG-CPT-take SG.garment SG-other cover cover.completely there  
 ‘He took some cloth and covered [the calabash] completely [with it] there.’  
 (Kempf 2017: 85)
- (9b) Bzna131006-5.087  
*áni w-ékēb éṣēk àdāk ádī igbím*  
 so.now 2SG-cover cover.completely place LOC\village God  
*ámú rē-kó á*  
 LOC or Q  
 ‘So you are only covering the upper part [of the felled palm tree] or how?’

The Kuteb extension *-cī* ‘resulting in closure’ might have developed from a verb, similarly to the Bezen *éṣēk* ‘cover completely’. The two morphemes might be cognate: both contain alveolar sounds and fronted vowels, respectively.<sup>14</sup> If we assume that the initial vowel in Bezen is a retention and that Kuteb has lost it, we only have to explain the loss of the final consonant, which is not difficult, either. Indeed, both languages tend not to release the final consonant which finally might get lost altogether (Koops 2009: 31, 74; Fogwe-Chibaka & Akumbu 2012; Tabah forthcoming). Furthermore, the verbal root carries the same mid tone. The position of the morphemes in the clause is also similar: *éṣēk* occurs in V<sub>2</sub> position and *-cī* is a suffix. Koops (2009: 74), however, rather sees a connection to the Proto Niger-Congo iterative extension *\*ti/\*si*.

### Separative *tā*

The separative extension *tā* has its origin in the verb *tā* ‘shoot, hit’ (Koops 2009: 74). The verb can be used as the predicate of monoverbal clauses, as

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14. The grapheme <c> represents the phoneme /tʃ/ in Koops (2009: 11).

presented in (10a and 10b)<sup>15</sup> or in V<sub>1</sub> position of SVCs with the object directly following V<sub>1</sub> and preceding V<sub>2</sub> (10c).

- (10a) àwū tā wū  
3SG shoot 3SG  
'He shot him/her/it.' (Koops 2009: 240)
- (10b) àmè tā ùnzù ipìy kínzō àmá ipìy ndè bék-wū  
1SG shoot mouth gun one but gun do be.bad-3SG  
'I got off one shoot, but the gun jammed.' (Koops 2009: 223)
- (10c) abā tā ibyē bá  
3PL shoot animal come  
'They shot and brought an animal.' (Koops 2009: 197)

The verb *tā* 'shoot' is combined with verbs which already imply a separation of (parts of) entities, as presented in (11) (Koops 2009: 74):<sup>16</sup>

- (11a) tàén tā 'split'  
nyāŋ tā 'break'  
sáén tā 'free'  
kàn tā 'divide'  
'divide shoot' (Koops 2009: 22, 74)  
yá tā 'leave'  
'leave shoot' (Koops 2009: 74, 258)
- (11b) àwū táké tā ùkùm wū  
3SG split shoot stick ?  
'He split the stick' (Koops 2009: 73)
- (11c) ā kàn tā wúcī  
3PL divide shoot food  
'They divided the food' (Koops 2009: 73)

Koops (2009: 74) classifies *tā* as a tentative suffix, however, this interpretation is problematic, since, in some cases at least, the morpheme may be separated from the verb by the direct object, as in (12). If it were a suffix, no lexeme could stand between the verb and the extension.

- (12a) á sáén wū tā  
3SG release 3SG shoot  
'They released him.' (Koops 2009: 75)
- (12b) tī ā nā yá kúsóg nā tā nà ùwá-wū  
PURP 3PL IS leave house IS shoot give wife-3SG  
'They must leave the house [to the benefit of] his wife.' (Koops 2009: 286 [Kempf])

15. I modified the transcription and annotation of this example, see the section on the tentative extension *mbék* for further details.

16. Contrary to the extension -cī 'resulting in closure', I separate *tā* 'shoot' from the other verb since the examples convincingly show that the latter is not an extension but simply a verb. I did not find a literal translation in Koops 2009 for any of the verbs presented above; the annotation for *táké* 'split' is my own.

Koops (2009) considers *tā* to be a verbal extension because he is not sure whether there is a connection to the verb *tā* ‘shoot’. He speculates that “it may be related to an earlier CAUSATIVE suffix” (Koops 2009: 74, capitalisation in the original) and thus compares it with the Hausa stativiser *-tā* and the Mandinka perfective marker *-tā* (Koops 2009: 225). Here, the Bezen data supports a link between the alleged extension and its verbal origin.

### Bezen evidence

Bezen has a similar verb *ātī* which has a broad range of meanings, the most basic being ‘shoot’ or ‘throw’. It serves as a source for lexicalisations: it is combined with verbs of utterance, and to denote SEPARATION. In (13a), the verb *ātī* is presented with its lexical meaning ‘shoot’. In (13b), the meaning is ‘throw’.

- (13a) Bzna161011-1.143

<i>bākān=ní</i>	<i>ātī</i>	<i>àmì</i>	<i>úrú</i>	<i>àkíj</i>	<i>m-òsūr=mí</i>
juju=DEF	OBL\shoot	1SG	day	REL.SG	1SG-OBL\accept=PFV

‘The juju shall shoot me the day that I will have admitted.’

- (13b) Bzna111130-5b.512

<i>ø-tī</i>	<i>érè</i>	<i>kédànī</i>
IMP <sup>17</sup> -shoot	down	now

‘Throw (it) down now!’

The verb *ātī* ‘shoot’ may occur in V<sub>1</sub> or V<sub>2</sub> position in verbal serialisation. Whereas in (14a), *ātī* has its basic lexical meaning, in (14b) it has the broad meaning of SEPARATION, similar to the Kuteb examples.

- (14a) Bzna111125-1.005

<i>iyí</i>	<i>ùhōb</i>	<i>ū-wúj</i>	<i>ājīn</i>	<i>k-ātī</i>
SG.ETHN	Akum.person	SG-other	leave	CFG-shoot
<i>ōwōn</i>	<i>ímbār</i>	<i>iyí</i>	<i>ámí</i>	<i>úsàn</i>
kill	SG.sibling	3SG	in	SG.farm with

‘A certain Akum person went and killed his brother and his wife in the farm.’ (Kempf 2017: 83)

- (14b) Bzna131006-5.007

<i>ílák=ní</i>	<i>w-òtúr</i>	<i>ātī=ní</i>
PL.palms=DEF	2SG-OBL\chop	OBL\fell=DEF

‘The palms, when you fell them, ...’

The Kuteb and Bezen verbs *tā* and *ātī* ‘shoot’ are cognate.<sup>18</sup> They share the alveolar /t/ and the mid tone on the root vowel; the initial vowel is missing in Kuteb and the root vowels differ, however. They have the same lexical meaning and have broadened their semantics in a similar way, from the specific meanings ‘throw’/‘shoot’ to a broader notion of SEPARATION,

17. The imperative modality is indicated by the missing initial vowel a.

18. In Yukuben, *tā* means ‘throw’ (Prischnegg 2008: 402). The meaning is similar to ‘shoot’, implying a fast separation of an object from an agent.

especially when occurring in V<sub>2</sub> position in SVCs.

Due to the language-specific and the comparative evidence, *tā* is probably simply the verb ‘shoot’ in Kuteb. Especially the fact that *tā* may be separated by other morphemes from the first verb of a series supports the assumption that it is a verb, rather than a suffix.

### Benefactive *nà*

Koops (2009) provides several conflicting interpretations for the benefactive extension *nà*.<sup>19</sup> The author (Koops 2009: 199) states that it has probably developed from the verb *ndà* ‘give’ and glosses it as ‘give’ at times (Koops 2009: 200). On the other side, he speculates that *nà* is related to the ‘applied’ extension \*DE in Proto Niger-Congo (Koops 2009: 75; Voeltz 1977: 59).

Whereas *ndà* ‘give’ is used as a full verb in Kuteb, the usage of *nà* is restricted to verbal serialisations. In (15), *ndà* ‘give’ serves as the predicate of monoverbal clauses. It is accompanied by three arguments, respectively: the agent (A), the recipient (R), which directly follows the verb (V), and the theme (Th), which itself follows the recipient.

(15a)	<i>àmè</i>	<i>à</i>	<i>bá</i>	<i>m</i>	<i>ú</i>	<i>ndà</i>	<i>fù</i>	<i>kóbò</i>
	1SG	if	come	1SG	FUT	give	2SG	kobo
	A	V	R		Th			

‘If I come, I’ll give you a kobo’<sup>20</sup>. (Koops 2009: 26)

(15b)	<i>ā</i>	<i>ndà</i>	<i>izé</i>	<i>rinyànwàè</i>
	3PL	give	Ize	present
	A	V	R	Th

‘They gave Ize a present.’ (Koops 2009: 170)

In (16), the benefactive co-verb *nà* is presented.<sup>21</sup> The order of the arguments is similar as in monoverbal clauses: the agent (A) stands in pre-verbal position, expressed in the 3PL pronoun *ā* in (16a) and the 1PL pronoun *àtī* in (16b). The recipient (R) and theme (Th) follow each other (with R preceding Th) and occur after the benefactive co-verb *nà*.

(16a)	<i>ā</i>	<i>ndè</i>	<i>nà</i>	<i>m</i>	<i>wándè</i>
	3PL	do	give	1SG	work
	A	V	V	R	Th

‘They did [the] work for me!’ (Koops 2009: 74 [Kempf])

19. Whereas on p. 74, Koops (2009) labels *nà* as a ‘benefactive extension’ and writes it together with the main verb, on p. 177, he annotates it as BEN and writes it separately from the verb. On p.183, *nà* is glossed as ‘to’; on p.199, as ‘give’ and on p. 200 no glossing is provided. It would make it easier for the reader to be presented directly with the author’s final analysis, which would not prevent him for making remarks in due course about his own hesitations.

20. Kobo is the name of a subdivision of the naira, the official currency in Nigeria. One naira consists of 100 kobo. See: Central Bank of Nigeria <http://www.cbn.gov.ng>.

21. I have added the glossing to the examples.

- (16b) *àtī tō nà fū ùtòŋ*  
 1PL cooked give 2SG soup  
 A V V R Th  
 ‘We cooked soup for you.’ (Koops 2009: 74)

By now, one may think that the case is clear: the verb *ndà* ‘give’ has grammaticalised to produce a verbal extension *-nà*. However, things are not that straightforward, as it is possible to separate the tentative extension from the verb (17) <sup>22</sup>:

- (17a) *àmè sà kóbò nà wū*  
 1SG take kobo give 3SG  
 ‘I gave him a kobo.’ (Koops 2009: 200)
- (17b) *àmè sà kóbò kú nà wū*  
 1SG take kobo IPFV give 3SG  
 ‘I am giving him a kobo.’ (Koops 2009: 200)

Considering the examples in (17), it is clear that *nà* still has verbal properties. Koops himself comes to this conclusion, after having presented various contradicting solutions: “The aspect markers show that **na** must be treated as a verb. Though it cannot occur by itself as a verb, it does function as a normal verb in the SVCs. I therefore call it a ‘restricted verb’.” (2009: 200; bold in the original).

#### Bezen evidence

In Bezen, *ānì* ‘give’ may occur as the only verb in a sentence or in series with other verbs. In any case, it introduces the BENEFICIARY or RECIPIENT role (see Kempf 2017: 100). In (18), *ānì* ‘give’ is presented as the predicate of monoverbal clauses.

- (18a) Bzna161011-1.564  
*kīrīk àrì ùtūŋ ùwù ìgbìm ānì ùwù=mí*  
 SG.thing OBL\be SG. possession 2SG God give 2SG=PFV  
 ‘Something that is your own, God has given it to you.’
- (18b) Bzna140903-4.080  
*ázì iyi éhìŋ óbū sàdúnà*  
 3PL.ADH\take 3SG ADH\go LOC\hands Sàdúnà  
*ánì ák-ānì iyi ērīk ámyāŋ tírì*  
 so.that 3PL.ADH\CFG-give 3SG PL.food now  
 ‘They should take her and go to Saduna’s place so that they go and give her something to eat now!’ (Kempf 2017: 100)

In verbal serialisations, *ānì* ‘give’ may follow directly the first verb, as in (19a) or occur after the object, as in (19b) –see also (29c). The RECIPIENT/BENEFICIARY role necessarily follows *ānì* ‘give’.

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22. Koops (2009: 200) does not provide a glossing for *nà* in these two examples. I label it as ‘give’ here.

- (19a) Bzna131006-5.061

<i>áni</i>	<i>m-àryáŋ</i>	<i>kō</i>	<i>m-átt̄</i>	<i>áni</i>
so.that 1SG-OBL\want		QUOT 1SG-ADH\shoot		ADH\give
<i>ōjn̄i=ní</i>	<i>kīrīk</i>	<i>ūwóŋ</i>	<i>ákí-ōsū</i>	<i>émi</i> <i>kín</i>
SG.person=DEF SG.thing	other	FUT\NEG-descend	there	NEG

'So that if I want to pour it for somebody, nothing will fall inside the wine.'

- (19b) Bzna161011-1.148

<i>ùwù</i>	<i>ímbār</i>	<i>ùwù</i>	<i>ōkōb</i>	<i>āmbār</i>	<i>ízīn</i>
2SG	SG.sibling	2SG	SG.woman	deliver	SG.child
<i>āni</i>	<i>ùwù</i>				

'You, your sister delivered a child to you (gave you a nephew).'

There is evidence from Yukuben for similar benefactive constructions (Anyanwu 2013). Here, the verb "*dà* 'give'" is cognate with the Kuteb verb *ndà* 'give' which is only used as predicate in monoverbal clauses. In Yukuben, similarly as in Bezen, "*dà*" can be used alone, or in combination with other verbs to introduce the recipient or the beneficiary role. In (20), the verb is used as the predicate of monoverbal clauses. It is directly followed by the recipient, respectively, encoded in the 3PL pronoun *bī* in (20a) and the 1PL pronoun *di* in (20b). The theme is postponed to the recipient and encoded in the noun *állá* 'food' in (20a) and the NP *ánáŋ*  $\Box$ *ní* 'the money' in (20b).

- (20a)
- i*
- ndá*
- bī*
- á-llá*
- ó-yīŋ*
- ó-yīŋ*
- 
- 3SG give IMPERS.3PL CL-food PREF-each PREF-each
- 
- A V R Th

'He gave some food to each one [of them].' (Anyanwu 2013: 131 [Kempf])

- (20b) "
- dà-di*
- á-náŋ*
- $\downarrow$
- ní*
- 
- give-1PL    CL-money    DET
- 
- V-R            Th

'Give us the money!' (Anyanwu 2013: 160)

In verbal serialisation, "*dà* 'give'" occurs in second position and introduces the RECIPIENT or the BENEFICIARY role (21). Whereas in (21a), the serial verbs *bú* 'do' and "*dà* 'give'" are juxtaposed, in (21b) the verbs *tóm* 'cook' and *ndà* 'give' are separated by the theme, encoded by the noun *kízú* 'something'.

- (21a)
- iyēè*
- mè*
- ré*
- ò-bú*
- à-*
- <sup>n</sup>
- dà*
- úú-déŋ*
- kój*
- 
- NEG 1SG IPFV SM-do ANAPH.AGR-give CL-chief NEG
- 
- A V V R

'No, I am not working for the chief.' (Anyanwu 2013: 227)

- (21b)
- ú*
- tóm*
- kí-zú*
- $\uparrow$
- <sup>n</sup>
- dà*
- í-ba*
- <sup>n</sup>
- dú*
- 
- 2SG cook CL-(some)thing give CL-husband 2SG.POSS
- 
- A V Th V R

$\tilde{aa}$

Q-tag

'Did you cook (some)thing for your husband?' (Anyanwu 2013: 227)

Whereas in Bezen and in Yukuben, the verbs for ‘give’, *ānì* and “*dà* respectively, can be used in monoverbal clauses or in SVCs, Kuteb has two different lexemes which express the meaning ‘give’: *ndà* for monoverbal clauses and *nà* for verbal serialisations. It seems as if *nà* has developed from the full verb and is in the process of grammaticalisation to a verbal extension or preposition. The presence of the multifunctional cognate form “*dà* in Yukuben suggests that in Kuteb, too, *ndà* was used in all syntactic contexts in the past but has undergone a differentiation.

The development from a verb meaning ‘give’ to a benefactive marker is very common cross-linguistically. In West-African languages it is accounted for in Jimini (Carlson 1991: 214; Heine & Kuteva 2002: 149), in Twi, in Awutu (Lord 1993: 39; Heine & Kuteva 2002: 149) and in Efik (Welmers 1968: 68f.; Heine & Kuteva 2002: 149).

#### ‘Resulting in damage’ *mbéb*

A further verbal extension that Koops (2009: 73) proposes is *mbéb* ‘resulting in damage’. He sometimes transcribes it as *mbéb* (2009: 73, 74, 118, 164) and sometimes as *béb* (2009: 165, 167, 223, 246, 255, 279, 280).<sup>23</sup> Based on comparative data from Bezen, I propose that the extension *mbéb* is derived from the verb *béb* in Kuteb (Koops 2009: 139). The range of this verb seems to include the stative meaning ‘be bad’ and the dynamic meaning ‘spoil’. This polysemy seems to be in agreement with Koops’ observation (2009: 66) that “[m]ost [Kuteb] verbs can have multiple senses, one of which may be transitive, another stative, and another intransitive.”

In (22), the verb *béb* ‘be bad, spoil’ is presented as the predicate of a monoverbal clause.<sup>24</sup>

- (22) *kó ùndè à béb rímāŋ ùwàè ùtēnsè iké*  
 even personCOND be.bad how in world here  
*àfù nā sáérū-fù àwū bē*  
 2SG IS despise-2SG 3SG NEG  
 ‘No matter how bad a person is here in this world, do not despise him...’  
 (Koops 2009: 286)

Koops’ (2009) grammar contains many sentences which exemplify the word *ndèbéb/ndèmbéb*, translated as ‘spoil’ so that I started to wonder, whether the component *ndè* ever occurs on its own, which is the case: It has the meaning ‘do’, as presented in the following two examples (23a) and (23b).

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23. Furthermore, there is the verb *mbúb* ‘spoil’, which may be a phonetic variant of *béb/mbéb* ‘be bad’ (Koops 2009: 205f.).

24. In the original, *béb* is glossed as ‘bad’, which I have adjusted here to ‘be bad’. The fact that the lexeme is modified by the conditional marker *à* in (22) supports the interpretation that *béb* is a verb.

- (23a) *àpùrá ú ndè*  
Apura FUT do  
‘Apura will do it.’ (Koops 2009: 55)
- (23b) *ndè wánda-fù titàwé*  
do work-2SG first  
‘Do your work first.’ (Koops 2009: 77)

Whenever *mbéb* or *béb* is combined with another verb in series, it directly follows the preceding verb; there is no evidence that something may stand between the verb and the proposed extension. In (24a) and (24b), the verb ‘be bad, spoil’ is written as *mbéb*, in (24c) and (24d) as *béb*—see also (10b).<sup>25</sup>

- (24a) *ndè mbéb-fù ùtōb bē*  
do spoil-2SG heart NEG  
‘Don’t be upset.’ (Koops 2009: 74)
- (24b) *rédiò tī àwū jāēb iké ndè mbéb pú-wū*  
radio REL 3SG buy here do spoil PFV-3SG  
‘The radio he bought here is spoiled.’ (Koops 2009: 118)
- (24c) *rìsū tī àfù kú bōm nè ndè bēb*  
head REL 2SG IPFV strong DEM do spoil  
*m ùtōb*  
1SG heart  
‘This stubbornness of yours bothers me.’ (Koops 2009: 167)
- (24d) *ùmbàè tī ndè bēb kìsīm-fù nwínn pú-wū*  
child REL do spoil knife-2SG arise PFV-3SG  
‘The child who spoiled your knife has gone.’ (Koops 2009: 255)

The varying transcription of the proposed extension *mbéb/béb* hints towards a relatedness to the homophonous verb *béb* ‘be bad, spoil’. The fact that the verb may occur as the predicate of monoverbal clauses leads to the conclusion that *mbéb/béb* is not an extension but simply a coverb in series. Comparative data from Bezen supports this analysis.

#### Bezen evidence

Bezen has the verb *ábāb* which is cognate to Kuteb *béb*. The Bezen equivalent also occurs as a stative intransitive verb and as a dynamic transitive verb with the meaning ‘spoil’. It may occur in monoverbal clauses, as in (25a) and (25b) or in verbal serialisations, as in (25c) and (25d). In the latter, it stands in V<sub>2</sub> position, similar as in Kuteb.

- (25a) Bzna120921-15.105
- |              |             |             |               |                |
|--------------|-------------|-------------|---------------|----------------|
| <i>ùkwák</i> | <i>àkíj</i> | <i>ówūr</i> | <i>ámú=ní</i> | <i>ábāb</i>    |
| SG.angle     | REL.SG      | LOC\front   | here=DEF      | be.bad         |
| <i>ézīn</i>  | <i>àkíj</i> | <i>ámú</i>  | <i>ùkwāy</i>  | <i>âñi=kín</i> |
| seemingly    | REL.SG      | on          | LOC\SG.road   | there=NEG      |
- ‘The angle which is in front here is not as bad as the one on the road there.’ (Kempf 2017: 93)

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25. I have streamlined the transcription of all four examples, separating *mbéb/béb* from the verb *ndè* ‘do’ and annotating it as ‘spoil’.

- (25b) Bzna111130-5b.455

*ārī̄      iuwù      ánt̄-ábāb̄      ā*  
be      2SG      FUT-spoil      Q

‘Is it you, who will spoil it?’ (Kempf 2017: 93)

- (25c)
- bélim=ní*
- āyī̄*
- ábāb̄*
- ùtar=ní*

PL.children=DEF      do      spoil      SG.cloth=DEF  
‘The children damaged the cloth.’ (Kempf 2017: 93)

- (25d) Bzna111130-8b.021b

*bósún*      *bēwúj*      *āhū*      *ábāb̄~bāb̄~bāb̄*  
PL.fowls      PL.other      fall      be.bad~INT~INT

‘Other fowls fell very badly.’ (Kempf 2017: 93)

The varying transcriptions of the proposed verbal extension *mbéb/béb* hints towards its origin in the verb *béb* ‘spoil’ in Kuteb (Koops 2009). This hypothesis is supported by evidence from Bezen, in which there is a verb *béb* ‘be bad, spoil’.<sup>26</sup> It is highly disputable, whether the Kuteb morpheme *mbéb/béb* can be analysed as a verbal extension. On the one hand, it occurs as the predicate of a clause but on the other hand, the examples presented in Koops (2009) suggest that no other morpheme may stand between the first verb in series and *mbéb/béb*. However, it is not clear, whether in the imperfective modality, for example, the two verbs could be disrupted, since “[t]he imperfective marker **kú** preferably precedes the final verb in a string.” (Koops 2009: 185, bold in the original).

### Habitual *kób*

From the morphemes discussed so far, the habitual *-kób* may be one of the true verbal extensions in Kuteb. There is one verb which has the same form as the suffix, *kób* ‘be tall’, but it is unlikely that the extension has developed from this verb since the semantics of ‘be tall’ does not imply REGULAR ACTION (see also Heine & Kuteva 2002, who do not mention such a grammaticalisation path).<sup>27</sup> Furthermore, there is no evidence in Koops (2009) that another morpheme may stand in between the verb and the suffix.

In ex. (26), the extension *-kób* is presented in context.<sup>28</sup>

- (26a)
- ànī̄      kú      bá-kób      iké*
- 
- 2PL      IPFV      come-HAB      here

‘You are always coming here.’ (Koops 2009: 73)

- (26b)
- àwū̄      kú      rū-kób      yī̄      bíká*
- 
- 3SG      IPFV      go-HAB      to      Bika

‘He always goes to Bika.’ (Koops 2009: 138)

26. In Yukuben, ‘be bad’ is *bōb* (Prischnegg 2008: 402).

27. Nicolas Quint (personal communication), however, reports a grammaticalisation path from *tawíil* ‘long (dimension)’ > *tawwala* ‘spend a lot of time (somewhere)’ in Sudanese Arabic.

28. The transcription and the glossing have been adjusted to the analysis and the extension is attached to the verb by a dash.

The fact that in both available examples the habitual *-kób* co-occurs with the imperfective marker *kú* hampers the interpretation of *-kób* as a verbal extension. However, Koops (2009: 222) remarks that there is a possibility to omit the morpheme: “It [the habitual extension] often, but not necessarily, co-occurs with the imperfective marker **kú**.” (bold in the original).

### Bezen evidence

In Bezen, HABITUAL is expressed by the prefix *āŋ̄t̄*, which has probably developed from the verb *āŋ̄t̄* ‘sit; live’ (Kempf 2017: 31 ff.). Thus, the Bezen habitual marker formally diverges from the Kuteb extension *-kób*. The position in the clause is also different: whereas the Kuteb morpheme occurs after another verb, the Bezen marker is preverbal. In (27a) and (27b), the Bezen verb *āŋ̄t̄* ‘sit; live’ is presented as the predicate of monoverbal clauses. In (27c) and (27d), it is used as a habitual prefix (see also ex. 29a).

- (27a) Bzna111130-5b.110

<i>w-āŋ̄t̄</i>	<i>àbì</i>	<i>bānī</i>	<i>ák̄t̄b</i>
2SG-sit	with	PL.people	be.old
‘You are sitting with the elders!’			

- (27b) Bzna140903-3.048b

<i>māŋ̄t̄</i>	<i>bídáy</i>	<i>bé-b̄t̄</i>	<i>kūhú</i>	<i>ōwūn</i>	<i>àm̄i=m̄i</i>
1SG-sit	SG.chair	SG-bad	death	kill	1SG=PFV
‘I sit in a bad chair; death has killed me.’					

- (27c) Bzna130914-1.201

<i>ēyāŋ̄</i>	<i>ōbū</i>	<i>àwū</i>	<i>āŋ̄t̄-ākár</i>	<i>ókūŋ̄</i>	<i>ámú</i>
PL.fingers	PL.hands	3PL.POSS	HAB-trek	only	LOC
‘Their fingers are always trekking on that thing [the notebook]!’					

- (27d) Bzna140903-1.302

<i>bélím=ní</i>	<i>āŋ̄t̄-ōwūb</i>	<i>àbì</i>	<i>būʒ̄i</i>	<i>á</i>	<i>kītʃāŋ̄</i>
PL.children=DEF	HAB-scorch	with	stealing	LOC	SG.house
‘The children always steal in this house!’					

It may be possible that the Kuteb habitual extension *-kób* has developed from a verb, similar as in Bezen. However, I did not find a verb in present day Kuteb which may have served as a source for this grammaticalisation path.

### Assistive *yà*

The assistive extension *-yà* also does not have any verbal cognate in Kuteb and it can plausibly be considered as a real verbal extension. In (28), it is presented in context. The extension is often combined with the verb *ndè*

‘do’ (28b), to result in *ndèyà*, which is glossed as ‘help’ by Koops (2009: 29, 72, 95).<sup>29</sup>

- (28a) *àmè kûr-yà wû kîrâen*  
1SG cook-ASS 3SG food  
'I helped her cook food.' (Koops 2009: 73)
- (28b) *ā ndè-yà m*  
3PL do-ASS 1SG  
'They helped me.' (Koops 2009: 74)

There are no examples in Koops (2009) which indicate that another morpheme may intervene between the verb and the extension.

#### Bezen evidence

In Bezen, the lexical equivalent of English ‘to help’ is expressed by the verbal phrase *āyī ókū* ‘do help (n.)’. I have chosen to compare these Kuteb and Bezen expressions because of the formal similarity of the ‘assistive’ - *yà* in Kuteb and Bezen *āyī* ‘do’. However, there is a problem in the comparison: whereas - *yà* encodes the notion of assistance in Kuteb, in Bezen this notion is encoded in the noun *ókū* ‘help’. Furthermore, the position of the lexemes is different: while - *yà* occurs after the verb, *āyī* serves as the main verb, being accompanied by the object *ókū*. Nevertheless, it is interesting that in both languages the concept of HELP is expressed by means of rather complex constructions. In (29a) and (29b), the verb *āyī* ‘do’ is used as the predicate of monoverbal clauses; in (29c) and (29d), we see the VP *āyī ókū* ‘do help’ in context.

- (29a) Bzna140903-1.074  
*m-ákí-āyī-āyī isâr=ní kítítik à mì=kín*  
1SG-FUT\NEG-HAB-do divination=DEF alone 1SG=NEG  
'I never do the divination alone.'
- (29b) Bzna140903-3.013  
*únâní ērîk bêtñin èzî úrûj*  
this PL.things PL.parents 1PL.POSS long.ago  
*áyī-áyī=ní â*  
SUB\HAB-SUB\do=DEF Q  
'Are these not things of our parents of long time ago that they did?' (Kempf in preparation)
- (29c) Bzna111125-2.031  
*m-āyī ókū àwú àn-ôtsòk kítñâj ânì àwû=mí*  
1SG-do help 3PL NOM-build SG.house give 3PL=PFV  
'I helped them to build a house for them.'
- (29d) Bzna140926-5.208  
*ärî ùwù áni àmì átñ= ní kô*  
be 2SG ADH-give 1SG medicine= DEF QUOT  
*m-âyî ókû ôñû*  
1SG-OBL\do help SG.person  
'It is you who has given me the medicine so that I could help somebody.'

29. I separate the extension - *yà* by a dash in the examples and gloss it as ASS for ‘assistive’.

#### 4. Conclusion

Koops (2009: 73) states that some verbal extensions in Kuteb are retentions from Proto Niger-Congo and others innovations. A reassessment of the examples presented by Koops (2009) and the comparison with equivalent serial verbs in Bezen help clarifying which of these extensions might have recently developed from verbs in Kuteb.

Thus, for four of the seven analysed morphemes, the status of a verbal extension has to be rejected, including the abilitative *fòb* ('reach'), the separative *tā* ('shoot'), the benefactive *nà* ('give') and *mbéb*, 'resulting in damage' ('be bad, spoil'). As was shown above, these proposed extensions are merely verbs whose meaning has been expanded. In the case of *nà*, a phonological reduction has taken place additionally to the semantic expansion, combined with a functional split: whereas *ndà* 'give' occurs in monoverbal clauses, *nà* 'give' is restricted to verbal serialisations. For the other three morphemes that were considered in the discussion, *-cī* 'resulting in closure', *-kób* 'habitual', and *-yà* 'assistive', the status of extensions is confirmed: they do not have homophonous verbs in Kuteb from which they could have possibly developed and they only occur as bound suffixes on verbs.

#### Abbreviations

A = agent; ADH = adhortative; ANAPH.AGR = anaphoric agreement; ASS = assistive; CFG = centrifugal; CL = class prefix; CLOS = closure; COND = conditional; CPT = centripetal; DEF = definitive; DEM = demonstrative; DET = determiner; ETHN = ethnonym; FUT = future; H = high tone; HAB = habitual; IMP = imperative; IMPERS = impersonal; IPFV = imperfective; INT = intensification; IS = indirect speech; L = low tone; LOC = locative; M = mid tone; n. = noun; NEG = negation; NOM = nominaliser; NP = noun phrase; OBL = obligative; PFV = perfective; PL = plural; POSS = possessive; PREF = prefix; PURP = purpose; Q = question; QUOT = quotation; R = recipient; REL = relative; SG = singular; SM = subject marker; SVC = serial verb construction; Th = theme; V = verb; VP = verbal phrase.

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# 3

## A Note on the Present Tenses in some Southern Tanzanian Bantu Languages

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### Abstract

In this article we discuss the shape of the present tense prefixes in a dozen Bantu languages that are spoken in a contingent area in southwestern Tanzania. All of these feature a high front vowel /i/ in at least one of their allomorphs. Comparing these present-day constructions and taking into account findings from grammaticalization theory, we propose a source structure involving a verbal periphrasis featuring a reflex of Proto-Bantu \**jikad* ‘dwell, be, sit’. Based on its geographic distribution, we further propose that this innovation originated in Guthrie’s G60 zone.

### Keywords

Bantu, tense, aspect, grammaticalization, Tanzania.

### Résumé

Cet article porte sur la forme des préfixes du présent [de l’indicatif] dans une douzaine de langues bantoues parlées dans des territoires contigus situés au sud-ouest de la Tanzanie. Ces préfixes comportent tous une voyelle fermée /i/ dans au moins un de leurs allomorphes. En comparant les constructions actuelles et en prenant en compte les avancées de la recherche dans le domaine de la théorie de la grammaticalisation, nous proposons une structure-source dérivant d’une périphrase verbale comportant un terme issu du proto-bantou \**jikad* ‘habiter, être (assis)’. En nous appuyant sur sa distribution géographique, nous postulons que cette innovation trouve son origine dans la zone G60 de Guthrie.

## Mots clés

bantou, temps, aspect, grammaticalisation, Tanzanie.

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### 1. Introduction<sup>1</sup>

In a number of Bantu languages in southern Tanzania, the simple or imperfective present is marked by a prefix containing the high front vowel /i/. The exact shape of the prefix is subject to different kinds of morpho-phonological variation. This type of present tense marking is uncommon from a pan-Bantu perspective; it does, for instance, not belong to the common tense-aspect markers discussed by Nurse & Philippson (2006). Also, the historical source structure is not readily identifiable.

This study therefore offers an overview of the occurrence of this marker and its various language- and context-specific realizations. In addition, it attempts to offer a historical explanation to its occurrence, by tracing its source structure, its pathway of development and its geographical spread.

The following examples are a few representative cases from our language sample of present tense constructions with *i*- (which we refer to as ‘*i*-presents’ throughout this paper).<sup>2</sup>

- (1) Nyakyusa M31 (Persohn 2017)  
 iku-book-a  
 a-(i)ku-book-a<sup>3</sup>  
 SM1-PRS-go-FV  
 ‘S/he goes / is going.’
- (2) Bena G63 (Morrison 2011)  
 i-géénd-a  
 a-i-geend-a  
 SM1-PRS-walk-FV  
 ‘S/he walks / is walking.’
- (3) Manda-Matumba N11 (Bernander 2017)  
 i-bit-a                    ku-Ludéwa  
 a-i-bit-a                ku-Ludewa  
 SM1-PRS-walk-FV      17-L.  
 ‘S/he is going to Ludewa.’

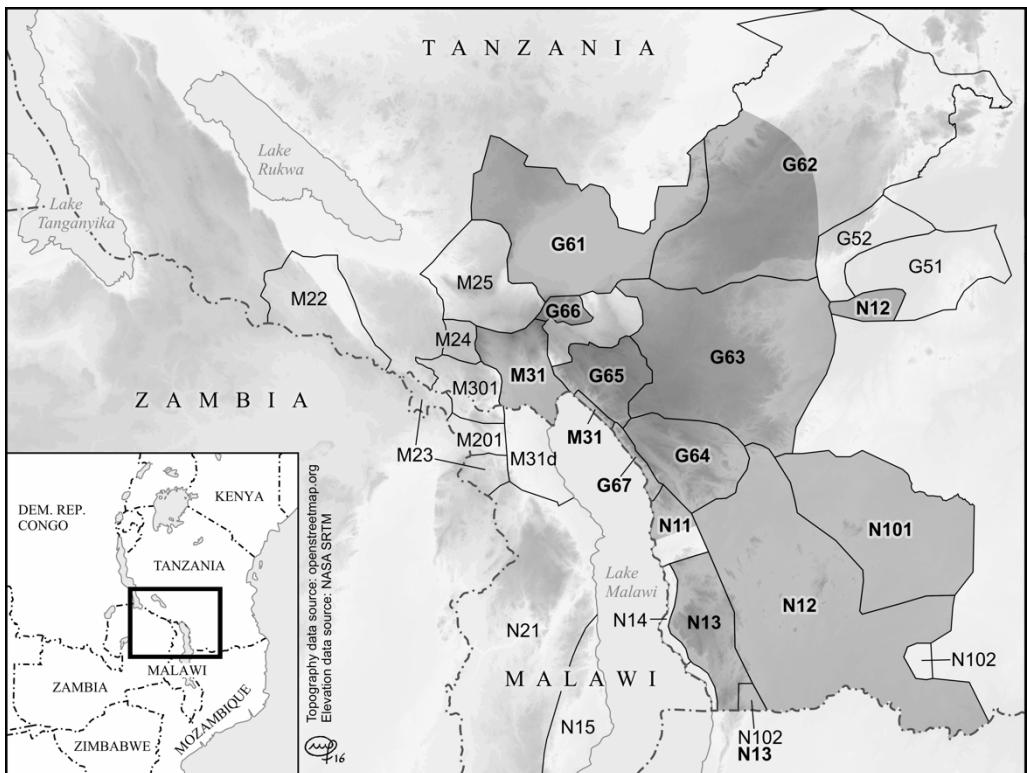
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1. We wish to thank the two anonymous reviewers and Nicolas Quint for their helpful comments, Mary Chambers for improving our English, and Monika Feinen for creating the maps used in this paper. The usual disclaimer applies.

2. An extra tier has been added in the interlinearization of the data to help the readers keep track of some morpho-phonological alterations important for the analysis. Notice for the glossing that digits in isolation refer to specific noun classes whereas <1SG/PL> and <2SG/PL> refer to first and second person (singular/plural).

3. See (4) below concerning (i) in Nyakyusa.

*Map 1.- Geographic distribution of the *i*-presents*



Map 1 illustrates the geographic distribution of the phenomenon. As can be gathered from this map, the *i*-presents are found in 12 languages<sup>4</sup>, all spoken in a coherent geographic area of southern Tanzania, namely:<sup>5</sup>

- G61 Sango
- G62 Hehe (Kalenga variety)
- G63 Bena

4. The sources consulted for each language are listed in the Appendix.

5. Languages and dialects are referred to by the names and Guthrie codes given in Maho (2009a) and Lewis *et al.* (2016), with the exception of the Hehe variety which we refer to as Kalenga following Walsh (2004). Maho (2009b) and Lewis *et al.* (2016) both make reference to a glottonym Nindi (coded as N102). Due to its total lack of documentation, it could not be included in this study. According to Ebner (1939), Nindi was a variety of Ndendeule before the Ngoni invasion in the 1860s. Lewis *et al.* (2016) also describe it as “reportedly similar to Ndendeule”, and estimate a population of 100 speakers (see also Ngonyani (2003: 1) who refers to Nindi as “quickly disappearing”). Johnston (1919: 792) claims that the vocabulary of the “Kisutu” variety of Ngoni included in Spiss (1904) is specifically Nindi. This, however, is not corroborated in the source itself nor by Ebner (1939) as further explained in §2.2. Maho (2009b:67), referring to Johnston and his claim, writes: “[Johnston’s] geographical location seems a bit off (but then his geographical locations sometimes are).”

- G64 Pangwa
- G65 Kinga
- G66 Wanji
- G67 Kisi
- M31 Nyakyusa
- N11 Manda (Matumba variety)
- N101 Ndendeule
- N12 Ngoni
- N13 Matengo (future use, see §2.5)

In the following, we first take a closer look at the various types of *i*-presents (§2) before proceeding to an internal reconstruction, first of the source structure of the subjacent grammaticalization process (§3.1, §3.2) and then of the historical spreading of this innovation (§3.3). Lastly, some limitations of our study are discussed (§3.4).

## 2. The *i*-presents in detail

While the *i*-presents are found in a contingent geographic area, they do not form a homogeneous phenomenon. Thus compare the Nyakyusa example (1) above, where the noun class 1 subject prefix plus the present prefix yield a sequence *ikv-*, to (2, 3) from Bena and Manda-Matumba, where the equivalent sequence results in a bare vowel segment *i-*. The various manifestations of *i*-presents can be overall classified into five types, each of which merits a short discussion. As will be seen in §3 below, all of these types can be understood as being synchronic results of one and the same process of grammaticalization from a common source structure, with slightly different paths of phonological erosion.

### 2.1 Nyakyusa

The first *i*-present type is represented by Nyakyusa (M31). In this language, the simple present is formed with a prefix *kv-*. In certain cases, a change in the vowel quality of the subject marker gives clear evidence of a former prefix *\*ikv-*. This can be observed most clearly in the southern variety (Kyela district) of Nyakyusa, in which the /a, ɪ/ of subject markers becomes /i/ before the present prefix. The rounded degree-two back vowel /ʊ/ is raised to /u/ in this environment (4). The latter may synchronically be understood as a spreading of the [+tense] feature of the first vocalic segment of an underlying prefix *ikv-*. Diachronically, it probably goes back to a process of glide formation: /ɔi/ > /ui/ with subsequent deletion of the front vowel. As we will see below, this forms part of a geographically more widespread tendency to avoid /ui/ sequences in this position. In the northern and eastern varieties of Nyakyusa, no raising of /ʊ/ to /u/ takes place and the situation concerning /ɪ/ to /i/ is irregular (5). In all varieties,

the second person singular subject prefix is *ø-* before *kv-*, but *o-* elsewhere.<sup>6</sup>

- (4) Southern Nyakyusa M31 (Berger 1938; Dan King, p.c.)

{a, i}	→ i	/ _ <i>ko<sub>PRS</sub></i>
2SG	→ Ø	/ _ <i>ko<sub>PRS</sub></i>
o	→ u	/ _ <i>ko<sub>PRS</sub></i>

- (5) Subject prefixes of northern and eastern Nyakyusa M31 (Persohn 2017)

Person/Class	SM	SM / _ <i>ko<sub>PRS</sub></i>	Class	SM	SM/ _ <i>ko<sub>PRS</sub></i>
1SG	n-	n-	8	fi-	fi-
2SG	o-	Ø-	9	ji-	ji-
1PL	to-	to-	10	si-	si-
2PL	mu-	mu-	11	lo-	lo-
1	a-	i-	12	ka-	ki-
2	ba-	bi-	13	to-	to-
3	gu-	gu-	14	ka-	ki-
4	gi-	gi-	15	ko-	ko-
5	li-	li-	16	pa-	pi-
6	ga-	gi-	17	ko-	ko-
7	ki-	ki-	18	mu-	mu-

In the northernmost varieties of Nyakyusa, a variant *o-kv-* is sometimes heard with noun class 1 subjects. Given that this form is geographically very restricted, considered non-standard or plainly rejected by most speakers and that all other subject markers recorded for this variety have the predictable outcome /a/ → /i/, it is safe to assume that this constitutes an innovative case of assimilation; see also below on Kisi G67.

Further indications of a former prefix \**ikv-* in Nyakyusa come from two sources. First, in earlier chronolects (e.g. Schumann 1899; Berger 1933), the first person singular yields *n-ikv*, and example (6) shows that the underlying form of the first person singular subject marker is *n-*. Second, the negative present is formed with a prefix *ti-* preceding *kv-*, which does not induce a change in the vowel quality of the subject marker (7). The fact that Nyakyusa's closest relatives Ngonde (M31D) and Ndali/Sukwa<sup>7</sup> (M301) have the widespread Bantu morpheme *ta-* as their negative prefix in all indicative constructions suggests that *ti-kv-* historically goes back to a merger of \**ta-ikv-*.

6. Word-initial *o-* is realized as *go-* / \_ V.

7. Sukwa is classified as M202 by Maho (2009a). A comparison of Kershner's (2002) description of Sukwa to the available sources on Ndali M301 (Botne 2008; Swilla 1998) shows that these two languages are extremely similar at all levels of linguistic description.

- (6) naagile  
 n-ag-ile  
 SM1SG-find-PFV  
 ‘I have found.’
- (7) atikobuuka  
 a-ti-ku-book-a  
 SM1-NEG-PRS-go-FV  
 ‘S/he does not go / is not going.’

## 2.2 The Bena-Kinga type

In Sango (G61), Bena (G63), Kinga (G65) and Wanji (G66) the present prefix is generally *i*-, but changes to *iku*- (or a regular variant thereof) in certain morphophonemic environments. (8) illustrates this for Bena, where the present prefix surfaces as *ihu*- preceding vowel-initial stems and all object markers (/h/ is a regular reflex of Proto-Bantu \**k* in this language<sup>8</sup>).

- (8) Bena G63 (Morrison 2011)
- (a)  $i_{\text{PRS}} \rightarrow ihu- / \_ \{V, OM\}$
  - (b) igéénda  
 a-i-geend-a  
 SM1-PRS-walk-FV  
 ‘S/he walks / is walking.’
  - (c) wihweelúha  
 u-ihu-eluh-a  
 SM2SG-PRS-climb-FV  
 ‘S/he climbs / is climbing.’
  - (d) ihumútova  
 a-ihu-mu-tov-a  
 SM1-PRS-OM1-hit-FV  
 ‘S/he hits him/her / is hitting him/her.’

In Sango (G61) the longer allomorph, like the infinitive class 15 prefix in that particular language, features a high front vowel. Unlike in the Bena examples above, in Sango the longer allomorph surfaces only when preceding object markers. This coincides with the fact that Sango has only one vowel-initial verb root, and even this root may be in the process of being re-analyzed as consonant-initial (see Kajaan 2012: 57).

- (9) Sango G61 (Kajaan 2012)
- (a)  $i_{\text{PRS}} \rightarrow iki- / \_ OM$
  - (b) iyíinsa  
 a-i-yiins-a  
 SM1-PRS-come-FV  
 ‘S/he comes / is coming.’

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8. More precisely, with the exception of some dialectal varieties, PB \*/k/ appears as /h/ when occurring non-root initially, i.e. root-medially and on prefixes (Morrison 2011: 40–41).

- (c) **ikinisákula**  
 a-iki-ni-sakul-a  
 SM1-PRS-OM1SG-search-FV  
 ‘s/he looks / is looking for me’

There are two exceptions to the Sango rule given in (9a): in the second person singular and plural, the long allomorph is *ki-* without the initial vocalic segment (Kajaan 2012: 107). Likewise, in Kinga (G65) the long allomorph is *ku-* following subject prefixes with a rounded back vowel. With the short allomorph, there is free variation between *i-* and  $\emptyset$  in the second person singular, the first person plural and the second person plural (Wolff 1905: 64 –65). These languages thus show some overlap with those of the Ngoni type, to be discussed in the following section.

### 2.3 The Ngoni type

The Ngoni type languages show some overlap with those of the Bena-Kinga type discussed in the preceding section. Thus, in Ngoni (N12), the simple present is formed with a prefix *i-*, unless an object marker is present, in which case the prefix is *ku-*. That is, unlike the Bena-Kinga type, the vowel segment /i/ is consistently dropped preceding object markers, as shown in (10).

- (10) Ngoni N12 (Ngonyani & Githinji 2006)

- (a)  $i_{\text{PRS}} \rightarrow ku- / \_ \text{OM}$
- |                                |                  |         |
|--------------------------------|------------------|---------|
| kuku                           | <b>igega</b>     | ligela  |
| kuku                           | a-i-geg-a        | li-gela |
| grandpa(1)                     | SM1-PRS-carry-FV | 5-hoe   |
| ‘Grandpa is carrying the hoe.’ |                  |         |
- (b) kuku            **akuveragegela**            vajukulu            ligela  
 kuku            a-ku-va-geg-el-a            va-jukulu            li-gela  
 grandpa(1)     SM1-PRS-OM2-carry-APPL-FV     2-grandchild     5-hoe  
 ‘Grandpa is carrying a hoe for the grandchildren.’

The same inventory of allomorphs as in Ngoni is found in the Kalenga variety of Hehe (G62). Unlike in Ngoni, the present prefix also surfaces as *ku-* preceding vowel-initial stems and the reflexive/reciprocal *i-*.<sup>9</sup> In this respect Hehe-Kalenga thus parallels the Kinga-Bena type discussed in §2.2.

- (11) Hehe-Kalenga G62 (Crema 1987; Okoa 2012)

- (a)  $i_{\text{PRS}} \rightarrow ku- / \_ \{ \text{OM}, \text{V} \}$
- (b) twítova            avayetu  
 tu-i-tov-a            a-va-yetu  
 SM1PL-PRS-hit-FV    AUG-2-our\_friends  
 ‘We hit/are hitting our friends.’

---

9. In Hehe, the reflexive has acquired the additional function of reciprocal.

- (c) dada            akumwenda            umwana        wake            John  
     dada            a-ku-mu-end-a        u-mu-ana        u-ake        J.  
     father(1)        SM1-PRS-OM1-love-FV    AUG-1-child    1-POSS.1    J.  
     ‘Father loves his child John.’
- (d) ukwenda  
     u-ku-end-a  
     SM2SG-PRS-love-FV  
     ‘you love’
- (e) avana            vakwitanga            kuteleka  
     avana            va-ku-i-tang-a        ku-telek-a  
     children        SM2-PRS-REFL/RECP-help-FV    15(INF)-cook-FV  
     ‘The children are helping each other to cook.’

A prefix *ku-* also sometimes surfaces with first person singular subjects:

- (12) Hehe G62 (Crema 1987)  
     ngwiga  
     n-ku-ig-a  
     SM1SG-PRS-imitate-FV  
     ‘I imitate/ am imitating.’

## 2.4 Ndendeule

In Ndendeule (N101), the present is reportedly also formed with a prefix *i-*, which, however, “often deletes” (Nurse 2007, citing Ngonyani 1999). The specific contexts in which *i-* is deleted are not easily identifiable from Ngonyani’s description. From the few examples available, however, it seems that Ndendeule exhibits a pattern similar to the Ngoni type, with *i-* disappearing before object markers. However, unlike the Ngoni type, there is no prefix *ku-* either:

- (13) Ndendeule N101(Ngonyani 2013)
- (a) i<sub>PRS</sub> → ø-        / \_ OM
- (b) bhiyenda  
     bha-i-yend-a  
     SM2-PRS-go-FV  
     ‘They go / are going.’
- (c) mundeka  
     mu-n-lek-a  
     SM2PL.PRS-OM1-leave-FV  
     ‘You (pl.) leave / are leaving him here.’

## 2.5 The Kisi type

The last type to be discussed is found in a number of languages in the southeast of the *i*-present area: Pangwa (G64), Kisi (G67), the Matumba variety of Manda (N11) and Matengo (N13). In these languages, the prefix in question is generally *i-*, but it shows some intriguing allomorphic alternation when preceding object markers. Thus, the present in Kisi patterns with the Bena-Kinga type, but at the same time it has a free variant

*ka-* preceding object markers (14d).

- (14) Kisi G67 (Gray, m.s.)
- (a)  $i_{\text{PRS}} \rightarrow iku-$  OR  $ka-$  / \_ OM
  - (b) **iteleka**  
a-i-telek-a  
SM1-PRS-cook-FV  
'S/he is cooking / cooks.'
  - (c) **bikunsuumä**  
ba-iku-mu-suum-a  
SM1-PRS-OM1-beg-FV  
'They are begging him/her / beg him/her.'
  - (d) **bakansuumä**  
ba-ka-mu-suum-a  
SM1-PRS- OM1-beg-FV  
'They are begging him/her / beg him/her.'

This picture is slightly complicated by the fact that in Kisi, like in Kinga, the vowel segment /i/ of the allomorph /iku/ is not realized following a rounded back vowel. Also, the /Ciku/ sequence of subject marker plus present prefix is sometimes realized as /Cuku/, which is probably a case of assimilation (cf. Nyakyusa, §2.1). Moreover the *ku-* prefix is deleted before the homophonous object marker of the second person singular.

Allomorphy of the present prefix comparable to the case of Kisi is also found in the Matumba variety of Manda, which patterns with the Ngoni type, but features a free variant *ka-* before object markers:

- (15) Manda-Matumba N11 (Bernander 2017)
- (a)  $i_{\text{PRS}} \rightarrow ku-$  OR  $ka-$  / \_ OM
  - (b) **itéléka**  
a-i-telek-a  
SM1-PRS-cook-FV  
'S/he cooks / is cooking.'
  - (c) **akunifwáta**  
a-ku-ni-fwat-a  
SM1-PRS-OM1SG-follow-FV  
'S/he follows / is following me.'
  - (d) **akaniyímálila**  
a-ka-ni-ymalil-a  
SM1-PRS-OM1SG-supervise-FV  
'S/he supervises / is supervising me.'

In Pangwa, the two long allomorphs stand in complementary distribution. With vowel-initial stems this language patterns with the Bena-Kinga type, having *ixu-* as the present prefix. Preceding an object marker, the prefix surfaces as *xa-* (where /x/ is a regular reflex of Proto-Bantu \**k*; see Nurse 1988).

- (16) Pangwa G64 (Stirnimann 1983)

- (a)  $i_{\text{PRS}}$  → ixu- / \_ V  
→ xa- / \_ OM
- (b) **itova**  
a-i-tov-a  
SM1-PRS-hit-FV  
'S/he hits / is hitting.'
- (c) **ixwima**  
a-ixu-im-a  
SM1-PRS-stand-FV  
'S/he stands / is standing.'
- (d) **axamtova**  
a-xa-mu-tov-a  
SM1-PRS-OM1-hit-FV  
'S/he hit / is hitting him/her.'

Lastly, in Matengo we find a future tense formed with a prefix *i*- . In many Bantu languages, morphological presents can be used with future time reference, and consequently a shift from present to future is widely attested (Nurse 2008: 297–298; for a wider cross-linguistic perspective, see Haspelmath 1998). We can thus assume that the Matengo future is a posterior development out of a former *i*-present. Similar to Pangwa, the Matengo *i*- prefix has only one allomorph preceding an object marker, namely *á*-.

- (17) Matengo N13 (Yoneda 2000)

- (a)  $i_{\text{FUT}}$  → *á* - / \_ OM
- (b) twíbóm̩ba kibêga  
tu-í-bómb-a ki-béga  
SM1PL-FUT-create-FV 7-clay\_pot  
'We will make a clay pot.'
- (c) twágubombila kibêga  
tu-á-gu-bómb-il-a ki-béga  
SM1PL-FUT-OM2SG-create-APPL-FV 7-clay\_pot  
'We will make a clay pot for you.'

While the allomorphs *ka-/xa-/a-* might seem strange at first, we will show below that they constitute valuable evidence as to the source structure of the *i*-presents.

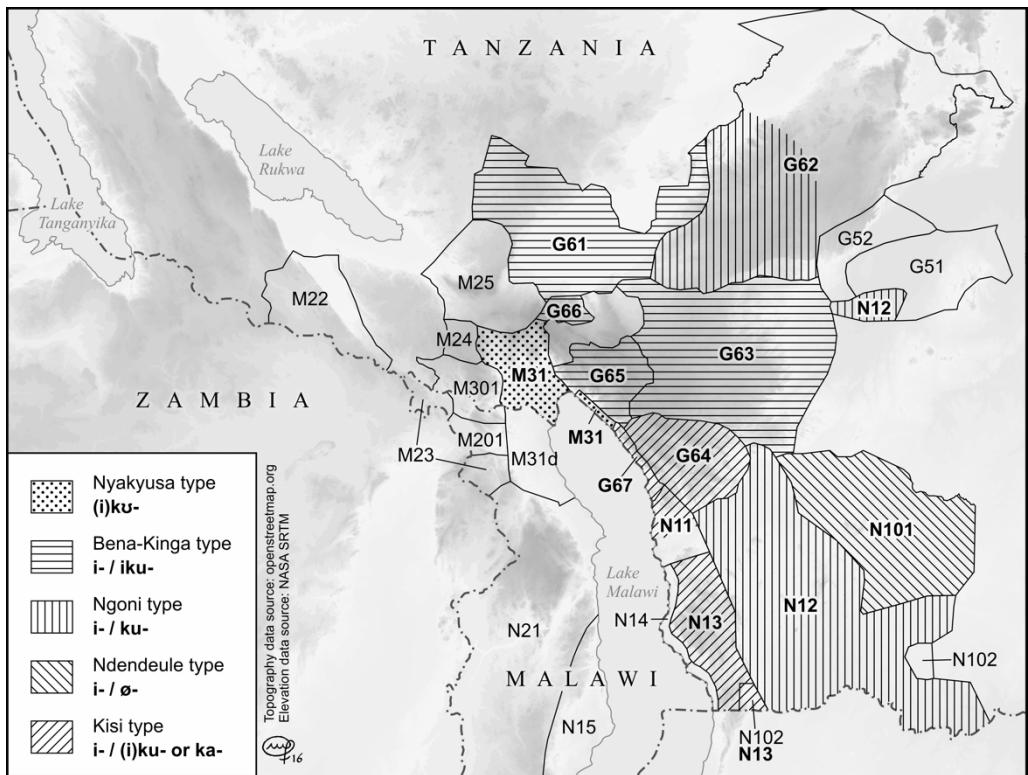
## 2.6 Summary and geographic distribution

Table 1 gives a synoptic overview over the different types of *i*-presents and their language-specific manifestations. Map 2 shows the geographic distribution of these types.

Table 1.- Overview of the types of *i*-presents

Type	Language(s)	Shape(s) of the present prefix
Nyakyusa	Nyakyusa (M31)	<p><i>kō-</i></p> <p>Effects on preceding vowels:  <math>\text{U}_2\text{SG} \rightarrow \emptyset / \_ \text{kō}_{\text{PRS}}</math>  <math>\text{a} \rightarrow \text{i} / \_ \text{kō}_{\text{PRS}}</math>  <math>\text{u} \rightarrow \text{u} / \_ \text{kō}_{\text{PRS}}</math>          (only southern variety)  <math>\text{i} \rightarrow \text{i} / \_ \text{kō}_{\text{PRS}}</math>          (irregular in northern and eastern varieties)</p>
Bena-Kinga	Sango (G61), Bena (G63), Kinga (G65), Vwanji (G66)	<p><i>i-</i>  <math>\text{iki-}</math> (G61), <math>\text{ihu-}</math> (G63), <math>\text{ikō-}</math> (G65, G66)  <math>/ \_ \text{OM}</math> (G61)  <math>/ \_ \{\text{v}, \text{OM}\}</math> (G63,G65,G66)</p> <p>Particularities:  <math>\text{ki-} / \{ \text{SM.2SG, SM.2PL} \} \_ \text{OM}</math> (G61)  <math>\text{i-} \rightarrow \emptyset / \_ \{ \text{SM.2SG, SM.1PL, SM2.PL} \}</math> (optional) (G65)</p>
Ngoni	Ngoni (N12), Hehe-Kalenga (G62)	<p><i>i-</i>  <math>\text{ku-} / \_ \text{OM}</math> (N12)  <math>\text{ku-} / \_ \{\text{v, OM}\}</math> (G62)  <math>\text{ku-} / \text{SM.1SG} \_</math> (G62)</p>
Ndendeule	Ndendeule (N101)	<p><i>i-</i>  <math>\emptyset / \_ \text{OM}</math></p>
Kisi	Pangwa (G64), Kisi (G67), Manda-Matumba (N11), Matengo (N13)	<p><i>i-</i>  <math>\text{ixu-}</math> (G64), <math>\text{iku-}</math> (G67), <math>\text{ku-}</math> (N11) / <math>\_ \text{v}</math>  <math>\text{iku}</math> (G67), <math>\text{ku-}</math> (N11), free variant <math>\text{ka-} / \_ \text{OM}</math> (G67, N11)  <math>\text{xa-}</math> (G64), <math>\text{a-}</math> (N13) / <math>\_ \text{OM}</math></p> <p>Particularities:          FUT, not PRS in N13  <math>\text{ku-} / \text{V}^{[+back][+round]} \_ \{\text{v, OM}\}</math> (G67)  <math>/ \text{C-iku}_{\text{PRS}} / \rightarrow / \text{C-uku} /</math> (optional) (G67)</p>

*Map 2.- Geographic distribution of the types of *i*-presents*



### 3. Reconstruction

In this section, we first propose a possible source structure that has served as the initial point of grammaticalization of *i*-presents (§3.2). We then reconstruct the geographical spread of the phenomenon (§3.3), and lastly we discuss the limitations of our proposal (§3.4).

#### 3.1 An inventory

The different types of *i*-presents discussed in §2 share two common features. First, all have the defining criterion of a vowel /i/, to which we come back later; and second, all but Ndendeule feature a sequence /ku~ku~hu/. The exception is Sango, where we find a sequence /ki/. In all cases, this sequence is homophonous with the noun class 15 (infinitives) prefix.

#### 3.2 Tracing the source structure

The presence of the sequence *ku*- and its variants is a clear indication that diachronically *i*-presents go back to a verbal periphrasis featuring an infinitive as a second verb. In fact, the grammaticalization path from a

verbal periphrasis expressing progressive aspect to a present tense is well known (e.g. Bybee *et al.* 1994). This still leaves open the question as to the source of the vowel /i/ and thus ultimately the source structure of this grammaticalization process. Present tenses including a high front vowel are also found in other Bantu areas, from Kikongo (H16) in the west (Dom & Bostoen 2015) to Chaga (E60) in the north-east (Emanatian 1991). According to Maho (2007), the presence of a high front vowel is geographically so widely spread in the Bantu-speaking area that it might be a remnant of a formative already existing in Proto-Bantu. However, the formal variation in the realization of the *i*-present – both within and between the languages described above – strongly points toward a more recent innovation.

Moreover, although the source of the *i*-formative in Kikongo is as of yet unknown, it is known for Chaga. According to Emanatian (1991), the formative originates from an infinitive marker *i*-, which simultaneously functions as the noun class 5 prefix. As the languages in this study all derive their infinitives from noun class 15 rather than 5, it is not likely that the *i*-present has the same origin or development path as the one described for Chaga. Before proposing a source structure, it is worth excluding another candidate, namely a reflex of the copula \**dì* (Meeussen 1967). In all 7-vowel languages in our sample, the *i*-presents feature a degree one vowel /i/, whereas the copula has degree two /ɪ/. In relation to this, Bastin (1989a, 1989b) reconstructs a progressive periphrasis of the shape \**dì mu-kv-* ‘COP LOC-INF-’. A reflex of this periphrasis is attested at least in Bena, where it continues to serve as a progressive, and in Nyakyusa, where it functions as a narrative marker. It is safe to assume that its function in the latter language is a remnant of a specialized use of an erstwhile present (see Persohn 2016).

A cross-linguistically attested source of progressives, and ultimately present tenses, are periphrases containing locational verbs (Heine & Kuteva 2002). An especially robust source of these on the African continent are verbs denoting ‘to sit; to live, to dwell’ (Heine *et al.* 1991). For Proto-Bantu a verb \**jikad* ‘dwell, be, sit’ has been reconstructed, reflexes of which are attested in all of Guthrie’s zones (Bastin *et al.* 2002). On a more local scale, reflexes of this verb are found in zone G60, in most of which \**j* > *ø* (e.g. Bena G63 *ikala* ‘dwell’), and in zone M30, not in Nyakyusa, but its western neighbour Ndali M301 (*ikala* ‘sit; dwell’). Interestingly, this verb has become obsolete in zone N10, a fact to which we come back later. Now, recall that in the Kisi-type of *i*-presents, we find a sequence *ka-/xa-/á-* preceding object markers. Assuming a verbal periphrasis based on a reflex of \**jikad* is thus not only typologically plausible, but gives a motivated explanation for both the segment /i/ as well as for the puzzling appearance of *ka-/xa-/á-* in Kisi, Manda-Matumba, Pangwa and Matengo.

The cases of Nyakyusa, the Bena-Kinga type, the Ngoni type and – to a certain extent – the Kisi type of *i*-presents, all point to an intermediate stage at which the periphrasis had eroded and contracted to *\*ikv-*, further along the “cline of grammaticality” (Hopper & Traugott 2003). The merging of the vocalic segment with the subject marker, as found in Nyakyusa (§2.1), as well as the contextually determined allomorphs *i*- and *ku*- found in the Benga-Kinga and Ngoni types can then be understood as a case of further phonological erosion and, on the systemic level, as a tighter integration into the prevailing (C)V pattern of prefixes. The cases of Nyakyusa (§2.1), Sango, Kinga (both §2.2) and Kisi (§2.5) indicate that the reduction of *\*ikv-* to *\*kv-* begins when the prefix follows a subject marker with a rounded back vowel. The allomorphy preceding vowel-initial stems, where in most of the languages in question a longer allomorph is found, may be understood as an expression of a morphophonemic requirement for the macro-stem to have an onset consonant, along the lines argued for by Downing (1998). The motivation for a long allomorph preceding object markers, however, remains unsolved. It is likely that prosodic constraints play a role. For instance, Mkochi (2017) argues that in Malawian Tonga (N15) the realization of the “present progressive” prefix as *tu-* before monosyllabic stems, vowel initial stems and object markers (vis-à-vis  $\emptyset$  elsewhere) is governed by metricality.

The distribution of the variant forms in the Kisi type indicates that in these south-eastern languages the process of erosion branched into two different paths depending on the following morphological material. We come back to this in the following section.

### 3.3 Geographical spread

The area discussed in this paper is socio-historically notable for its extensive regional-internal migrations. Aligned into smaller communities, people have been constantly moving both across parts of Lake Nyasa<sup>10</sup> and between different parts of the hinterland. It was only relatively late in history that these communities consolidated politically under the ethnonyms and glossonyms that we have referred to here (Park 1988; Nyagava 1999). On a socio-historical level this is reflected for example in shared clan names or “praise names” (see Park 1988). With this as a general background, it should be noted that the *i*-presents are found nearly exclusively in Guthrie’s adjacent groups G60 and N10 (see Map 1). It is well known that there is a strong diachronic link between the G60 and N10 groups and that the former has exercised particularly great influence upon the latter, the N10 communities being “pounded culturally” by their G60 neighbours (Nurse 1988: 71). Nurse (1982, 1988, 1999) has even proposed

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10. There is even a term in Manda – *va-lowoka* (pl.) ‘crossers’ <*kulowoka* ‘to cross’ – for members of the local community who claim their ancestry from other parts of the lake.

– based on lexicostatistics and some (morpho-)phonological traits – that Manda (N11) is in fact essentially a G60 language. That Manda has strong historical ties with Pangwa has also been claimed elsewhere in the literature (e.g. by Ebner 1955) as well as by the speakers themselves. Furthermore, Ngonyani (2001) argues that Ngoni (N12) also stands genealogically closer to the G60 group. Although these suggestions are far from conclusive (see Gray & Roth 2016), they do point towards the fact that these two language groups have been affecting each other, presumably also on a structural level.

The contact and intermingling of these groups is also connected to the Ngoni migration to and invasion of southern Tanzania in the 19<sup>th</sup> century. The Ngoni who migrated from South Africa did not settle in this area until the 1860's (Gulliver 1974; Ebner 1955), when they raided the previously existing communities and their neighbours, taking the inhabitants as slaves or wives (Ebner 1939, 1955, Ngonyani 2001). The subjugated groups and their descendants became, in turn, part of the Ngoni community without shifting to the medium of communication of their rulers. Hence, what is occasionally referred to as *kisutu* (lit. ‘slavish’ or ‘slave language’) in older documents is what constitutes Tanzanian Ngoni of today. At the same time, the original Ngoni variety which had its roots in the Nguni languages of South Africa is basically extinct, with only a small set of archaisms remaining. According to Ebner (1939, 1955; see also Ngonyani 2001), the Ngoni spoken today historically consists mainly of Pangwa – i.e. a G60 language – and Ndendeule, an N10 language. However, unlike Pangwa, which shares the *i*-formative with all its closest relatives, the neighbours of Ndendeule do not have this formative. For instance, Ngindo (P14) – the closest neighbour to Ndendeule in the East and according to Ngonyani (2001) also its closest relative – lacks this tense marker altogether (cf. Gromova & Urmanchieva 2005). Thus, it is more likely that the *i*-construction dispersed from Pangwa into Manda and Ngoni and from there into the other N10 languages, rather than the other way around. The hypothesis that the spread of this innovation came from the G60 languages is further reinforced by two additional facts. First, a present tense formative *i-* is part of the inventory of all G60 languages, unlike the N10 group where it surfaces more sparsely. Second, the suggested source verb *\*-jikad-* is obsolete as a lexical verb in the N10 languages but not in the G60 languages.

The only language with an *i*-present outside of the G60-N10 connection is Nyakyusa (M31). The Nyakyusa people, however, share a common religious cult with the Kinga and there have also been waves of migration from the Kinga speaking area towards the Nyakyusa-speaking one (Weber 1998: ch. 7). Kinga loans in Nyakyusa give further evidence of contact between the two languages (Labroussi 1998: 218). Recall from §2.1 that

the surface realization of the *i*-present in southern Nyakyusa (Kyela district) can be described as rule-based; in the northern varieties, however, it is irregular. This suggests a spread of the innovation from the south, which is closest to the Kinga-speaking area (cf. Map 1), with the innovation being adopted only imperfectly in the north – a scenario in accordance with the proposed cradle of the *i*-presents lying in zone G60. Assuming that geographic spread reflects the diachronic reality (but see §3.4 below for some limitations) would, in turn, have an impact on our understanding of the history of Nyakyusa: indeed, it is commonly assumed that this language has long been isolated from its geolinguistic environment and that it has played the role of the donor rather than that of the recipient in the spread of linguistic innovations; see Persohn (2017: §1.2.4) for an overview of the relevant literature.

The geographic distribution of the various types of *i*-presents summarized in §2.1 – §2.5 and in Map 2 furthermore suggests a major split in how the *i*-presents evolved. Everywhere but in the southeast, we find a majority group of languages which reduced \**jikada ku-* (and respective reflexes) to *iku-* plus subsequent developments. On the other side, in the southeast, we find the Kisi-type languages, which are characterized by an allomorph *ka-/xa-/á-* preceding object markers. Recall from §2.5 that in Pangwa and Matengo this is the only shape of the present prefix in this morphological environment. Kisi and the Matumba variety of Manda however have free variation between (*i*)*ku-* and *ka-* before object marker. Now Kisi shares its northern border with Nyakyusa, in which we find a sequence /*ku*/ in all environments (§2.1), and Kisi is also known to have, at least in the recent past, been in contact with this language of high local prestige. Concerning the case of Manda (N11), not only does Lake Nyasa allow for mobility towards the Nyakyusa language area, but also at least one village within the Kisi language area is actually populated predominantly by Manda speakers (Gray & Mitterhofer 2015). That is, it is conceivable that *ka-* preceding object markers in Kisi and Manda might be the older variant, whereas *ku-* could have been adopted under the influence of Nyakyusa.

### 3.4 Further discussion

Having proposed a source structure and a scenario of how the *i*-presents may have spread geographically, a word of caution is appropriate. Our reconstruction hinges on the synchronic traces of the defining feature of the constructions in question, namely a vocalic prefix /*i*. The phonological erosion that characterizes grammaticalization processes may however lead to the loss of this segment. This is the case with certain noun classes in northern varieties of Nyakyusa, whereas in southern varieties of this language with several noun classes a trace of \**i* is found only in the degree of vowel closure of the preceding subject prefix (§2.1). Likewise, zero

allomorphs are found in a few delimitable environments in Sango and Kinga (§2.2).<sup>11</sup> A number of languages of the wider area, such as Ndamba G52, Malila M24 and Tumbuka N21, have a present prefix *ku-/ku-/hu-* and it is as yet unclear whether these forms go back to *i*-presents or have grammaticalized from a different source structure. A case in point is Ngonde (M31d), the Malawian sister of Nyakyusa: in this language a trace of an *i*-present is found in the negative sequence *ti-ku-* (Kishindo 1999), whereas the affirmative present is formed with bare *ku-*, without any trace of /i/. This is probably due to intensive contact with neighbouring Tumbuka. Thus, the historical extent of *i*-presents may once have been wider than what can be observed in the present-day languages.

#### 4. Conclusion

In §2 we have taken a detailed look at the present tense prefixes in twelve Bantu languages that are spoken in a coherent area of southern Tanzania. As pointed out in §3.1, all of these prefixes share two common features. First, all have a high front vowel /i/ in at least one of their allomorphs (hence the term ‘*i*-presents’). Second, in all languages but Matengo and Ndendeule we also find a sequence *ku~ku~hu* (Sango: *ki-*) in one of the allomorphs. In each language, this sequence is identical to the noun class 15 (infinitive) prefix. In Pangwa G64, Kisi G67, Manda-Matumba N11, and Matengo N13 we further find a sequence *ka-/xa-/á-* preceding object markers.

In §3.2 we have proposed that all these present tense prefixes go back to a grammaticalization process from a common source structure, which consisted of a reflex of Proto-Bantu *jikad* ‘dwell, be, sit’ plus an infinitive. In §3.3, by giving a closer look at the geographic distribution of the specific types of *i*-presents, and also taking into account the social history of the language communities, we have proposed that this innovation originated in the languages of Guthrie’s zone G60. Lastly, in §3.4 we have pointed out that our proposal hinges on the synchronic traces of a prefix vowel /i/, which over time might have gone lost in some of the neighbouring languages.

To conclude, our study has shown that taking a fine-grained look at the formal variation of a linguistic expression across languages can provide valuable insights into its origin and spread, even in the absence of diachronic data.

#### Abbreviations

- |        |                     |
|--------|---------------------|
| 1...18 | noun class numbers  |
| 1PL    | first person plural |

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11. This means that it is possible that the zero marking of the present tense in e.g. the Nyanja variety of Manda also stems from the deletion of a previous *i*-formative.

1SG	first person singular
2PL	second person plural
2SG	second person singular
APPL	applicative
AUG	augment
C	consonant segment
COP	copula
FUT	future
FV	final vowel
INF	infinitive
LOC	locative
NEG	negation
OM	object marker
PB	Proto-Bantu
PFV	perfective
PRS	present
SM	subject marker
V	vowel segment

### Appendix: Sources for individual languages

Guthrie-Code (Maho 2009a)	Name	Source(s)
F24	Kimbu	Nurse (2000)
G11	Gogo	Nurse (1979:70-76)
G38	Vidunda	Legère (2011; p.c.)
G51	Pogoro	Nurse (2007)
G52	Ndamba	Edelsten & Lijongwa (2010)
G61	Sango	Heese (1919/20); Kajaan (2012)
G62	Hehe-Kalenga	Crema (1987); Okoa (2012); Robert Botne (p.c.)
G62	Hehe-Dzungwa	Lengson Ngwasi (p.c.)
G63	Bena	Küsters (193?a); Morrison (2011); Oelke (193?); Priebusch (1935)
G64	Pangwa	Stirnimann (1983); Küsters (193?b)
G65	Kinga	Helen Eaton (p.c.); Wolff (1905)
G66	Wanji	Helen Eaton (forthcoming)

G67	Kisi	Gray, m.s.; Ngonyani, m.s.
M22	Inamwanga	Busse (1941)
M23	Nyika	Busse (1960)
M24	Malila	Helen Eaton (p.c.)
M25	Safwa	Helen Eaton (p.c.)
M301	Ndali	Botne (2008); Swilla (1998)
M31	Nyakyusa	Berger (1938); Daniel King (p.c.); Persohn (2017); Schumann (1899)
M31d	Ngonde	Labroussi (1998); Kishindo (1999)
N101	Ndendeule	Ngonyani (2000, 2013); Nurse (2007)
N11	Manda-Matumba	Bernander (2017)
N11	Manda-Nyanja	Bernander (2017)
N12	Ngoni	Ngonyani (2003); Ngonyani & Githinji (2006); Moser (1983); Ebner (1939)
N13	Matengo	Yoneda (2000)
N14	Mpoto	Bernander (field notes); Nurse (2007, 2008)
N15	Tonga	Mphande (2006); Mkochi (2017)
N21	Tumbuka	Kiso (2012)
N30	Chewa	Kiso (2012)
N44	Sena	Kiso (2012); Nurse (2008)
P14	Ngindo	Urmanchieva (2010); Gromova & Urmanchieva (2005)
P21	Yao	Sanderson (1922)

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## Consonant Voicing, Tonal Morphemes, and Downstep in Gwari<sup>1</sup>

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### **Abstract**

This paper studies the downstep phenomenon in Gwari, a West Benue-Congo language spoken in Nigeria and reports that high and mid tones are subject to downstepping in the language. The phenomenon is however blocked in syllables whose onsets contain voiceless obstruents. It is also reported that in the associative construction, the language marks the genitive relation with a floating high tonal morpheme (H-tomorph) that has the capability to dock directly onto the first tone bearing unit in the stem of the rightmost noun, whether that noun has a prefix or not. Downstep then arises when the docking of the tomorph is followed by the loss of a low toned prefix, and other structural conditions are met.

### **Keywords**

downstep, voiceless obstruents, associative constructions, tonal morpheme, West Benue-Congo.

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## Résumé

Cet article traite du phénomène de faille tonale (*downstep*) en Gwari, une langue Bénoué-Congo de l’Ouest parlée au Nigéria et montre que, dans cette langue, les tons hauts comme bas peuvent être sujets à des failles tonales. Ce phénomène est cependant bloqué lorsque l’attaque de la syllabe considérée contient une obstruante sourde. Cet article illustre également le fait que, dans les constructions associatives, le génitif est marqué au moyen d’un morphème tonal flottant haut (tonomorphème-H) susceptible de s’associer directement à la première unité porteuse de ton (UPT) du radical du nom situé le plus à droite, indépendamment du fait que ledit nom comporte ou non un préfixe. Dans ce cas de figure, on observe une faille tonale lorsque l’association du tonomorphème à son UPT s’accompagne de l’effacement d’un préfixe à ton bas et que d’autres conditions d’ordre structurel sont également remplies.

## Mots-clés

faille tonale (*downstep*), obstruantes sourdes, constructions associatives, morphème tonal, Benoué-Congo de l’Ouest.

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## 0. Introduction

Many three-tone languages of West Benue-Congo (WBC<sup>2</sup>) are now being described as operating terraced-level tone systems, whereby a floating low tone triggers the downstepping of the tone following it (Armstrong 1968; Elugbe 1985; Adeniyi forthcoming, 2016)<sup>3</sup>. The aim of this article is therefore to describe downstep (DS) in Gwari and show how it interacts with segmental phenomena in the language.

This article demonstrates that DS is an essential part of the Gwari tone system. It then argues that the associative floating high tonal morpheme (H-tomorph) and consonant voicing both independently function to determine whether DS is realised or not in each context. That consonant voicing interacts with tone is an established fact (George 1970; Hombert 1977; Bradshaw 1999; Kingston 2007; Tang 2008). It has also been demonstrated that beyond the fact that consonant voicing interacts with tone spreading, it also exerts a profound effect on downstep in many WBC languages (Adeniyi forthcoming, 2014, 2015). Further, it has been repeatedly reported that the tones on lexical items do change in some specific grammatical environments due to the docking of floating tones that characterise such grammatical constructions. For instance, Adeniyi

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2. List of abbreviations: 1/3SG = first/third person singular pronoun; AM = associative marker; DS = downstep; DSM = downstepped mid tone; DSH = downstepped high tone; N = noun; REL.PRO = relative pronoun; T = tone; TBU = tone-bearing unit; V = vowel; WBC = West Benue-Congo.

3. In Igala and Yala (Ikom), lost mid tone also triggers the downstepping of following high tones

(2015) shows that when two adjacent nouns are in a genitive relation in Nupe, and when the final tone of the first one is underlyingly a non-H tone, it is often replaced by H in the output. This is shown in the phrase *èfò* ‘chance’ # *èlè* ‘past’ realised as *èfò<sup>H</sup>lé* ‘past chance’ where the word-final mid tone of ‘chance’ is replaced by H in the output. This article therefore aims at providing further support for these trends by describing the mechanism of floating tone docking in Gwari. Specifically, it will be shown that in Gwari, floating tones are capable of interacting intricately with both consonant voicing and downstep simultaneously and of getting downstepped themselves.

Regarding its structure, this article first provides background information on Gwari phonology in §1, an outline of DS in Gwari in §2, and describes the effects of the associative H-tomorph and long-distance tonal effects in DS in §3. Alternative analyses of DS in associative constructions are considered in §4, and the link between contour tones and DS is discussed in §5, while §6 contains a discussion of the role of voiceless consonants in DS realisation. The work is then summarised and concluded in §7.

### 1. Background on Gwari phonology

Gwari is a West Benue-Congo language spoken by about 700, 000 people in Abuja, Nigeria’s capital city and parts of other North Central states of Kaduna, Niger, and Nasarawa (Gordon 2005; Elugbe 2013). Its consonant and vowel phonemes are outlined in Tables 1 and 2.

*Table 1.- Gwari consonant phonemes*

	Labial	Alveolar	Palatal	Velar	Labial-Velar	Glottal
Nasal	m	n	ɲ		ŋw	
Plosive	p b	t d		k g	kp gb	
Implosive	b					
Affricate		ts dz	tʃ ɖʒ			
Fricative	f v	s z	ʃ ʒ			h
Approximant		l	j		w	

*Table 2.- Gwari Vowel Phonemes*

	Front	Central	Back
Close	i		u
Close-Mid	e		o
Open-Mid	ɛ		ɔ
Open		a	

Gwari has five different syllable types including the simple types V (containing single vowels or nasals such as *i* 'still', *bɔ̄.m* 'palm wine'), and CV (consonant-vowel such as *gà* 'give'), as well as types with complex onsets: CNV (consonant-nasal-vowel, such as *kni* 'to select'), CGV (consonant-glide-vowel, such as *bwá* 'to pound'), CNGV (consonant-nasal-glide-vowel, such as *bmwyá* 'to be good') (Hyman & Magaji 1970).

Gwari operates a terraced level three-tone system having low (L), mid (M) and high (H) tones (Hyman & Magaji 1971:15) as well as downdrift and downstep. Although there are no minimal sets of the three tones in Hyman & Magaji's work, one can find sets such as (1a-c) where (1b-c) form a minimal pair and (1a) is in a near minimal distribution with them, and (2a-c) where the three tones contrast in monosyllabic verbs containing relatively similar segmental materials.

- (1a) **gjí** 'eat'
- (1b) **gwō** 'grind'
- (1c) **gwò** 'receive'
- (2a) **mwá** 'beg'
- (2b) **knā**<sup>4</sup> 'fry'
- (2c) **bmà** 'break'

In addition, the different tonal combinations expected of a three-tone systems are found between the three tones of Gwari in bisyllabic nouns. Gwari also has a tone spreading process by which H is realised as a rising contour after L (3a-b) and L is realized as a falling contour after both M and H (see 3c-d and 3e respectively)<sup>5</sup> (Hyman & Magaji 1970).

- (3a) **atʃí** 'needle'
- (3b) **gjìwjě** 'money'
- (3c) **ōzâ** 'person'
- (3d) **dʒkwô** 'horse'
- (3e) **fáknû** 'pot'

Note also that, in cases where a H or a M follows a L, a downdrift is regularly observed. Although the rising contour obscures the presence of downdrift H after L in cases such as (3a-b), the fact remains that the end point is significantly lower than the normal level of H. In a similar vein, the M also downdrifts after L, as M following L in an L-M sequence is clearly perceived as lower than M in other environments.

4. Usually, vowels are phonetically nasalized after nasal consonants in Gwari, but this is not indicated in the data to avoid the use of multiple diacritics that would result.

5. In fact, as discussed below in section 5, the actual realization of L as a falling contours varies according to the tone it follows: it is  $\widehat{ML}$  after a M tone (3c-d) and  $\widehat{HL}$  after a H tone (3e).

## 2. Downstep in Gwari

There are downstepped mid (DSM) and downstepped high (DSH) tones in Gwari. While DSH is perceived as a raised M, DSM is perceived as a lowered M<sup>6</sup>. Basically, H and M become downstepped in Gwari when they are preceded by a floating L. As can be seen in the examples in (4a-b) and elsewhere in this article, the most common source of floating L in Gwari is vowel sequence reduction. Generally, when two vowels form a sequence across word boundaries in Gwari, the noun prefix which is always V2 in a V1#V2 ordering is elided. If the elided noun prefix bears a L, then its tone is delinked and set floating, and any non-L tone directly following it is downstepped. Examples (4a-b) illustrate DSM while (5a-b) illustrate DSH derived in this way. Note that in (5a) H is realised as a rising contour in the input, but as DSH in the output. As noted in section 1, the rise of the input is a result of the spreading of the L preceding it; but once the L get deleted, its spreading on the following H is reversed and what is left is the downstepped form of the H.

### (4) DSM in Gwari verb phrases

- (4a) gwō àmū  
grind sand  
'grind sand'  
→ gwō  $\boxed{^+mū}$ <sup>7</sup>
- (4b) gjí òb̄mjā ògbē  
eat fish mouth  
'eat the mouth of the fish'

### (5) DSH in Gwari verb phrases

- (5a) gjàgā àgjí  
jump up  
'jump up'  
→ gjàgā  $\boxed{^+gjí}$
- (5b) dōkwō ìj<sup>8</sup> kú èdʒé  
horse REL.PRO carry cloth  
'the horse that carried the cloth'

If the tone on V1 (T1) is L and that on V2 (T2) is M ( $\grave{V}1\#\grave{V}2$ ), V2 is still elided, but its tone remains. The principle of tone height hierarchy then applies to delink the L on V1 while the M that remains following V2

6. Adeniyi (2015) reports that DSM is also perceived as a raised L in the speech of some speakers.

7. For the sake of clarity, at any place deemed necessary throughout this paper, the syllables where a phenomenon of downstep applies are displayed in a box.

8. In (5b), the syllabic velar nasal /íj/ is a relative pronoun (REL.PRO) that occurs at the beginning of a relative clause in Gwari (Hyman & Magaji 1970: 47). It can be observed that this relative pronoun is preceded by a L (a mid-falling allotone of L) in the input; but in the output, the L gets delinked and replaced by the word-initial M, whereby the H on the relative pronoun becomes DSH.

9. The final falling tone on the input of this word is usually displaced by the preceding M when it is followed by a non-L in a larger construction. This explains why the word dōkwō bears a M-M tonal sequence in the output. See section 5 for a fuller discussion of this tonal behavior.

elision re-links to V1. Examples (6a-b) show that after this has taken place, the delinked L being a floating tone, triggers the downstepping of the surviving M.  $\bar{V}1\#\bar{V}2$  combination is not attested because available data indicates that H does not occur on noun prefixes in Gwari.

- (6a) dādā íj dù ēwjē → dādā n̄í  $\overset{+}{dù}$ wjē  
 Father REL.PRO cook lizard  
 ‘father (= daddy) who cooked lizard’
- (6b) nú gá ñwā → nú  $\overset{+}{gá}$ wā  
 I give snake  
 ‘I give snake’

Other combinations such as  $\acute{V}1\#\bar{V}2$  (7a-b),  $\bar{V}1\#\bar{V}2$  (8a-b) do not result in DS since they do not involve any floating L.

- (7a) lá ñwjē → láwjē  
 carry lizard  
 ‘carry the lizard’
- (7b) gjí ñwā → gjíwā  
 eat snake  
 ‘eat snake’
- (8a) ápí hō ñmwālō → ápí hōmwālō  
 house is big  
 ‘the house is big’
- (8b) mwā ñsū → mwāsū  
 praise chief  
 ‘praise the chief’

### 3. Associative constructions

Gwari marks the genitive relation with a floating high tonal morpheme (H-tomorph), in a way similar to many other West Benue-Congo languages (Elugbe 2001; Adeniyi Forthcoming, 2014). The tomorph is clearly manifested where the first tone-bearing unit (TBU) in the stem of the second of such nouns in association (N2) bears an underlying L, but is phonetically realised with H. In examples (9-10), this fact is illustrated with N2s that do not have prefixes. In (9a-b) a H-tomorph is postulated and represented by the “H” placed between the nouns in association and is glossed AM meaning “Associative Marker.” Observe specifically that all the tones on the second noun in the string (N2) *gbàdùmà* ‘banana’ and *bègjè* ‘neck’ in (9a-b) are L in the input. But in the output, the first tone in each of the words appears as H, which is evidence that the H-tomorph docks to that TBU and dissociates the L originally there. There is no DS in this case because the tone following the dissociated L is also an L, which is not subject to downstepping in Gwari.

- (9a) dògnú H gbàdùmà → dògnú gbádùmà  
 uncle AM banana  
 ‘uncle’s banana’
- (9b) dādā H bégjè → dādā bégjè  
 father AM neck  
 ‘the father’s neck’

The docking of this tomorph is not felt if N2 has a non-low tone on its initial TBU. Observe that in example (10a) where N2 already has initial H, the docking of the tomorph is not seen. Also in (10b), where N2 only contains Ms, the tomorph is still not seen.

- (10a) ēbí H gbégbé → ēbí gbégbé  
 child AM grass  
 ‘the child’s grass’
- (10b) ēbí H dādā → ēbí dādā  
 child AM father  
 ‘the child’s father’

However, when the docked tomorph displaces a L (thereby setting the L floating), and the tone following the floating L is M or H, then a DS can arise. Examples (11a-d) show that in this situation the L that is set afloat by the docked tomorph triggers the downstepping of a following M or H.

- (11a) ēbí H gbògnū → ēbí gbó<sup>f</sup>gnū  
 child AM squirrel  
 ‘the child’s squirrel’
- (11b) mágàdží H jàmá → mágàdží já<sup>f</sup>má  
 Magaji AM yam  
 ‘Magaji’s yam’
- (11c) òmū H nùbwɔsâ → òmū nù<sup>f</sup>bwɔsâ  
 1SG AM stomach  
 ‘my stomach’<sup>10</sup>

The picture of H-tomorph docking is different when N2 has a noun prefix, especially if the prefix is meant to be elided during vowel sequence reduction. This is because the final vowel of N1 (invariably a TBU<sup>11</sup>) then forms a sequence with the noun prefix of N2, forcing the noun prefix to be elided during vowel sequence reduction (12a-c). For that reason, the docking of the tomorph varies according to the tones of N2. Since H does not occur on noun prefixes, the first two tones of N2 can only be MM, ML, MH, LL, LM or LH sequences respectively. What happens in each of these sequences is considered in examples (12-14).

Examples (12a-b) show what happens when MM and ML sequences follow the tomorph: the M on the noun prefix blocks the docking of the tomorph in both cases. In (12a) the M on the noun prefix of N2 deletes

10. òmū (or its shorter form mū) is the first person singular pronoun interpretable as ‘I’, ‘me’, or ‘my’.

11. The term *vowel* is used interchangeably with TBU in this article for purely expository purposes.

along with the vowel, but the M on the stem remains M, suggesting the tomorph did not dock onto that TBU. The M on the noun prefix also deletes along with the prefix in (12b), but in this case the L appears as M.<sup>12</sup> Example (12c) has an MH sequence following the tomorph. While the M is deleted along with its TBU, it can still not be said that the remainig H is a docked tomorph since the TBU bears an underlying H.

- (12a) ɔzō H ɔfā → ɔzōfā  
beans AM farm  
'beans farm'
- (12b) ɔwā H ābū → ɔwābū  
snake AM meat  
'snake meat'
- (12c) ɔsū H ēbí → ɔsūbí  
chief AM child  
'chief's child'

However, when N2 has a prefix bearing L followed by another L on the noun stem, the tomorph shows up on the first TBU of the stem, but is then downstepped. This is clearly seen in examples (13a-b) where the input N2 in both cases bears only L, and there is, in fact, no linked H in the entire input strings of (13a). Notice that the noun prefix is not realised in the output, while the first TBU of the stem comes out as DSH.

- (13) H-tomorph docking, L dissociation, and Vowel elision
- (13a) ɔmū H òbwà → ɔmū<sup>\*</sup>bwà  
1SG AM nose  
'my nose'
- (13b) ɔkpmī H àzà mánájí → ɔkpmja<sup>\*</sup>zá mánájí  
okra AM discussion good  
'a good discussion about okra'

This is also true in cases where the prefix bears L and the first TBU of N2 stem bears M. In (14a-d) the noun prefixes of the N2s bear L, while the first TBUs of the N2 stems all bear M. Observe that the noun prefixes are not realised in the output. Observe further that in place of the Ms on the first TBU of each stem there is now DSH in the outputs. First the tone in the outputs is DSH because the L set afloat by the elision of the noun prefix triggers downstepping in all cases contemplated in (14a-d). This also results in DS in (14e) except that the first TBU of the stem already has H, and the effect of the H-tomorph docking is not felt.

- (14) H-tomorph docking and vowel elision
- (14a) ɔmū H ɔnā → ɔmū<sup>\*</sup>ná  
1SG AM goat  
'my goat'

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12. As we shall show in section 5, it is the preceding M which triggers the realization of the L as  $\widehat{ML}$  in the first place and eventually displaces it. This is similar to examples (5b) earlier and (21a-d) in section 5.

- (14b) *ɛbí H ɔ̄bmjā* → *ɛbí<sup>†</sup>bmjá*  
 child AM fish  
 ‘the child’s fish’
- (14c) *òwō<sup>13</sup> H òmwī rídʒiā* → *òwō<sup>†</sup>mwí rídʒiā*  
 3SG AM dog wel  
 ‘his dog in the well’
- (14d) *tʃé dògnú H ònā kútá* → *tʃé dògnú<sup>†</sup>ná kútá*  
 throw uncle AM goat stone  
 ‘throw a stone at uncle’s goat’
- (14e) *ɔ̄vji H èdʒé ɛbí* → *ɔ̄vji<sup>†</sup>dʒé bí*  
 thief AM cloth child  
 ‘the thief’s cloth with the child’

#### 4. More on H-tomorph docking in Gwari

H-tomorph docking in Gwari raises a number of questions; first, the floating L that triggers the downstepping of the H-tomorph in examples (13-14) seems to come after the tomorph in the input. Secondly, as it appears, H-tomorph docking is executed based on prior information about vowel elision, but it precedes the elision itself. By this it is assumed that the tomorph exists between the two nouns in association, and consequently has the prefix of N2 directly following it. Since it is the L on the prefix that triggers its downstepping after docking, it may appear as if the tomorph is aware that the prefix is meant for elision, and then jumps over it to dock onto the next TBU.

This can be approached from different analytical perspectives. The first possible approach is the possibility that the tomorph can only dock on a TBU occurring in a syllable with a non-null onset, and its docking precedes vowel elision. The second is that the tomorph first docks onto the prefix, but survives the elision of the prefix (since H tones normally survive the elision of their host in Gwari), and then shifts to the next TBU on its right. A third option to be considered is that the tomorph is not really positioned between the nouns in such a way that it may be constrained by the tones directly adjacent to it, but that it is on a tier of its own and has the freedom to dock wherever the morpheme structure conditions of the language allow. These three options will be assessed one after the other.

##### 4.1 H-Tomorph can only dock onto a TBU with an onset

The assumption that the H-tomorph can only dock onto a TBU occurring in a syllable with a non-null onset will explain why it skips the noun prefix and docks onto the first TBU of the noun stem, replacing the underlying tone on that TBU. Following the docking of the tomorph, the noun prefix gets elided and its L is set afloat (It is the floating L that then triggers the downstepping of the docked tomorph). This proceeds as shown in (15),

13. *òwō* (or its shorter form *wō*) is the third person singular pronoun interpretable as “she/he/it”, “her/him/it”, or “his/her/its”.

where the H to the left of the word boundary represents the H-tomorph, the L to its right represents the tone on the noun prefix and final M stands for the first tone on the stem of a disyllabic noun.

- (15) H#LM → LH → ⊖ \*H → \*H

This accurately predicts the phonetic outputs produced by competent Gwari speakers. But the question needs to be asked of where the tomorph will dock should a speaker choose to avoid vowel elision as is common in careful speech among speakers of many WBC languages (Adeniyi 2015). If it still skips the noun prefix to dock onto the first TBU with an onset, then it could be that the tomorph only docks on TBUs with onset. But if it docks onto the noun prefix, then this approach is falsified. Competent speakers were presented with the utterances in examples (16a-c) and they did not produce them without elision. This then suggests that it is the existence of a syllable onset that determines where the tomorph docks.

- (16a) ḥmū H ḥnā → \*ḥmū ḥnā  
1SG AM goat  
'my goat'  
[only ḥmū<sup>†</sup>nā is possible, see (14a)]
- (16b) ḫbí H ḥbmjā → \*ᬁbí ḥbmjā  
child AM fish  
'the child's fish'  
[only ḫbí<sup>†</sup>bmjā is possible, see (14b)]
- (16c) ḥvji H ḱdʒě → \*ᬁvji ḫ<sup>†</sup>dʒě  
thief AM cloth  
'the thief's cloth'  
[only ḥvji<sup>†</sup>dʒě is possible, see (14e)]

#### 4.2 H-tomorph docks onto the noun prefix but shifts rightward after the elision of the prefix

In this approach, a H-tomorph is postulated between the two nouns in association. The approach then predicts that the H-tomorph docks onto the prefix next to it on the right, replacing the tone on that prefix. This sets the tone originally on the prefix floating. When the prefix gets elided, the tomorph shifts to the next TBU still on the right. This predicts outputs schematised in (17) below, where the H to the left of the word boundary represents the H-tomorph and the strings to the right represent tonal arrangement on a disyllabic noun. Recall that the tomorph does not dock when there is a non-low on the prefix of N2 (see 12a-c), leaving us with only two possibilities because its docking can also not be ascertained when the prefix L is followed by H.

- (17a) H#LL → HL → H  
(17b) H#LM → HM → H

Schema (17a-b) predicts that where the tomorph is followed by strings of LL or LM respectively, the first of which is on a noun prefix, the

phonetic form contains only a single H. In the light of the outputs in examples (13a-b) and (14a-d) above, this prediction is not correct. The outputs in (13a-b) and (14a-d) contain DSH, and not pure H.

The only way to accommodate the realisation of DSH in these utterances is to assume that the L that was dissociated on the prefix in stage two of the derivation continues to exist (that is, it is only delinked; it is not deleted) on the tonal tier, which is proved by the eventual downstepping of the docked tomorph.

#### 4.3 H-tomorph is on a tier of its own

This approach is predicated on the question of whether the H-tomorph must be analytically positioned between the two nouns in association. It assumes that the tomorph exists on a tier of its own, such that it is the separation of tiers that indicates the difference between a tomorph and an underlyingly linked tone. The first implication of this is that since the tomorph is not on the same tier as the linked tones in the utterance, it cannot be said to really precede the L that triggers its downstepping in examples (13) and (14). This therefore predicts a phonetic DSH for following LL and LM sequences as shown in (18a-b).

$$(18a) \text{ LL} \rightarrow \text{LL} \rightarrow \text{LH} \rightarrow \text{L}^* \text{H} \rightarrow \text{H}$$

$$(18b) \text{ LM} \rightarrow \text{LM} \rightarrow \text{LH} \rightarrow \text{L}^* \text{H} \rightarrow \text{H}$$

As shown in the autosegmental derivations in (19a-b), H-tomorph docking precedes both vowel elision and the delinking of the tone on the elided vowel.

$$(19a) \text{ εbí } \text{H } \text{òb̥mjā} \rightarrow \text{εbí}^* \text{b̥mjá} \quad (\text{'the child's fish'})$$

	input	$\rightarrow$	H-Tom. <sup>14</sup>	$\rightarrow$	tone	$\rightarrow$	vowel	$\rightarrow$	output
			docking		delinking		elision		
CV	εbí    b̥mjá	$\rightarrow$	εbí əb̥mjá	$\rightarrow$	εbí əb̥mjá	$\rightarrow$	εbí b̥mjá	$\rightarrow$	εbíb̥mjá
Tone	MH    L    M	$\rightarrow$	MH L    M	$\rightarrow$	MH L	$\rightarrow$	MH L	$\rightarrow$	MH L    M    H
Tom.	H		H		H		H		

$$(19b) \text{ òmū } \text{H } \text{òbwà} \rightarrow \text{òmū}^* \text{bwá} \quad (\text{'my nose'})$$

	input	$\rightarrow$	H-Tom. <sup>14</sup>	$\rightarrow$	tone	$\rightarrow$	vowel	$\rightarrow$	output
			docking		delinking		elision		
CV	ɔmu obwa	$\rightarrow$	ɔmu obwa	$\rightarrow$	ɔmu obwa	$\rightarrow$	ɔmu bwa	$\rightarrow$	ɔmubwa
Tone	L    M    L	$\rightarrow$	L    M L	$\rightarrow$	L M L	$\rightarrow$	L L M	$\rightarrow$	L M H
Tom.	H		H		H		H		

Sample pitch tracks of these utterances are supplied in Fig. 1a-b. In both

14. = Tomorph.

examples, DSH is realised within the range of M. It should be pointed out that the position of DSH in Fig. 1b was underlyingly occupied by L, and the input of the entire utterance contains no linked H.

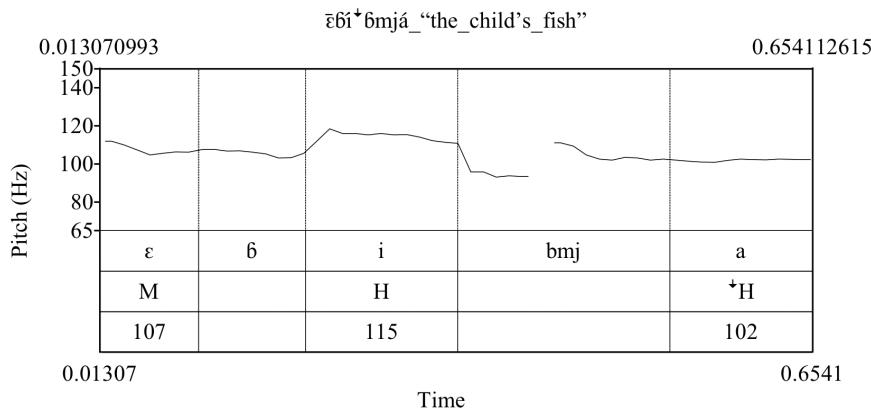


Fig. 1a

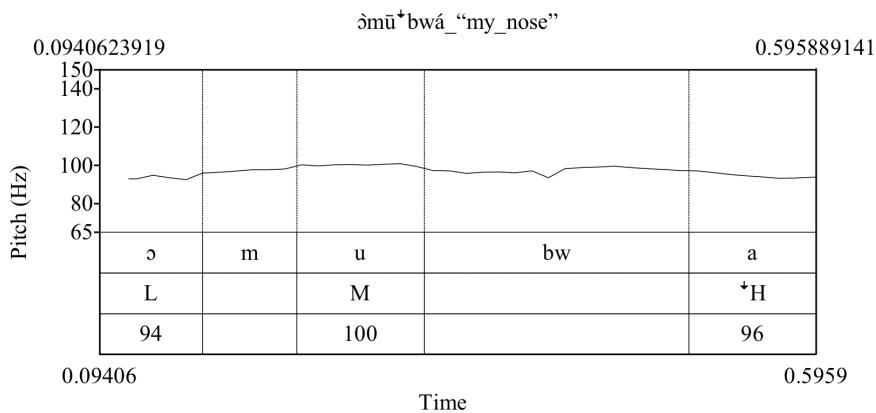


Fig. 1b

#### 4.4 From H-tomorph docking to downstep: a choice

To start with, the assumption that the tomorph docks onto the TBU to its immediate right, from where it may then shift if the TBU gets deleted does not account for cases where the tomorph gets downstepped after docking. This rules out this perspective.

Secondly, by assuming that the tomorph docks only on a TBU occurring in a syllable with a non-null onset, we are able to correctly predict the output of Gwari native speakers. But there is a theoretical problem with this perspective: association lines must cross to achieve the

correct output.

On the other hand, by assuming that the tomorph exists on a tier of its own, from where it is afforded the freedom to dock onto a TBU that is not marked for elision in N2, we are able to account for every instance of H-tomorph docking in Gwari. If after its docking, a preceding low tone is set afloat, then the tomorph appears downstepped.

It must be said at this point that the assumption that the tomorph exists on a tier of its own does not conflict with the assumption that it must only dock on a TBU occurring in a syllable with a non-null onset since available data do not show any instance of the contrary. In fact, the two perspectives are complementary since docking on TBUs occurring in syllables with a non-null onset predicts correct outputs, except for the theoretical problem of crossing association lines. But examples (19a-b) show that assuming that the tomorph exists on its own tier eliminates this problem. Combining the two assumptions therefore allows for the capturing of tomorph docking within the Autosegmental framework.

Tone has been said to possess the capacity to exert influences far beyond its immediate environment (Hyman 2010; 2011; Adeniyi 2015). However, in the case of Gwari, what appears to be a case of long-distant tonal effect is more straight-forwardly accounted for as a case of a tonal morpheme existing on a different autosegment from other tones and not restricted to any specific position. Ghotuo is another WBC language presenting similar tomorph behaviour. Elugbe (2001) and Adeniyi (2015) show that in Ghotuo, the genitive H-tomorph is inherently enabled to scan through linked tones and access tones not adjacent to it such that it raises Ls to M once the L is directly preceded by a word boundary (20a) or another L (20a-b) and displaces Ls directly preceded by non-low tones (20b-c). This is demonstrated in examples (20a-e), where the H-tomorph marks genitive relation along with the H-toned word *sé* “of”. Elugbe (2001) shows that whereas the high tone on *sé* moves rightward in case of the loss of its TBU (20a-c), the tomorph exerts its influence leftward. As a result, following the docking of the tomorph in (20a), the LL sequence on its left appears as MM in the output, a case of tone raising<sup>15</sup>. But in (20b) where it is preceded by a MLL sequence, it raises the first two Ls to M and then displaces the third completely because it is preceded by a non-L. In (20c) where it is preceded by ML sequence, the L is simply displaced by the tomorph, making it come out as H in the output. As shown in (20d-e), nothing happens if the tomorph is directly preceded by a non-L. Elugbe (2001) argues that the tomorph can only dock when it is preceded by a L; it then scans leftward and raises every L along the way to M. It is

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15. The two Ls to the left of the tomorph (**ghòvà**) are both raised to M. The L immediately preceding the tomorph (-và) is raised to M because it is itself preceded by L, while the next L further to the left (**ghò-**) is raised to M because it is immediately preceded by a word boundary.

only the L preceded by a non-L that it displaces ; if there is no such tone then the only evidence of the tomorph is the raising of Ls to M. But once the tomorph is conceptualised as belonging to a different autosegment from the underlyingly linked tones and not tied to any particular position on its tier as has been proposed for Gwari, this “scanning” becomes less of a mystery.

(20) H-Tomorph behaviour in Ghotuo

- (20a) ghòvò                    sé òmò                    →     **ghòvò**sómò  
leg H-tomorph      of child  
‘leg of child’
- (20b) īgbálàkà                    sé òmò                    →     **īgbálákà**sómò  
ladder H-tomorph      of child  
‘ladder of child’
- (20c) ötà                            sé ghèrà                    →     ötá sé ghèrà  
wood H-tomorph        of fire  
‘firewood’
- (20d) ègbā                            sé ògùà                    →     ègbásógwà  
hoe H-tomorph        of farm  
‘hoe of farm’
- (20e) ìní                            sé òrà                    →     ìní sórà  
elephant H-Tomorph    of swamp  
‘elephant of the swamp’

One attraction to this proposal is that it allows for a theoretical distinction between tones that are underlyingly linked and those that are underlyingly floating on the basis of their tiers. This distinction further explains why tomorphs are capable of long-distant effects (they are not particularly tied to any specific position anyway!), whereas underlyingly linked tones are more restricted to their local environment.

## 5. Contour tones and downstep

Apart from vowel elision and H-tomorph docking, downstep can also be triggered by contour tone simplification in Gwari. One way this happens is through the simplification of  $\widehat{H}L$  and  $\widehat{M}L$  falling contours, which induce the lowering of following non-L. As shown in (3c-e) above, the  $\widehat{H}L$  and  $\widehat{M}L$  falling contours are the allotones of the L when it is preceded by H and M respectively. Apparently refraining from the use of the term downstep because the phenomenon was still believed not to be compatible with three-tone systems at that time, Hyman & Magaji (1970:18) reported that when a falling tone becomes simplified before a non-L, that non-L is realised on a lower level. We interpret this as DS in this article. This is illustrated in examples (21a-d)<sup>16</sup>. Notice first that the falling contour falls from the level of the non-L (M or H) preceding it, and equally gets

16. Examples (21b-c) are taken from Hyman & Magaji (1970: 18), but downstep diacritics are inserted in this work to support the discussion.

simplified to the level of that preceding non-L (H in 21a-b, and M in 21c-d). Thus we have a case whereby the preceding non-L dissociates the L entirely. Since the dissociated L still exists as a floating tone in the string, it creates the structural condition for the downstepping of non-Ls directly following the floating L.

- (21a) ḡwō lá jáknū mī → wōlá jáknú <sup>+</sup>mī  
3SG has pot make  
'he has made a pot'
- (21b) jáknū lá bājā → jáknú <sup>+</sup>lá bājā  
pot has break  
'the pot has broken'
- (21c) òzā lá bē → òzā <sup>+</sup>lá bē<sup>17</sup>  
person has come  
'the person has come'
- (21d) òsū gwō òwjí lī → òsū gwō òwjí <sup>+</sup>lī  
chief receive guinea corn is  
'the chief is receiving guinea corn'

Fig. 2 is the pitch track of example (21a); observe that the DSM at the word-final position is 28Hz lower than the M occurring word-initially in the same utterance.

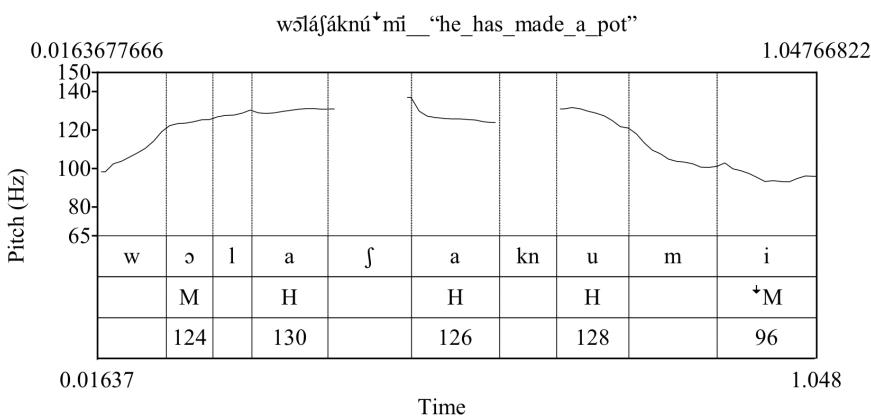


Fig. 2<sup>18</sup>

The simplification of the rising contour can also result in downstep in Gwari. The high tone is realised as  $\widehat{L}H$  rising contours when preceded by L in Gwari. But this  $\widehat{L}H$  contour is simplified when it is immediately followed by a non-L (Hyman & Magaji 1970). However, whereas Hyman

17. The rising contour tone on **bē** remains here because it is not immediately followed by a non-low tone, which is the condition for its simplification.

18. Although the F0 on /ú/ appears to be falling, the fall is not perceptible because its lowest point is still within the range of the H, clearly higher than M.

& Magaji reported that the simplification of the LH rising contour is to M, we show that it is rather to H, albeit a DSH. First it has been sufficiently proved that the rise in rising contours in utterances such as in (5b,11b-c,14e) and (22a-b) below does not get to the level of the H (Hyman & Magaji 1970:15,17; Adeniyi 2015:122-125), which denotes downdrift. This suggests that the simplification of the contour by which the L-component is lost must only leave us with DSH, and not M as Hyman & Magaji proposed. Also, observe that the only L in the input of the utterance in (22a) is part of the rising contour. Following the simplification of *bé* “come,” what we have is <sup>+</sup>*bé* and not *bé* (Fig. 3). This is easily justified by the fact that the simplified contour is followed by an MHM sequence, and the heights of both tones are apparently lower than those of the utterance-initial H and M in Fig. 3. This constraint on post-downstep tones has been variously referred to as “ceiling effect” or “level-setting” and is evidence that in this case the simplified tone is a downstepped tone.

- (22a) wō lá bē dā lūlū → wō lá <sup>+</sup>bē dālūlū  
3SG has come to cotton

‘s/he has come to the cotton’

- (22b) òmū H dògnú → mā dó <sup>+</sup>gnú  
1SG AM uncle  
‘my uncle’

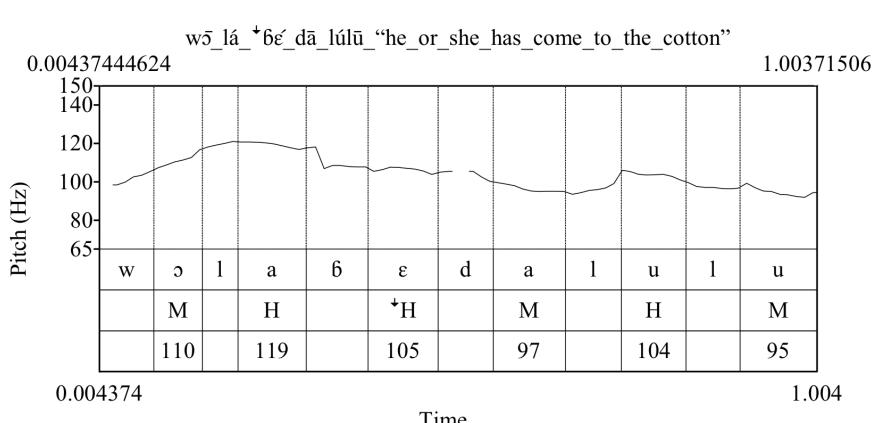


Fig. 3

## 6. Voiceless consonants and DS in Gwari

Up to this point, the occurrence of downstep in Gwari as well as the fact that the genitive tonal morpheme is a floating high tone have been illustrated with utterances in which these phenomena are directly preceded by voiced consonants. The picture is however not as straightforward when these phenomena are preceded by voiceless obstruents. This is because voiceless obstruents are tone-raisers in Gwari. Experiments reported in Adeniyi (2015:129) show that the high and mid tones are 5Hz and 7.9Hz

higher after voiceless fricatives than after voiced fricatives, while M is 9.2Hz higher after voiceless stops than after voiced stops. L is also reported to be 7Hz higher after voiceless stops than after voiced stops. Although this range of tone raising after voiceless consonants may appear relatively marginal, it accounts for the fact that downstep is not consistently realised when directly preceded by voiceless consonants in Gwari. For instance, whereas the DS version of the docked H-tomorph is consistently realised after voiced consonants, it alternates between pure H and DSH after voiceless consonants. All of the six speakers recorded for this study fluctuated between the realisation and absence of DS in the utterances in (23a-b), while they consistently did not realise it in the utterances in (24a-b).

- (23a) *ɛbí H ɔ̄knā ɔ̄mwālɔ̄ → ɛbí [kŋá] ɔ̄mwālɔ̄*  
child AM monkey big  
'the child's monkey is big'
- (23b) *ɔ̄sū H ètnī dná ăpí → ɔ̄sū [tní] dnápí*  
chief AM land inside village  
'chief's land in the village'
- (24a) *àtʃí H ɔ̄kpà → àtʃí[kpá]*  
needle AM long  
'long needle'
- (24b) *kāwú H ɔ̄sá → kāwúsá*  
drought AM season  
'draught during rainy season'

Fig. 4 contains the pitch track of the utterance in (23a) in which rather than downstep the tone on [kŋá] is even 6Hz higher than the preceding H. Fig.5 presents the pitch track of example (24b) in which the tone on [sá] is acoustically only 6Hz lower than the preceding H; perceptually, both tones are more or less on the same level.

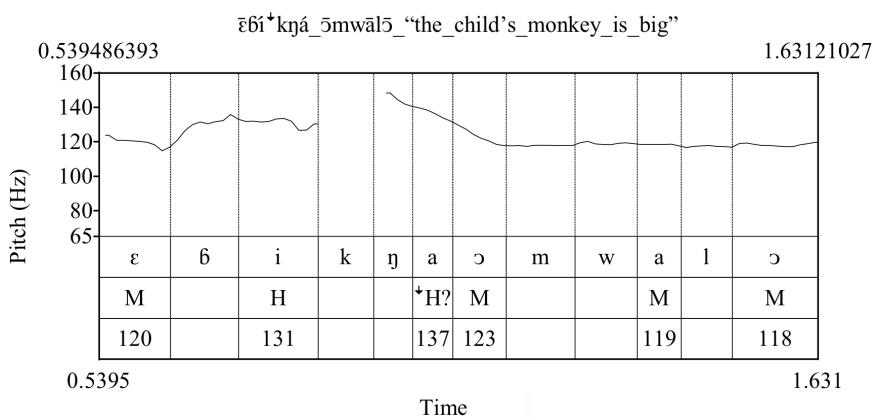


Fig. 4

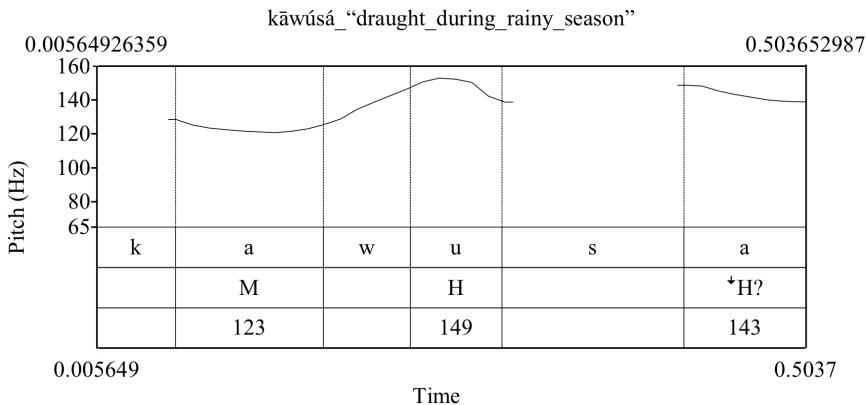


Fig. 5

Example (25a) contains two occurrences of DSM, but the speakers recorded alternated between the DSM and normal M on [kā] due to the influence of the voiceless velar plosive in the onset position of that particular syllable. Also in (26a-b) where the simplification of the rising contour is expected to result in DSH, the speakers alternated between the DSH and normal H.

- (25a) tʃáwó<sup>19</sup> ákáta fí òwó → tʃá<sup>\*</sup>káta fí **wó**  
 tell lie to 3SG  
 ‘tell lies to him’
- (25b) knú òtní → knú **tñí**  
 sell land  
 ‘sell the land’
- (26a) mè já àtʃí ló nápi → mè já **tʃí** ló nápi  
 I want needle in village  
 ‘I want the needle in the village’
- (26b) gjé òpjá gmájí lwé gmá → gjé **pjá** gmájí lwé gmá  
 look moon dark see darkness  
 ‘look at the moon in the dark’

This kind of consonant-downstep interaction has been reported for three-tone systems of WBC by Adeniyi (2015) and specifically for Igala and Yala (Ikom) by Adeniyi (2016).

19. In (25a), the syllable **wó** appears to have been dropped in the output; but notice that it is only its segmental materials that are dropped; its tone (M) appears on the immediately preceding syllable **tʃá**, displacing in the output the L underlyingly borne by that syllable. Thus this is a case of tone stability following the loss of its segmental host. We will not delve into this phenomenon here since it has little or no impact on our result.

## 7. Conclusion

This article has discussed the downstepping of H and M in Gwari. Essentially it has been shown that Gwari marks genitive relation with a H-tomorph which docks on the first TBU with an onset in N2. It was further reported that H-tomorph docking precedes vowel elision and it is when the docked H is immediately preceded by L set afloat during vowel elision that it is downstepped. The phonetic form of this tomorph however depends largely on the state of the glottis of the consonant in the onset of its syllable. While discussing associative construction in Gwari, Hyman & Magaji (1970) make allusion to a historical floating M, which supposedly accounts for the occurrence of “M” in these constructions. However, while this accounts for only a small fraction of their data, they are silent on the surfacing of H in a great majority of these data. It has been shown in this article that what appears as M in these constructions is actually DSH, while the tomorph appears as normal H once the structural condition for downstepping is not met or where a voiceless consonant interferes with DS lowering. The proposal in this article is therefore a more adequate account of tonal behaviour in the associative construction in Gwari.

The existence of DSH was also discussed in the light of contour simplification and it was argued that a  $\widehat{LH}$  rising contour never rises to the level of a normal H. It then follows that its simplification which results in the loss of the L-component of the contour (which is the L that spreads to it in the first place) only results in DSH. How the simplification of the  $\widehat{HL}$  and  $\widehat{ML}$  falling contours result in DS is more straightforward in the sense that the L is completely dissociated by the preceding non-L that spreads to it in the first place. The phonetic loss of the L then creates the structural condition for the downstepping of an immediately following M or H.

The inconsistency of DS in Gwari was explained by arguing that voiceless obstruents have a blocking effect on DS in the language. This is due to the larynx being higher for voiceless obstruents, an effect that usually carries over into the production of following vowels (Ohala 1978; Gussenhoven 2004), which in effect neutralises DS lowering. This finds support in the fact that in cases where DS is realised after voiceless onsets in Gwari, the lowering is usually both perceptually and acoustically less significant than when it takes place after voiced consonant (Adeniyi 2015). This indicates that there is a counter-balancing relationship between voiceless-consonant induced tone-raising and downstepping, and whether or not there is downstep in such environments depends on the outcome of this relationship.

A point that has become obvious from the discussion so far is that DS blocking in Gwari is not total. Indeed there are instances where it is attested in a blocking environment. Coupled with this is the existence of speaker variation in the implementation of DS blocking, which owes to the

counter-balancing effect of tone raising on downstepping in each speech situation. All of this suggests that downstep is a later acquisition in Gwari and that it is yet to fully develop to the level of consistency such as is seen in the classical two-tone systems. That downstep has a tendency to be acquired by tone languages is well noted in the DS literature (Fromkin 1972: 57; Clements 1979: 541), and if this is indeed the case, then one should expect progression in the sense that DS variation in Gwari will gradually disappear over time.

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## **Notes & Documents**

# **Les processus tonals en koyó**

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## **Résumé**

Le koyó est une langue bantoue dans laquelle on remarque la manifestation de quatre processus tonals: la stabilité tonale, l'assimilation tonale anticipatoire, la chute tonale et l'insertion tonale. Le premier processus induit un allongement compensatoire de la voyelle de l'élément suivant. Le second processus ne s'applique qu'à des segments n'ayant pas de spécification tonale. Le troisième processus affecte la voyelle du préfixe de classe. Le quatrième processus, concerne un ton flottant qui émerge dans les conditions syntaxiques particulières.

A travers l'interprétation de ces processus tonals, nous montrons combien la théorie autosegmentale explique bien ces faits de langues.

## **Mots clés**

koyó, bantou, ton, propagation, stabilité, chute, assimilation.

## **Abstract**

Koyó is a Bantu language with four tonal processes: tonal stability, anticipatory tone assimilation, tonal drop and tone insertion. The first process involves a compensatory vowel lengthening of the next element. The second only concerns toneless segments. The third affects the vowel of the classifier and the fourth concerns a floating tone appearing in specific syntactic conditions. Through the interpretation of these processes, we will show that the autosegmental theory is particularly suited to explain these languages facts.

## **Keywords**

Koyó, Bantu, tone, spreading, stability, drop, assimilation.

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## Introduction

Le koyó est une langue bantoue du groupe C<sub>20</sub>. Il est classé dans le sous-groupe C<sub>24</sub> (Guthrie 1970). Cette langue est parlée au Nord de la République du Congo dans le Département de la Cuvette, plus précisément dans le district d’Owando. C'est une langue à « tons » c'est-à-dire qu'elle utilise les variations de hauteur mélodique à des fins de différenciation lexicale et/ou grammaticale. Un mot, dans cette langue, est constitué d'un niveau segmental et d'un niveau mélodique. Les deux niveaux ont une autonomie de fonctionnement. Un terme koyó comme *lekási* ‘feuille’ comprend d'une part un niveau segmental constitué par les sons l, e, k, a, s et i et d'autre part un niveau tonal représenté par la suite des tons Bas, Haut et Bas. Soit

(1)	l	e	k	a	s	i
	B	H	B			

Les deux niveaux, bien qu'autonomes sont liés entre eux par des traits d'association.

Ce travail est une exploitation de notre enquête menée entièrement à Brazzaville en 2016 auprès de locuteurs natifs du koyó :

Informateur	Age	Village d'origine	Sexe
Koumou Juliana	35 ans	Ongóyó	Féminin
Ibara Georges	62 ans	Ongóyó	Masculin
Okombi Arnaud	43 ans	Linnengué	Masculin
ApendiBouya	54 ans	Linnengué	Féminin

Cette étude s'inscrit dans le cadre de l'approche autosegmentale (Goldsmith 1976), selon laquelle les tons et les segments évoluent de manière autonome. La synchronisation est faite au niveau du squelette, ce dernier représentant l'armature sur laquelle se réalisent les unités phoniques. Une position squelettale peut être occupée par une unité de chaque niveau tout comme elle peut rester vide. Une unité phonique peut ne pas avoir d'ancre spécifique au niveau du squelette, elle est alors déclarée flottante. Un autosegment — ton ou segment — n'est réalisable que s'il est relié à une position squelettale effective.

L'objectif général de ce travail est de contribuer à la connaissance du système tonal koyó.

Les questions centrales à l'étude sont les suivantes :

- Quels sont les différents processus tonals en koyó ?
- Comment fonctionnent-ils ?

Cette étude est articulée autour des deux points suivants : (1) l'identification des tons et (2) leur fonctionnement.

### 1. L'identification des tons

Le koyó fait usage de deux tons, haut (H) et bas (B)<sup>1</sup>. Bien d'autres études avant nous sont unanimes sur le nombre (deux) de tons en koyó, (p.ex. Gazania 1972, Elounga 2012). Dans cette langue, le ton a pour support la more. La structure du substantif est : préfixe de classe + racine. La voyelle du préfixe de classe est de ton bas (B). La pertinence de ces tons est établie par les paires minimales en (2) :

(2) La pertinence des tons en koyó

(2a) Racines monosyllabiques

-k    o    'forêt'	/	-k    o    'banane plantain'
 H		 B

-p    a    'bord'	/	-p    a    'écorce'
 H		 B

(2b) Racines polysyllabiques

-b    u    m    a    'fruit'	/	-b    u    m    a    'baobab'
 H        H		 H        B

-ng    o    s    i    'renflement'	/	-ng o    s    i    'liane'
 B        B		 B        H

Les exemples ci-dessus montrent que le ton, en koyó, a une valeur distinctive. Il constitue l'unité suprasegmentale qui contribue à opposer deux éléments de signification. Les tons du koyó peuvent occuper n'importe quelle position dans les racines nominales. Nous avons relevé, dans cette langue, les schèmes tonals H, HH, HB, HBH, HBB, HHB, HHH, B, BB, BH, BHB, BHH, BBB que l'on retrouve dans les exemples (3).

(3) Les différents schèmes tonals dans les racines koyó

(3a) H    -s    ε	'fougère'	-l    o	'épine'
 H		 H	
(3b) HH    -h    u    l    i	'saleté'	-b    a    ng    u	'joue'
 H        H		 H        H	
(3c) HB    -h    u    l    i	'fraîcheur'	-b    ε    l    u	'lèvre'
 H        B		 H        B	
(3d) HBH    -k    u    l    u    l    u	'obscurité'	-b    ε    b    ε    ng    u	'menton'
 H        B        H		 H        B        H	

1. Seul le ton haut (') est noté dans les transcriptions associant les segments au ton.

(3e) HBB -ng o	1 u m a	'jus de palme'	-ngɔ	k ɔ t ɔ	'genou'
	H   B   B		H   B   B		
(3f) HHB -s	ɔ s ɔ n i	'plante sp.'	-k a t a k u	H H B	'singe sp.'
	H   H   B		H   H   B		
(3g) HHH -p	a k a t a	'gifle'	-k o l o ng o	H H H	'proverbe'
	H   H   H		H   H   H		
(3h) B -k o		'pied'	-nga		'maladie'
	B		B		
(3i) BB -b u n u		'machette'	-s a b i	B B	'doigt'
	B   B		B   B		
(3j) BH -b a ndz i		'côte'	-t ɔ ng u	B H	'nombril'
	B   H		B   H		
(3k) BHH -p a b e l e		'arrière-petit-fils'	-s a s a nd a	B H H	'araignée'
	B   H   H		B   H   H		
(3l) BHB -p u ng i s i		'chauve-souris'	-k o l i k i	B B	'pétrin'
	B   H   B		B   H   B		
(3m) BBB -k u k i l i		'porte'	-b ɔ ndz ɔ l ɔ	B B B	'domination'
	B   B   B		B   B   B		

Ces exemples montrent que les tons en koyó font partie inhérente des racines lexicales.

## 2. Les processus tonals

Nous avons relevé, en koyó, des processus tonals résultant des tons ponctuels et d'autres résultant des tons flottants.

### 2.1 Processus liés aux tons ponctuels

Un ton ponctuel est une unité suprasegmentale associée à une Unité Porteuse de Ton. Nous avons relevé trois processus tonals liés aux tons ponctuels en koyó : la stabilité tonale, la chute tonale et l'assimilation tonale anticipatoire.

#### • Stabilité tonale

Lors de la formation de *glides*<sup>2</sup>(ou semi-consonnes) et de l'élosion<sup>3</sup>

2. Dans cette langue, lorsque les voyelles *i* et *o* sont suivies d'une autre voyelle de timbre différent dont elles sont séparées par une limite de mot, elles se réalisent respectivement comme le *glide* correspondant, à savoir [j] et [w].

3. En koyó, en dehors des cas qui entraînent la formation de *glides* évoqués dans la note précédente, lorsque deux voyelles se suivent en frontière de mot, la première tombe.

vocalique en koyó, le ton initialement associé à la voyelle transformée ou élidée reste stable. Il en résulte une longueur vocalique de la voyelle suivante liée au phénomène d'allongement compensatoire régressif que Beltzung (2008 : 3) formalise ainsi : « un segment s'efface et libère son unité squelettale, qui est prise pour cible par un segment adjacent ». Ce phénomène est aussi relevé dans bien d'autres langues du groupe C20 à l'instar du mbochi de Boundji (Aborobongui 2013 : 105).

Il s'explique comme une double association de V<sub>2</sub> qui prend la more de V<sub>1</sub> pour cible. C'est ce qui ressort de (4) et (5) :

(4) La formation des *glides* en koyó

Forme sous-jacente <sup>4</sup>		Forme réalisée	Sens
B H     li-bo CL.5-tête	#	B HB      li- nEE CL.5-gros	→ [ibwīinéε] 'grosse tête'
B B     ma-ko CL.6-pied	#	B HB      ma-tano CL.6-cinq	→ [akwaatáno] 'cinq pieds'
B B B       mo-sabi CL.3-doigt	#	B H B       mo-sisu CL.3-autre	→ [osabyoosísu] '[un] autre doigt'
B H B       ba-kani CL.2-notable	#	B H     ba- tsɔ CL.2-tout	→ [akányaaatsɔ] 'tous les notables'

Le processus phonologique de formation des *glides* est représenté comme suit pour le syntagme *ibó inéε* 'grosse tête' :

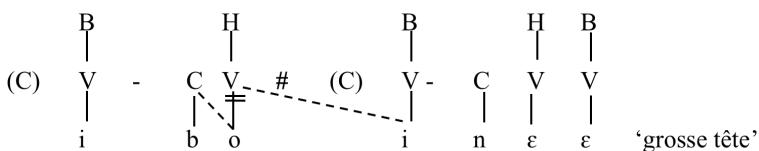


Figure 1.

4. Les formes sous-jacentes comportent des préfixes de classe qui renvoient à un système de classification nominale dans les langues bantoues proposé par Bleek (1851) et adopté depuis dans l'étude des langues bantoues. Dans les formes réalisées, en koyó comme dans beaucoup de langues du groupe C20, la position consonantique de plusieurs de ces préfixes est flottante et ne se manifeste que dans les formes d'accord. Cela est dû à une chute historique des consonnes des préfixes de classe nominale.

## (5) L'élation en koyó

Forme sous-jacente		Forme réalisée	Sens
B BB       bi-eka CL.8-chose	H # ba CL.8-de	B BB       bo-kuli CL.14-richesse	→ [bebabóokuli] <sup>5</sup> ‘argent’
BH B       mo-ana CL.1-enfant	B # ya CL.1-de	B HB       mo-yutu CL.1-femme	→ [mwánooyúru] <sup>6</sup> ‘fille’
B BB       le-kube CL.11-arête	B H B       li-hóko CL.5-un		→ [lekúbiihóxó] ‘une arête’
B B H       li-sobe CL.5-canard	B HB       li-sisu CL.5-autre		→ [isobíísísu] ‘[un] autre canard’

Le processus phonologique d'élation vocalique est représenté figure 2 à travers le syntagme *bieka bá okuli* ‘argent’:

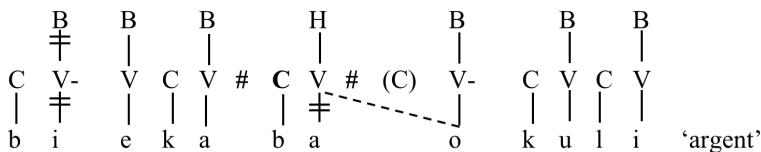


Figure 2.

Les représentations en (i) et en (ii) ci-dessus montrent que la distribution tonale en koyó se fait selon le modèle d'un ton par more. La modulation tonale suppose d'une part, la conservation de la position V<sub>1</sub> et d'autre part, l'allongement de V<sub>2</sub> sur la position de V<sub>1</sub> flottante.

- Chute tonale

La chute tonale est motivée, en koyó, par les processus phonologiques de formation de *glides* et d'élation à la frontière morphologique entre le préfixe de classe et la racine. A cette frontière morphologique, le ton du préfixe de classe tombe avec son support segmental. En fait, il s'agit d'une chute de position.

5. Le phonème occlusif sourd *k* du koyó est réalisé comme une consonne fricative vélaire sonore [χ] en position intervocalique dans les racines nominales ou verbo-nominales. La consonne *b-* de *bá* ne tombe pas parce que c'est un préfixe d'accord dont le contenu segmental est déterminé par le préfixe nominal du nom *bieka*. Par contre, la consonne *b-* de *bo-* tombe parce qu'elle est flottante ; le préfixe proto-bantou *bo-* se réalise *o-* en koyó.

6. Le phonème occlusif dental sourd *t* est réalisé comme une consonne liquide vibrante sonore [ɾ] en position intervocalique dans les racines nominales ou verbo-nominales.

Les exemples (6) illustrent la disparition du ton B du préfixe de classe à l'issue de la formation de *glides* et d'une elision vocalique.

(6) La chute tonale en koyó

	Forme sous-jacente	Forme réalisée	Sens
(6a)	B HB       bo-ato CL.14-pirogue	→[bwáro]	'pirogue'
	B HB       mo-eti CL.3-étoile	→[mwéri]	'étoile'
	B HH       mi-ese CL.4-jour	→[myésé]	'jours'
(6b)	B HB       ma-ato CL.6-pirogue	→[máro]	'pirogues'
	B HB       ma-ina CL.6-dent	→[mína]	'dents'
	BHB       li-isu CL.5-œil	→[lísu]	'œil'

Ces deux processus phonologiques sont représentés de la manière suivante à travers les mots *boáto* 'pirogue' et *maína* 'dents' (figures 3 et 4) :

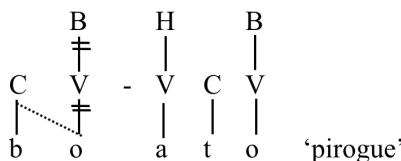


Figure 3.

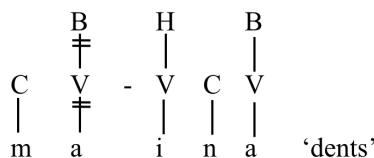


Figure 4.

• Assimilation tonale anticipatoire

L'assimilation tonale anticipatoire concerne les morphèmes d'extension. Ceux-ci sont, en général (Meeussen 1961, Bastin 1986), dépourvus de spécification tonale. Ces morphèmes sont au nombre de quatre en koyó:

1. le causatif *-is-* : le sujet fait faire l'action exprimée par le verbe;
2. le réciproque *-in-* : l'action du verbe produit un effet mutuel;
3. le passif *-im-* : le sujet subit l'action du verbe ;
4. l'itératif *-it-* : ce suffixe indique une répétition de l'action ou de l'état exprimé par le verbe.

Les morphèmes d'extension sont illustrés en (7) :

(7) Les formes verbales issues des morphèmes d'extension

	Racine	Extension	Forme sous-jacente	Forme réalisée	Sens
(7a)	B   -lib- 'couvrir'	-is- →	B B     e-lib-is-a CL.7-couvrir-CAUS-VF	[elibisa]	'faire couvrir'
	H   -sa- 'cultiver'	-is- →	B H B       e-sa-is-a CL.7-cultiver-CAUS-VF	[esáasa] <sup>7</sup>	'faire cultiver'
(7b)	B   -məm- 'caresser'	-in- →	B B B       e-məm-in-a CL.7-caresser-RECIP-VF	[eməmina]	'se caresser [l'un l'autre']
	B   -sə- 'médire'	-in- →	B B B       e-sə -in-a CL.7-médire-RECIP-VF	[esəena]	'médire l'un de [l'autre']'
(7c)	H   -sɔŋ- 'choisir'	-im- →	B H B       e-sɔŋ-im-a CL.7-choisir-PASS-VF	[esónguma] <sup>8</sup>	'être choisi'
	H   -ta- 'voir'	-im- →	B H B       e-ta-im-a CL.7-voir-PASS-VF	[etáuma]	'être vu'
	B   -lib- 'couvrir'	-it- →	B B B       e-lib -im-a CL.7-couvrir-ITER-VF	[elibira]	'recouvrir'

7. En koyó, après une racine verbale monosyllabique, la voyelle *i* des suffixes des extensions *-is-* et *-in-* se réalise comme une copie de la voyelle de la racine.

8. Placée devant la consonne nasale labiale *m*, la voyelle *i* du suffixe de l'extension se réalise *u* en koyó. L'apparition de *u* résulte de la propagation du trait [labial] de la consonne de l'extension sur la position de la voyelle. On rappellera qu'un trait peut se répandre d'une consonne vers une voyelle ou vice versa, phénomène qualifié d'« assimilation transcatégorielle » par Clements (1993 : 109).

B   -kang-	-it-	→	B B B       e-kang-it-a CL.7-fermer-ITER-VF	[ekangira]	'refermer'
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Les morphèmes d'extension acquièrent leur ton par anticipation du ton de la voyelle finale du lexème verbal. Meeussen a formalisé ce phénomène de la manière suivante :

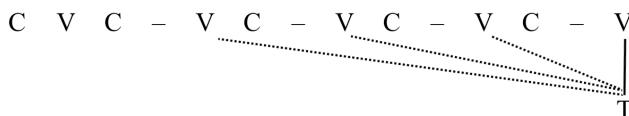


Fig. 5. Assimilation tonale anticipatoire des voyelles d'une extension verbale par le ton de la voyelle finale du verbe (Meeussen 1961, 1967, in Hyman 2005 : 20)

On voit que le ton (H ou B) se propage à partir de la finale du verbe jusqu'à la voyelle (ou aux voyelles) des extensions précédant cette voyelle finale. C'est ce qui ressort des exemples (8) :

(8) L'assimilation tonale anticipatoire

	Forme sous-jacente	Forme réalisée	Sens
(8a)	B B B       ba-yamb-in-a PV-embrasser-RECIP-VF	→ [bayambina]	'ils s'embrassent'
	B H B       a- ho-is-a PV-parler-CAUS-VF	→ [ahóɔsɔ]	'il fait parler'
	B B B       a- ting-it-a PV-attacher-ITER-VF	→ [atingira]	'il rattache'
(8b)	B B H       ba- yamb-in-i PV-embrasser-RECIP-VF	→ [bayambíni]	'ils se sont embrassés'
	B H H       a- sul-im-i PV-surprendre-PASS-VF	→ [asúlúmú]	'il a été surpris'
	B B H       a- ting-it-i PV-attacher-ITER-VF	→ [atingíri]	'il a rattaché'

Ce phénomène de propagation est représenté dans les figures 6 et 7 par un trait oblique en pointillé :

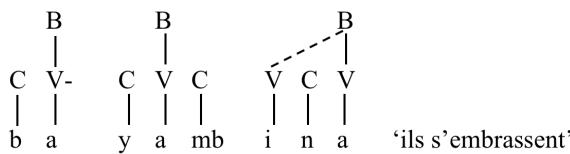


Figure 6.

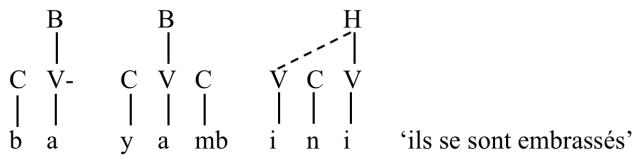


Figure 7.

## 2.2 Processus tonal lié au ton flottant : la métatonie

La métatonie est un phénomène de variation tonale consistant en la suppression du ton ponctuel de la voyelle finale d'un item par l'insertion du ton flottant qui émerge dans des conditions syntaxiques particulières.

Un ton flottant est une unité suprasegmentale dépourvue de segment propre. D'après Goldsmith (1990 : 20), l'existence de tons flottants constitue un argument supplémentaire en faveur de l'indépendance entre la ligne des tons et celles des segments puisqu'elle indique qu'un ton peut exister sans aucun support. Le koyó fait usage du ton flottant haut à la frontière entre un verbe et son complément comme dans beaucoup de langues bantoues (Schadeberg 1995 ; Hyman & Lionnet 2011).

Le ton bas de la voyelle finale du verbe est automatiquement supprimé après l'insertion d'un ton haut flottant. Celui-ci, une fois associé à la finale du verbe, fonctionne comme un ton lexical. Il est soumis aux principes de fonctionnement tonal de la langue. C'est ce que montrent les exemples (9).

- (9) L'insertion du ton flottant (H) en koyó

- (9a) Formes verbales non suivies d'objet

Forme sous-jacente	Forme réalisée	Sens
B B B       a- yamb-a PV-recevoir-VF	→[ayamba]	'il reçoit'
B H B       a- lamb-a PV-préparer-VF	→[alámba]	'il prépare'

B B B		
a-tong-a	→[atonga]	'il construit'

PV-construire-VF

## (9b) Formes verbales suivies d'objet

B H B	B B B	
a-lamb-a	# bi-eka	→ [alámbábera] 'il prépare de la nourriture'

PV-préparer-VF CL.8-nourriture

B B B	B B	
a-yamb-a	# N-mbengo	→ [ayambámbengo] 'il reçoit le colis'

PV-recevoir-VF CL.9-colis

B B B	H B	
a-tong-a	# N-ndako	→ [atongándaxo] 'il construit la maison'

PV-construire-VF CL.9-maison

Cette insertion est représentée, figure 9, par un trait pointillé :

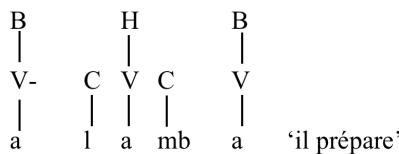


Figure 8.

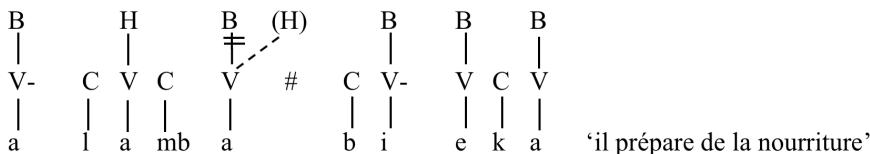


Figure 9.

### Conclusion

En conclusion, l'on retiendra que le koyó a deux tons ponctuels : Haut et Bas. Ils sont distribués suivant le modèle d'association un à un pour lequel le nombre de tons doit être égal à celui de leurs unités porteuses. Les positions des classificateurs nominaux sont toujours occupées par le ton B, tandis que les extensions n'ont pas de tons. Elles reçoivent leurs tons par anticipation du ton de la finale du verbe. La langue dispose aussi d'un ton H flottant qui n'émerge que dans un contexte syntaxique particulier (présence d'objet). Ces données pourront être utilisées avec profit pour de futurs travaux de description du koyó ou dans le cadre d'études comparatives des langues bantoues.

### Conventions de notation et abréviations

[ ]	transcription phonétique	CL :	préfixe de classe nominale
-	: frontière de morphème	VF :	voyelle finale du verbe
#	: frontière de mot	H :	ton haut
→	: se réalise	ITER :	itératif
†	: chute de segment	PASS :	passif
B :	ton bas	PV :	préfixe verbal
C :	consonne	RECIP :	réciprocatif
CAUS :	causatif	V :	voyelle

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**Comptes-rendus de lecture**

**Book Reviews**

Sokhna BAO DIOP, *Le baynunk guñaamolo, une langue du sud du Sénégal : Analyse phonologique, morphologique et syntaxique*, Paris, L'Harmattan, 2017, 392 p.

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L'ouvrage de Sokhna Bao-Diop (dorénavant SBD), actuellement enseignante-rechercheure à l'Université Gaston-Berger de Saint-Louis du Sénégal, est une version remaniée de sa thèse de doctorat, *Description du baynunk guñaamolo, langue minoritaire du Sénégal : analyse phonologique, morphologique et syntaxique*, soutenue à Paris le 4 mars 2013.

Cet ouvrage de 373 pages, publié en avril 2017 chez L'Harmattan sous le titre *Le baynunk guñaamolo, une langue du Sénégal : Analyse phonologique, morphologique et syntaxique*, présente une description générale et aussi complète que possible de la grammaire du baynunk guñaamolo, langue atlantique parlée par environ 6 220 locuteurs en Casamance, au sud du Sénégal (*Ethnologue* 2006 : 26).

L'ouvrage est organisé en 5 parties (v. p. 43). Après une première partie de 69 pages (p. 45-114) consacrée à la phonologie et à la morphophonologie, une deuxième et une troisième parties traitent respectivement de la morphologie nominale (87 pages, p. 115-202) et verbale (69 pages, p. 205-274). La quatrième partie (19 pages, p. 277-296) est consacrée aux autres catégories grammaticales, plus précisément les prépositions et les adverbes et enfin la cinquième partie (64 pages, p. 299-363) traite de syntaxe.

En plus des 5 parties mentionnées ci-dessus, on trouve aussi : (i) divers éléments liminaires en début d'ouvrage (p. 7-26) – remerciements (p. 7-8), préface (p. 9-10), résumé (p. 11), table des matières (p. 13-20), liste des figures et tableaux (p. 21-22), abréviations (p. 23-26), (ii) une partie introductory d'environ 16 pages (p. 27-43) qui traite notamment de la situation actuelle du parler décrit et de son contexte historique, (iii) une conclusion de 3 pages (p. 365-367) qui propose une synthèse portant sur la phonologie, la morphologie et la syntaxe de l'idiome considéré ; (iv) une bibliographie de 4 pages (369-373) suivie (v) d'une annexe non paginée mentionnée dans la table des matières (p. 20) mais pas dans le plan du livre (p. 43).

Le livre de SBD fournit ainsi la base indispensable pour tout travail d'un point de vue typologique et fonctionnel. Il est présenté avec soin, agréable à consulter, et de nombreux tableaux (31 au total) en facilitent la compréhension. Les exemples illustratifs (en tout 905) sont abondants, bien choisis et bien présentés, avec des gloses tout à fait conformes aux normes actuelles en linguistique descriptive ou typologique.

En ce qui concerne le contenu, l'auteure manifeste une maîtrise certaine de la méthodologie de la description des langues à traditions orales. Les questions abordées sont bien celles qu'on peut s'attendre à trouver discutées dans un ouvrage de ce genre.

Une lecture linéaire de l'ouvrage permet notamment de faire émerger les points suivants :

- Dans sa phonologie, l'auteure a inventorié 19 phonèmes consonantiques (tableau 8, p. 80) et 20 phonèmes vocaliques dont 10 brefs (tableau 9, p. 89) et 10 longs (tableau 10, p. 94) ;
- À propos de la morphologie nominale, SBD présente pour le guñaamolo 29 préfixes de classes dont 17 de singulier et 12 de pluriel ;
- Dans son traitement de la morphologie verbale, SBD distingue les formes verbales simples et les formes verbales analytiques. On peut aussi noter que le verbe en guñaamolo n'est pas concerné par l'accord de classe ;
- Dans la partie consacrée à la syntaxe, SBD traite des types particuliers de prédications et de modification de la valence verbale. Elle étudie d'abord la structure de la phrase simple (ordre des constituants) en guñaamolo, puis celui de la phrase complexe. Dans l'étude de la phrase complexe, il est question des subordonnées relatives, complétives et circonstancielles ainsi que de la coordination. SBD aborde également les questions liées à la topicalisation, à la focalisation et à l'interrogation.

Comme aucun ouvrage n'est jamais parfait, celui-ci n'est pas exempt de défauts. Cependant, je tiens à souligner que ce compte-rendu n'est ni un procès, ni un règlement de compte vis-à-vis de l'auteure, mais plutôt une contribution scientifique qui pourra éventuellement être utilisée par SBD pour une réédition de son ouvrage.

Le livre de Bao-Diop manifeste beaucoup de légèretés et de confusions. Une des légèretés porte sur la prise en compte des études antérieures sur le guñaamolo (p. 38-39). En effet, l'auteure n'a pas mentionné des travaux (notamment des mémoires de maîtrise et de DEA) sur le guñaamolo qui existaient déjà au Département de Linguistique de l'Université Cheikh Anta Diop. Parmi ces travaux, on peut citer Bodian (2007, 2008, 2015<sup>1</sup>), et Ngom (2007), dont SDB a très vraisemblablement rencontré les auteurs (étudiants à l'Université de Dakar) lors de ses séjours de terrain au Sénégal. On constate aussi de nombreuses omissions de travaux existants sur la langue baynunk en général : en gúbaher (parler de Djibonker), les informations mentionnées sur ce parler à la page 35 de ce livre ont probablement

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1. La thèse de Bodian (2015) est également une description générale du baynunk guñaamolo. Elle a été soutenue après celle de SBD mais nettement avant la publication du présent ouvrage (2017) qui aurait gagné à l'inclure au moins en bibliographie.

été tirées de Biagui (2013 : 17) sans que l'auteure ne prenne le soin de mentionner sa source ; toujours pour le gúbaher, Cobbinah (2010) n'est pas non plus cité ; pas de trace non plus des travaux de Goudiaby (2009, 2010<sup>2</sup>) sur le gújáahár.

Au niveau de la phonologie, les analyses de SBD souffrent parfois d'un manque de rigueur et de cohérence, en particulier en ce qui concerne les réalisations longues des consonnes et des voyelles. Ainsi, après avoir inventorié 19 phonèmes consonantiques (p. 80), l'auteure, en conclusion du livre (p. 365) avance que « 13 [de ces phonèmes] sont susceptibles d'être géminés ». Cependant, SBD refuse à ces géminées le statut de phonème, car (p. 78) « elles ne sont jamais admises devant voyelle longue et jamais à l'initiale. Ce qui ne nous permet pas de les considérer parmi les phonèmes de la langue ».

En revanche, en ce qui concerne les phonèmes vocaliques, SBD en recense 10 brefs et 10 longs et elle considère donc que les voyelles longues sont des phonèmes au même titre que leurs correspondantes brèves (*Cf.* tableaux 9 et 10, p. 89 et 94). Le fait que les voyelles longues aient un statut phonématisé semble lié au fait qu'elles apparaissent en position interne et aussi que certaines voyelles longues apparaissent en position finale (*oo*, *ii*, *aa*). Cependant, cette analyse est doublement sujette à caution :

1. En ce qui concerne la longueur vocalique en position finale, les données fournies par SBD ne semblent pas consensuelles. En effet, si l'on considère les mots *fí* « toi » (p. 90) et *saahaa* « mouton » (p. 93), (i) d'autres auteurs (p.ex. Bodian 2015 : 327 et 354) relèvent pour le gunyaamolo une voyelle brève (soit *fi* et *saaha*) pour ces mêmes termes ; (ii) SBD elle-même n'est pas cohérente à ce niveau puisque, dans les ex. 23 et 874 (p. 110 et 354) de son ouvrage, le mot *saaha* comporte une voyelle finale brève. L'existence de voyelles longues finales en guñaamolo ne semble donc pas avérée ;
2. Par ailleurs, on ne voit pas trop pourquoi les voyelles longues auraient un statut de phonème dans la langue alors que, comme on l'a vu plus haut, ce statut est refusé aux consonnes longues (géminées) qui, pourtant, apparaissent essentiellement dans les mêmes contextes positionnels (c'est-à-dire [quasi] exclusivement à l'intérieur des mots) que les voyelles longues. De fait, si, comme le dit SDB (v. ci-dessus), une consonne longue n'est jamais admise devant une voyelle longue, cela revient finalement à dire qu'une voyelle longue n'est jamais admise à la suite d'une consonne longue. Quels sont donc les arguments qui restent pour conférer le statut de phonème aux voyelles longues et pas aux consonnes longues ? Ces arguments ne semblent pas clairs dans l'analyse proposée par SBD.

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2. Il est par contre plus compréhensible que la récente (2016) thèse de Goudiaby sur le même parler n'ait pu être prise en compte par SBD.

Un autre point faible de ce livre est la morphophonologie. À mon sens, cette partie devrait probablement constituer un chapitre à part de l'ouvrage, à la charnière entre la phonologie et la morphologie.

Dans ce livre, seulement quatre faits proprement morphophonologiques (i) chute de certaines consonnes et (ii) voyelles, (iii) affaiblissement et assimilation consonantiques et (iv) traitement de la voyelle de la marque du démonstratif (p. 113-114) sont mentionnés (p. 105-114), ce qui semble insuffisant pour rendre compte précisément d'une langue à la morphologie aussi dense et riche que le baynunk. De fait, cette partie de l'ouvrage constitue une sorte de maillon faible. Ainsi, pour soutenir que la semi-voyelle /j/ chute quand elle est en contact avec une voyelle, SBD ne se fonde apparemment que sur un seul cas attesté (ex. 22 p. 109), à savoir la forme réduite *guroj* de *guyuroj* « ce n'est pas » (avec *y* = [j]) :

là aussi il se passe des choses assez intéressantes. Nous assistons d'abord à une première élimination de la voyelle [u] de la marque de négation (qui est généralement –Vr). Et donc, pour éviter la rencontre entre la semi-voyelle [j] et le son [r], nous assistons à une nouvelle chute. Celle de la semi-voyelle du radical, ce qui fait que nous nous retrouvons avec *guroj* et non *gujroy* (SDB 2017 : 109)

Cependant la forme pleine *guyuroj* semble aussi largement attestée (v. ex. 266a p. 251 dans Bodian 2015) et à partir des données fournies, on ne peut pas comprendre comment ces deux formes alternent et quels sont les mécanismes qui sous-tendent cette alternance.

Par ailleurs, à propos de l'affaiblissement de consonne à l'intervocalique, SBD (p. 110) postule qu'il y a un affaiblissement d'une consonne lorsqu'elle est entre deux voyelles, en se fondant sur l'existence d'une variante intervocalique *-hu* pour le connecteur de génitif, réalisé *-ku* dans d'autres contextes. Cette analyse n'est pas plausible. En effet l'alternance entre *-ku* et *-hu* n'est visiblement pas fondée sur un contraste entre position intervocalique vs. autres positions. Ainsi, *-ku*, s'adjoint à des lexèmes nominaux ou verbaux (i) dont la consonne finale peut chuter : *díg+ku* donne *dikú* « maison de » (v. ex. 8 p. 105, *-ku* est ici en position intervocalique), ou (ii) terminés par une nasale : *udikam+ku* donne *udikayku* « femme de » (v. ex. 19 p. 108). Quant à *-hu*, il apparaît dans les autres cas notamment (i) lorsque le lexème nominal est à finale vocalique : *saaha+hu* donne *saahahu* « mouton de » (v. ex. 23, p. 110), ou (ii) qu'il est terminé par une consonne latérale : *gusol+hu* donne *gusolhu* « habit de » (v. ex. 24 p. 110). On notera que dans *gusolhu*, *-hu* apparaît après une consonne et non à l'intervocalique, ce qui infirme l'analyse de SBD.

En syntaxe, concernant la focalisation, SBD (p. 351) soutient que le morphème qui exprime la focalisation est *g-*. Pourtant p. 352, ex. 865, on note un autre morphème de focalisation *may*, et on peut se demander lequel des deux morphèmes marque réellement la focalisation ? En examinant l'exemple 865 on a l'impression que c'est plutôt *may* qui est spécialisé

dans la focalisation et que le morphème *g-* n'est rien d'autre qu'un pronom relatif équivalent à « qui » en français.

D'une manière générale, le baynunk *guñaamolo* tel qu'il est décrit dans ce livre, ne présente pas de particularités typologiques exceptionnelles par rapport aux langues les plus connues du groupe atlantique. Néanmoins, son étude offre indéniablement des informations utiles pour une meilleure connaissance des langues de ce groupe et pour leur étude comparative.

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**Sabine LITTIG, *Linguistische Beschreibung des Kolbila. Eine Adamawasprache der Nordregion Kameruns*, Cologne, Rüdiger Köppe Verlag, 2016, 227 p.**

par Aurore MONTÉBRAN

Llacan-Inalco

L'ouvrage de Sabine Littig (dorénavant SL), dont le titre signifie en français « Description linguistique du kolbila, une langue adamaoua de la région nord du Cameroun », s'attache à fournir un aperçu global – c'est-à-dire une première description d'ensemble – de la langue. Il s'inscrit dans une dynamique de documentation des langues adamaoua, et traduit la volonté de rendre disponible des données sur une langue en danger. Un des buts clairs de l'auteure est aussi de s'attaquer à la question problématique de la classification du kolbila dans l'un ou l'autre des sous-groupes des langues adamaoua.

L'ouvrage commence par une introduction (p. 1-39) qui fournit des données socio-ethno-linguistiques sur les Kolbila, leur langue et leur mode de vie, définit le cadre théorique du travail effectué et précise la méthodologie d'obtention des données.

En ce qui concerne sa classification, le kolbila a été rattaché au groupe adamaoua par les travaux de Greenberg (1949). Par la suite, les analyses successives – Bennet et Sterk (1977), Bennet (1983), Boyd (1989), Williamson & Blench (2000), Blench (2012), Kleinewillinghöfer (2015, 2016a et b) – ont placé la langue dans différents sous-groupes. En ce qui concerne la méthodologie employée, la présente analyse a été réalisée dans une perspective typologique fonctionnelle, telle qu'elle est définie par Croft (2003). Enfin, au niveau de la collecte des données, celle-ci a été effectuée au cours de missions de terrain dans le nord du Cameroun, et apparaissent tout au long du travail sous la forme de mots et de phrases glosées.

La première grande partie de l'ouvrage (p. 40-69) concerne la phonologie du kolbila. Se focalisant surtout sur la phonologie segmentale, SL identifie 18 phonèmes consonantiques et 20 phonèmes vocaliques à partir d'une analyse de paires minimales, dont le détail est fourni en annexe.

Les phonèmes consonantiques sont analysés selon leur distribution mais aussi en fonction de phénomènes d'allogphonie dont les contextes d'apparition sont pour la plupart étayés d'exemples. SL relève une série de trois nasales typiques des langues adamaoua selon Boyd (1989) [m], [n] et [ŋ] à laquelle SL ajoute la palatale [ɲ] sans pour autant lui accorder le statut de phonème. Les nasales sont aussi susceptibles de porter un ton, mais ce n'est pas systématique. Le kolbila présente également les occlusives [p], [b], [t], [d] (avec [ɾ] en allophone selon le contexte vocalique), [k], [g]

(allophone [y] entre deux voyelles ouvertes dans certains parlers) ainsi que les labiovélaires [kp] et [gb] ; les fricatives [f], [v], [s], [z] et [ʃ] ; la latérale alvéolaire [l], et deux approximantes [y] et [w]. La question du statut du flap voisé labiodental [v] est notamment soulevée, avec une hypothèse aréale pour expliquer sa faible présence en kolbila. Deux implosives sont également relevées, [b] et [d], présentes uniquement à l'initiale d'un petit nombre de lexèmes. SL envisage pour ces deux consonnes une origine foulfouldé, cette variante du peul étant aussi la langue véhiculaire de la région.

Concernant les phonèmes vocaliques (p. 52-56), ils sont divisés en deux jeux de dix s'opposant par leur longueur. L'analyse ne montre aucune règle réelle régissant leur distribution, bien que certaines tendances apparaissent : la seule restriction concerne l'absence de /e/ en position initiale. SL note aussi qu'il y a très peu de successions de voyelles hormis celles impliquant l'élément /a/ qui apparaît en finale dans les formes de citations des verbes et des noms, ou dans des formes impératives (ex. Tableau 10 p. 55, reproduit partiellement ici).

(10) Quelques successions de voyelles attestées en kolbila		
i → a	<b>b<small>ñ</small>sì=á</b>	vipère
u → a	<b>kúá</b>	mange !
e → a	<b>á<small>à</small>sè=á</b>	antilope
ə → a	<b>k<small>ò</small>psə=á</b>	crocodile
ɔ → a	<b>k<small>ò</small>=á</b>	attrape !

(115) V vs Y	
<b>t<small>è</small>e-</b>	tisser, coiffer
<b>t<small>è</small>é-</b>	tisser, coiffer, contourner (en véhicule), renverser
<b>ɛm-</b>	marcher, aller à pied, se promener
<b>ɛm-</b>	marcher, aller à pied (vers un but)
<b>d<small>è</small>d-</b>	laisser des cicatrices, des traces
<b>d<small>è</small>d-</b>	écrire, marquer
<b>s<small>à</small>a-</b>	crépiter, cliqueter, tamiser
<b>s<small>à</small>á-</b>	insister

Deux éléments suprasegmentaux sont également mentionnés, bien que leur étude ne soit ici qu'évoquée : les tons et la nasalité. Le kolbila présente trois tons (haut, moyen et bas), qui sont à la fois lexicaux et grammaticaux

(p. 59-62). Quant à la nasalité (p. 62-65), son statut semble varier selon les voyelles. Le kolbila présente quatre phonèmes correspondants à des voyelles nasales [ã] et [ãã] ainsi que [í] et [íí]. SL relève pourtant que chaque voyelle peut être nasalisée, mais que ce phénomène semble plutôt obéir à une règle sémantique (avec un élargissement du sens des lexèmes, ex. 115, p. 63, reproduit ci-dessus) qu'à une règle grammaticale.

Comme signalé plus haut, cette partie phonologique met essentiellement l'accent sur la phonologie segmentale, esquissant seulement les grands traits de l'analyse suprasegmentale et de phénomènes tels que l'épenthèse, l'existence d'un ton haut d'intensité ou l'assimilation (p. 65-66).

La seconde partie de cette étude (p. 70-186) est consacrée à la morphosyntaxe du kolbila. C'est la partie la plus conséquente de l'ouvrage. Elle est construite à la fois autour des différentes parties du discours tels que les noms, verbes, pronoms, adpositions, particules, ou idéophones ainsi que de l'expression de certains concepts qualificatifs, des éléments marquant la référence, ou des formes adverbiales.

La morphologie nominale flexionnelle est limitée, puisque le kolbila ne présente que les vestiges d'un système de classes nominales ; la langue ne présente pas de morphèmes de classes sur les noms, ni de marques d'accord avec d'autres éléments syntaxiques. SL rappelle que d'après Elders (2006), les langues adamaoua présentent au moins des traces d'un système de classes nominales ; ainsi en kolbila, certains éléments peuvent être analysés comme un héritage des morphèmes de classes. C'est le cas notamment des indénombrables (tels que les liquides, la farine ou les céréales) dont la majorité se termine en *-m* (p. 72, Tableau 14, repris ci-dessous)<sup>1</sup> :

<b>zā̄má</b>	farine	<b>lā̄límá</b>	fumée
<b>bā́ámá</b>	vin	<b>vō̄má</b>	lait
<b>fō̄omá</b>	souffle	<b>lū̄má</b>	satiété
<b>fā̄má</b>	vapeur	<b>méémá</b>	larmes
<b>kīlímá</b>	huile	<b>zá̄amá</b>	urine

SL mentionne (p. 73-78) le fait que la dérivation nominale est possible (formation de noms d'agents, de noms verbaux, etc.) ainsi que la composition. Le nom peut également porter la prédition (notamment dans le cas de l'identification (ex. 179 p. 87), alors que les constructions existentielle (ex. 189 p. 88) et la localisation spatiale sont formulées à l'aide d'une copule.

1. Dans les exemples du tableau, la voyelle finale /á/ marque la forme de citation pour les noms et les verbes.

- (179) *wūl* = á  
 N.Eau MFS  
 ‘Eau’, ou ‘C’est l’eau.’
- (189) *wūl dá àāŋ*  
 N.Eau COP ici  
 ‘L’eau est ici.’

La morphologie verbale flexionnelle est également assez réduite, les marqueurs de temps, aspect et mode n’étant pas portés par le verbe. La forme verbale finie la plus fréquemment employée, comme dans d’autres langues adamaoua (SL cite notamment les langues tchad, adamaoua et adamaoua-oubanguiennes), est une forme rédupliquée fonctionnant, dans le cas du kolbila, sur le principe suivant : la base (V.) est dupliquée et se voit adjoindre (V2) une syllabe supplémentaire ainsi qu’un schéma tonal spécifique (ton haut suivi d’un ton bas) ; cet élément V2 suit le duplicat V (ex. 199 p. 95). L’objet (pronominal ou lexical) se place systématiquement entre le verbe et sa seconde occurrence (respectivement ex. 203 et 204 p. 98).

- (199) *Kéén* | *zá* | *zánā*  
 N.femme | V.partir | V2.partir  
 ‘La femme part / est sur le point de partir.’
- (203) *Yè yāā* | *bɔb* | =*māŋ* | *bɔbā*  
 2PL V.venir | V.retrouver | 1PL.O | V2.retrouver  
 ‘Venez nous retrouver !’
- (204) *Mā* | *wɔ* | *wūl* | *wɔnā*  
 1PL V.construire | N.hutte | V2.construire  
 ‘Nous sommes en train de construire une hutte.’

Le kolbila présente deux catégories d’extensions verbales (p. 100-109) : les premières permettent des modifications de valence (pour les déterminer, SL s’appuie sur la mise en parallèle du kolbila avec d’autres langues adamaoua et le proto-bantou) ; les deuxièmes expriment la direction de l’action (vers le locuteur („venitiv“ dans l’original) ; ou vers un objectif („andativ“ dans l’original)). SL ne détaille pourtant que le cas de l’extension exprimant le fait que l’action est dirigée vers un objectif, laquelle est marquée par une voyelle finale longue (ex. 240 p. 106).

(240) *lāā-* ‘jeter, viser’ (le verbe source n’est pas mentionné dans l’ouvrage)

Il faut souligner l’absence d’extensions verbales concernant le TAM, ces catégories n’étant pas portées par le verbe (p. 109). Les formes verbales exprimant la conjugaison présentent donc trois structures différentes :

1. Une forme minimale tonalement marquée (par opposition à la forme de citation qui se distingue de la forme finie par un ton moyen), qui exprime des valeurs de présent (temporel ou de vérité générale), de perfectif et d’aoriste. La forme minimale peut aussi être employée pour l’impératif dans le cas d’un verbe transitif avec objet lexical (dans les autres cas, l’impératif est exprimé par une forme rédupliquée, v. p. 111-112 et ex. 203 ci-dessus<sup>2</sup>).
2. Une forme rédupliquée (v. précédemment).
3. Des constructions à auxiliaires : l’auxiliaire fonctionnant comme élément verbal fini, il ne porte pas non plus d’extensions de TAM. Son emploi permet cependant l’expression de différentes nuances de aspecto-temporelles (habituel, prospectif/futur, progressif, v. p. 113-117).

La négation (p. 117-120), quant à elle, est exprimée au moyen de particules et distingue une négation standard (selon les termes de Miestamo (2005)), un prohibitif, une copule négative et une particule pour les questions interro-négatives.

L’expression de notions adjectivales (ou qualificatifs, „Eigenschaftskonzepte“ dans l’original) est rendue possible par l’usage de noms et de verbes les exprimant (p. 120-127). Concernant les pronoms (p. 127-146), SL propose un inventaire assez détaillé des pronoms personnels reprenant les pronoms en isolation, les pronoms objets, sujets, possessifs, honorifiques et interrogatifs. D’autres éléments fonctionnent comme des marqueurs référentiels (p. 146-157), tels que le marqueur de fin de syntagme en *-á/*, le marqueur de pluriel (un clitique s’ajoutant à la fin des noms ou des syntagmes nominaux), les démonstratifs, ainsi que les quantificateurs (numériques et non numériques).

Le kolbila possède de nombreuses particules („Partikel“ dans l’original), traitées par SL dans une partie dédiée (p. 157-172) de son ouvrage. L’analyse de SL présente cinq particules discursives, une particule déictique, trois particules conjonctives et trois particules négatives (placées en fin de phrase, elles expriment la négation standard, la négation de l’impératif et celle des questions fermées et se distinguent de la copule négative). Cette partie consacrée aux particules est étayée à la fois par des exemples et par des comparaisons avec d’autres langues (notamment le moundang).

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2. En (203), il semble que le fait que l’impératif *yāā* de ‘venir’ soit à la forme minimale est dû à ce que ‘venir’ se comporte ici comme un verbe transitif, la proposition qui suit jouant le rôle d’objet.

Les adpositions (p. 172-181) sont majoritairement postposées en kolbila et ont une valeur essentiellement temporelle et spatiale.

La partie morphosyntaxique se termine par un inventaire rapide des idéophones, ainsi que des éléments correspondant aux adverbes des langues ouest-européennes (p. 181-186).

La morphosyntaxe est réellement le cœur du travail de SL. L'analyse y est particulièrement détaillée et plusieurs points traités font appel à des données comparatives provenant de diverses langues du groupe adamaoua, lui permettant de produire des éléments déterminants pour la classification du kolbila parmi les langues adamaoua.

Enfin, la troisième et dernière partie, très succincte (p. 187-199), s'intéresse à la syntaxe, c'est-à-dire essentiellement à l'organisation des constituants au sein de la phrase, ainsi qu'à la structure des phrases complexes. Le point majeur relevé dans cette partie est la question de la variation de l'ordre des constituants, la structure de base SVO (ex. 500 p. 188) se modifiant dans les constructions à auxiliaires pour lesquelles l'objet se présente avant le verbe, selon un schéma S Aux O V (ex. 501 p. 189). Sur ce point aussi, SL propose une comparaison avec les autres langues adamaoua, tout en signalant que l'approfondissement de cette comparaison nécessiterait une étude spécifique.

(500)	wáá	kú	sááriŋyāāb	-á
	N.enfant	V.manger	N.riz	MFS
'L'enfant mange du riz'				

(501)	ārváān	dá	sááriŋyāāb	lām-	-òó <sup>3</sup>
	N.homme	AUX	N.riz	culture	NV
'L'homme est en train de cultiver le riz'					

En conclusion, l'ouvrage de SL sur le kolbila repose sur un travail conséquent d'analyse à partir de données collectées et d'approches comparatives. Concernant l'apparentement du kolbila et son inclusion dans l'un ou l'autre des sous-groupes adamaoua, SL conclut que cette langue présente de nombreux points communs avec le groupe samba de la branche sud samba-dourou. Si certains éléments sont étudiés en profondeur, notamment dans cette approche comparative, d'autres (tels que la phonologie suprasegmentale (en particulier les tons), les extensions verbales directionnelles (notamment celle orientée vers le locuteur) ou les structures de TAM) ne sont que succinctement traités, l'auteure proposant alors plutôt des hypothèses ou des pistes d'analyse à développer. Par ailleurs, l'ouvrage offre une grande place aux exemples glosés, mais on peut regretter

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3. Le nom verbal en -òó est une forme syntaxiquement contrainte utilisée dans les constructions auxiliaires pour le verbe prédicat de la phrase (p. 75).

l'absence de corpus glosé dans les annexes. En tout état de cause, ce livre constitue une contribution bienvenue dans le domaine des études consacrées aux langues adamaoua.

### Abréviations

1/2/3	première / deuxième / troisième personne
AUX	Auxiliaire
COP	Copule
N	Nom
NV	nom verbal
MFS	Marqueur de fin de syntagme
PL	Pluriel
V	Verbe
V2	deuxième occurrence du verbe

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**Manuele Bandeira, *Reconstrução fonológica e lexical do protocrioulo do golfo da Guiné*, Munich, Lincom Europa, 2017, 221 p.**

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Héritage de la présence portugaise, le golfe de Guinée compte aujourd’hui quatre créoles portugais : la lungwa santome ou forro et l’angolar (lunga ngola), tous deux parlés dans l’île de São Tomé, le lung’le parlé dans l’île du Prince (Príncipe) et le fa d’Ambô, langue de l’île d’Ano Bom (souvent orthographiée Annobon) ou Pagalu qui aujourd’hui appartient à la Guinée équatoriale. L’histoire du peuplement de ces îles et de nombreuses ressemblances ont amené certains chercheurs à postuler l’existence antérieure d’un système linguistique, né dans les premières années du peuplement et des contacts entre les esclaves africains et la langue portugaise, système duquel ces quatre langues seraient issues. Le nom de proto-créole a souvent été donné à ce système hypothétique. Manuele Bandeira (MB) publie une étude qui a pour ambition de présenter la reconstruction de la phonologie et du lexique de ce proto-créole.

Il s’agit d’un texte qui reprend dans une version fort peu remaniée, semble-t-il, la thèse soutenue par l’auteur à l’Université de São Paulo. L’ouvrage, de facture classique pour une thèse, est composé de 221 pages réparties en six chapitres, le premier et le sixième étant respectivement l’introduction et la conclusion.

Dans le deuxième chapitre, MB présente quelques questions de méthodologie. Elle s’intéresse d’abord au recueil des données et explique qu’elle a croisé les données déjà disponibles dans la littérature avec celles obtenues au cours d’enquêtes sur le terrain. Pour le fa d’Ambô dans l’impossibilité de se rendre dans l’île, elle a utilisé exclusivement des données de deuxième main. La majeure partie du chapitre est consacrée à la méthode de reconstruction. Après la présentation de six grands types de changement phonétique (lénition, insertion, effacement, réorganisation de sons, assimilation, dissimilation), l’auteur introduit les principes de la méthode historico-comparative qui a orienté sa recherche. Les techniques d’analyse utilisées pour la phonologie s’appuient sur cinq principes repris à Crowley (1997) : (i) proposer des changements phonétiques plausibles, (ii) combler les lacunes des systèmes phonologiques plutôt que proposer un système déséquilibré, (iii) ne reconstruire que des phonèmes absolument nécessaires, (iv) chercher des correspondances de sons phonétiquement similaires et (v) dans les cas douteux chercher des distributions complémentaires. Chaque principe est illustré d’exemples repris de la reconstruction du proto-créole.

Le chapitre suivant est consacré à la « question créole ». Sont d'abord présentés différents courants théoriques (monogénèse/polygénèse, substratisme/superstratisme, universalisme) de la créolisation. Une attention particulière est apportée à la thèse de Mufwene du « principe fondateur » qui met en avant l'importance des fondateurs des communautés dans l'émergence des créoles. Il semble cependant que l'auteur fasse un contresens en présentant Mufwene comme un des principaux tenants des théories substratistes. Toujours est-il que l'importance des premiers habitants sera reprise plus loin avec justesse, à notre avis, dans la présentation de l'histoire des créoles du Golfe de Guinée.

MB applique à l'histoire de l'archipel la division en deux phases opérée par Chaudenson, jamais cité, à propos des créoles français (voir par exemple Chaudenson 1979) : phase d'habitation, phase de plantation. Si l'on peut discuter de la pertinence de ces termes concernant São Tomé, Príncipe et Ano Bom, cette division permet cependant de bien comprendre que, comme le souligne fort à propos l'auteur, ces créoles se sont formés dans les premiers temps au contact des langues du Nigéria parlées par les esclaves transportés au moment du défrichage des îles, puis au contact des langues bantoues parlées par les esclaves achetés dans les royaumes congolais et angolais pour travailler dans les plantations. C'est la première phase qui correspond au stade du proto-créole.

Deux faits historiques sont justement soulignés qui ont une importance particulière dans l'émergence de ces créoles ; le premier est l'attribution d'une esclave noire à chacun des premiers colons et l'affranchissement plus tard de leurs enfants ; le deuxième est l'abandon de l'archipel par une partie de la population portugaise à la fin du 16<sup>e</sup> siècle. De même, les diverses hypothèses concernant les Angolars (population préexistante à l'arrivée des Portugais ou descendants des rescapés d'un navire négrier échoué au large du sud de l'île ou bien encore population issue de communautés d'esclaves marrons ayant fui les plantations) sont bien présentées et l'auteur semble opter, avec raison selon nous, pour l'hypothèse des communautés de marrons.

Le quatrième chapitre dans lequel est présentée la reconstruction du système phonologique du proto-créole constitue le véritable cœur de l'ouvrage. D'emblée l'auteur indique que le système phonologique du proto-créole était composé de dix-huit consonnes, dont trois nasales, et de sept voyelles toutes orales. Puis elle passe en revue chacun de ces phonèmes en établissant pour chacun d'entre eux comment il se « reflète » dans les langues actuelles. Après avoir traité de la question de l'accent, l'auteur se penche sur divers processus phonologiques : les stratégies de réparation des liquides, l'allongement compensatoire, la nasalisation en coda (réalisation de la consonne nasale ou nasalisation de la voyelle), la réduction syllabique, la palatalisation de /\*t/, /\*d/, /\*s/ et /\*z/ devant /i/, la

prothèse de voyelles initiales, l'harmonisation vocalique. L'auteur a – même si elle n'est pas la première à évoquer ces questions et même si on n'est pas toujours convaincu par ses explications – le mérite de bien mettre l'accent sur les principaux phénomènes qui posent de vrais problèmes dans l'étude diachroniques de ces créoles pris séparément ou dans une approche comparative. Comment expliquer le maintien de liquides, avec ou sans métathèse, en forro ? D'où viennent les voyelles initiales, principalement en lung'Ie ?

Quiconque a une connaissance minimale de la littérature concernant ces langues notera une grosse lacune dans cette présentation phonologique. En effet, les linguistes sont divisés sur le point de savoir si ces créoles sont des langues tonales. Philippe Maurer, à qui l'on doit les principaux travaux sur les créoles du Golfe de Guinée, décrit l'angolar et le lung'Ie comme des langues tonales (Maurer 1995, 2009). Il livre une description soigneuse de leur tonologie. Que l'on partage cette opinion ou non, on ne peut pas faire l'impasse dessus. Retenir (ou non) l'hypothèse de Maurer a des conséquences importantes dans la perspective de la reconstruction : le proto-créole était-il une langue tonale ? Pas une ligne n'est consacrée à cette question dans l'ouvrage de MB.

Le cinquième et dernier chapitre est consacré à la reconstruction lexicale. Il est composé d'un tableau regroupant 536 items classés en 27 champs sémantiques (aliments et boissons, anatomie animale, anatomie humaine, animaux, concepts abstraits, etc.). Pour chacun de ces items sont données la forme proto-créole puis la forme correspondante dans les différents créoles et enfin une traduction en portugais moderne.

Ce tableau est caractéristique du reproche essentiel que l'on peut formuler à l'encontre de l'ensemble de ce travail. S'agit-il d'une maladresse de présentation ? Toujours est-il qu'on a constamment l'impression, à la lecture de cet ouvrage, qu'il ne s'agit pas d'une reconstruction, mais que, au contraire, on a posé un système nommé proto-créole duquel on tente de voir comment les formes créoles ont pu être dérivées. À cet égard, il est significatif qu'à aucun moment ne sont présentés les systèmes phonologiques des différents créoles à partir desquels est supposé être reconstruit celui du proto-créole. Par ailleurs, cette démarche amène l'auteur à passer à côté de situations particulièrement intéressantes du point de vue de l'évolution des langues. Prenons, parmi de nombreux autres, l'exemple des noms signifiant ‘maison’ dans les quatre créoles : *ke* en forro, *kai* en angolar, *xai* en fa d'Ambô et *kasi* en lung'Ie. On remarque facilement que ces formes « *se présentent comme les maillons d'une même chaîne (...)* à partir de laquelle on peut reconstruire une forme antérieure commune (...)\**kasi* » (Rougé 2004). Si MB indique bien la forme reconstruite \**kasi*, à aucun moment elle ne s'intéresse à la progression entre la forme du lung'Ie et celle du

forro. En particulier, elle n'indique jamais que le /ɛ/ ici du seul forro, mais dans d'autres cas aussi du lung'le et/ou de l'angolar, suppose une forme antérieure [\*ai] qui elle-même provient le plus souvent d'une forme [\*aCi]. Elle laisse ainsi de côté tout ce que de telles progressions nous disent de l'histoire des créoles portugais du Golfe de Guinée.

L'intérêt majeur du livre de MB est qu'il montre que l'on doit envisager l'histoire de ces créoles non pas à partir d'une simple comparaison des créoles avec le portugais, mais aussi en comparant ces créoles entre eux et que le point de départ de la créolisation n'est pas le portugais, mais un embryon de système, sinon un système, né des premiers contacts entre le portugais et les langues africaines.

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John Vanderelst, *A Grammar of Dagik*. Köln, Rüdiger Köppe, 2016, 263 p.

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Dagik is a Kordofanian language of the Talodi Group spoken in the Nuba Mountains (Sudan) in a handful of villages lying south of the Kadugli-Talodi road. The language has previously been known in the literature under the ethnonym “Masakin Gusar, including Masakin Buram and Dagig” (Stevenson 1956–57: §71). Since Masakin has pejorative connotations, meaning ‘poor’ in Arabic, speakers prefer the name Nuba Dagik, probably from Sudanese Arabic *dagiig* ‘small’. Dagik speakers also refer to themselves as the people of Duwa or Ruwa [rua] ‘homeland’ (p. 3).

John Vanderelst’s *Grammar of Dagik* is the published version of his PhD thesis, supervised by Prof. G. J. Dimmendaal and defended at Cologne University in 2015. It was the first published grammar of any Talodi language until the appearance of Heleen Smits’ more detailed *Grammar of Lumun* in 2017. Vanderelst conducted most of his fieldwork with displaced Nuba Dagik in Omdurman, but managed to briefly visit the Dagik homeland in 2011. Methodologically, he situates himself in the descriptive framework called Basic Linguistic Theory (Dixon 2010). The book is organized as follows: chapter 1: Introduction, chapter 2 to 7: Morphology and phrase-level syntax, chapter 8: Clause structure. Three appendices present spelling conventions, a text (51 lines with interlinear glosses and a free translation), and a Dagik–English wordlist (884 items). The preliminaries and back matter include a section on conventions and abbreviations and bibliographical references.

The phonology chapter deals with vowels, consonants, syllable structure and tone. There are twelve vowels that can be arranged in two symmetric sets, which the author considers to reflect ±ATR.

### (1) Dagik vowels

+ATR	i	[e]	[a]	[ə]	[o]	u
-ATR	ɪ	ɛ	a	ə	ɔ	ʊ

The vowels here represented by symbols between brackets occur only as the result of vowel harmony but not, for example, as the only vowel(s) within a word, which leaves eight vowel phonemes. The vowels within a root and associated affixes belong to the same harmony set; the situation is more complex when clitics and compounds are considered. Schwa is the only vowel that cannot occur word-finally

The consonant inventory consists of obstruents, nasals, the trill *r*, the flap *t̪*, and the approximants *l*, *y* and *w*. The voiceless/voiced opposition

and the plosive/fricative opposition are only marginally exploited, which is a feature commonly found in Kordofanian (and other Nuba Mountain) languages. Another areal feature, the use of five places of articulation for obstruents, has been lost in Dagik, which shifted palatal \*c to s and \*ŋ to ɳ. (The shift from a palatal to a non-adjacent dental nasal shows that the most salient feature of these two nasals is not their place of articulation but the extended contact between tongue and the hard palate.) This leaves four phonemic obstruents:

(2) Dagik obstruents

	/p/	/ð/	/t/	/k/
initial	p (~ β)	ð (~ t̪)	t	k (~ γ)
intervocalic	β	ð	t̪	γ
after nasal	b	ɖ	d	g
geminated	p:	t̪:	t:	k:
final	(in loans)	—	—	ək' (~ əŋ')

The only consonant that regularly appears word-finally is *k* ~ *ŋ* (p. 24f.), occurring always in the sequence *ək'* – in free variation with *əŋ'* – in words of more than one syllable. In connected speech, the sequence is always deleted. In isolation, word-final *ək'* ~ *əŋ'* is optionally deleted after *r*, e.g., *ŋerək'* ~ *ŋerk'* ~ *ŋer* ‘water’.

Consonant gemination is perceived more clearly by their voiceless plosive articulation of obstruents than by actual lengthening. Other arguments for consonant gemination can be detected in morphological processes such as the formation of pluractionals as well as in the equilibrium between automatic vowel lengthening in CV:CV as opposed to automatic nasal lengthening in CVN:V words.

Tone receives just a sketchy documentation and analysis (p. 35f.). The author shows that tone must be lexically contrastive with nouns (p. 41f.) and adjectives (p. 143f.), though not with verbs where tones depend on inflectional categories (p. 85–87). Tone is left unmarked and only incidentally referred to in rest of the book.

The central chapters of the book present nouns and their modifiers (Ch. 3), verb morphology (Ch. 4), adjectives (Ch. 5), free and bound pronouns (Ch. 6), and ways in which spatial and temporal meanings are expressed (Ch. 7). Like other Kordofanian languages, Dagik has a fully functioning noun class system as known from Bantu and other Niger-Congo languages. Nominal prefixes are in most cases single consonants and noun class agreement markers are alliterative; agreement is marked on nominal modifiers (demonstratives, possessives, associative constructions, the lower numerals ‘one’, ‘two’ and ‘three’, adjectives, relative clauses) as well as on predicates (verbs, copulas, adjectives). Kinship terms (except ‘father’ and ‘mother’) form their plurals not by prefix

alternation but by adding a (phrase-?) final clitic =ε. The agreement markers for personal pronouns and kinship terms are *p-* in the singular and *ð-* in the plural (though alliterative agreement sometimes prevails). In the singular, this corresponds to the pair of classes containing the word *por / or* ‘woman / women, human being/s’ as well as many other nouns referring to people, but the plural agreement marker *ð-* is a bit of a mystery since the paired plural class of this “human gender” has the glide *j-* as its agreement marker. The noun class prefix *ð-* occurs as the singular of a gender containing, amongst other items, long things, e.g. *ðoləŋe / røləŋe* ‘tongue/s’, *ðɔr / rɔr* ‘rope/s’, *ðuga / ruغا* ‘root/s, vein/s’; some single-class nouns with *ð-* as prefix and agreement marker are *ði* ‘fire’, *ðɔri* ‘strength’ and *ðuŋu* ‘a kind of grass’. There appears to be no particular link with human plurality.

Dagik has an interesting system of numerals (p. 78f.). Numbers ‘one’, ‘two’ and ‘three’ are adjectives and agree in class with the modified noun, ‘four’ is invariable. ‘Five’ is a shortened form of the phrase ‘one-arm’, ‘ten’ and ‘fifteen’ are shortened from ‘all-arms’ and ‘all-arms-and-one’. Intermediate values are expressed by adding ‘and-one’, ‘and-two’, ‘and-three’, ‘and-four’. ‘Twenty’ is shortened from ‘whole body’, ‘forty’ from ‘bodies of two persons’, and so on to ‘two hundred’ which is ‘bodies of ten persons’. So, how much is this:

### (3) A Dagik number puzzle

<i>wasa</i>	<i>wasa</i>	<i>wɔr</i>	<i>jeŋa</i>
bodies	bodies	of.persons	two

I would have guessed eight hundred ( $20 \times 20 \times 2$ ), rather than four hundred (as on p. 79)! One can easily understand why in daily practice higher numbers are increasingly being replaced by Arabic.

Chapter 4 deals with verbal derivation and inflection. In its easiest form, a verb stem consists of a root, possibly one or more extensions, and a final vowel. Extensions are causative, benefactive, locative, associative (reciprocal), middle voice, inchoative-stative, iterative and pluractional. (Pluractional verbs are also derived by stem-initial partial reduplication.) For example:

### (4) Dagik verb extensions

causative	<i>rəg-i</i> ‘feed’	< <i>rəg-o</i> ‘eat’	(p. 89)
benefactive	<i>tɔr-m-o</i>	< <i>tɔr-a</i> ‘cut (grass)’	(p. 93)
locative	<i>rəg-ɔ-t̪:ɛ</i>	< <i>rəg-o</i> ‘eat’	(p. 96)
reciprocal	<i>ðiŋ-ər-a</i>	< <i>ðiŋ-o</i> ‘push’	(p. 98)
middle voice	<i>t-ɛ-k-ɔ</i>	< <i>t-ɛ</i> ‘cook’	(p. 100)
inch.-stative	<i>səŋ-a</i> ‘lie down’	< <i>səŋ-i</i> ‘lay down’	(p. 104)
iterative	<i>pəl-ɛ</i>	< <i>pəl-o</i> ‘run’	(p. 104)
pluractional	<i>ul:-ət̪-o</i>	< <i>ul:-o</i> ‘descend’	(p. 130)

The morphophonological details can become quite complex, and I often found the explanations difficult to follow. What exactly are the three “states” of the verb (p. 120-122), and how best to interpret the distinction between “final vowels” and “FV”, which is somehow important for defining the inflectional classes (p. 88f.)?

The array of inflectional categories appears to be manageable. One-word verb forms are the imperative and the perfective; the imperfective uses the (agreeing) copula *-a*, to which is added the clitic locative marker *ti/ti* to form the progressive and the cliticizable word *anda* ‘afterwards’ to form the “prospective” (future).

#### (5) Dagik inflectional categories of the verb

imperative	<i>rəg-i / rəg-u</i> ‘Eat!’ (SG/PL)	(p. 109f.)
perfective	<i>ayi b-o-rəg-o</i> ‘I ate.’	(p. 115)
imperfective	<i>ayi b-a rəg-o yərsə</i> ‘I eat in the morning.’	(p. 116)
progressive	<i>ayi b-a=rı rəg-o</i> ‘I am eating.’	(p. 117)
prospective	<i>ayi b-a=nda rəg-o</i> ‘I will eat.’	(p. 118)

In these examples, the prefix *b-* marks agreement with the “human” class, which in the perfective is followed by the “predicative marker” *-o*. The nominal or pronominal subject “normally” precedes the verbal complex, a nominal object would follow it. Of course, this is not the full story, which only unfolds slowly as one reads on, especially through the chapters dealing with pronouns and clause structure.

Pronouns are presented as occurring in six sets, P1 through P6. Each set consists of eight forms, exemplified here by set P1 representing the independent pronouns (p. 153):

#### (6) Dagik independent personal pronouns:

1SG	<i>ayi</i> ‘I’	1PL	<i>ayɔni</i> ‘I and others’
2SG	<i>aya</i> ‘you’	2PL	<i>ayɔnɔ</i> ‘you and others’
3SG	<i>ayɔ</i> ‘s/he’	3PL	<i>ayɛ</i> ‘s/he and others’
12SG	<i>ayɔri</i> ‘I and you’	12PL	<i>ayenɔ</i> ‘I and you and others’

While the labels “singular” and “plural” may not be fully appropriate for personal pronouns, avoiding the categories “dual” and “inclusive / exclusive” seems an elegant analysis to me since it captures the essential two-times-four symmetry of the system. Throughout the book (unless I have missed something) third person independent pronouns always refer to humans, though the statement that they can refer “anaphorically, i.e. to an entity previously mentioned” (p. 153) suggests no such restriction. In a previous article on Dagik personal pronouns, the author said about the third person pronoun that it “is restricted in its range to the pronominalization of animates (or maybe humans)” (Vanderelst 2013: 161).

Independent or free personal pronouns (P1) occur in preverbal position where they represent “the subject in independent declarative clauses without constituent focus” (p. 153). The other sets represent bound pronouns. Sets P2 and P3 attach to verbs, the remaining sets occur after the locative markers *ti/ti* and *nɔ* (P4, p. 166f.), as possessives after CL-ɔ- (the pronominal equivalent of the so-called associative construction; P5, p. 167), and after *na-* ‘and’ (P6, p. 167f.).

The verbal complex has separate slots for bound pronouns and class markers. Moreover, fillers of these slots are not restricted in their reference to just one syntactic argument (subject, object). Dagik shares this striking feature with other core-Kordofanian languages (term introduced by Vanderelst 2013: 159, referring to TALODI and HEIBAN), which distinguishes these languages from, *inter alia*, canonical (descriptions of) Bantu languages (s. also Schadeberg & Kossman 2010).

Class markers (conords) occur only at the beginning of the verbal complex, see *b-* in (5) above; bound pronouns occur as verb suffixes. Conords refer to the preverbal noun or free pronoun, and this anaphoric (or backwards) reference defines the preverbal argument as syntactic subject in Vanderelst’s analysis. Post-verbal bound pronouns can refer to the object but also to the “demoted subject”. In more conventional relational grammar, when the argument of a predicate is changed, it is demoted or promoted to a different status, the ranking being S > DO > IO > chômeur. For Vanderelst, a demoted subject is still a kind of subject, and hence a clause can have a subject or a demoted subject or both – or even no subject at all. Only preverbal subjects – be they nouns or independent pronouns – have a concord preceding the verbal complex; a nominal object follows the verbal complex (7a: *k:əbi*). Pronominal objects referring to humans (and sometimes also to animals) are suffixed to the verb (7b: *-a*); there is no pronominal reference referring to inanimate objects. The same postverbal slot also hosts demoted subjects, which are said to occur in sentences with verbal focus (8a: with clause-final question marker *=â*), preverbal focus (8b), and passives (8c).

#### (7) Nominal and pronominal objects

- (a) *k:oraðt b-ɔ-rəgɔ k:əbi* ‘Kudadhi ate meat.’ (p. 91)
- (b) *ayi b-ɔ-rəgɔr-a* ‘I ate you.’ (p. 163)

#### (8) Demoted pronominal subjects:

- (a) *rəgɔr-a=â*: ‘Did you eat?’ (p. 155)
- (b) *mara letar-a* ‘How did you scratch?’ (p. 204)
- (c) *ŋabɛ ŋ-ɔ-rəgɔ-ŋɛ* ‘The fish was eaten by them.’ (p. 205)

Even in the presence of a demoted nominal subject, there is obligatory doubling through a pronominal verbal suffix, as shown here by a content question (9a) and by a so-called passive (9b). This seems to be true for the perfective aspect only, not for the imperfective (10a) or the progressive aspect (10b), where the verbal complex includes a copula; cf. (5) above.

(9) Demoted nominal and pronominal subjects:

- (a) *mara rəgɔ̃-ŋɔ̃ k:ʊraðɪ ŋabe* ‘How did K. eat the fish?’ (p. 205)
- (b) *k:ʊraðɪ b-a-bərl-i-ŋɔ̃ pat:i* ‘K. was hit by the man.’ (p. 204)

(10) Demoted nominal subjects without doubling:

- (a) *k:ʊraðɪ b-a gak:i kəra* ‘K. is scratched by Kaki.’ (p. 204)
- (b) *k:ʊraðɪ b-a gak:i ri-kəra* ‘K. is being scratched by Kaki.’ (p. 205)

A curious by-product of Vanderelst’s definition of “subject” is that it leads to analysing sentences such as (11a) as having no subject at all since the preverbal argument “which elephant” does not agree with the immediately following verb.

(11) Sentence without subject?

- (a) *maðɔ̃ migə asɔ̃* ‘Which<sub>2</sub> elephant<sub>1</sub> came<sub>3</sub>?’ (p. 218)
- (b) *seɻu siga səgɪt:a* ‘Which<sub>2</sub> lion<sub>1</sub> did you see<sub>3</sub>?’ (p. 219)

Vanderelst posits “a distinction between the subject position, which agrees with the verbal complex, and the preverbal focus position, which does not” (p. 218). An alternative view would be that only topics agree, and that the passive construction is characterized by its information structure, i.e. promotion of patient to topic and demotion of agent to non-topic, rather than by its syntactic structure, i.e. syntactic promotion of patient to S and syntactic demotion of agent (see Van der Wal 2015, especially p. 94). This is in line with the observation that agreement in Dagik is strictly left-to-right, never cataphoric, or referring ahead to a later expression. The alternative view would give the sentence in (11a) a subject – albeit a focussed one. It would also resolve the uneasy ambiguity of the sentence in (9a) which Vanderelst is obliged to translate as ““How did Kudadhi eat the fish?” (lit. ‘How was eaten by Kudadhi the fish?’)”, an ambiguity which presumably also applies to (11b): ‘Which lion was seen by you?’. It would also account for the rather peculiar circumstance that the passive construction is only available for sentences with an expressed agent, which also has to be animate since no bound pronouns exist for other entities.

At first it seems that *A grammar of Dagik* is not difficult to read, but once you try to dig deeper, you realize how complex many issues are. Each subject is dealt with on just a few pages, not enough to answer all questions that come up. Looking at other recent studies of Kordofanian,

notably on Lumun (TALODI; Smits 2017) but also on Moro (HEIBAN, e.g. Rose 2013), the lack of tonal data and analysis makes one suspect that many details of morphology and syntax remain undetected. *A grammar of Dagik* may have shortcomings in coverage and in analysis, but that is what one may expect from a pioneering work by a young scholar presenting an uncharted language from a very poorly known language group.

For some scholars, Kordofanian languages derive their interest primarily from their isolated position: they are the only real enclave of an otherwise contiguous large language family, i.e. Niger-Congo, and even within the assumed NC family tree they occupy a rather isolated position (or positions, see Dimmendaal 2014). *A grammar of Dagik* again shows that the study of any of these language substantially adds to our knowledge and understanding of African languages and of human language.

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Sara Petrollino, *A Grammar of Hamar. A South Omotic Language of Ethiopia*.  
Köln, Köppe (Cushitic and Omotic Studies 6), 2016, xxii + 342 p.

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The Hamar ethnic group is one of the best studied in Ethiopia thanks to the works of the anthropologists Ivo Strecker and Jean Lydall who, together with their numerous students and other collaborators, have been doing research in the South Omo area for many decades. Their outstanding anthropological documentation, which also encompasses aspects of linguistic anthropology, has so far been in stark contrast to the slim documentation on the grammar and lexicon of Hamar. Lydall (1976) is a brief grammatical sketch, while more recent works deal with grammatical details, such as pronouns (Moges 2005) and copulas (Binyam & Moges 2014), but no comprehensive grammatical study has ever been conducted. In the general linguistic literature, Hamar has until now been associated with two features that have attracted the attention of typologists and comparativists: Lydall (1988) reports on the unusual gender system, in which feminine gender is associated with bigness and masculine gender with smallness. Zaborski (2004) notes similarities between the Hamar pronoun system and that of neighbouring Nilo-Saharan languages, on which grounds he contests the affiliation of Hamar, and South Omotic (SO) in general, to the Omotic stock. According to the last census (Central Statistical Agency 2007), Hamar is spoken by an estimated 46,500 people in the South Omo Zone of Ethiopia's Southern Region. The immediate neighbours are speakers of SO, East Cushitic, Eastern Nilotic and Surmic languages.

With the book under review – the published version of a PhD thesis written and defended at the universities of Lyon II and Leiden – Sara Petrollino sets out to fill a crucial gap in our linguistic knowledge of SO and provides the first substantial description of Hamar. The thirteen chapters, totalling 285 pages and ranging from phonology to pragmatics, are supplemented by an appendix with three selected texts (two animal tales and a procedural text, pp. 287-295), a Hamar-English wordlist of about 1,300 entries (pp. 297-318), a reverse English-Hamar list (pp. 319-332), a bibliography and a short subject index (pp. 333-342). The work is based on data collected during a total of nine months of fieldwork (2013/2014) from 14 native speakers and a corpus of 50 texts.

**SUMMARY:** After the introduction, chapter 2 deals with the Hamar sound system, the consonant and vowel inventories, syllable and word structure, stress and tone, and numerous (morpho)phonological processes.

Chapter 3 (“Nouns”) is a description of the intricate gender and number system and the semantic and pragmatic values associated with masculine and feminine gender and plural number morphemes. Two subsections of chapter 3 deal with nominal derivation and adjectives.

Chapter 4 (“Pronouns and pronominal clitics”) discusses personal, possessive, reflexive and demonstrative pronouns as well as the non-pronominal restrictive (‘alone’) and inclusive (‘too, also’) morphemes. Unlike all other SO languages, Hamar has a 6-form pronoun system (1SG, 2SG, 3M = 3PL, 3F, 1PL, 2PL), where the opposition between 3<sup>rd</sup> person masculine and plural is neutralised.

Chapter 5 is more eclectic, assembling information on various “other word classes”, i.e. locational adverbs, body part nouns, temporal and manner adverbs, ideophones, and cardinal and ordinal numerals. It contains, among other things, a notable description of counting gestures (p. 128).

Chapter 6 (“Verbs”) presents a partial description of the verbal morphology, namely an analysis of derivational mechanisms (causative, passive and non-productive morphology) and a brief overview of pronominal subject marking on verbs. Verb forms are divided into three types: (i) “uninflected paradigms”, i.e. invariant forms (e.g. General Declarative and Perfect) that cannot host subject proclitics but only combine with independent subject pronouns, (ii) verb forms with proclitic subject agreement (e.g. Perfective and Imperfective) and (iii) (true) inflected paradigms (e.g. Present Negative and Past Negative), in which portmanteau suffixes mark subject agreement, tense/aspect, mood and polarity. Petrollino is able to disprove Bender’s (2000) claim about the “near-absence” of person and number marking on Hamar verbs.

Chapter 7 (“Basic syntax”) is heterogeneous, bringing together a summary of word order rules at the clause and NP levels, a discussion of the discourse functions of gender and number morphemes, a description of the forms and usages of core case forms as well as an analysis of the marking patterns of two types of passive construction. In this chapter, we learn, among other things, that Hamar is head-final on the clause level but predominately head-initial on the NP level, where all modifiers apart from genitive nouns follow the head noun. Hamar is a nominative-accusative language, but only feminine nouns make an obligatory distinction between subject and non-subject forms. These are characterised by a morpheme *-n* labelled “oblique”, as this *-n*-form is used for direct and indirect objects and as the base to which non-core case markers attach. Unlike many other Ethiopian languages, Hamar does not have a *marked* nominative case system. The feminine non-subject form has a wide range of functions, but it is used neither as the citation nor as the predicate form; the nominative cannot be derived from it. Masculine and plural

nouns do not distinguish between subject and non-subject forms. A pragmatically determined, phrasal morpheme *-dan*, labelled “accusative”, can explicitly mark an NP of any gender/number as being in object function. As for the morpheme *-n* – it remains unclear whether this element is homophonous with the feminine oblique or a functional extension of the latter – it is shown to be a “relational marker” in various grammatical domains, whose functional commonalities are not readily apparent.

Chapter 8 (“Syntax of the noun phrase”) addresses agreement phenomena in the NP (§8.1), the formation and use of non-core cases (§8.2), the encoding of nominal and possessive modifiers (§8.3), the formation of relative clauses (§8.4), and mechanisms of conjunction and disjunction (§8.5). Hamar is shown to have an unusually elaborate system of non-core cases, which includes, among other things, the dative *-na* for recipients, beneficiaries, the source of ‘run’ and the standard of comparative constructions. The so-called “affective” case, *-xal* ~ *-kal*, marks locations (‘at somebody’s place’), possessors in predicative possession, and experiencers. The instrumental *-ka* ~ *-xa* marks instruments, points in time and places passed by (perlicative) and is clearly distinct from the comitative case *-be* ~ *-bet* ~ *-bette*. In addition, Hamar has seven locative(-only) cases to mark static and dynamic locations, e.g. the inessive case *-r* for a containment relation and a dedicated ablative *-rra*. Finally, the genitive *-sa* marks possessors and other nominal modifiers. The functional difference between genitive and NN constructions remains unclear. The section on relative clauses (§8.4) includes a discussion of the morphology of relative verbs, which are shown to be true participles agreeing in gender and number with their head noun (p. 201). Regrettably, Petrollino overlooks many interesting aspects of relativisation, such as the fact that Hamar seems to have internally headed relative clauses (cf. (57b) and (58) on p. 203). It would be interesting to know which grammatical functions the head noun can have *inside* the relative clause (see Keenan & Comrie’s 1977 accessibility hierarchy). The final section of chapter 8 includes information on a variety of NP and sentential coordination strategies and deals with the comitative morpheme as NP coordinator (‘and’), the inclusive morpheme *-l* as intersentential coordinator (‘both ... and’) and the interrogative disjunctive coordinator *-mo* ‘or’.

In spite of its name, chapter 9 (“Simple clauses”) is predominately an outline of Hamar verbal morphology and thus resumes the discussion of the verbal structure that was interrupted in chapter 6. For independent sentence-final verb forms, Petrollino makes a primary distinction between simple and complex predicates (§9.1). Discussion of subordinate verb forms is postponed to chapter 10. In chapter 9, Petrollino sketches a

complex TAM system with a multitude of simple and periphrastic verb forms. The different verb forms are formed through suffixation or cliticisation, stem reduplication and auxiliation; furthermore, the position of TAM morphemes and the obligatory or optional presence/absence of subject clitics and their position determine the different TAM values. This results in no less than nine simple verb forms (Imperative, General Declarative, Present/Jussive, Future, Intentional Future, Perfect, Perfective, Imperfective, Narrative) and eight periphrastic independent verb forms, the latter consisting of a dependent verb form plus an auxiliary. Auxiliaries originate from existential verbs, ‘want’, ‘think’, ‘stay’ and ‘stop’. The remainder of chapter 9 discusses the affirmative, non-interrogative copula *-ne* (§9.2) and the existential verb *dáa* ‘exist; live’ (§9.3).

Chapter 10 (“Complex clauses”) centres on the morphology and syntax of dependent verb forms and the functions of subordinating suffixes. Hamar is shown to mark converbs for switch-reference (SR). Thus Petrollino’s description fills a gap in our knowledge of the geographic spread of SR in Ethiopia (see Treis 2012 where Hamar could not be taken into account due to a lack of data). The different subject (DS) morpheme *-énka* (possibly *-én-ka* historically) is cognate with DS morphemes in North Omotic (NO); see, for example, *-ém* in Maale (Azeb 2000). The three-converb system of Hamar, where a DS converb is opposed to two same subject converbs (which Petrollino labels “same-event” and “general converb”) parallels the converb system of Baskeet (NO) (Treis 2012). Apart from converb clauses, chapter 10 is concerned with temporal, reason, conditional and purposive clauses, subordinate non-verbal predicates, complement and quotative clauses.

Chapter 11 (“Interrogative clauses”) details the marking of verbs and copulas in content and polar questions and provides a list of question pronouns, while chapter 12 (“Negative clauses”) elaborates on the negation of the copula, the existential, and independent and dependent verbs, supplemented by a discussion of the associated TAM neutralizations.

Chapter 13 presents a valuable critical discussion of the genetic links between Hamar and the other SO languages, in the light of Petrollino’s new data. A list of 150 Hamar words is contrasted with data from Kara, Aari and Dime (§13.3.1), while grammatical morphemes are compared across SO (§13.3.2, §13.3.4, §13.3.5). Following up on Zaborski (2004), the SO pronoun systems are compared to those of selected Nilo-Saharan languages, NO languages and Ongota. While the tight genetic links between the SO languages are clearly visible both in the lexicon and the grammar, the commonalities with NO are still difficult to spot (but see cognate DS converb markers). Thanks to Petrollino’s description it will be

possible to evaluate the relations between SO and NO more systematically in the future. Petrollino does not seem to subscribe to the Nilo-Saharan hypothesis of SO and considers similarities in the pronoun systems to be the result of language contact (p. 285).

EVALUATION: Unfortunately, Petrollino's monograph is not easy to read because of the way the information is organised and a number of rather opaque analyses. The organisation of the grammar is not very reader-friendly and the composition of the individual chapters often unintuitive (see especially §5 and §7). Admittedly, given the linear nature of a grammar, not all information that belongs together can always be presented together, but Petrollino unnecessarily splits up the description of certain grammatical domains and distributes them across the entire book in a way that is not obviously motivated by the structure of Hamar. The noun chapter (§3) includes a partial analysis of the gender and number system but does not discuss case. Case morphology is instead described in §7.4 of "Basic syntax", as far as core (/syntactic) cases are concerned, and in §8.2 of "Syntax of the noun phrase" [sic!], as far as non-core (/semantic) cases are concerned. The discussion of the functions of gender and number morphemes that was begun in chapter 3 is picked up in §7.3 of the "Basic syntax" chapter with information on the discourse functions of these morphemes. The presentation of demonstratives is spread across two chapters (§4.5 "Demonstrative pronouns" and §5.1 "Locational adverbs"), without clarifying the formal and functional similarities (or differences) of the forms given there. The grammar lacks a chapter dedicated to verbal morphology. Instead, information on verbal derivation is found in chapter 6 ("Verbs"); the TAM and subject agreement morphology of main verbs is laid out in chapter 9 ("Simple clauses") and that of converbs and most other subordinate verb forms in chapter 10 ("Complex clauses"), while the morphology of relative verbs is already sketched in chapter 8 ("Syntax of the noun phrase"). Interrogative and negative verb forms are given in §11.2.3 and §12.3, respectively. Thus the reader never gets a coherent picture of the formal relations between the different verb forms (or paradigms). Apart from these organisational issues, some of the proposed analyses are lacking in rigour. For reasons of space, this review addresses problematic aspects only in the analyses of the phonology and the verbal morphology.

Hamar is shown to have a tricky sound system. However, the complexity is not due to its phoneme inventory, which is not particularly complex: 26 (+1 marginal) consonant phonemes including 5 glottalised stops, seven vowels and five diphthongs. Rather it is due to the defective distribution of many consonants (only 10 out of 26 occur word-finally), the limited phonematicity of gemination (only 14 out of 26 consonants have a simplex-geminate contrast), the unclear phoneme status of some

consonants and vowels, and the numerous (morpho)phonological rules, some of which apply fairly generally while others target only very restricted grammatical contexts. While an easier solution to the (morpho) phonological problems is not immediately apparent, I have the impression that the description of the sound system does not yet do justice to the language and it might be possible to formulate more general rules (or motivate the postulated rules) with a larger database. Furthermore, some of the proposed phonological analyses are questionable. The phoneme /p/ is said to have two allophones [p] and [ɸ] – which is also a common phenomenon in other southwestern Ethiopian languages. For unclear reasons, Petrollino introduces this allophonic variation into the phonemic transcription of her data, representing phonetic [p] by *p* and [ɸ] by *f* (p. 9). Consequently, throughout the book, lexemes are arbitrarily written with *p* or *f*: *shípo* or *shifo* ‘shadow’, *eep-* or *eef-* ‘cry’, *aapá* or *aafá* ‘eye’, *durp-* or *durf-* ‘be fat’. These concerns notwithstanding, Petrollino does make an interesting observation about the Hamar consonant system, namely the existence of a “breathy-voiced glottal transition” (p. 21), transcribed as /h/ [ɦ], word-initially before /a/. This is not only reminiscent of the breathy vowels of Aari, as Petrollino notes, but also of unusual “h-phonemes” in Ometo languages, which all have a marginal status and sometimes contrast with plain /h/ (see e.g. Treis & Werth 2014 on Baskeet). The glottal fricatives in southwestern Ethiopia would definitely merit an in-depth phonetic study in the future.

Neither is Petrollino’s analysis of the 7-vowel system with phonemic length contrasts entirely convincing. The phonemic status of the mid-low vowels /ɛ/ and /ɔ/ remains questionable, as they are mostly the result of (morpho-)phonological processes (p. 29). It is also unclear why originally long vowels that are shortened before consonant clusters are considered to be (phonemically) short although they remain phonetically longer than word-initial short vowels (p. 36).

In §2.4, Petrollino argues “that Hamar has two co-existing, yet *independent* [prosodic] systems which can be analysed in terms of stress and tone” (p. 40; emphasis mine). Stress, which is realised as increased duration, high pitch and loudness on one syllable in every word, is lexically distinctive in nouns, see e.g. *átti* ‘bird’ vs. *attí* ‘fermented sorghum’ and *ánqasi* ‘bee’ vs. *anqási* ‘lamb’ (p. 41), and is also used to distinguish grammatical forms in the verbal system, e.g. Negative Past vs. Negative Present (p. 48). Petrollino’s claim that Hamar is also a tonal language is entirely based on the observation that certain grammatical forms are realised with a word-final falling tone, e.g. masculine nouns *qásá* ‘louse’ > *qasá* ‘louse:M’ (p. 42). This falling tone is analysed as a toneme, contrasting with a default level toneme. However, it is by no means clear that Hamar is a tone language. The word-final vowels with

“falling tone”, e.g. *â*, could satisfactorily be analysed as stressed bisegmental double vowels (*áa*), resulting from the coalescence of two vowel phonemes, the second of which is usually a separate morpheme. Three pieces of evidence for the plausibility of such an alternative analysis can be found in the description itself. Firstly, Petrollino herself observes that vowels such as *â* are realised phonetically long (p. 42). Secondly, Hamar does not seem to have final long vowels with level tone. Thirdly, some vowels ending with falling “tone” are in free variation with diphthongs, see e.g. *qoléi* [exist.not] (p. 166) ~ *qolé* [exist.not] (p. 110) and *wuc'-ê* ~ *wuc'-ái* [drink-PRES.NEG.3] ‘he doesn’t/she doesn’t/they don’t drink’ (p. 261).

The author presents a complex TAM system with altogether nine simple and eight periphrastic paradigms (or invariant verb forms) used in affirmative main clauses, nine subordinate verb forms, five interrogative paradigms and two negative paradigms. However, the presentation of the verbal system is difficult to understand for several reasons. Sometimes the description and the examples are in contradiction with each other. On other occasions, the analysis is not sufficiently illustrated with *contextualised* examples. The mobile imperfective and perfective morphemes are interpreted as being suffixal in some verb forms but as enclitic or proclitic in others. In addition, Petrollino treats some formally identical morphemes as homophonous (e.g. 2SG Imperative *-á* vs. stem formative *-á*) and others as polysemous (e.g. Present and Jussive *-é* are not differentiated, both being glossed as PRES, and are jointly opposed to the 2PL Imperative *-é*). Given my insufficient knowledge of Hamar I do not want to question these decisions but convincing arguments for keeping them are lacking.

Now let us turn to the postulated TAM values of simple affirmative main verb forms. Petrollino distinguishes nine TAM values: Imperative (2SG vs. 2PL), General Declarative (invariant, double stem), Present / Jussive (invariant, subject clitics obligatory) (1), Future (invariant, double stem, subject clitics obligatory) (2), Intentional Future (only 1SG), Perfect (invariant), Perfective (invariant, subject clitics optional), Imperfective (invariant, subject clitics optional) (3) and Narrative (invariant).

This list shows us, among other things, that not all verb forms are marked for person, that both aspect and tense are marked morphologically, and that in two verb forms, General Declarative and Future, the verb stem is expressed twice, see *kalsh[á]* ‘help’ in (2). Not all TAM values are defined by the occurrence of a certain TAM morpheme (e.g. the Narrative is marked by the narrative morpheme *-b*), but Petrollino associates some TAM values with a combination of TAM markers and a certain morpheme order, e.g. the Future (2) is marked by a sequence of two verb stems, the first of which carries subject agreement and the

imperfective morpheme, the second of which carries the present morpheme.

- (1) Present (p. 212)

<i>kánki-xa</i>	<i>wo=da=yi?</i> -é
car-INS	1PL=IPFV-go-PRES
'We go by car.'	

- (2) Future (p. 213)

<i>ínta</i>	<i>haan</i>	<i>kalshá=i=da</i>	<i>kalsh-é</i>
1SG	2SG.ACC	HELP=1SG=IPFV	help-PRES
'I will help you (now, later, one day).'			

- (3) Imperfective (p. 215)

<i>t'álian</i>	<i>ká-te</i>	<i>galdó-n-te</i>	<i>qaná-da</i>
Italians	PRX.SP-LOC	lap-F.OBL-LOC	hit-IPFV
'The Italians used to hit here on the laps.'			

It is problematic that no terminological or orthographic distinction is made between, on the one hand, present, perfective and imperfective morphemes, which occur in various verb forms, often in combination (cf. (2)), and, on the other hand, constructions that express the TAM values such as Present, Perfective and Imperfective. This review differentiates these two usages by means of capitalisation. It is also unclear why some morpheme combinations are interpreted as encoding separate TAM values, while others are not. For example, the perfect morpheme alone and perfect + copula marking (p. 214) are both considered to encode Perfect.

Petrollino describes the function of the Present as referring to "actions which take place at the moment of speaking" (p. 212). The examples throughout the book, however, show that this might not be a sufficient, and may even be an erroneous characterisation of this verb form. The Present is seen to express futurity (ex. (30), p. 145), habituality (ex. (6b), p. 212) in the present and even habituality in the past (ex. (27d), p. 241). In contrast, the verb form called "Future" is used in procedural contexts – see Text 3 about the preparation of goat hides where the Future form is used five times as the main verb form – where the General Declarative would have been expected if Petrollino's description of the latter verb form is adequate (p. 211). The Future also occurs in habitual contexts in the present (ex. p. 242, ex. 29c). So there is good reason to believe that the choice between the single-stem Present and the double-stem Future verb form is not determined by tense and that Petrollino's analysis needs to be revised. It is also unfortunate that the Present tense and Jussive mood, which are both marked by -é, are lumped together, although they are structurally distinct in the first and second person.

The function of the Perfect is characterised as referring to "actions viewed as already completed at the time of reference. The completed action might have present relevance" (p. 214). Petrollino continues: "In

the perfective the emphasis is put on the whole event, whereas in the perfect [...] the emphasis is on the end point of the action.” The language-internal functional differences between the Perfect and the Perfective are not further discussed with textual examples. It should also be noted that Petrollino usually translates the Hamar Perfect with the English Past tense and that the animal tales in the appendix contain several Perfect but no Perfective main verb form. In addition, the difference between the Perfect and the Narrative is not explored.

Whereas the TAM system in affirmative main clauses distinguishes tense and aspect values, the analysis reduces the system to a binary opposition between Present vs. Past in relative clauses (p. 201ff), content questions (p. 247ff) and negative clauses (p. 261ff). (Note that main verbs have no Past value.) As for relative markers on verbs, they are analysed as portmanteau morphemes expressing gender/number and tense. It would be worth exploring whether the two relative paradigms could not be interpreted as reflecting an Imperfective vs. Perfective aspectual difference. The Past Relative (/Perfective) of ‘be.angry’ and ‘sit’ are translated as ‘who is angry’ (p. 201) and ‘who is seated’ (p. 201), respectively – which is reminiscent of the behaviour of change of state verbs (‘be(come) angry, sit (down)’) in many Ethiopian languages with an aspect opposition, where the Perfective expresses a state resulting from a change and the Imperfective an ongoing change of state.

The pragmatic explanations for certain constructional or morphological variants often appear to be *ad hoc*, as, for example, when the impersonal passive of transitive verbs is said to have a “backgrounding effect on the event expressed by the verb” (p. 147), or when passivised intransitive verbs are claimed to “highlight the event expressed by the verb” (p. 147). What is also missing is morphosyntactic definitions for the postulated word classes, especially for adjectives and adverbs. Petrollino does not clearly spell out the criteria for considering certain morphemes to be affixes, others to be clitics, and a third type to be affixes in one context and clitics in another. For unclear reasons, the restrictive =*mal* ‘only’ is considered to be an enclitic, while the inclusive -*l* ‘also’ is regarded as a suffix (p. 109f); it is equally unclear why case and gender/number morphemes are considered enclitic on pronouns (personal: p. 103f, possessive: p. 106, reflexive: p. 107) but suffixal on nouns. Some terminological choices are debatable: Petrollino speaks of “paradigms” even when a verb form is invariant; see the “uninflected paradigms” on p. 150. I would have preferred the term “proximative” (Heine 1994) over the label “inceptive” for the verb form expressing ‘be about to V’, and the term “additive” (Forker 2016) over “inclusive” for the -*l*-morpheme marking addition and coordination. The label “realis” for the complex verb form expressing ‘almost V-ed (but then didn’t V)’ is

misleading; “action narrowly averted” (Kuteva 1998) would be an alternative. In the glosses, the difference between pronoun I and II forms – to which ample reference is made in the description – should have been indicated. Similarly, the glosses should have noted the distinction between the present markers in content and polar interrogative (INT) clauses, -é and -ó (probably: <\* PRES -é + INT -u), which are both glossed PRES.INT.

The book contains a fair number of typos, grammatical errors and errors of word choice, including, to cite but a few examples, “Dhaasanec” (p. 1), “Dhaasanc” (p. 206, 231) > “Dhaasanac”, *?oonéè* (p. 44, figure) > *?oonéè*, “in the shadow” > “in the shade” (p. 116), “child” > “1SG” for the gloss of *inta* (p. 120), “ordinal number ‘one’” > “cardinal number ‘one’” (p. 131), “illegal consonant cluster” > “illicit consonant cluster” (p. 139), “comitative” > “comitative” (p. 177), “Kenya-ABL-LOC” > “Kenya-ABL-COP” (p. 205, ex. 62c), *qóle* (4a) > *qóle* (19a) (p. 253), “*bóna adj*” > “*bóna n*” (p. 299). More references to earlier works on Hamar and to descriptions of related languages in the individual chapters would also have been welcome.

These critical observations are not meant to diminish the overall value of this highly recommended work, which was completed in the time frame of a PhD project and under challenging field conditions. Petrollino’s Hamar grammar takes us a great step forward in the description of the still little known Omotic languages. It lays the foundation for future comparative studies on the genetic relations between SO and NO and, together with the natural text corpus on which the description is based, it constitutes a substantial source and a valuable starting point for future in-depth studies of specific grammatical issues.

## Abbreviations

ABL	ablative	NEG	negation
ACC	accusative	NO	North Omotic
COP	copula	OBL	oblique
DS	different subject	PL	plural
F	feminine	PRES	present
INS	instrumental	PRX	proximal
INT	interrogative	SG	singular
IPFV	imperfective	SO	South Omotic
LOC	locative	SP	specific locational
M	masculine	SR	switch-reference

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