# バントゥ諸語マイクロ類型論と Bantu morphosyntactic variation database

品川大輔

東京外国語大学アジア・アフリカ言語文化研究所

ds@aa.tufs.ac.jp

2023-01-22@NII-1810

# アウトライン

1. はじめに：バントゥ諸語とマイクロ類型論
2. バントゥ諸語マイクロ類型論：研究史
3. BMV (Bantu morphosyntactic variation database)
4. 類型論的一般化の試み – focus markingに関するcovariation
5. 課題と展望

# 1. はじめに：バントゥ諸語とマイクロ類型論


Greenberg (1963)


Watters (2018: 7)

★ サブ・サハラ・アフリカの広大な地域で話される言語数約500を数える一大言語群

★ ニジェール・コンゴ語族ベヌエ・コンゴ語派のなかの一分派

★ 祖地は現在のナイジェリア・カメルーン国境のあたり

# 1. はじめに：バントゥ諸語とマイクロ類型論



Williamson & Blench (2000)
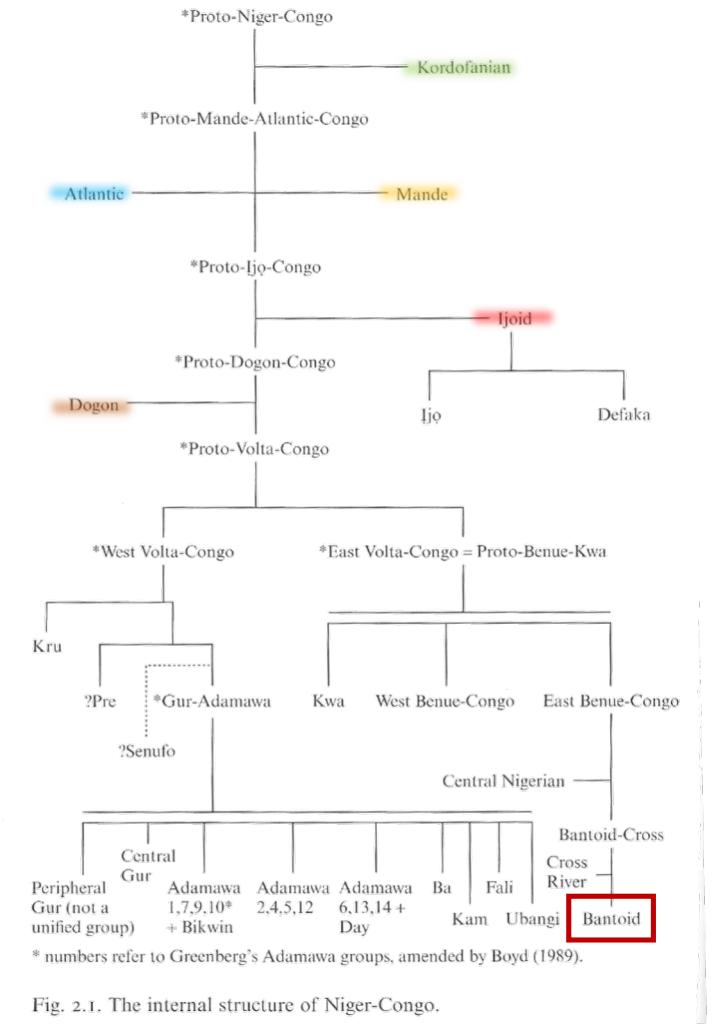


Fig. 2.1. The internal structure of Niger-Congo.

* numbers refer to Greenberg's Adamawa groups, amended by Boyd (1989).

# 1. はじめに：バントゥ諸語とマイクロ類型論



SUMMARY
OF
CLASSIFICATION

I. ☐ CONGO-KORDOFANIAN
　I.A. Niger-Congo
　　I.A.1 West Atlantic
　　I.A.2 Mande
　　I.A.3 Voltaic
　　I.A.4 Kwa
　　I.A.5 Benue-Congo
　　I.A.6 Adamawa-Eastern
　I.B. Kordofanian
　　I.B.1 Koalib
　　I.B.2 Tegali
　　I.B.3 Talodi ⎫ not shown
　　I.B.4 Tumtum ⎬
　　I.B.5 Katla ⎭

II. ▦ NILO-SAHARAN
　II.A. Songhai
　II.B. Saharan
　II.C. Maban
　II.D. Fur
　II.E. Chari-Nile
　　II.E.1 Eastern Sudanic
　　II.E.2 Central Sudanic
　　II.E.3 Berta
　　II.E.4 Kunama
　II.F. Koman
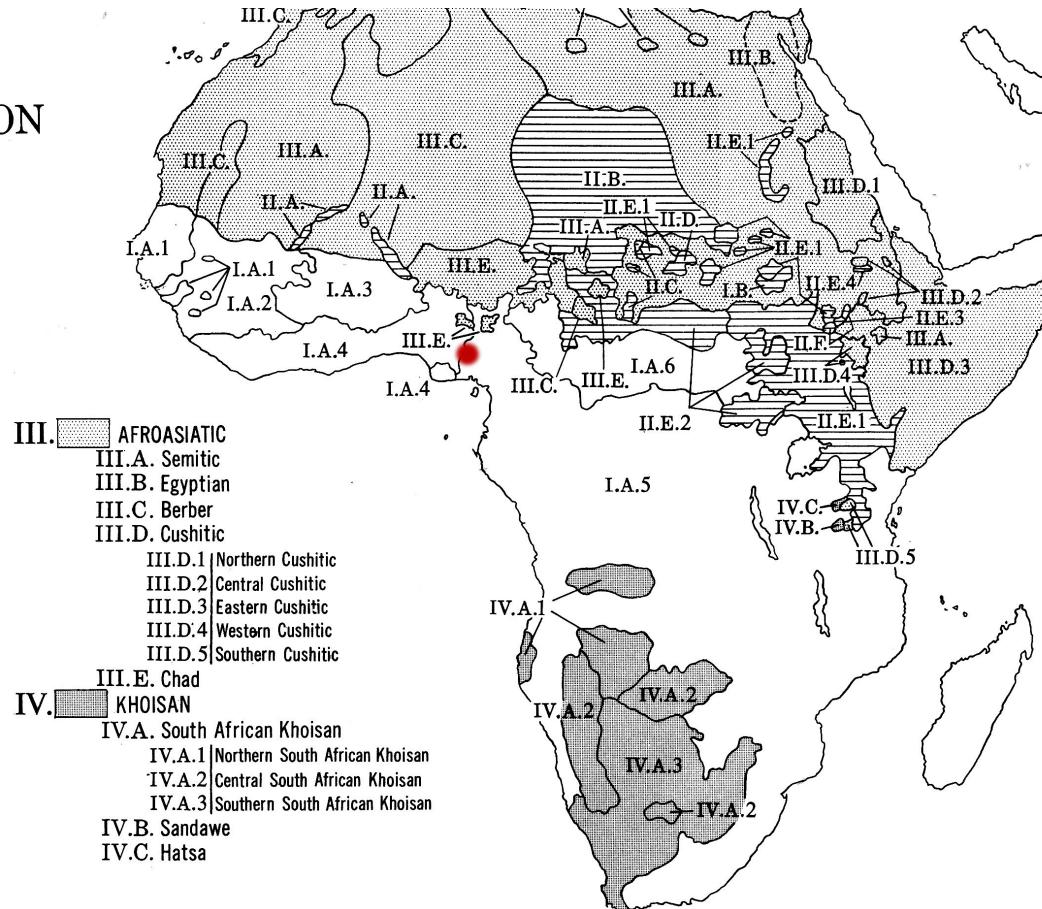
III. ▨ AFROASIATIC
　III.A. Semitic
　III.B. Egyptian
　III.C. Berber
　III.D. Cushitic
　　III.D.1 Northern Cushitic
　　III.D.2 Central Cushitic
　　III.D.3 Eastern Cushitic
　　III.D.4 Western Cushitic
　　III.D.5 Southern Cushitic
　III.E. Chad

IV. ▨ KHOISAN
　IV.A. South African Khoisan
　　IV.A.1 Northern South African Khoisan
　　IV.A.2 Central South African Khoisan
　　IV.A.3 Southern South African Khoisan
　IV.B. Sandawe
　IV.C. Hatsa

Greenberg (1963)

Watters (2018: 7)

★ サブ・サハラ・アフリカの広大な地域で話される言語数約500を数える一大言語群

★ ニジェール・コンゴ語族ベヌエ・コンゴ語派のなかの一分派

★ 祖地は現在のナイジェリア・カメルーン国境のあたり
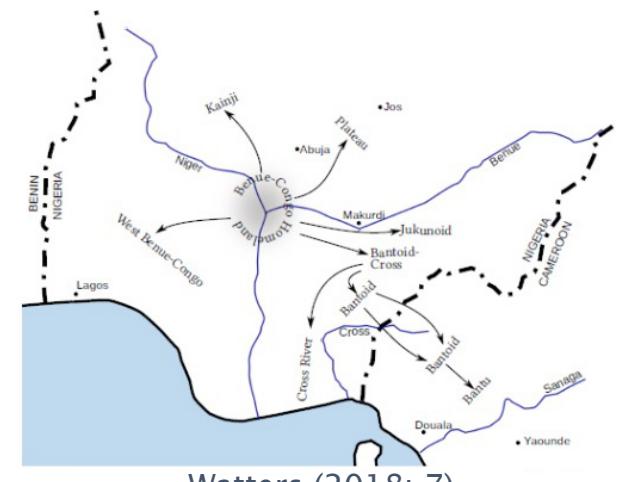
# 1. はじめに：バントゥ諸語とマイクロ類型論

❖ Bantu expansion: バントゥ諸語の分岐・拡散のルート (Grollemund et al. 2015)



←NW
←CW
←WW
←SW
←E
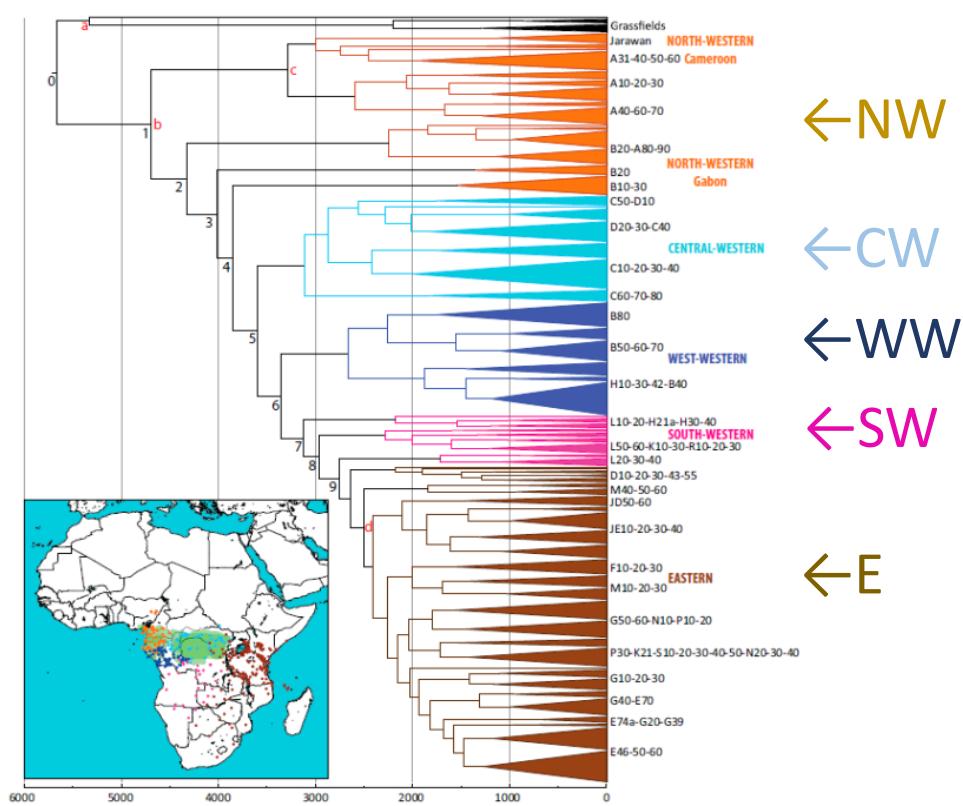
Fig 1. Consensus time tree of n=424 Bantu languages
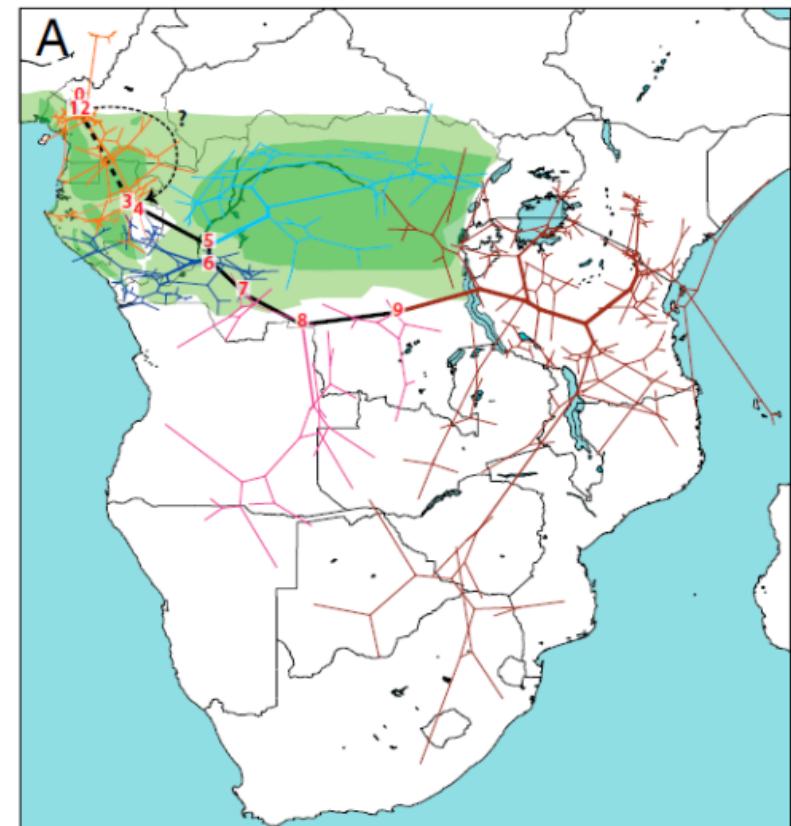


Fig 2. Ancestral migration route reconstructed on the consensus time tree (Fig 1)

# 1. はじめに：バントゥ諸語とマイクロ類型論

❖ **Guthrie code:** バントゥ諸語の参照分類コード (Guthrie 1967–71)
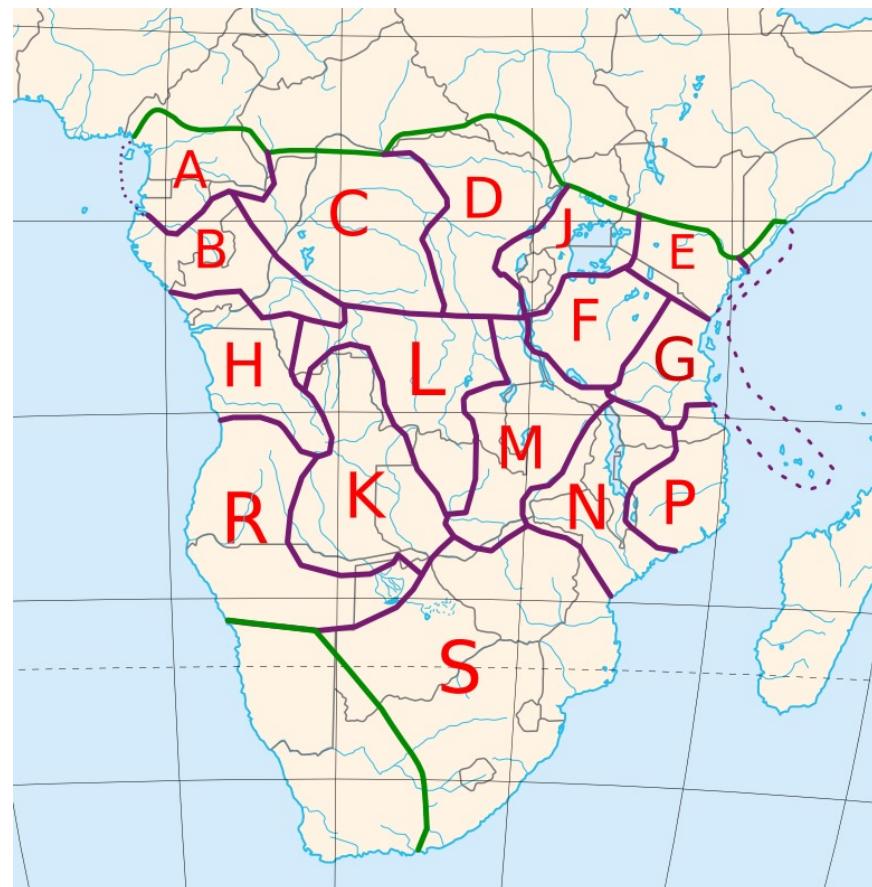


Map source: https://commons.wikimedia.org/wiki/File:Bantu_zones.png

# 2. バントゥ諸語マイクロ類型論：研究史

❖ Bastin (1983) "Essai de classification de quatre-vingt langues bantoues par la statistique grammaticale"

   ✦ 52の 'Item-based' な音韻／形態／語彙的パラメター

   ✦ 系統分類研究への貢献を意図
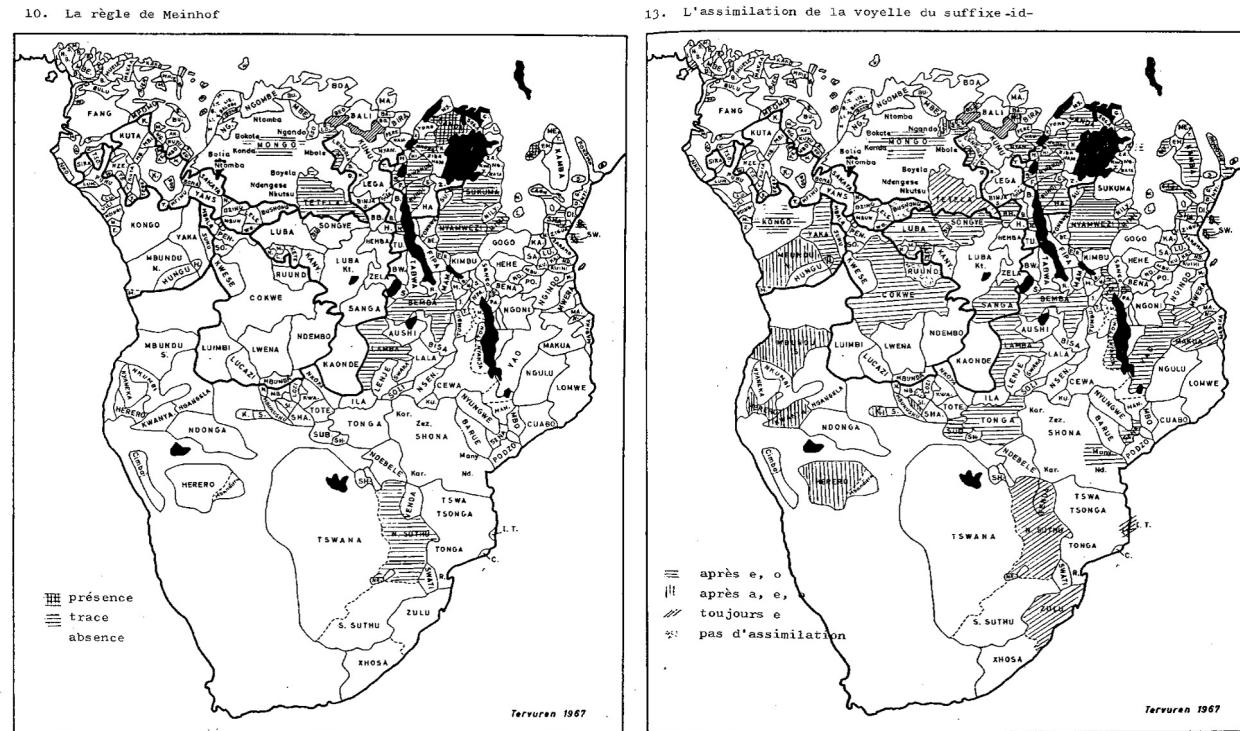


Bastin (1983: 82-85)

# 2. バントゥ諸語マイクロ類型論：研究史

❖ Marten *et al.* (2007) "Parameters of morphosyntactic variation in Bantu"

 ★ 抽象的な形態統語レベルのメカニズムを反映したパラメター

 ★ 類型論研究への明確な指向性

### Table 2. Parameters of the study

**Object markers**

| | |
|---|---|
| 1 OM – obj NP | Can the object marker and the lexical object NP co-occur? |
| 2 OM obligatory | Is co-occurrence required in some contexts? |
| 3 OM loc | Are there locative object markers? |
| 4a One OM | Is object marking restricted to one object marker per verb? |
| 4b Restr 2 OM | Are two object markers possible in restricted contexts? |
| 4c Mult OM | Are two or more object markers freely available? |
| 4d Free order | Is the order of multiple object markers structurally free? |

**Double objects**

| | |
|---|---|
| 5 Sym word-order | Can either object be adjacent to the verb? |
| 6 Sym passive | Can either object become subject under passivisation? |
| 7 Sym OM | Can either object be expressed by an object marker? |

**Relatives**

| | |
|---|---|
| 8 Agr Rel mark | Does the relative marker agree with the head noun? |
| 9a Res OM obl | Is an object marker required in object relatives? |
| 9b Res OM barred | Is an object marker disallowed in object relatives? |
| 9c Res OM optional | Is an object marker optional in object relatives? |

**Locative inversion**

| | |
|---|---|
| 10 LI restr | Is locative inversion thematically restricted to intransitives? |
| 11 Full loc SM | Are there three different locative subject markers? |

**Conjunct agreement**

| | |
|---|---|
| 12 Partial Agr | Is partial agreement with conjoined NPs possible? |

**Conjoint/disjoint**

| | |
|---|---|
| 13 Conj/disj | Is there a (tonal) distinction between conjoint/disjoint forms? |
| 14 Tone case | Is there a (tonal) distinction of nominal 'cases'? |

### Table 3. Values for ten Bantu languages

| | Swah. | Chaga | Ha | Bem. | Chich. | Nseng. | Tswa. | Lozi | Swati | Her. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 OM – obj NP | yes | no | yes | yes | no | ? | no | yes | no | no |
| 2 OM obligatory | yes | yes | ? | no | no | ? | no | no | no | no |
| 3 OM loc | yes | yes | yes | yes | yes | yes | yes | no | no | yes |
| 4a One OM | yes | no | no | no | yes | ? | no | yes | yes | yes |
| 4b Restr 2 OM | no | no | no | yes | no | ? | no | no | no | no |
| 4c Multiple OM | no | yes | yes | no | no | ? | yes | no | no | no |
| 4d Free order | no | no | no | no | no | ? | yes | no | no | no |
| 5 Sym order | no | no | yes | no | no | ? | yes | no | no | no |
| 6 Sym passive | no | yes | ? | no | no | ? | yes | yes | yes | yes |
| 7 Sym OM | no | yes | ? | no | no | ? | yes | yes | yes | yes |
| 8 Agr Rel mark | yes | ? | yes | yes | yes | yes | yes | yes | no | yes |
| 9a Res OM oblig | no | ? | no | no | yes | no | yes | no | yes | no |
| 9b Res OM barred | no | ? | no | yes | no | no | no | yes | no | yes |
| 9c Res OM poss | yes | ? | yes | no | no | yes | no | no | no | no |
| 10 LI restr | yes | yes | ? | yes | yes | no | yes | yes | no | no |
| 11 Full loc SM | yes | no | no | yes | yes | yes | no | no | no | yes |
| 12 Partial agr | yes | ? | no | no | no | yes | ? | ? | yes | no |
| 13 Conj/disj | no | no | yes | yes | no | ? | yes | ? | yes | no |
| 14 Tone case | no | no | no | no | no | ? | no | ? | no | yes |

# 2. バントゥ諸語マイクロ類型論：研究史

❖ Marten *et al.* (2018) "Bantu Morphosyntactic Variation Database (BMV)"

★ 形態統語領域を網羅的にカバーする142の micro-parameters (Guérois *et al.* 2017) [1]

★ 100以上の言語のデータを集約，inter-parametric な分析が可能に
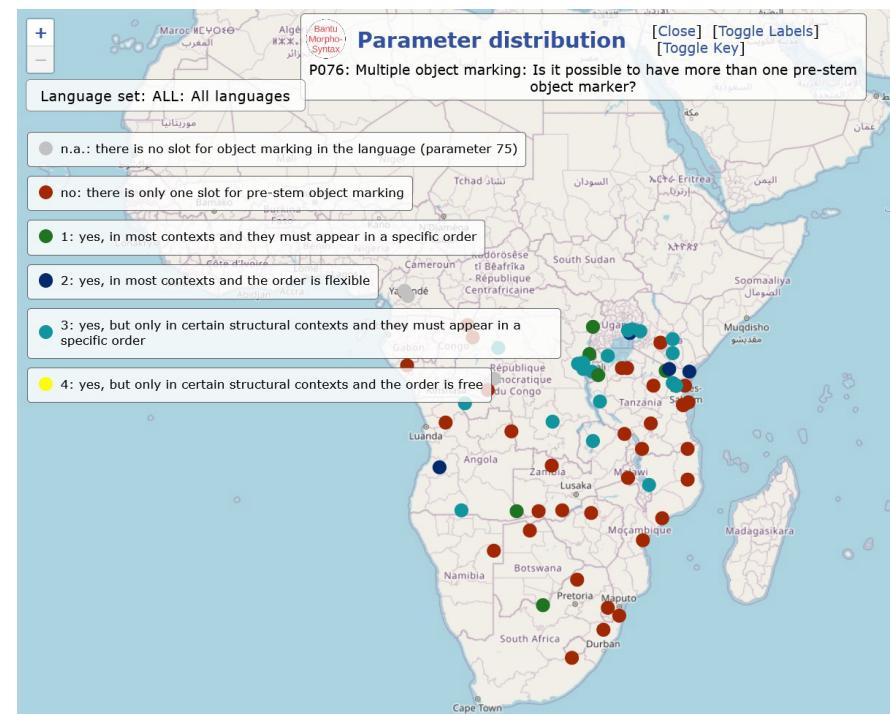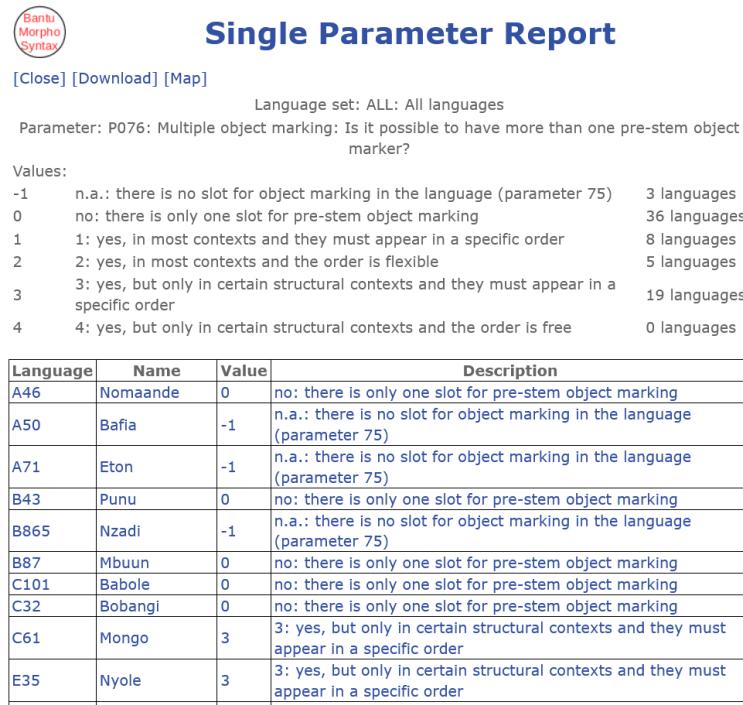


[1] Guérois, Rozenn, Hannah Gibson, and Lutz Marten. 2017. Parameters of Bantu Morphosyntactic Variation. Available online at https://zenodo.org/record/3958997#.Y8uXUxPP3Vs. DOI: 10.5281/zenodo.3958997

# 3. BMV (Bantu morphosyntactic variation database)

❖ パラメターの例

P076: Multiple OM: 複数の目的語接辞 (OM) をとることはできるか

Is it possible to have more than one pre-stem object marker?

| verb[PreInitial= | Initial- | PostInitial- | Pre-Stem- | Radical | -Extensive | -PreFinal | -Final | =PostFinal] |
|---|---|---|---|---|---|---|---|---|
| NEG | Subject agreement | TAM, NEG | Object agreement | Verb Root | Valency | Aspect | Mood | Mood, NEG |



| value | description | number |
|---|---|---|
| n.a.: | スロットなし | [3] |
| no: | OMは1つのみ | [35] |
| 1: | multiple OM可；環境制約なし；辞順固定 | [8] |
| 2: | multiple OM可；環境制約なし；辞順自由 | [5] |
| 3: | multiple OM可；環境制約あり；辞順固定 | [19] |
| 4: | multiple OM可；環境制約あり；辞順自由 | [0] |
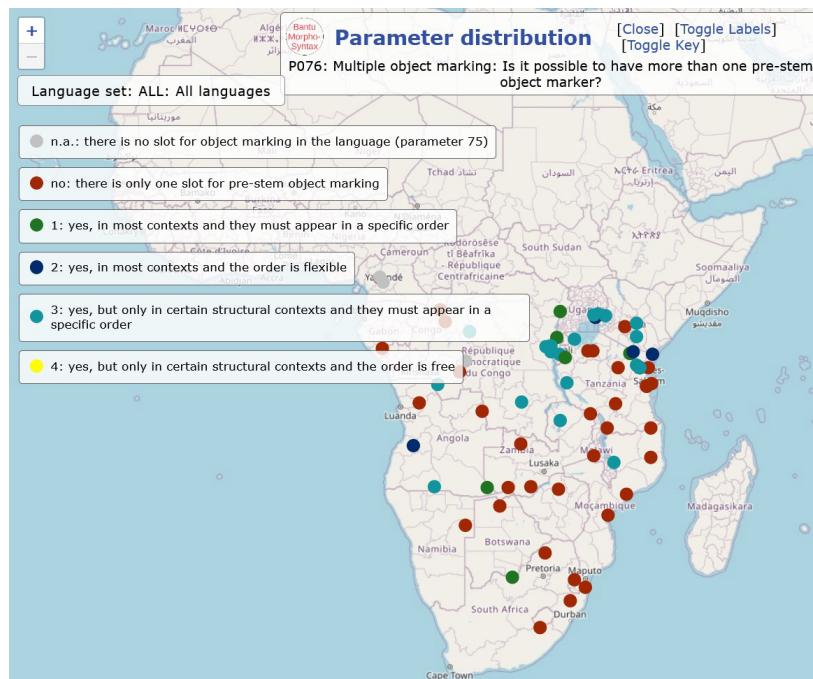
**P076に関する一般傾向**

i)   多くの言語はOMをひとつしかとらない
ii)  multi-OMは，特定の環境制約の元で許容される言語が比較的多い
iii) 環境制約があり，かつ辞順が自由であるという言語は（今のところ）確認されていない

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 形態論的焦点標識 (Morphological focus marker)

P140: フォーカス項は形態論的フォーカスマーカー (MFM) によって標示されうるか
Can a focussed term be marked by a morphological focus marker?
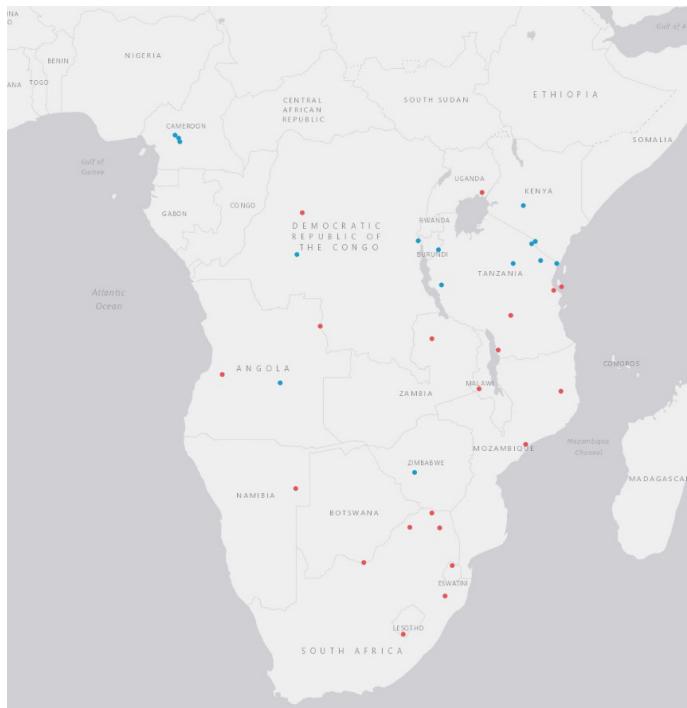


● yes [15]　　　● no [20]

★ 具体例

Chaga-Mochi [E622A] Philippson and Montlahuc (2003: 490–491) [1]

a. **ɲì ḿsòrò áléwónà**
ɲi m̩-soro a-le≠won-a
COP 1-man SM1-PST2≠see-FV
'It's a man he saw (not a woman)'

b. **ɲǎlèwónà m̀sòrǒ**
ɲi=a-le≠won-a m̩-soro
FOC=SM1-PST2≠see-FV 1-man
'He saw a man (that's what he did)'

Kpāʔ (Bafia) [A53] Guarisma (2003: 333–334) [2]

a. **c-óʔ k-ɛ́'ɛ́-m̀**
7-forest 7-FOC-be
'It is a forest'

b. **kǐ-pɛ́n k-ɛ́ɛ̀ kɨ́ à-á-ɗíí**
7-fufu 7-FOC 7 SM1-IMM-eat;PFV
'It is fufu that he ate.'

★ 地理的分布 (Marten et al. 2018)
北東部 (zones: E, F, JE, etc.) ＋ 北西部 (zones: A, B, etc.)

[1] Philippson, G. and M-L. Montlahuc. 2003. Kilimanjaro Bantu (E60 and E74), in: Nurse, D. and G. Philippson (eds.) *The Bantu languages*. London: Routledge, pp. 475–500. [2] Guarisma, G. Kpāʔ (A53), in Nurse and Philippson (eds.) pp. 307–334.

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 共接/離接形 (Conjoint: CJ/Disjoint: DJ form)

P074: CJ/DJ対立を有するか?

Does the language have a conjoint / disjoint distinction?
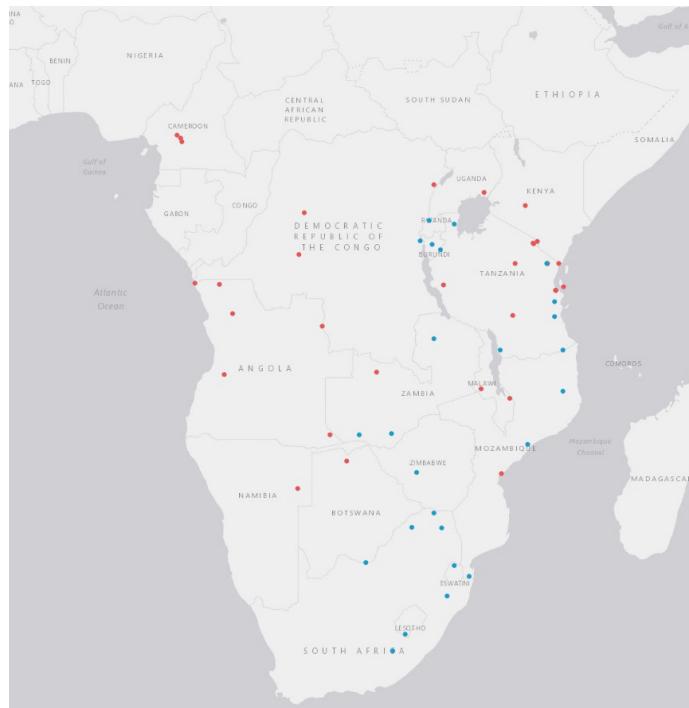
★ 具体例

統語論+形態論+音調による交替: Bemba [M42] Kula (2017: 271) [1]

a. [CJ] **bá̠-lóóndólòl-à lyòònsè**　　b. [DJ] **bá̠-lá-lóóndólól-á**
　　　 SM2-explain-FV　all the time　　　　　 SM2-PFV.DJ-explain-FV
　　　 'They explain all the time'　　　　　　 'They explain'

音調ベースの交替: Tonga [M64] Hyman (2017: 107) [2]

a. [CJ] **ndà-ká-ꜜtól-á　ₕnyàmà**　　b. [DJ] **ndà-ká-tòl-à | ₕ→ønyàmà**
　　　 'I took MEAT'　　　　　　　　　　　 'I TOOK meat'

★ 地理的分布 (Van der Wal 2017: 16-17) [3]
　　 南部 (zones: M, N, P, and S) ＋ ヴィクトリア湖畔 (zones: JD, Gの一部 etc.)

[1] Kula, N. C. 2017. The conjoin/disjoint alternation and phonological phrasing in Bemba, In Van der Wal, J. and L. Hyman (eds.) *The conjoint/disjoint alternation in Bantu*. Berlin/Boston: Walter de Gruyter, pp. 258-294. [2] Hyman, L. 2017. Disentangling conjoint, disjoint, metatony, tone cases, augments, prosody, and focus in Bantu, In Van der Wal and Hyman (eds.) pp. 100-121. [3] Van der Wal, J. 2017. What is the conjoint/disjoint alternation? Parameters of crosslinguistic variation, In van der Wal and Hyman (eds.) pp. 14-60.

yes [25]　　　　no [34]

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 焦点表示をめぐる構造特性の連動関係と類型論的一般化への示唆

> MFMとCJ/DJは概ね相補的に分布 ⇒ 機能的な相同性の反映 (Shinagawa & Marten 2021a)[1]
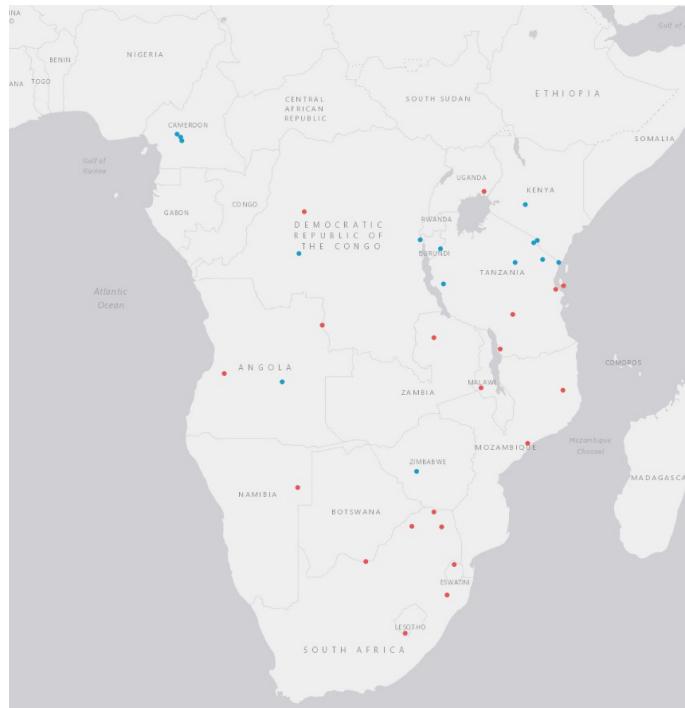
### P140: 形態的焦点標識 (MFM)          ### P074: 共接/離接形 (CJ/DJ)
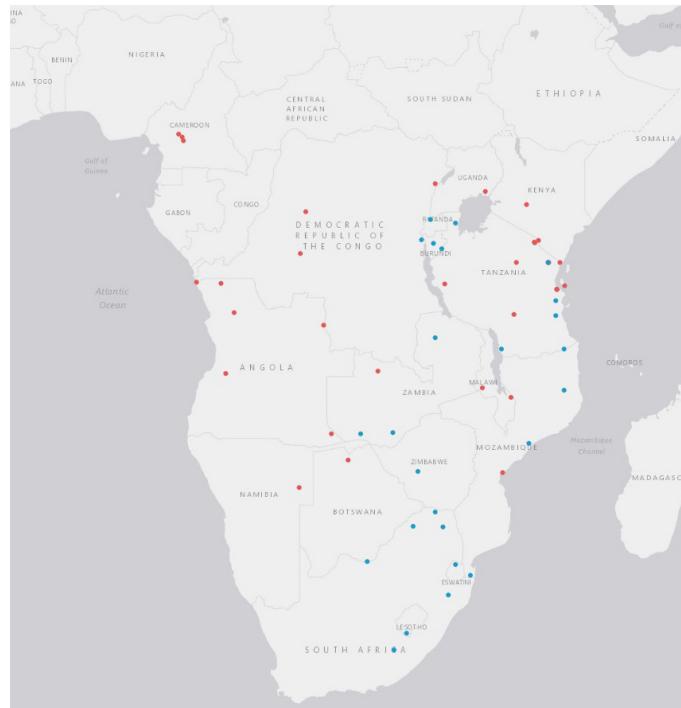



|  | + CJ/DJ (25) | - CJ/DJ (34) |
|---|---|---|
| +MFM (15) | 3 lgs: .231/.214<br>- Kifuliiru [JD63]*1<br>- Ha [JD66]*2<br>- S. Ndebele [S44]*3 | 10 lgs: .770/0.526<br>A50, A601, A71, B865, E622d, E623, E73, F12, F33 |
| - MFM (20) | 11 lgs: .550/.786<br>M42, N13, P31, P34, S21, S31, S32, S33, S42, S43, S53 | 9 lgs: .450/0.474<br>C61, G42, G43c, G52, JE15, K11, N31, R11, R31 |

*1分裂構文の一部?
*2CJ/DJ表示の形態的操作の一部?
*3形態化された分裂構文?

↓

類型論データベースの抱える
「課題」へ

[1] Shinagawa, D. & L. Marten. 2021. A micro-parametric survey on typological covariation related to focus marking strategies: Based on the Bantu Morphosyntactic Variation database. Paper read at the 10th World Congress of African Linguistics. DOI 10.17605/OSF.IO/Z86PV

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 動詞反復 (Verb doubling: VD)

P107: (非定動詞が定動詞に先行する) 動詞反復構文はあるか?

Are there verb doubling constructions, where a non-finite verb form (e.g. infinitive, verbal base) appears before an inflected form of the same verb?



- verb focus [8]
- both [9]
- topicalisation [8]
- no [10]
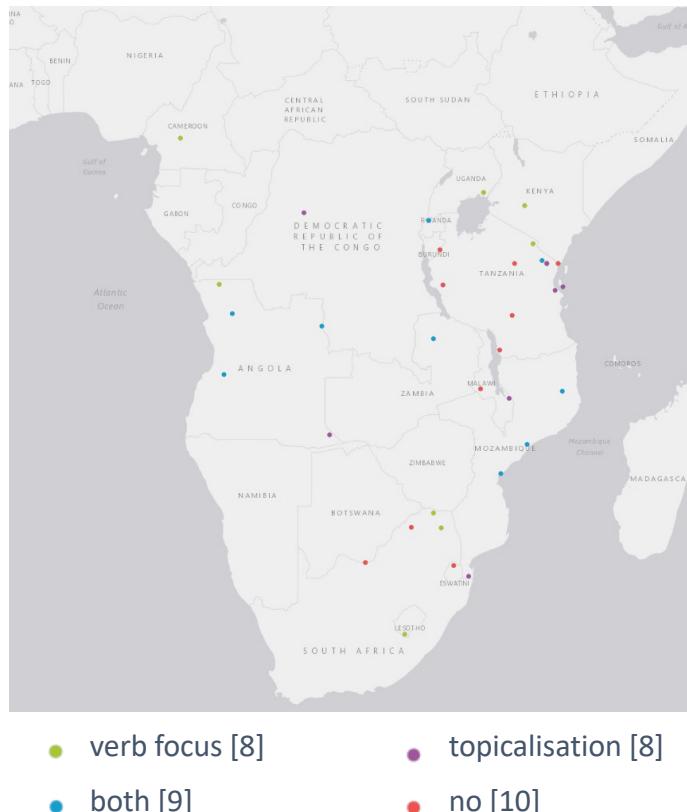
★ 具体例

Suundi [H13b] Hadermann (1996: 161) cited in Güldemann (2003)
  a. **ndyèká–tá:ngà**   vs.   b. **kù–tá:ngà**   **ndyèká–tá:ngà**
     1SG:FUT–read              INF–read         1SG:FUT–read
     'je vais lire'            'je vais lire'

★ 地理的分布

> VDとCJ/DJの間には顕著に相補的な分布は確認されない

| | + CJ/DJ (25) | - CJ/DJ (33) |
|---|---|---|
| +VD (17) *FOC-related | 7 lgs: .438/.583 <br> JD61, M42, P31, P34, S21, S33, S53 | 9 lgs: .563/.643 <br> A601, E51, E622d, H16a-1, H21, JE15, K11, N44, R11 |
| - VD (10) | 5 lgs: .500/.417 <br> JD66, N13, S31, S32, S43 | 5 lgs: .500/.357 <br> E73, F12, F33, G52, N31 |

MFM–CJ/DJのケースと異なり, VD–CJ/DJには顕著に相補的な分布は確認されない (contra. Güldemann et al. 2014, Morimoto 2017: 171).

→ VDによって表示しうるフォーカスのタイプが, 特定のpredicate–centered focusに限定されるため?

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 焦点標示関連パラメーターと否定および倒置に関するパラメーターとの連動

| | | NEG particle | | Locative inversion | | | | Patient inversion | |
|---|---|---|---|---|---|---|---|---|---|
| | | P056=no | P056=1 | P122=1 | P122=2 | P122=3 | P122=no | P123=yes | P123=no |
| | number of lgs. | 35 | 8 | 36 | 5 | 9 | 13 | 15 | 37 |
| | average | 0.547 | 0.125 | 0.571 | 0.079 | 0.143 | 0.206 | 0.288 | 0.712 |
| CJ/DJ | if P074=yes (25) | 0.938 | 0.063 | 0.412 | 0.176 | 0.118 | 0.235 | 0.059 | 0.941 |
| CJ/DJ | if P074=no (34) | 0.533 | 0.167 | 0.652 | 0.043 | 0.261 | 0.261 | 0.348 | 0.652 |
| VD | if P107=FOC (8) | 0.750 | 0.125 | 0.333 | 0.000 | 0.167 | 0.667 | 0.000 | 1.000 |
| VD | if P107=TOP (8) | 0.750 | 0.000 | 0.714 | 0.143 | 0.286 | 0.000 | 0.429 | 0.571 |
| VD | if P107=both (9) | 0.778 | 0.000 | 0.556 | 0.000 | 0.111 | 0.333 | 0.000 | 1.000 |
| VD | if P107=no (10) | 0.700 | 0.200 | 0.556 | 0.111 | 0.222 | 0.111 | 0.111 | 0.889 |
| MFM | if P140=yes (15) | 0.533 | 0.267 | 0.273 | 0.000 | 0.273 | 0.455 | 0.091 | 0.909 |
| MFM | if P140=no (20) | 0.800 | 0.050 | 0.579 | 0.158 | 0.158 | 0.105 | 0.211 | 0.789 |

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ CJ/DJと否定および倒置に関するパラメーターとの連動

| | | NEG particle | | Locative inversion | | | | Patient inversion | |
|---|---|---|---|---|---|---|---|---|---|
| | | P056=no | P056=1 | P122=1 | P122=2 | P122=3 | P122=no | P123=yes | P123=no |
| | number of lgs. | 35 | 8 | 36 | 5 | 9 | 13 | 15 | 37 |
| | average | 0.547 | 0.125 | 0.571 | 0.079 | 0.143 | 0.206 | 0.288 | 0.712 |
| CJ/DJ | if P074=yes (25) | 0.938 | 0.063 | 0.412 | 0.176 | 0.118 | 0.235 | 0.059 | 0.941 |
| CJ/DJ | if P074=no (34) | 0.533 | 0.167 | 0.652 | 0.043 | 0.261 | 0.261 | 0.348 | 0.652 |

★ CJ/DJ対立を有する言語は，顕著に否定不変化詞を欠く

| [+CJ/DJ, –NEG particle] | [+CJ/DJ, +NEG particle] |
|---|---|
| 0.938 = 15/16<br>Kinyarwanda [JD61] Kifuliiru [JD63] Ha [JD66] Bemba [M42] Matengo [N13]<br>Makhuwa [P31] Cuwabo [P34] Venda [S21] Tswana [S31] Northern Sotho [S32]<br>Sesotho [S33] Zulu [S42] Swati [S43] Ndebele [S44] Tsonga [S53] Ronga [S54] | 0.063= 1/16<br>Matengo [N13] |

★ CJ/DJ対立を有する言語は，顕著に被動者倒置を許容しない

| [+CJ/DJ, –Patient inversion] | [+CJ/DJ, +Patient inversion] |
|---|---|
| 0.941 = 16/17<br>Kinyarwanda [JD61]? Kifuliiru [JD63] Bemba [M42] Matengo [N13] Matuumbi [P13]<br>Makhuwa [P31] Cuwabo [P34] Venda [S21] Tswana [S31] Northern Sotho [S32]<br>Sesotho [S33] Zulu [S42] Swati [S43] Ndebele [S44] Tsonga [S53] Ronga [S54] | 0.059= 1/17<br>Kirundi [JD62] |

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ MFMと否定および倒置に関するパラメーターとの連動

| | | NEG particle | | Locative inversion | | | | Patient inversion | |
|---|---|---|---|---|---|---|---|---|---|
| | | P056=no | P056=1 | P122=1 | P122=2 | P122=3 | P122=no | P123=yes | P123=no |
| | number of lgs. | 35 | 8 | 36 | 5 | 9 | 13 | 15 | 37 |
| | average | 0.547 | 0.125 | 0.571 | 0.079 | 0.143 | 0.206 | 0.288 | 0.712 |
| MFM | if P140=yes (15) | 0.533 | 0.267 | 0.273 | 0.000 | 0.273 | 0.455 | 0.091 | 0.909 |
| MFM | if P140=no (20) | 0.800 | 0.050 | 0.579 | 0.158 | 0.158 | 0.105 | 0.211 | 0.789 |

★ MFMを欠く言語は，否定不変化詞を欠く傾向

| [- MFM, - NEG] | [- MFM, +NEG (1, 3, 4)] |
|---|---|
| 0.800 = 16/20<br>Mongo [C61] Swahili [G42] Ganda [JE15] Bemba [M42] Cewa [N31] Makhuwa [P31] Cuwabo [P34] Umbundu [R11] Herero [R31] Venda [S21] Tswana [S31] Northern Sotho [S32] Sesotho [S33] Zulu [S42] Swati [S43] Tsonga [S53] | 0.200= 4/20<br>Chindamba [G52] Matengo [N13] (depending on tense): Cokwe [K11] Makunduchi [G43c] |

★ MFMを有する言語は，顕著に被動者倒置を許容しない

| [+MFM, – Patient inversion] | [+MFM, +Patient inversion] |
|---|---|
| 0.909 = 10/11<br>Tuki [A601] Gikuyu [E51] Uru [E622d] Rombo [E623] Digo [E73] Bende [F12] Rangi [F33] Chasu [G22] Kifuliiru [JD63] Ndebele [S44] | 0.091= 1/11<br>Nzadi [B865] |

# 4. 類型論的一般化の試み − focus markingに関するcovariation

❖ 連動関係を支える論理：MFMとNEG particle

★ MFMを欠く言語は，否定不変化詞を欠く傾向

| [- MFM, - NEG] | [- MFM, +NEG (1, 3, 4)] |
|---|---|
| 0.800 = 16/20 | 0.200= 4/20 |

⇨ 否定不変化詞を安定的に用いる言語 (P056=1) は，MFMを有する (Shinagawa and Marten 2021)

| If P056=1 → P140=1 |
|---|
| 1.000 = 6/6　　Nzadi (B865), Uru (E622d), Rombo (E623), Rangi (F33), Manda (N11), and Matengo (N13) |

⇨ 否定詞の語彙的資源としての **'focus enforcer'** e.g., locative (cl.17) pronoun cf. Devos and van der Auwera (2013: 250–251)

Kwezo [L13] Forges (1983: 330)

| **lo** | **gwâmì** | | **nga–swĕg–á** |
|---|---|---|---|
| NEG | (17.POSS.1SG)NEG | | 1SG–hide–PRF |

'I have not hidden.'

cf. Bembe [H11] Nsayi (1984: 224)

| **me** | **mua–mǎn–a** | **kuámi** |
|---|---|---|
| I | 1SG.PROX–finish–F | 17.POSS.1SG |

'As for me, I am finished.'
(i.e., the others haven't finished yet)

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 連動関係を支える論理：CJ/DJとPre-Initial negation

★ CJ/DJ対立を有する言語は，顕著に否定不変化詞を欠く

| [+CJ/DJ, –NEG particle] | [+CJ/DJ, +NEG particle] |
|---|---|
| 0.938 = 15/16 | 0.063= 1/16 |

⇨ CJ/DJ対立を有する言語は，動詞内で否定標示を行う傾向

⇨ 主節否定の動詞内否定形式として顕著に用いられる傾向が高いのはPre-Initial marker

Swahili [G42]
a.  ha-wa-ta-on-a          'They will not see'   vs. b.  wa-si-o-on-a          '(They) who do not see'
    NEG-SM2-FUT-see-FV                                SM2-NEG-R2-see-FV

⇨ Pre-Initial markerは 'Focused negation' として発達 (Güldemann 1999: 570-576)

⇨ 多くのCJ/DJ型言語では否定環境ではその対立が中和され，もっぱらDJ形 ≒ 動詞フォーカス形が否定動詞として用いられる傾向 (Van der Wal 2017: 35)[1]

Makhuwa [P31] Van der Wal (2009: 219)
a.[CJ]O-hi-ń-thúma  esheeni?    'What doesn't he buy?'   vs. b.  [DJ]Kha-ń-thúma. 'He doesn't buy (it).'
      SM1-NEG-PRES-buy.CJ 9.what                                NEG.SM1-PRES-buy.DJ

[1] "In Makhuwa there are two negative paradigms for the alternating tenses, of which the CJ form is not used often – the DJ form is the regular negative form" (Van der Wal 2017: 35)

# 4. 類型論的一般化の試み – focus markingに関するcovariation

❖ 連動関係を支える論理：focus markingと倒置構文

| 場所名詞句倒置 (Locative inversion): Swahili [G42] |
| --- |

simba amalala msituni 「ライオンが森で寝ている」

msituni kumelala simba 「森ではライオンが寝ている」

| 被動者倒置 (Patient inversion): Rundi [JD62] |
| --- |

johani arasoma igitabo 「ヨハニは本をもう読んでいる」

igitabo kirasoma johani 「**ヨハニが**もう本を読んでいる」

| | | Locative inversion | | | | Patient inversion | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| | | P122=1 | P122=2 | P122=3 | P122=no | P123=yes | P123=no |
| | number of lgs. | 36 | 5 | 9 | 13 | 15 | 37 |
| | average | 0.571 | 0.079 | 0.143 | 0.206 | 0.288 | 0.712 |
| CJ/DJ | if P074=yes (25) | 0.412 | 0.176 | 0.118 | 0.235 | 0.059 | 0.941 |
| CJ/DJ | if P074=no (34) | 0.652 | 0.043 | 0.261 | 0.261 | 0.348 | 0.652 |

動詞の側で焦点表示に関与的なストラテジーを有する言語 (P074=yes) は，有意に被動者倒置構文を許容しない (P123=no)

| P074:P122–1 p-value = 1 | | |
| --- | --- | --- |
| | P122 =1+2+3 | P122 =no |
| P074=yes | 13 | 4 |
| P074=no | 22 | 6 |

| P074:P122–2 p-value = 0.7004 | | |
| --- | --- | --- |
| | P122 =1+3 | P122 =no |
| P074=yes | 9 | 4 |
| P074=no | 21 | 6 |

| P074:P123 p-value = 0.0281 | | |
| --- | --- | --- |
| | P123 =yes | P123 =no |
| P074=yes | 1 | 16 |
| P074=no | 9 | 15 |

フィッシャーの正確確率検定による検証結果．P074: P123が統計的有意であるのに対し，P074: P122に有意差はない

主題化 (topicalization) ストラテジーとして見做される傾向にある倒置構文だが，バントゥ諸語類型論における被動者倒置についてはむしろ積極的な焦点表示 (focus marking) ストラテジーと解釈できる可能性
(Shinagawa and Marten 2021a, Van der Wal 2022)

# 5. 課題と展望

❖ データの量的拡充

# 5. 課題と展望

❖ データの量的拡充
❖ データの質的検証 (validation)：データ自体＋パラメター解釈の妥当性のチェック



**THE WORLD ATLAS OF LANGUAGE STRUCTURES ONLINE**

Home　Features　Chapters　Languages　References　Authors
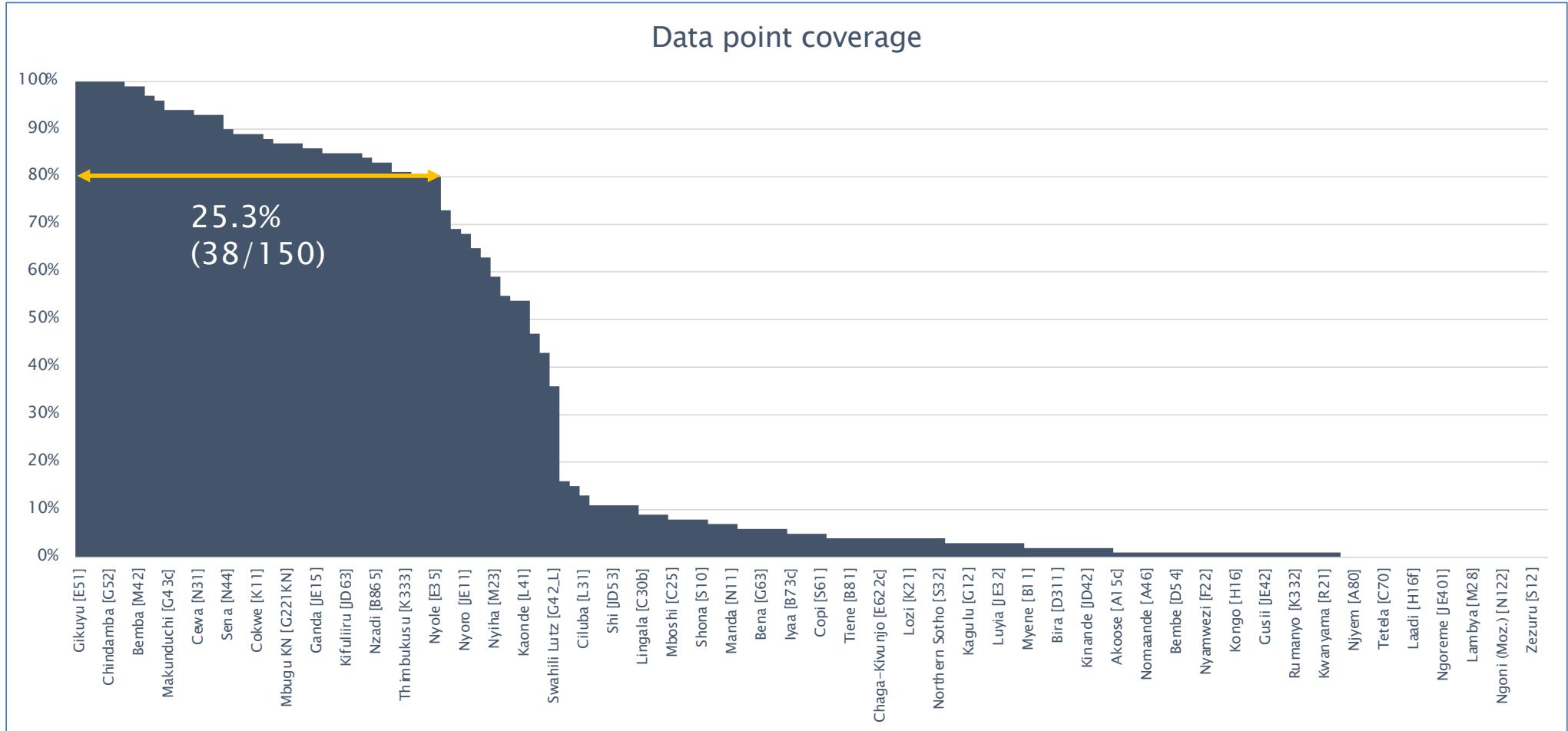
## Welcome to WALS Online

The World Atlas of Language Structures (WALS) is a large database of structural (phonological, grammatical, lexical) properties of languages gathered from descriptive materials (such as reference grammars) by a team of 55 authors.

The first version of WALS was published as a book with CD-ROM in 2005 by Oxford University Press. The first online version was published in April 2008.

The 2013 edition of WALS corrects a number of coding errors especially in Chapters 1 and 3. A full list of changes is available ⟳ here.

Starting with the 2013 edition of WALS, we will release and publish sets of corrections periodically. Thus, any citation of WALS Online 2013 should include the particular version, as listed on ⟳ Zenodo.

# 5. 課題と展望

❖ データの量的拡充
❖ データの質的検証 (validation)：データ自体＋パラメター解釈の妥当性のチェック
❖ **reductionist vs. scenario-based approaches** (Van de Velde, to appear)
❖ **correlation/covariation**の質的検証：その関係は**causal**か?
❖ 統計的手法の洗練
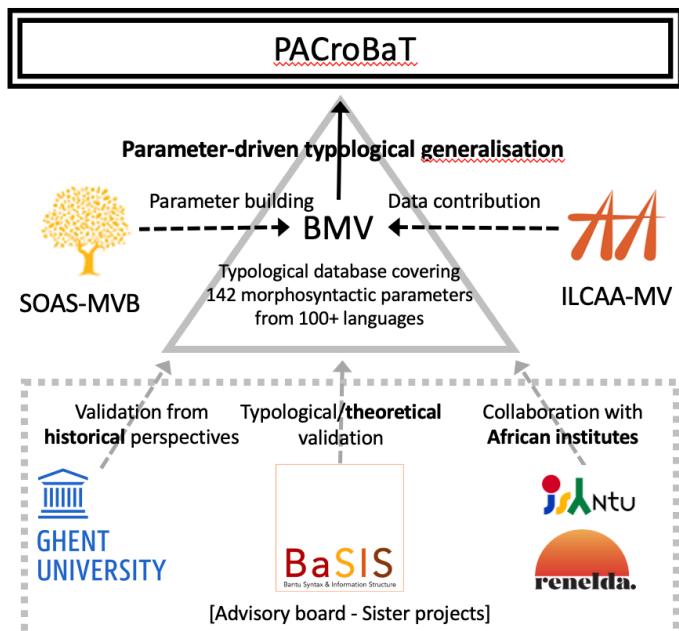


❖ **parameter-driven micro-typology**の国際的研究体制の構築

⇛ 国際的な共同研究体制のもとで，歴史言語学および理論言語学的な視点からの批判的検討を繰り返しつつ，データの量的拡充，質的検証を進めることでより精度の高い類型論的一般化へ

❖ データの拡充，検証のみならず，より有効なパラメター設計についての議論も必要

⇛ 記述研究と類型論研究のより有意義な協働へ

# References

Bastin, Y. 1983. Essai de classification de quatre-vingt langues bantoues par la statistique grammaticale. *Africana Linguistica* 9: 9-108.

De Kind, J., M. Devos, G-M. de Schryver and K. Bostoen. 2013. Negation markers, focus markers and Jespersen cycles in Kikongo (Bantu, H16): a comparative and diachronic corpus-based approach, paper presented at Workshop on information structure in Bantu, Berlin.

Devos, M. 2017. Shangaji paired tenses: Emergence of a CJ/DJ system? In: Van der Wal and Hyman (eds.) 2018. pp. 122-146

Devos, M. and J. Van der Auwera. 2013. Jespersen cycles in Bantu: double and triple negation. *Journal of African Languages and Linguistics* 34(2): 205-274.

Dryer, M. S. and M. Haspelmath (eds.) 2013. The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at http://wals.info, Accessed on 2023-01-19.

Edelsten, P. et al. forthc. Comparative analysis of morphosyntactic variation in Bantu languages: Parameters, data representation and database design. In: Helsinki vol.

Gibson, H., A. Koumbarou, L. Marten and J. Van der Wal. 2017. Locating the Bantu conjoint/disjoint alternation in a typology of focus marking. In: Van der Wal and Hyman (eds.). pp. 61-99.

Guarisma, G. Kpā? (A53) In: Nurse, D and G. Philippson (eds.) The Bantu languages. Oxon: Routledge. pp. 307-334.

Guérois, R., H. Gibson, and L. Marten. 2017. Parameters of Bantu Morphosyntactic Variation. Available online at https://zenodo.org/record/3958997#.Y8uXUxPP3Vs. DOI: 10.5281/zenodo.3958997

Güldemann, T. 1999. The Genesis of Verbal Negation in Bantu and its Dependency on Functional Features of Clause Types. In Hombert, J-M and L. M. Hyman (eds.) *Bantu Historical Linguistics.* California: CSLI, pp. 545-587.

Güldemann, T. 2003. Present progressive vis-à-vis predication focus in Bantu: A verbal category between semantics and pragmatics. *Studies in Language*, 27(2): 323-360.

Güldemann, T., I. Fiedler, and Y. Morimoto. 2014. The verb in the preverbal domain across Bantu' infinitive "fronting" and predicate-centered focus. Paper presented at the Workshop on Preverbal Domains, Berlin: ZAS.

Hadermann, P. 1996. Grammaticalisation de la structure infinitif + verbe conjugué dans quelques langues bantoues. *Studies in African Linguistics* 25(2): 155-169.

Harjula, L. 2004. *The Ha language of Tanzania: Grammar, texts and vocabulary*. Cologne: Rüdiger Köppe.

Hyman, L. M. 2003. Basaá. In: Nurse, D. and G. Philippson (eds.) *The Bantu Languages*. Oxon: Routledge. pp. 257-282

Hyman, L. M. 2017. Disentangling conjoint, disjoint, metatony, tone cases, augments, prosody, and focus in Bantu. In: Van der Wal and Hyman (eds.). pp. 100-121.

Kula, N. 2017. The conjoint/disjoint alternation and phonological phrasing in Bemba. In: Van der Wal and Hyman (eds.). pp. 258-294.

Marten, L., N. Kula, and N. Thwala. 2007. Parameters of morphosyntactic variation in Bantu. *Transactions of the Philological Society* 105(3): 253-338.

Marten, L., P. Edelsten, H. Gibson and R. Guérois. 2018. Bantu Morphological Variation Database. Online database hosted at SOAS University of London. (bantu.soas.ac.uk, last accessed on FEB-09-2022)

Masilela, P., D. Shinagawa, and B. Mathibela. 2021. South Ndebele (S407) In: Lee, S., Y. Abe and D. Shinagawa (eds.) *Descriptive materials of morphosyntactic microvariation in Bantu vol. 2: A microparametric survey of morphosyntactic microvariation in Southern Bantu languages.* Tokyo: ILCAA. pp. 257-331.

Meeussen, E. A. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3: 79-121.

Morimoto, Y. 2016. Verb Doubling vs. the Conjoint/Disjoint Alternation. Paper presented at the 6th international conference of Bantu languages. University of Helsinki.

Morimoto, Y. 2017. The Kikuyu focus marker nĩ: Formal and functional similarities to the conjoint/disjoint alternation. In: Van der Wal and Hyman (eds.). pp. 147-174.

Philippson and Montlahuc. 2003. Kilimanjaro Bantu (E60 and E74). In: Nurse, D. and G. Philippson (eds.) *The Bantu Languages*. Oxon: Routledge. pp. 475-500

Shinagawa, D. and L. Marten. 2021a. Micro-typological Covariation of Negation and Focus Marking in Eastern Bantu languages. *Gengo Kenkyu* (Journal of the Linguistic Society of Japan) 160: 215-248.

Shinagawa, D. and L. Marten. To appear. A micro-parametric survey on typological covariation related to focus marking strategies: Based on the Bantu Morphosyntactic Variation database. In *Linguistique et Langues Africaines Special Issue: Bantu Universals and Variation.* eds. by Li, Z., A. Asiimwe, E. Kerr, E. Nshemezimana, and J. Van der Wal.

Van der Wal, J. and L. Hyman (eds.) 2017. *The Conjoint/Disjoint Alternation in Bantu*. Berlin: Mouton de Gruyter.

Van der Wal, J. 2017. What is the conjoin/disjoint alternation? Parameters of cross-linguistic variation. In: Van der Wal and Hyman (eds.). pp. 14-60

Van der Wal, J. 2022. A featural typology of Bantu agreement. Oxford: Oxford University Press

Van de Velde, M. to appear. Alternatives for reductionist approaches to comparative Bantu grammar. *Linguistique et Langues Africaines Special Issue: Bantu Universals and Variation.* eds. by Li, Z., A. Asiimwe, E. Kerr, E. Nshemezimana, and J. Van der Wal.

Van Otterloo, R. 2011. *The Kifuliiru Language: Volume 2 A descriptive grammar*. Dallas: SIL International.

# 謝辞

本研究は以下のプロジェクトによって遂行された調査の成果の一部です．記して感謝いたします．