

Dissertation:
Predicate-centered focus in Sara-Bagirmi.
Verbal iteration and semantic evaluative categories
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Preface

In many Sara-Bagirmi languages, **verbal iteration** is a very productive strategy
- it occurs in different constructions and shows several functions

In the following, I will

- present examples from Sara-Bagirmi languages (BAGIRMI, KENGA, MBAY, SAR)
- analyze the **semantic concepts** behind the structural means of verbal iteration, and
- draw conclusions about their formal and functional specifics

Verbal iteration in Sara-Bagirmi

- occurs in different construction types and
- shows a strict correlation between form and function

1 Theoretical background

1.1 Information structure

Information structure (IS) is the structuring of linguistic information, typically in order to optimize information transfer within discourse (Chafe 1976, Krifka 2007)

Focus is the most important or salient information (Dik 1997)

Predicate-centered focus (PCF) (Güldemann 2009) subsumes

- focus on the lexical meaning of the verb (**SoA focus**)
- focus on the tense, aspect or mood operators (**TAM focus**) and
- focus on the truth value of the utterance (**Polarity focus**)

1.2 The group of Sara-Bagirmi languages

1.2.1 Genetic affiliation

Nilo-Saharan > Central Sudanic > West > Bongo-Bagirmi > **Sara-Bagirmi**

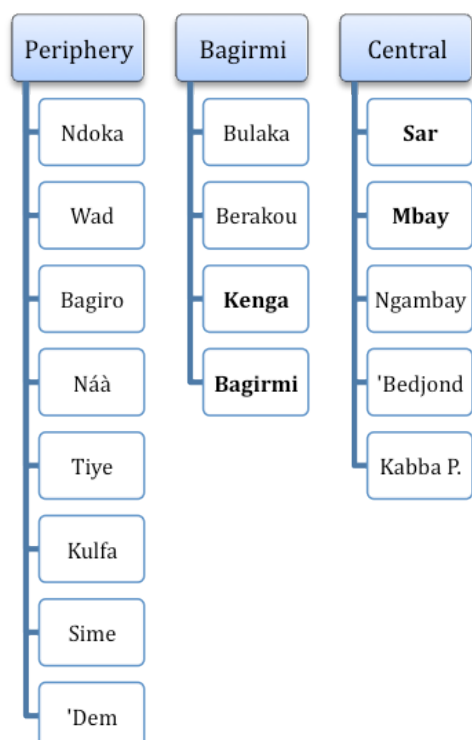


Figure 1: Languages of Sara-Bagirmi (Lewis et al. 2013, Boyeldieu 2006)

1.2.2 Typological information

- predominantly agglutinative languages with synthetic features
- all languages have S(ubject)V(erb)O(bject) word order
- all languages are tone languages with three level tones (high: á, middle: a, low: à)¹

Information structure is expressed by **morpho-syntactic means**

- IS marked terms usually occur in **sentence-initial position**
- this position can be used for focal and topical elements as well
- its concrete interpretation is disambiguated by the usage of **different markers**
- the markers always have scope over the preceding elements
- **PCF types** are often realized by “**verbal iteration**”

2 Verbal iteration in Sara-Bagirmi

Verbal iteration is used as a cover term for all constructions analyzed here

- where **two lexically identical verb forms** co-occur in one sentence,
- where one of these verb forms is **finite** and the other one **non-finite**

In Sara-Bagirmi, verbal iteration is embedded in different structures:

- **split structures** (= structures with preposing) and
- **in-situ doubling strategies** (= structures without preposing)

According to Güldemann (2010), the preposing structures can be differentiated in:

1. “verb focus preposing” (VFP) with the structure $[V_{INF}]_{FOC} [V_{FIN}]_{BG}$ and
2. “verb topic preposing” (VTP) with the structure $[V_{INF}]_{BG} [V_{FIN}]_{FOC}$

In-situ doubling structures can be analyzed in analogy to the split structures, because they show the same functional split as preposing structures:

1. “non-finite focus doubling” (NFD) with the structure $[V_{FIN}]_{BG} [V_{INF}]_{FOC}$ and
2. “non-finite topic doubling” (NTD) with the structure $[V_{FIN}]_{FOC} [V_{INF}]_{BG}$

Verbal iteration in Sara-Bagirmi is used for **realizing PCF** and other semantic concepts

→ The following data will illustrate the **functional spectrum of verbal iteration**

¹ In the literature for some languages all tones are marked (á, ā and à). For consistency reason (with Sara-Bagirmi languages), I will abstain here to the explicit marking of middle tones.

2.1 Verbal preposing strategies in Sara-Bagirmi

2.1.1 Preposing structures in MBAY

The structure [V_{INF} la] [V_{FIN} yé]

MBAY uses preposing, as seen in (1), and in-situ doubling (as in section 2.2.2):

- (1a) ... nà ndusə la ndusə yé.
 but INF.be_worm_eaten G.FOC be_worm_eaten BG
 [CONJ V_{INF} la]_{FOC} [V_{FIN} yé]_{BG}
 {Your wood is bad. – No, the wood is fine;} it's just that it's WORM-EATEN.
 (Keegan 1997: 148)

- (1b) ... nà tɔɔ la tɔɔ yé.
 but INF.be_broken G.FOC be_broken BG
 [CONJ V_{INF} la]_{FOC} [V_{FIN} yé]_{BG}
 {No, I did put water in the pot;} it's just that it's BROKEN. (Keegan 1997: 148)

The examples in (1) are structured as follows:²

- the first part contains the non-finite verb, marked by generic focus marker *la*
- the second part entails the finite verb, which is marked by background marker *yé*³
- while the preposed part indicates focus, the second part provides the background

The structure [V_{INF} la]_{FOC} [V_{FIN} yé]_{BG} corresponds to “**verb focus preposing**”

- the formal properties suggests an interpretation as SoA focus, because structures with a preposed focalized verb often refer to SoA focus (c.f. Güldemann 2010)
- the translation and the context confirm this analysis as **(contrastive) SoA focus**⁴

² The glossing in this example contradicts the analysis in the literature. Keegan (1997: 147f.) describes the first element as finite and the second one as non-finite. Compared to the marking strategies for term focus in MBAY, it is more likely that verb focus follows the same structure.

³ Term focus in MBAY is expressed by a similar structure, where the focused element is in sentence-initial position, followed by *la*:

- (i) Súu la ndà ngon-̀n yé.
 PN G.FOC hit child-POSS.3S.MSR BG
 It was SUU_i who hit his_i child. (Keegan 1997: 158).

⁴ Many examples presented here can be interpreted as realizing theticity as well. Even if this function is often realized by constructions that are used for PCF (c.f. Güldemann 2013), the thetic function will not be discussed in this talk.

The structure [V_{INF}] [ń V_{FIN} dá]

Beyond the structure presented in (1), MBAY has another preposing structure:

(2a) Tèjè ñ-tèn dá yikə ń yikə dá.
 honey DEM BG INF.be_sweet that be_sweet BG
 [SBJ dá]_{TOP} [V_{INF}]_{FOC} [ń V_{FIN} dá]_{BG}
 This honey is very sweet. (Keegan 1997: 151)

(2b) Mótò dá màjè ń màjè dá.
 motorcycle BG INF.be_good that be_good BG
 [SBJ dá]_{TOP} [V_{INF}]_{FOC} [ń V_{FIN} dá]_{BG}
 This motorcycle is terrific! (Keegan 1997: 151)

(2) starts with an aboutness topic (marked by *dá*), followed by the non-finite verb, the complementizer *ń*⁵, the finite verb and the marker *dá*

The structure [V_{INF}]_{FOC} [ń ... V_{FIN} dá]_{BG} can be analyzed as “**verb focus preposing**”:

- the preposed verb is not morphologically marked, but it must be interpreted as focus
- the background part includes the finite verb and starts with *ń* and ends with *dá*

Due to the lacking context, the structure in (2) might be interpreted

- as expressing **SoA focus**:

{How is the honey, very bitter?} (No,) it is very SWEET.

{How is the motorcycle, boring?} (No,) it is TERRIFIC.

- or **polarity focus** (even if this interpretation is not very likely):

{I can't believe that the honey is (so) very sweet.} It IS very sweet.

{I can't believe that the motorcycle is terrific.} It IS terrific.

The translation indicates rather an **intensification of the predicate**:

{All honey is sweet, but} this honey is VERY sweet.

{All motorcycles are good, but} this motorcycle is TERRIFIC.

⁵ Keegan (1997: 119ff.) classified *ń* as a complementizer for introducing relative clauses (i). I argue that *ń + dá* indicates focus (ii), while *ń + nò* is restricted to relative structures (iii):

(i) M-oo ngon ń bògè biya lò-í nò.
 1S-see child that 3S.steal goat POSS-2S BG
 I saw the child who stole your goat. (Keegan 1997: 146)

(ii) [...]_{FOC} [ń ... dá]_{BG}

(iii) [NP] [ń ... nò]_{REL}.

Even if the structure in (2) suggests – similar to (1) – an interpretation as SoA focus, the translation refers more to a **qualitative intensification**

This intensification refers to an **increase of the (inherent) verbal property**

→ here, the sweetness/goodness is **more than normal** or **more than expected**⁶

While the verbs in (2) are stative verbs, (3) shows the structure with active verbs:

(3a) **ḃògè** **ń** **à**⁷ **ḃògè** **dá**.
 INF.steal that IPFV 3S.steal BG
 [V_{INF}]_{FOC} [ń TAM V_{FIN} dá]_{BG}
 He really steals a lot. (Keegan 1997: 151)

(3b) Ngon **ń-tèn** **dá** **k-ày** **kàsè** **ń** **à** **ày** **dá**.
 child DEM BG INF-drink alcohol that IPFV 3S.drink BG
 [SBJ dá]_{TOP} [V_{INF} OBJ]_{FOC} [ń TAM V_{FIN} dá]_{BG}
 This boy really drinks a lot. (Keegan 1997: 151)

The structure in (3) differs from the one in (2) in – at least – two points:

1. The preposed part in (3b) includes the **object**, which follows the non-finite form, and is not repeated with the finite form
2. (3) entails the **imperfective marker à**
 - this marker doesn't occur with stative verbs, as seen in the examples in (2)
 - but with active verbs, as seen in (3), it is obligatory

The structure might be used

- for marking **SoA focus** (even if this is not very likely):
 - {?Does he really drink a lot or steal a lot?} He really **STEALS** a lot.
 - {?Does he really drink a lot or steal a lot?} He really **DRINKS** a lot.
- or for expressing **polarity focus**:
 - {I can't believe that he steals so much.} He **REALLY** steals a lot.
 - {I can't believe that he drinks so much.} He **REALLY** drinks a lot.
- or for indicating **intensification** as well:

⁶ Bond/Anderson (i.p.: 9f.) describe “intensification” as expressing “property proclivity”. They analyze (2a) as referring to a scale of sweetness, on which the structure points to a high level.

⁷ Keegan (1997: 70f.) classifies *à* as habitual marker. It doesn't occur with “adjectival verbs”. The combination of these verbs and the marker expresses inchoative reading (Keegan 1997: 75). Because the function of this marker is not restricted to the habitualis, I gloss it as imperfective.

with **event frequency**: {He doesn't steal once} he really steals A LOT.

with **object quantity**: {He doesn't drink one beer} he really drinks A LOT.

Bond/Anderson (i.p.: 8f.) describe the structure in (3) as indicating “event frequency”
- this is illustrated on a scale from low to high frequency, on which the structure refers to a relative high level of event frequency

This analysis is not sufficient, because the structure in (3) is not restricted to frequency
→ it is used to indicate a **high frequency** or a **high quantity** or **polarity focus**

2.1.3 Preposing structures in SAR

The structure [$\grave{\text{i}}$ V_{INF}] [$\grave{\text{n}}$ V_{FIN}]

Verbal iteration occurs in SAR in preposing structures only:

- (4) $\grave{\text{i}}$ k-òy $\grave{\text{n}}$ lábə òy.
 ID INF-be_dead that PN 3S.be_dead
 [$\grave{\text{i}}$ V_{INF}]_{FOC} [$\grave{\text{n}}$ SBJ V_{FIN}]_{BG}
 C'est de mort, qu'est mort Labe (il est bien mort). (Palayer 1989: 274)
 (Labe is DEAD. (lit. He is really dead). – PJ)

(4) starts with the identificational $\grave{\text{i}}$ and the non-finite verb
- followed by the complementizer $\grave{\text{n}}$, the subject and the finite verb

The structure [V_{INF}]_{FOC} [$\grave{\text{n}}$... V_{FIN}]_{BG} can be characterized as “**verb focus preposing**”
- the first part is focused (marked by $\grave{\text{i}}$), while the second part provides the background

(4) expresses PCF, but without context it might be interpreted as **SoA focus**:

{How is Labe, sick or healthy?} Labe is DEAD.

- or as **polarity focus**:

{I can't believe that he is dead.} He is REALLY dead./It is true, that he is dead.

- or as **intensification** (but not very likely):

?{Labe had died yesterday, and now} he is TOTALLY dead.

Based on the structural properties, one can argue that (4) indicates SoA focus, but the translation refers to polarity focus as well

The structure [V_{INF}] [V_{FIN}]

The next example shows another preposing structure:

- (5) **ḡògḡ** lábḡ **ḡògḡ** ngáy.
 INF.steal PN 3S.steal much
 [V_{INF}]_{BG} [SBJ V_{FIN} ADV]_{FOC}
 Pour ce qui est de voler, Labe vole beaucoup. (Palayer 1989: 274)
 (As for stealing, Labe steals a lot. – PJ)

The example in (5) contains the non-finite verb, the subject, the finite verb and an adverbial (without any morphological marking)

The structure [V_{INF}]_{BG} [V_{FIN}]_{FOC} can be analyzed as “**verb topic preposing**”:

- the first part provides background information, and the second part is in focus

Verb topic preposing is – in terms of information structure – organized as follows:

- the preposed (non-finite) element is defocalized (= background part),
- the assertive value is born by the finite verb form (= focus part),
- as the focus lies on the predicate (default interpretation), must be on the **operator**
→ VTP refers usually not to SoA focus, but to **operator focus** (c.f. Güldemann 2010)

The structure in (5) differs from the preceding examples

- in so far as the function is expressed by iteration and (additional) lexical material

Functionally, the structure could be used

- for marking **SoA focus** (but it is not very likely):

{Does Labe drink a lot or doe he steal a lot?} Labe/He **STEALS** a lot.

- for expressing **polarity focus**:

{I can't believe that Labe is a thief.} (As for stealing,) Labe/He (**REALLY**) steals a lot./ It is true, that Labe/he steals a lot.

- for indicating **intensification** (by additional lexis):

{Labe is very dishonest.} (As for stealing,) Labe/he steals **A LOT**.

Based on the structural properties, one can argue that (5) indicates polarity focus, but the translation refers to intensification as well

2.1.3 Preposing structures in KENGA

In KENGA, there are preposing structures as seen in (6) and in-situ doubling structures (see section 2.2.3):

(6)	Kúrsù	e	kúrs	kéè,	...
	cultiver	2S:FUT	cultiver	FOC	
	[V _{INF}] _{BG}	[V _{AUX}	V _{FIN}	kéè] _{FOC}	

Tu as beaucoup labouré (lit. labourer, tu laboures longtemps), {(mais) celui qui a de l'argent, il se lève et vient au moment de la récolte (lit. dans la saison de pluie) avec son peu d'argent et t'achètera tout le mil.} (Neukom 2010: 261)

(You have much cultivated (lit. as for cultivating, you will do it for a long time), {(but) he who has money, comes at harvest (lit. in the season of rain) with his money and buy you any of the mil.} – PJ)

(6) consists of the non-finite verb, the auxiliary, the finite verb and the marker *kéè*⁸

The structure [V_{INF}]_{BG} [V_{FIN} *kéè*]_{FOC} can be classified as “**verb topic preposing**”:

- the first part provides the background (without morphological marking),
- the second part is in focus, marked by focus marker *kéè*

In the given context, the structure in (6) can be interpreted as

- marking **polarity focus**:

{I know, there is no goodness in the world.} You HAVE much cultivated, ...

- or **intensification**:

{I know, there is no goodness in the world.} You have MUCH cultivated, ...

⁸ Marker *kéè* emphasizes the element it follows. In general, it is used to express polarity focus (i), but it occurs with term focus as well (ii):

(i) Naań sé mí-jèèl **kéè**, è k-ɔŋɔ.
 3S BG 1S-savoir FOC 3:FUT INF-trouver
 Je suis sûr qu'il passera (à l'examen). (Neukom 2010: 175)

(I'm sure he will pass (an exam). – PJ)

(ii) Něm něm kic bó **kéè** ...
 personne DUPL aussi FOC FOC

Personne {ne (te) demande de payer quelque chose}. (Neukom 2010: 262)

(Nobody {wants you to pay for anything}. – PJ).

2.1.4 Summary

According to Güldemann (2010: 8), preposing strategies can be differentiated into two structures with different interpretations:

I Verb focus preposing (VFP)

[Preposed predicate]^{FOCUS} (PIVOT) [Less asserted reduced predicate]^{TOPIC}

If the preposed verb form is **focal**, the main clause contains a **less asserted** verb form
→ the construction highlights the lexical meaning of the verb, it marks **SoA focus**

II Verb topic preposing (VTP)

[Preposed predicate]^{TOPIC} (PIVOT) [Asserted main clause predicate]^{FOCUS}

If the preposed verb form is **topical**, the main clause contains an asserted verb form
- it is used in the sense of ‘**As for *verbing*, (I assert that) X *verb***’ or ‘**X DOES *verb***’
→ the construction highlights the operator, it is used to mark **operator focus**

The data from Sara-Bagirmi has shown, that some structures mark “**intensification**”
→ The concept of intensification refers to the inherent **properties of the verb**⁹ and can be subdivided in – at least – two parts:

1. Structures with **stative verbs**

- highlight the **(inherent) quality** of the verb, e.g. sweetness, goodness, tallness, ...
- c.f. “property proclivity” (PP) of Bond/Anderson (i.p.)

2. Structures with **active verbs**

- highlight the **high frequency**, e.g. to drink OFTEN or
- highlights the **high quantity**, e.g. to drink VERY MUCH
- c.f. “event frequency” (EF) of Bond/Anderson (i.p.)

I argue, that the functional classification of Bond/Anderson (B/A) correlates with the inherent verb semantics (VS), as seen in table 1¹⁰:

⁹ My classification is based on Vendler (1957), who subdivided verbs in activities [+dynamic, +durative, -telic], states [-dynamic, +durative, -telic], achievements [-dynamic, -durative, +telic], and accomplishments [+dynamic, -durative, +telic].

Nr	Gloss	CT	Structure	VS	B/A	Function
MBAY						
1a	Be worm eaten	VFP I	[V _{INF} la] _{FOC} [V _{FIN} yé] _{BG}	STA	(PP)	SoA
1b	Be broken	VFP I	[V _{INF} la] _{FOC} [V _{FIN} yé] _{BG}	STA	(PP)	SoA
2a	Be sweet	VFP II	[V _{INF}] _{FOC} [ń V _{FIN} dá] _{BG}	STA	PP	INT (quality)
2b	Be good	VFP II	[V _{INF}] _{FOC} [ń V _{FIN} dá] _{BG}	STA	PP	INT (quality)
3a	Steal	VFP II	[V _{INF}] _{FOC} [ń à V _{FIN} dá] _{BG}	ACT	EF	POL/INT (frequency)
3b	Drink (alcohol)	VFP II	[V _{INF} OBJ] _{FOC} [ń à V _{FIN} dá] _{BG}	ACT	EF	POL/INT (quantity)
SAR						
4	Be dead	VFP	[l V _{INF}] _{FOC} [ń SBJ V _{FIN}] _{BG}	STA	(PP)	SoA/POL
5	Steal	VTP	[V _{INF}] _{BG} [SBJ V _{FIN} ADV] _{FOC}	ACT	(EF)	POL
KENGA						
6	Cultivate	VTP	[V _{INF}] _{BG} [V _{AUX} V _{FIN} kèè] _{FOC}	ACT	(EF)	POL/INT (quantity)

Table 1: Verb preposing strategies in MBAY, SAR, and KENGA

The data from Sara-Bagirmi show that the **construction types** (CT) correlate with the primary function as analyzed by Güldemann (2010):

Verb topic preposing (examples (5) and (6)) is strongly restricted to operator focus

- all examples here refer to polarity focus and/or intensification
- the interpretation as indicating SoA focus is excluded

Verb focus preposing shows language-internal differences:

MBAY has two structures with verb focus preposing, but no verb topic preposing

- this mismatch triggers a functional split:

→ **VFP I** (example (1)) refers to **SoA focus**

VFP II (example (2) and (3)) can be analyzed as an additional structure

- it is developed for disambiguating operator focus from SoA focus

→ **VFP II** expresses not SoA focus, but **polarity focus** and/or **intensification**

SAR has verb focus preposing and verb topic preposing, but there is no clear difference:

→ **VTP** is used to express **polarity focus**

→ the interpretation of **VFP** is unclear, it refers to SoA focus and/or to polarity focus

- for a sufficient analysis further research (with more examples) is needed

¹⁰ The examples in brackets refer to my classification in analogy to Bond/Anderson (i.p.).

2.2 In-situ doubling strategies in Sara-Bagirmi

2.2.1 In-situ doubling in BAGIRMI

In BAGIRMI, verbal iteration occurs as in-situ doubling only:

- (7) Boukar **táď** djùm tɛŋ **táďà**.
PN PFV.do gruel millet INF.do
[SBJ V_{FIN} OBJ]_{BG} [V_{INF}]_{FOC}
{Did Boukar cook millet gruel or did he eat it?} Boukar COOKED millet gruel.
(Jacob 2010: 129)

In (7), the subject is followed by the finite verb and the object, the non-finite verb follows immediately (without any morphological marking)

The structure [V_{FIN} (OBJ)]_{BG} [V_{INF}]_{FOC} can be analyzed as “**non-finite focus doubling**”
- the finite verb occurs in canonical position, the main clause provides the background
- the non-finite verb appears sentence-finally and indicates focus

Functionally, this structure is restricted to mark SoA focus¹¹

→ with respect to the given context, (7) refers to **selective SoA focus**

The in-situ doubling allows variation in valency and TAM, it occurs e.g.

- with intransitive verbs and progressive marker for **selective SoA focus** (8a),
- with intransitive verbs and future marker for **corrective SoA focus** (8b) and
- with transitive verbs and progressive marker for **corrective SoA focus** (8c):

- (8a) Djé dj-ét-kùn kùnù.
3P 3P-PROG-take INF.take
[SBJ V_{FIN}]_{BG} [V_{INF}]_{FOC}
{Are the boys carrying or pushing the log?} They are CARRYING. (Jacob f.n.)

¹¹ In-situ doubling occurs not with other PCF types, e.g. polarity focus (i) or TAM focus (ii):

- (i) Èé, djé dj-ɓog-inya.
no 3P 3P-steal-3S
{They didn't steal it, did they?} No, they DID steal it. (Jacob f.n.)

- (ii) Dj-ét tól-inya.
3P-PROG kill-3S
{Are they still killing the dog or has it been killed already?} They are still killing.
(Jacob f.n.)

- (8b) É'è, pádjàr ná, Boukar ká-táď táďà.
 no tomorrow BG PN FUT-do INF.do
 [NEG ADV ná]_{FRAME} [SBJ V_{FIN}]_{BG} [V_{INF}]_{FOC}
 {Will Boukar eat millet gruel tomorrow?} No, Boukar will COOK (it) tomorrow.
 (Jacob f.n.)
- (8c) É'è, n'djaniki kaso ná, Boukar ét-ndugo kro ndugo.
 no today market BG PN PROG-buy donkey INF.buy
 [NEG ADV ná]_{FRAME} [SBJ V_{FIN} OBJ]_{BG} [V_{INF}]_{FOC}
 {Is Boukar selling a donkey at the market today?}
 No, Boukar is BUYING a donkey at the market today. (Jacob f.n.)

2.2.2 In-situ doubling in MBAY

In MBAY, in-situ doubling occurs in combination with complement clauses or particles
 - these different combinations influence the particular function¹²

The structure [V_{FIN}] [V_{INF} ká ...]

The first example shows the combination with *ká kịjè*:

- (9) Ày kàsè k-ày ká kịjè.
 3S.drink alcohol INF-drink again
 [V_{FIN} OBJ]_{FOC} [V_{INF} ká kịjè]_{BG}
 He began drinking again. (Keegan 1997: 148)

- (9) starts with the finite verb and the object,
 - followed by the non-finite verb and the adverbial element *ká kịjè*¹³
 - here, *ká* can be analyzed as complementizer

The structure [V_{FIN} (OBJ)]_{FOC} [V_{INF}]_{BG} corresponds to “**non-finite topic doubling**”

- the first verb is finite and occurs in its canonical position – it is used to indicate focus
 - the second verb is non-finite – it provides (with the complement) the background

¹² Unfortunately, I haven't found in-situ doubling without additional material.

¹³ The combination *ká kịjè* consists of the complementizer *ká* and the verb *kịjè* ‘be new’:

- (i) bee ká kịjè nò
 house that be_new BG
 that new house (Keegan 1997: 143).

The example in (9) could be interpreted as

- marking **inchoative**: He BEGAN drinking again.
- or indicating **iterative**¹⁴ and/or **repetitive**¹⁵: He began drinking AGAIN.

The next example can be analyzed parallel to example (9)

- it shows the combination with a complement clause:

(10) Njòr dá àtə k-àtə ká màjə sà àí.
eggplant BG be_bitter INF-be_bitter that be_good eat NEG
[SUB dá]_{TOP} [V_{FIN}]_{FOC} [V_{INF} ká V_{FIN} V_{INF} NEG]_{BG}
The eggplant was so bitter that it wasn't good to eat. (Keegan 1997: 150)

(10) starts with the subject and the finite verb form, the non-finite verb precedes a complement clause, introduced by *ká*

The structure shows a combination of the iteration and the complement

- the iteration or the occurrence of a (verbal) noun is required by the complement
- The verbal iteration is needed as a **host for the complement clause**

The structure can be analyzed in the same way as (9):

- the finite verb is used to indicate focus,
- the non-finite verb and the following complement provides the background

Based on the given context, (10) is used to express **qualitative intensification**

The same structure as in (10) can be used with dynamic verbs as well:

(11) Ngon sà mángò sà ká lòo-tii-á kàm-á too-á ngáy.
child eat mango INF.eat that tomorrow stomach-3S hurt-3S much
[SUB]_{TOP} [V_{FIN} OBJ]_{FOC} [V_{INF} ká ADV SBJ V_{FIN} ADV]_{BG}
The child ate so much mango that the next day his stomach hurt a lot.
(Keegan 1997: 150)

Here, the “**non-finite topic doubling**” is used to mark **quantitative intensification**

¹⁴ Bond/Anderson (i.p.: 7ff.) describe this structure as marking “event iteration”.

¹⁵ The translation ‘began ... again’ comes – in my opinion – from *ká kịjə* only.

The structure [V_{FIN}] [ta] [V_{INF}]

In-situ doubling can be supplemented by the restrictive particle *ta*:

- (12) Mbùr lò-á **màjè** ta **màjè**.
 boule POSS-3S be_good only INF.be_good
 [SBJ]_{TOP} [V_{FIN}]_{FOC} [ta] [V_{INF}]_{BG}
 Her 'boule' is very good. (Keegan 1997: 147)

The particle *ta* 'only' always occurs **in between the verbal iteration**

- the inclusion of *ta* is required for expressing the restriction (even with nouns)¹⁶

Based on the context, (12) is used to express **qualitative intensification**

In-situ doubling with particle *ta* is also possible with dynamic verbs:

- (13a) Ày kàsè ta **k-ày**.
 3S.drink alcohol only INF-drink
 [V_{FIN} OBJ]_{FOC} [ta] [V_{INF}]_{BG}
 (S/he) does nothing but drink. (Keegan 1997: 147)

- (13b) Ndiì **èdè** ta **k-èdè**.
 rain 3S.precipitate only INF-precipitate
 [SBJ V_{FIN}]_{FOC} [ta]_{BG} [V_{INF}]_{BG}
 It does nothing but rain. (Keegan 1997: 147)

Bond/Anderson (i.p.: 25f.) classify this structure as "exclusive situation focus", but

- this interpretation is misleading, because the exclusivity or the restriction is triggered by the lexis only¹⁷

→ The structure marks **intensification**: (S/he) DRINKS A LOT./It RAINS A LOT.

¹⁶ The restrictive particle *ta* occurs also with (doubled) nouns for indicating restrictive focus:

- (i) Súu ì **nan-ńí** ta **nan-ńí**
 PN ID uncle-POSS.1S only uncle-POSS.1S
 nà ì b̀̀̀̀-ńí àí.
 3S ID father-POSS.1S NEG

Suu is only my uncle, he's not my father. (Keegan 1997: 147)

¹⁷ The examples with the restrictive particle don't refer to exclusive/restrictive focus in the traditional sense. The translation 'he does nothing but drink' implies that someone drinks a lot, but it doesn't imply a restriction to the event of drinking. One can imagine, that he does other things beyond the drinking, like eating, sleeping, speaking, going to the bathroom, ...

2.2.3 In-situ doubling in KENGA

In-situ doubling in KENGA is used for more than one function:

- (14) Jée mètĩn sé, naadé màla ààr k-ààr nààba, ...
 gens certain_{BG} 3P même 3:craindre INF-craindre travail
 [SBJ sé]_{TOP} [SBJ]_{TOP} [V_{FIN}]_{FOC} [V_{INF} OBJ]_{BG}

{Le travail, tu dois le chercher. Si tu as trouvé le travail, tu auras beaucoup de travail.} Certains ne veulent pas (lit. craignent) travailler eux-mêmes, {sinon, ici en ville, il y a beaucoup de travail.} (Neukom 2010: 264)

{(You have to look for work. If you find the work, there will be a lot of work.) Some people don't want to (lit. fear the) work, {but, here in the city, there is a lot of work.} – PJ)

The structure starts with the topicalized subject and the pronoun (marked by *màla*¹⁸)
 - the next elements are the finite verb, the non-finite verb and the object

This structure [V_{FIN}]_{FOC} [V_{INF} (OBJ)]_{BG} can be analyzed as “**non-finite topic doubling**”
 - the finite verb is used to indicate focus, the non-finite verb provides the background

In contrast to the structures in BAGIRMI and MBAY

- here both verb forms always occur **adjacent to each other**

(14) is a construction, which can be interpreted as

- marking **SoA focus**: Some people FEAR the work, ...
- or as expressing **polarity focus**: Some people REALLY fear the work, ...

¹⁸ Neukom (2010) describes *màla* as emphatic element. It functions as scalar particle ‘even’ and occurs in combination with focus marker *bó* (i), or without information-structural marking (ii).

Due to the different function, the examples are glossed differently:

- (i) Maám kic maám màla bó mí-túg kǎl-ùm.
 1S aussi 1S EMPH FOC 1S-laver habit-1S.POSS

Moi, je lave aussi mes habits moi-même. (Neukom 2010: 89)

(I do even my laundry myself. – PJ)

- (ii) Naái màla á-gàarge gen dèè.
 2S même 2-chef pour tête

Tu es autonome (lit. tu es le chef pour la tête toi-même). (Neukom 2010: 262)

(You are autonomous (lit. You are your own boss on your own head). – PJ)

The next example contains a transitive active verb with a pronominalized object:

(15) ... naaí ááy-gà sé, tɔɔl-i tɔɔɓ.
 2S 2:boire-PERF BG 3:tuer-2S tuer
 [SBJ] V_{FIN} sé]_{BG} [V_{FIN}]_{FOC} [V_{INF}]_{BG}

{Et si quelqu'un – si tu n'as pas mangé et} tu en bois, cela te tue.

(Neukom 2010: 270)

{If anyone –} if you drink it (although you didn't eat), it will kill you. – PJ)

The in-situ doubling follows a conditional clause (marked by sé),

- the finite verb includes the subject agreement and the pronominalized object
- it is followed by the non-finite verb

Due to the given context, the construction can express

- **SoA focus**: If you drink it, it will KILL you {not cure you}.
- or **polarity focus**: If you drink it, it WILL kill you {for sure}.

The in-situ doubling structure marks intensification as well:

(16) Kaaga kə-cóóɔc-íñ cóóɔcò.
 bois 1P-tailler-3S tailler
 [OBJ]_{TOP} [V_{FIN}]_{FOC} [V_{INF}]_{BG}

Le bois, on le taille (longtemps). (Neukom 2010: 132)

(We are treating the wood (several times/a long time). – PJ)

In (16), the object is fronted, followed by the finite verb and the non-finite verb

The translation implies an intensive action, which can refer

- to a regular treatment (with repetitions): for highlighting a **high frequency**
- to the fact, that the action lasts for some time: for highlighting the **continuity**

The structure is used for marking **progressive** (17a) and **inchoative** (17b) as well:

(17a) M-óɔs k-òsɔ.
 1S-manger INF-manger
 [V_{FIN}]_{FOC} [V_{INF}]_{BG}

{Que fais-tu?} Je mange. (Vandame 1968: 37)

{What do you do?} I'm eating. – PJ)

2.2.4 Summary

In-situ doubling strategies show the same dichotomy as the preposing structures:

I Non-finite focus doubling (NFD)

[Less asserted reduced predicate]^{TOPIC} (PIVOT) [Predicate]^{FOCUS}

If the non-finite verb form is **focal**, the main clause contains a **less asserted** verb form
 → the construction highlights the lexical meaning of the verb, it marks **SoA focus**

II Non-finite topic doubling (NTD)

[Asserted main clause predicate]^{FOCUS} (PIVOT) [Predicate]^{TOPIC}

If the non-finite verb form is **topical**, the main clause contains an asserted verb form
 - it is used in the sense of ‘As for *verbing*, (I assert that) X *verb*’ or ‘X DOES *verb*’
 → the construction highlights the operator, it is used to mark **operator focus**

In-situ doubling structures show the same functional spectrum as preposing structures:

Nr	Gloss	CT	Structure	VS	B/A	Function
BAGIRMI						
7	Do	NFD	[V _{FIN} OBJ] _{BG} [V _{INF}] _{FOC}	ACT		SoA (Selection)
8a	Take	NFD	[V _{FIN}] _{BG} [V _{INF}] _{FOC}	ACT		SoA (Selection)
8b	Do	NFD	[V _{FIN}] _{BG} [V _{INF}] _{FOC}	ACT		SoA (Correction)
8c	Buy	NFD	[V _{FIN} OBJ] _{BG} [V _{INF}] _{FOC}	ACT		SoA (Correction)
MBAY						
9	Drink	NTD I	[V _{FIN} OBJ] _{FOC} [V _{INF} ADV] _{BG}	ACT	EI	Inchoative/Iterative
10	Be bitter	NTD I	[V _{FIN}] _{FOC} [V _{INF} COMP] _{BG}	STA	PP	INT (quality)
11	Eat	NTD I	[V _{FIN} OBJ] _{FOC} [V _{INF} COMP] _{BG}	ACT	(EF)	INT (quantity)
12	Be good	NTD II	[V _{FIN}] _{FOC} [ta] [V _{INF}] _{BG}	STA	ESF	INT (quality)
13a	Drink	NTD II	[V _{FIN} OBJ] _{FOC} [ta] [V _{INF}] _{BG}	ACT	ESF	INT (quantity)
13b	Precipitate	NTD II	[V _{FIN}] _{FOC} [ta] [V _{INF}] _{BG}	ACT	ESF	INT (quantity)
KENGA						
14	Fear	NTD	[V _{FIN}] _{FOC} [V _{INF} OBJ] _{BG}	STA	(PP)	POL
15	Kill	NTD	[V _{FIN}] _{FOC} [V _{INF}] _{BG}	ACT	(EF)	POL
16	Treat	NTD	[V _{FIN}] _{FOC} [V _{INF}] _{BG}	ACT	(EF)	INT (frequency)/Continuity
17a	Eat	NTD	[V _{FIN}] _{FOC} [V _{INF}] _{BG}	ACT		Progressive
17b	Eat	NTD	[V _{FIN}] _{FOC} [V _{INF}] _{BG}	ACT		Inchoative
18	Stay	NTD	[V _{FIN}] _{FOC} [V _{INF} OBL] _{BG}	ACT		Simultaneity
19	Go up	NTD	[V V _{FIN}] _{FOC} [V _{INF}] _{BG}	ACT		Simultaneity/Sequentiality

Table 2: In-situ doubling structures in BAGIRMI, MBAY and KENGA

→ the construction refers not to SoA focus, but to **polarity focus, intensification or TAM-based functions**:

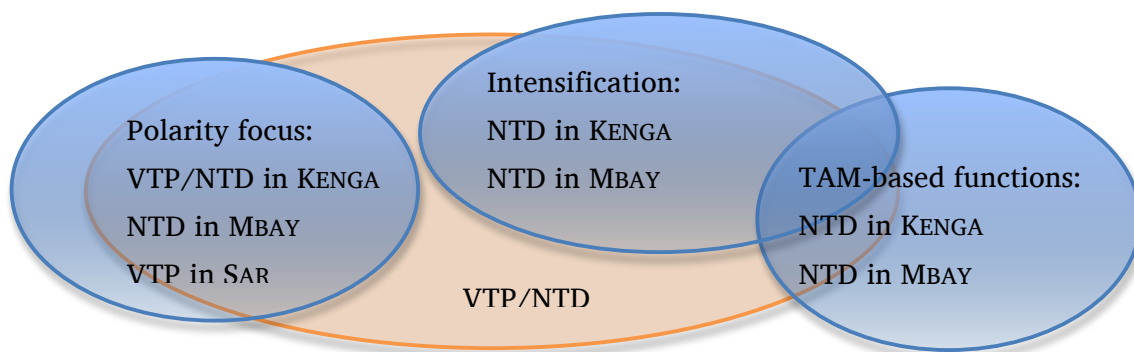


Figure 3: The functional spectrum of VTP/NTD structures in Sara-Bagirmi

VTP/NTD structures are used to express:

1. **Polarity focus** (or truth value focus): He REALLY drinks alcohol.

2. Intensification

2.1 The reference to a (unusually) **high quality**: The eggplant is VERY bitter.

- occurs in constructions with stative verbs
- comparable to the scale of “property proclivity” (Bond/Anderson i.p.)

2.2 The reference to a (unusually) **high quantity**: He drinks VERY much.

- occurs in constructions with active verbs
- comparable to the scale of “event frequency” (Bond/Anderson i.p.)

2.3 The reference to a (unusually) **high frequency**: He steals VERY often.

- occurs in constructions with active verbs
- comparable with the scale of “event frequency” (Bond/Anderson i.p.)

3. TAM-based functions

3.1 Focuses the beginning of an event (**Inchoative**): He STARTS eating.

3.2 Focuses the duration of an event (**Continuative**): He is eating (for a long time).

3.3 Points out that the event is ongoing (**Progressive**): He is eating (just now).

3.4 Points out that two (or more) events happen at the same time (**Simultaneity**):

We were on the way back, when we saw the lights.

3.5 Points out that two (or more) events happen successively (**Sequentiality**):

We stand up and (then) we are going up, ...

The functional spectrum of verbal iteration involves pragmatic and semantic issues¹⁹

The structural differences always correlate with the function:

- while VFP/NFD constructions are predominantly used for expressing SoA focus,
- VTP/NTD constructions mark **polarity focus**, **TAM focus** or **intensification**

All examples with VTP/NTD structures show

- that the **predicate of the main clause is asserted**
- this has to be interpreted as **focus on a sentential operator**
- either as **polarity focus**, as **TAM focus** or as something like **intensification**

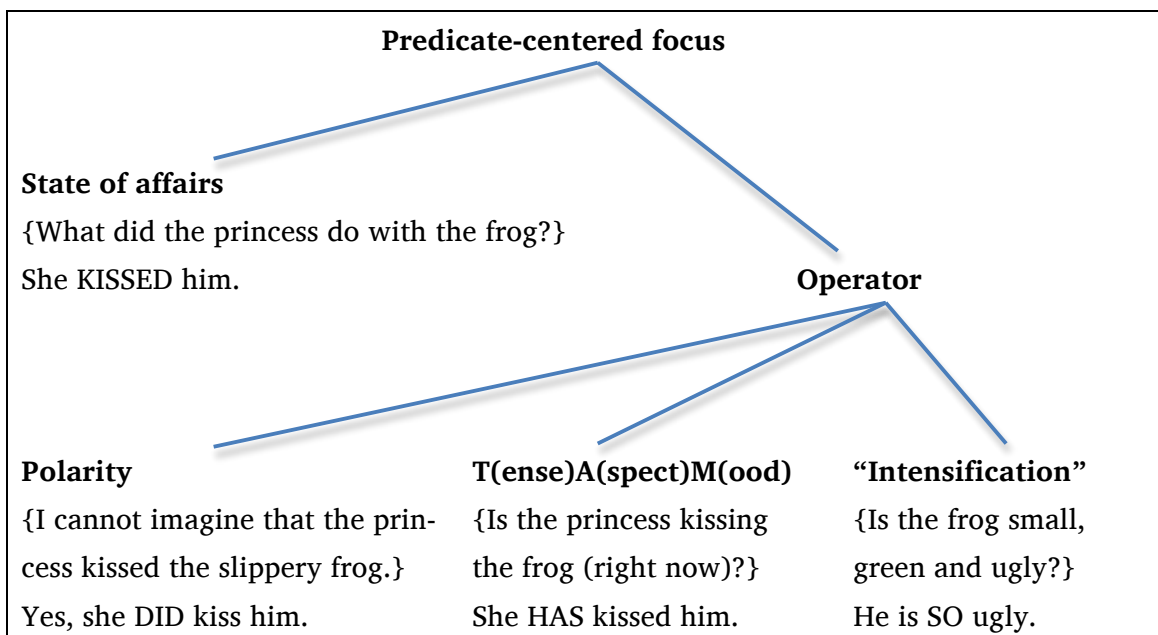


Figure 4: Basic subclassification of PCF (adapted from Güldemann 2009)

Progressive	High quality
Continuative	High quantity
Inchoative	High frequency
Simultaneity	...
Sequentiality	
...	

¹⁹ Güldemann (2003) attested for several Bantu languages, that the semantic concept of progressive, intensification and polarity focus is expressed by the same formal means.

Abbreviations

ACT	Activity	NFD	Non-finite focus doubling
ADV	Adverbial	NP	Noun phrase
AUX	Auxiliary	NTD	Non-finite topic doubling
B/A	Classification of Bond/Anderson	OBJ	Object
BG	Background	OBL	Oblique
COMP	Complement clause	P	Plural
CONJ	Conjunction	PCF	Predicate-centered focus
CONN	Connective	PERF	Perfect
CT	Construction type	PFV	Perfective
DEM	Demonstrative	PN	Proper name
DUPL	Reduplication	POL	Polarity (focus)
EF	Event frequency	POSS	Possessive
EI	Event iteration	PP	Property proclivity
EMPH	Emphatic	PROG	Progressive
ESF	Exclusive situation focus	REL	Relative
EXCL	Exclamative	S	Singular
FIN	Finite	SBJ	Subject
FOC	Focus	SoA	State of affairs (focus)
FUT	Future	STA	State
G	Generic	SUB	Subordination
ID	Identificational	TAM	Tempus/Aspect/Mood
INF	Infinitive/Non-finite	TOP	Topic(al)
IPFV	Imperfective	V	Verb(al)
IS	Information structure	VENT	Ventive
INT	Intensification	VFT	Verb focus preposing
LOC	Locative	VS	Verbal semantic
MSR	Mandatory subject reference	VTP	Verb topic preposing
NEG	Negative		

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