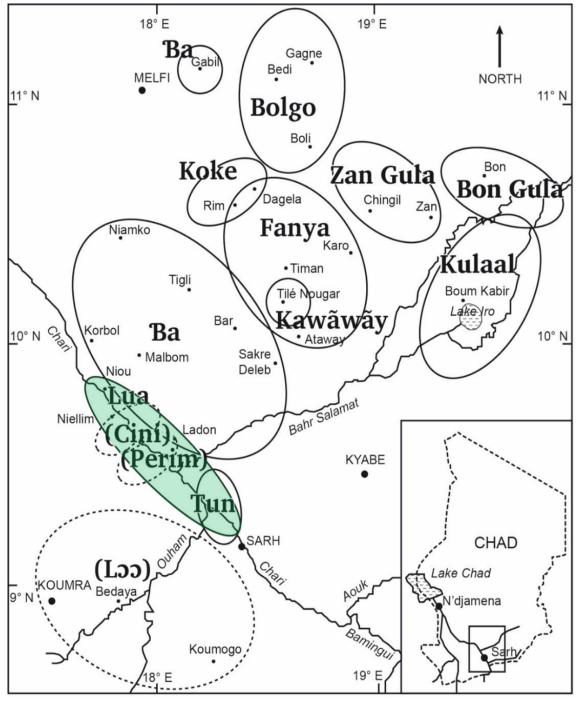
The verb system of Lua (a 'Bua' language of Chad)

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Bua languages
(Adamawa 13)
and position of Lua



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Outline

- Preamble: data, noun number, personal pronouns, homophones
- Verb classes (indicative/subjunctive moods) and Infinitive
- Core verb phrase
- Modality constructions (Obligatives)
- Auxiliary constructions (Durative, Future, Obligative)
- Adverbial constructions (Durative/Imminent, Necessity)
- Satellites (Dubitative, Remansive, Completed, Negation, Interrogative & Question)

Data

- Collected during a two-year stay in Chad (Fort Lamy/N'djaména 1973-75)
- Toolbox lexicon (2600 entries)
- Several elicited questionnaires (Bouquiaux & Thomas 1971): nouns, verbs, sentences
- Spontaneous speech productions (5 tales, transcribed, glossed, and translated)
- Interest in old data revived within the *Bua languages comparative group* (Boyeldieu, (Kastenholz), Kleinewillinghöfer & Lionnet, since 2017)
- N.B. Illustrations are elicited unless identified by a text reference (T-XX.nn)

Noun number

Various processes of noun plural marking (if any): apophony ('Umlaut') and suffixes, mainly representing relics of a former noun class system whose cognates are still active in only one of the Bua languages: Kulaal (BKKL 2018: 74-79)

Sg.	Pl.	
piāg	pēg	'shoulder'
súl	súrí	'head'
t í lā	tér ī	'tree, wood'
tuāy	tốy ∼ tóyg ī	'peanut'
dàā	də̃g	'arm'

Table 1. Types of noun plural formation

Personal pronouns

	Emphatic	Subject	Object, preposition-governed, and possessive	Self
1s	ŋìñ	'n	ń	mǎn
2s	ŋìm̄	m	ḿ	măm
3s	ŋír	ŕ	ŕ	măr (animate)
				màr ~ mày ~ mànì (inanimate)
LOGS	ŋìr	ì	r	mar (mar ?)
1PE	ŋìníí	í	í	mǎy
1PI	ŋìî	ì	ì	mày
2 _P	níí	í	í	mǎy
3P	ŋáá	á	á	mă ~ màná (anim.+ inanim.)
LOGP	ŋàà	à	à	?

Table 2. Personal pronouns

Homophones

1.a	wò /pl. bì	noun	'human being, person, (pl.) people'
b	wò {DUR}	auxiliary (invar.)	'Durative, Imminent'
c	wò {SIT}	copula (invar.)	'Situative, be at, exist'
2.a	65 {FUT}	auxiliary (invar.)	'Future, Virtual, Optative'
b	65 {QUOT}	quotative	'Quotative, Introducer of reported speech'
3.a	tī (inf. t ī m)	verb (cl. 4)	'sit, stay, be, become'
b	tī	preposition	'at, in, on'

Table 3. Noteworthy homophones

Verb classes (indicative/subjunctive moods) and infinitive (1/2)

2 finite forms ({IND.V}, {SBJ.V}) vs 1 infinite form ({V.INF})

Indicative mood: 'realis, factual'

Subjunctive mood: 'necessity, wish, order'

Class	Indicative	Subjunctive	Infinitive	
1	6àn	6àn	6ăn	'hang, hold onto'
3	6ōn	6ôn	buààn	'dance'
4	mōg	móg	móglī	'contract, make a fist'
4	lōy	lóy	lóóm	'lie, sleep'
4bis	sūrí	súrí	sūrí	'laugh at'
5	tóó	tōō	túúlā	'pound, crush'

Table 4. Verb classes and infinitives: some illustrations

Verb classes (indicative/subjunctive moods) and infinitive (2/2)

Class	Indicative	Subjunctive	Infinitive (main processes)	Lexical tokens
1	L	ML	M, LM; 2 suffixes	343
1bis	LH	MLH	LH	15
2	L	Н	M; 1 suffix	4
3	M	ML	$LM = \widehat{LMM}$; mostly suffixes	34
3bis	MH	MLH	MH	1
4	M	Н	M, HM, LM; some suffixes	182
4bis	MH	Н	MH	6
5	H	M	HM; mostly suffixes	24
invariable	•••	•••	•••	16
irregular	•••	•••	•••	3
Total				628

Table 5. Verb classes and infinitives – tone patterns (counts updated 2023)

Formalisation of mood markers? (1/2)

- Verb tones are both lexical and grammatical, e.g.: IND $t\bar{o}n$ / SBJ $t\bar{o}n$ 'forge' (cl. 3) vs IND $t\bar{o}n$ / SBJ $t\bar{o}n$ 'send' (cl. 5)
- Does one mood represent the marked form of the two? Note the following ambivalent tone patterns:

Class	Indicative	Subjunctive	Lex. tokens
1	L	ML	343
1bis	LH	MLH	15
2	L	, H	4
3	M	/ ML	34
3bis	MH	/ MLH	1
4	M 🔨	H	182
4bis	MH /	Н	6
5	H	M	24

Table 6. Moods and tone patterns: cases of ambivalence

Formalisation of mood markers? (2/2)

Two paths of research:

- Consonants? (thank you, Raymond!) In contrast to the frequencies observed in the general lexicon, cl. 3 verbs reveal a relatively high number of the initial glottalised stops b- and d-, while cl. 5 verbs show a markedly high frequency of the initial voiceless stops t- and c-. Implications however not obvious.
- Former polar tone? Initially marking SBJ? Possibly inherited from a likely historical *L/H tone system (BKKL 2018: 100; Lionnet 2023)?

Core verb phrase : [(S) IND/SBJ.Verb (O)]

- (1) f **bow** r buày
 3s IND.tie LOGS goat
 '(S)he *ties/tied* his/her (own) goat!'
- (2) tōŋ / tōŋ lŏl
 IND.end IND.end NEG
 'It is finished.' 'It is not finished'
- (3) bíím bow à buày child.PL SBJ.tie LOGP goat 'The children *should tie* their goat!/*Let* the children *tie* their goat!'
- (4) **bow** m buay!

 SBJ.tie 2s goat

 'Tie your goat!'

Modality constructions : [Mod (S) SBJ.Verb (O)]

- kiini {OBLIG} 'Obligative'
- (5) [...] búrū mày jàà gẻ ŕ páā bō nêr gẻ ì kuáar ndòw ndòw one even IND.say to 3s mate QUOT SBJ.paddle for 1PI dugout close close kííní ì lòg bì tòtôn!

 OBLIG 1PI SBJ.see person.PL DEM.PL

"... one said to his mate: paddle for us quite close, we *must see* these people!" (T-III.16)

Potentially functioning as a subordinator of purpose:

(6) wàn jàà: [...] r̀ 65 tómnī tī á luà **kííní** á **kâ** wájèn á chief IND.say LOGS FUT send.INF at 3P bottom OBLIG 3P SBJ.do what? 3P **hínā** ...

SBJ.come

'The chief said: ... I will send (a message) after them (saying that) they *must do* what? (they *must*) *come*. (T-IV.26, 28)

>>> 'The chief said... I will send (a message) after them so that they will do what? (so that they will) come.'

- $k\acute{a} \sim k\acute{t}$ {OBLIG} 'Obligative' (also Auxiliary, see above)
- (7) **kí** ŕ **tí** ?ín!

 OBLIG 3S SBJ.stay thus

 'Let him/her stay like this!'
- (8) [...] sòòn r páā kuār páā 65 ?uá ká pĩì sì ì IND.call LOGS mate young_man some QUOT SBJ.stand_up OBLIG 1PI.EMPH SBJ.go 1PI lòg ?íī nènèy!

 SBJ.see woman DEM.DEF

 '(He...) calls some mate (and) says: get up! we *must go* (and) *see* this woman!' (T-III.75)

Potentially functioning as a subordinator of purpose:

- (9) 65 í ná ń ndúū **ká** ǹ **p**î! í ná ń ʔààr ndúū **ká p**î!

 QUOT 2P SBJ.give 1s water OBLIG 1s SBJ.drink 2P SBJ.give 1s horse water OBLIG SBJ.drink

 '(She) said: give me water, I *must drink*, give water to my horse, (he) *must drink*!' (T-IV.76)

 >>> '(She) said: give me water *so that* I *drink*, give water to my horse *so that* (he) *drinks*!'
- (10) yāàr ń **ká** 'n **sõ**SBJ.help 1S OBLIG 1S SBJ.lift
 'Help me, I *must lift*!' >>> 'Help me *to lift*!'

Auxiliary constructions: [(S) AUX (gì Beneficiary) (O) Verb.INF]

- (11a) á **kà** gì wàn círā

 3P IND.do for chief work

 'They *do/did* (a) work for the chief.'
- (11b) á **bō** gɨ wàn círā **kààr**3P FUT for chief work do.INF
 'They will do (a) work for the chief.'
- (12a) nh **tén** rh tī ?ùūl
 1s IND.find 3s on road
 'I found him/her on the road.'
- (12b) n bō r tīnā tī ?ùūl 1s FUT 3s find.INF on road 'I will find him/her on the road.'

$w\grave{o}$ {DUR}

- 'Durative'
- (13) [...] 65 lòg r wấp hãam tâ r **wò jáblī**QUOT SBJ.see LOGS thing IND.get_lost then LOGS DUR look_for.INF

 '... (she) said: see! my cloth got lost, that's why I *am looking for* (it).'

 (T-II.20)
 - 'Near Future, Imminent'
- (14) [...] málīm mí jàà: bố tī bàrì hásā lēlē î ?ùn tī siàāl marabout ANPH IND.say well! IND.be good now here DEF place IND.be night tèén ná r̀ wò síílī already SUCC LOGS DUR go_back_home.INF

 '... the marabout said: well, that's good, now, here, night has come (lit. the place is already night) and I'm going to go back home.'

 (T-III.52)

$b\bar{\partial}$ {FUT}

- 'Future'
- (15)**bō sāál** báá ?íī m nà càw [...] r 6<u>11</u>r, păy Бō LOGS FUT go.INF child woman ANPH with marry.INF ask.INF INTERR 3P FUT 6áá bèé á **bō** gì r ?íī **a**? gì r kuāv m nă to LOGS refuse.INF or 3P FUT to LOGS child woman ANPH give.INF Q "... I will go and ask for the girl('s hand), will they refuse (her) to me or will they give me the girl?' (T-I.10)
 - 'Virtual/Potential'
- (16) [...] ʔàar nă hínā kúnă m̀ **bō** ʔàar hínā **pār** m̀ **bō** ʔàar hínā **pār** horse CONN2 tail as_if 2s fut horse tail catch.INF 2s fut horse tail catch.INF [the python is pursuing a flying horse]

 '... the tail of the horse is as if you [python] would catch the horse's tail, you would catch the horse's tail.'

 (T-IV.70)

$b\bar{\partial}$ {FUT} (cont.)

- 'Possible/Feasible'
- (17)[...] f jàà 65 nĩr mâr wấn nè r tén lŏ(1) lá 3s ind.say Quot logs.emph logs.slf thing dem logs ind.find neg also ř bā siilī lŏ(l) lá LOGS FUT go_back_home.INF NEG also "... she says (to herself): I, myself, did not find my thing (i.e. cloth) and I will not be able to go back home.' (T-II.14)
 - 'Optative/Deontic'
- [...] lèg r Píín jàà: luààr nèn ná (18)málim súl nĩr marabout IND.look_at LOGS head thus.long IND.say village DEM SUCC LOGS.EMPH iò liā jò tá r bò lŏl ná [...] FUT move.INF only and if then LOGS IND.move NEG SUCC 'The marabout... thought about (lit. looked at his head) for a long time (and) said (to himself): this village, I simply *have to move* and, if I don't move...[sth. bad will happen]' (T-III.4)

$$k\dot{a} \sim k\dot{i}$$
 {OBLIG}

- 'Obligative' *stricto sensu* (very limited use in the positive sense)
- (19) á **ká** (~ **kí**) **hínā**3P OBLIG come.INF
 'They have to come/they must come.'
 - 'Prohibitive' (most instances by far appear in a negative context, and address a second person subject, sg. or pl.)
- (20) ń bàà tààm 65 ň **ká** dűgrī **túrī lŏl**1s father IND.want QUOT 1s OBLIG mushroom eat.INF NEG
 'My father doesn't want me to eat mushrooms.' (lit. my father wants that I *don't eat* mushrooms)
- (21) [...] dāŋ-gà [...] pìn ʔuā nh wò tī yàál á tá mh **ká** nh when 1s.emph ind.stand_up 1s sit at run.inf succ then 2s oblig 1s hūl **dīb** nà mh dāŋ **lŏl** [...] stomach hit.inf with 2s leg neg [the flying horse is warning its rider] '... when... I will start to run, don't hit my stomach with your legs!...' (T-IV.61)

Adverbial constructions : [(S) wò/tī Prep. (gì Benef.) (O) Verb.INF]

- $w \dot{o} t \bar{t} \{ SIT[UATIVE]/at \} > 'durative/imminent'$
- (22) káy m ?ángāl tī jāā nè á **wò tī** gɨ m **jāā**! SBJ.put 2s attention at speech REL 3P SIT at to 2s tell.INF 'Pay attention to what people *are telling* you!'
- (23) [...] m jàà [...] 65 m bấá ?íī wò tī wò bốr kúúlā ɛ̃? [...]
 2S IND.say QUOT 2S child woman SIT at person male marry.INF eh?
 '... you tell... that your daughter is about to marry a man eh? ...'
 (T-I.42)
 - $t\bar{t}$ lé {IND.stay~be/for~aiming} > 'deserve/need' (elicited examples only)
- (24) f tī lé dīb

 3s IND.be for beat.INF

 '(S)he deserves beating (to be beaten).'
- (25) **tī lé** gɨ ŕ **jāā** lŏl
 IND.be for to 3s tell.INF NEG
 'It is not necessary to tell him (lit. it does not deserve to be told to him/her).'

Satellites (various orders and positions)

- ma {DUB} 'maybe (random), Dubitative' (preposed/postposed, limited instances)
- (26) **mā** f **hīnā** liāālí
 DUB 3s IND.come yesterday
 'Maybe he came yesterday.'
- (27) mã ndìlà bō nuăn ~ ndìlà mã bō nuăn DUB rain FUT rain.INF rain DUB FUT rain.INF 'Maybe it will rain.'
- (28) mã ŕ b̄̄̄ hínā ~ ŕ b̄̄̄ hínā mã

 DUB 3S FUT come.INF 3S FUT come.INF DUB

 'Maybe (s)he will come.'

Potentially functioning as a marker of indirect question:

(29) n jàà **mã** f **bō hínā**1s IND.say DUB 3s FUT come.INF

'I say *maybe* (s)he *will come*.' >>> 'I wonder whether (s)he will come.'

- day {REM} 'still, (not) yet, Remansive' (preposed/postposed, limited instances)
- (30) **dãŋ** nì **tī** ngáá ~ nì **tī** ngáá **dãŋ**REM 1s IND.be strong 1s IND.be strong REM
 'I am still strong.'
- (31) **dãn** ŕ sì lŏl ~ ŕ sì **dãn** lŏl REM 3S IND.go NEG 3S IND.go REM NEG '(S)he did not go yet.'
- (32) f wò wān túrī dān 3s dur thing eat.INF REM '(S)he is still eating.'
- (33) f bàà m mànì nă ?ààr nè tuàāní dãŋ f tī báá câl ?ín 3s father ANPH 3s.self conn2 horse rel before rem 3s ind.be child young thus tà f wò huáān tī súl ?ín déd-déd, [...] then 3s dur ride.inf on top thus long 'The very horse of her father that formerly, (as) he was still a young child like that, he had been riding on top like that for a long time...' (T-IV.43)

- *tèén* 'already, Completed' (postposed)
- (34) [...] bì tòtôn-ĩ á hīnā á **lòg** pìr ?ùn **tèén** pɛ̄`?

 person.PL DEM.PL-DEF 3P IND.come 3P IND.see LOGS.EMPH place already eh?

 '... these people came (and) *already saw* my place, eh?'

 (T-III.24)
- 6áá ?íī [...] **lèg** 6áá kuār tèén (35)m gàná, tī nè child woman IND.see child young_man ANPH already then IND.be DEM then 3s iàà gì r bàà **tèén** 65 6áá kuār nè iò pĩr tààm IND.say to LOGS father already QUOT child young_man DEM FOC LOGS.EMPH IND.want **?**? kúúlā păy kə̄v? 3s marry.INF eh? INTERR what?

'The girl... had already seen the young man (and) then, he was the one she had already told her father he was the young man she wanted to marry, eh?, isn't it?' (T-IV.22-23)

• tèén (cont.)

N.B. tèén 'already, Completed' may also modify an adjective:

60 wān nè tà ?ààr hììní tèén tà 6áá nènèy (36)bàà iàà nīm 3s father IND.say eh! thing DEM then horse old already then 2s.EMPH child DEM.DEF á ?èrgì 6áá kuār m ləg tī māán tī wàá [...] IND.be child young_man 2s SBJ.look_at 3P horse.PL proper IND.be how? [the chief disapproves the daughter who chose an old horse while her new husband and his mates ride young horses] 'Her father said: eh! this thing, the already old horse, you, this child is a young man, look, how are their own horses?...' (T-IV.44)

- *lŏl* {NEG} 'Negation' (postposed)
- (37) [...] í lòg wò ʔín tī wò 65r lŏl lá ʔíī lŏl lá păy
 2P IND.see person thus IND.be person man NEG also woman NEG also INTERR

 í lòg wò nín â?
 2P IND.see SIT présent Q

 '... did you (ever) see such a person (that he/she) is not a man, nor a woman, did you
 (ever) see (that) it exists?'

 (T-I.56)
- (38) [...] ŕ jàà: pīm nè m̀ ʔùnà jāā dúnā nàrì ná m̀ **ká**3s IND.say 2s.emph dem 2s IND.know speech life a_lot succ 2s oblig

 dūgā sāál tī ḿ luààr hūl lŏl liā m̀ tí tī pīr̀ mār

 go_back.INF go.INF at 2s village inside NEG but 2s sbj.stay in logs.emph logs.slf

 gðr hūl [...]

 earthen_house inside
 - "... he said: you, since you know a lot about life, you *must not go back* to your village but you have to stay in my own earthen house..." (T-I.64)

• păy {INTERR} 'Interrogative' (preposed) and a {Q} 'Question' (postposed)

The function of Interrogative $p\check{a}y$ is to introduce a question. It is sometimes used in the context of Wh-questions, as in (39), but is more systematically required in presence of a polar question marked by a, as in (40):

- (39) 65 [...] 6èé nĩr 65 gặp nã ŕ jàŋ-gũnī túúlā ná QUOT or LOGS.EMPH FUT stay.INF with 3s broken_millet_grains pound.INF SUCC pǎy r 65 wấp tìnā báy tà r 65 túrī?

 INTERR LOGS FUT thing find.INF where? then LOGS FUT eat.INF

 '(The dog) said:... or, if I stay pounding the broken millet grains, where shall I find something to eat?'

 (T-II.49)
- (40) [...] á jàà gì ŕ 65 măm bàà kà ứ kúm nā gì ứ dīblā 3P IND.say to 3S QUOT 2S.SLF father IND.do 2S affection IND.give to 2S a_lot ê nā gì ứ ndìnì mày ê pǎy nā gì ứ bìjīm ?ín â? eh? IND.give to 2S nice really eh? INTERR IND.give to 2S ugly thus Q '... they tell her: yourself, (our) father has a lot of affection for you eh?, (he) gives you very nice (things) eh?, did he ever give you ugly (things)?' (T-II.12)

Summary of the verb system

Finite verb constructions

IND	'Realis'
SBJ	'Necessity/Imperative'

Core

kiini - 'Obligative (+ 'so that')' $k\dot{a} \sim k\dot{i}$ - 'Obligative (+ 'so that')'

+ Modality

Infinitive constructions

Auxilary
$$-b\bar{\partial} -$$
 'Durative/Imminent'
$$-b\bar{\partial} -$$
 'Future/Virtual~Potential/
Possible~Feasible/Optative~Deontic'
$$-k\acute{a} \sim k\acute{t} -$$
 '(Obligative)/Prohibitive'
$$-w\grave{\partial} t\bar{t} - (\text{`be at'})$$
 'Durative/Imminent'
$$-t\bar{t} l\acute{e} - (\text{`be for'})$$
 'deserve/need'

Satellites: ma 'maybe (random), Dubitative'
daŋ 'still, (not) yet, Remansive'
tèén 'already, Completed'
lŏl 'Negation'
păy 'Interrogative'
a 'Question'

Summary of the verb system

Finite verb constructions

IND	'Realis'
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- 'Obligative (± 'so that')'

kiini - 'Obligative (+ 'so that')' $ka \sim ki$ - 'Obligative (+ 'so that')'

+ Modality

Infinitive constructions

```
Auxilary -b\bar{\partial} - 'Durative/Imminent'

-b\bar{\partial} - 'Future/Virtual~Potential/
Possible~Feasible/Optative~Deontic'

-k\acute{a} \sim k\acute{\iota} - '(Obligative)/Prohibitive'

Adverbial -w\grave{\partial} t\bar{\iota} - ('be at')
-t\bar{\iota} l\acute{e} - ('be for') 'Durative/Imminent'

'deserve/need'
```

Satellites: ma 'maybe (random), Dubitative'
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Infinitive constructions

Auxilary
$$-b\bar{\partial} -$$
 'Durative/Imminent'

Auxilary $-b\bar{\partial} -$ 'Future/Virtual~Potential/
Possible~Feasible/Optative~Deontic'

- $k\acute{a} \sim k\acute{i} -$ 'Obligative)/Prohibitive'

Adverbial $-w\grave{\partial} t\bar{\iota} -$ 'Durative/Imminent'

- $t\bar{\iota} l\acute{e} -$ ('be for') 'deserve/need'

Satellites: ma 'maybe (random), Dubitative'
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Abbreviations & glosses

1рі	1 st person plural inclusive	inf., INF	infinitive
1s	1 st person singular	INTERR	interrogative
2P	2 ^d person plural	invar.	invariable
2s	2 ^d person singular	LOGP	logophoric plural
3P	3 ^d person plural	LOGS	logophoric singular
3s	3 ^d person singular	NEG	negation
ANPH	anaphoric	OBLIG	obligative
conn2	connective 2 (nă)	pl., PL	plural
DEF	definite	Q	question
DEM	demonstrative	QUOT	quotative
DUB	dubitative	REL	relative
DUR	durative	REM	remansive
EMPH	emphatic	SBJ	subjonctive
FOC	focalizer	SIT	situative
FUT	future	SLF	self
IND	indicative	SUCC	successive

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