## When verbs come (and) clash together: the diachrony of multiverb constructions in Ju|'hoan and !Xun ${ }^{1}$

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## 1 Introduction

### 1.1 Background

+ What are serial verb constructions?


## Definition:

"a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination, or syntactic dependency of any other sort. Serial verb constructions describe what is conceptualized as a single event. They are monoclausal; their intonation properties are the same as those of a monoverbal clause, and they have just one tense, aspect, polarity value. SVCs may also share core and other arguments. Each component of an SVC must be able to occur on its own. Within an SVC, the individual verbs may have same, or different, transitivity values" (Aikhenvald 2006: 1, my emphasis)
> Cross-linguistically valid term? (See e.g., Bisang 2009, Haspelmath 2016)

+ Why are they interesting? They shed light on relationship between construction of discourse (clauses, predicates) and expression of events; areality; typology; language change; AND because discussion of SVCs can be traced to descriptions of Akan (Christaller 1875: 144) - thus to the study of African languages and linguistics ())
+ Multiverb constructions: an areal feature of Kalahari Basin Area languages (Güldemann 1998, Güldemann \& Fehn 2017) - yet by no means homogenous across Kx'a, Tuu, and Khoe-Kwadi
> Typological remarks: 'contiguous' (Aikhenvald 2006) or 'nuclear-root’ serialisation (e.g., Foley \& Van Valin 1984) in Kx'a and Tuu languages:
(1) Ju|'hoan (Ju, Kx'a Pratchett 2020: 92)
hä kű \|öhm !hárá mí tzí
PRO1 IPFV chop burst 1 SG mouth
'It is going to split my mouth open.'
(2) Taa (Tuu, Kießling 2013: 50)
ń sí \|ùhbú qx’ùà
1sG IPFV jump descend
'I jump down.'
> Different type in Khoe languages: so-called 'verb-juncture' construction (Güldemann \& Fehn 2017, cf. i.e., Kilian-Hatz 2006, Vossen 2010)
(3) Ts'ixa (Kalahari Khoe, Khoe-Kwadi, Güldemann \& Fehn 2017: 510)

$$
\begin{aligned}
& \text { noxá }=m \quad \text { ín }=m a ̀ \quad \text { tí } \quad \text { kò } \quad \text { mũ̃̃̀̀-̀̀--Tãà } \\
& \text { snake }=\text { M.S DEM.REF }=\text { M.S } \\
& \text { 'I recognise this snake.' }
\end{aligned}
$$

+Ju attests symmetrical and asymmetrical serial verbs (Aikhenvald 2006), with descriptions of form/functions of both in largely synchronic terms (e.g., Dickens 2005, König 2010, Heine \& König 2015) or grammaticalisation of certain verbs (e.g., Heine \& König 2005)

+ In !Xun, König (2010, also Heine \& König 2015) describe a formally divergent construction that involves "post-posed tense-aspect marking", illustrated in (4)
(4) !Xun (Heine \& König 2015: 55, 103-104)
hä má $g / e ̀-\bar{a}$ $\qquad$ nàmì tc'u
PRO1 TOP come-PROG circulate home
'He comes around the homestead.'
+ Research questions:
$>$ with research typically focussing on the 'fall' of serial verbs (e.g., grammaticalisation, etc.), this paper aims to shed light on the rise of serial verbs in Ju languages with a focus on the formal variation observed with asymmetrical serial verbs
$>$ what is the distribution of the construction across !Xun and Ju|'hoan? Which kind of verbs arise in the construction? What kinds of functions are expressed?
How does the construction relate to serial verbs in terms of form and function?
(How does the construction relate to other multiverb constructions across KBA languages?)


### 1.2 Ju languages



+ Language classification: Kx'a (family)
- Ju (language complex)
- !Xun (aka Northwestern Ju)
- Ju|'hoan (aka Southeastern Ju)
(cf. Heine \& König 2015: 22ff)
+Ju languages are spoken in western
Botswana, across northern Namibia, and southern Angola
+Ju languages are distantly related to the \#'Amkoe languages, spoken in Botswana


### 1.1.1 Basic clausal morphosyntax

+ Sparse verbal morphology, verbs unmarked for person and number (with exception of some posture/position verbs with suppletive stems SG/PL)
$>$ Verbal morphology with intransitive verbs (VE = valency external)
(5)a. Komtsa ú
b. Komtsa ú=á tju/ho
PN go
'Komtsa goes.'
PN go = VE 3.village
'Komtsa goes to the village.'
$>$ Verbal morphology with transitive verbs
(6)a. Komtsa 'ḿ(=á) \|oah
b. Komtsa 'ḿ=á
PN eat $(=V E)$ 3.spoon
PN eat = VE
'Komtsa eats (with) the spoon.' 'Komtsa eats with [it].' (also: 'Komtsa eats [there]')
$>$ No ditransitive verbs (König 2010b): second post-verbal argument introduced by MPO ( $=$ multipurpose oblique)
(7) Komtsa |'àn hà kò 'ḿ-sì

PN give:VE PRO1 MPO 3.food-PL
'Komtsa gives him food.'

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$>$ Dialectal alternative participant flagging strategies (see also §2.2.1):
(8) Ju|'hoan ( $\ddagger$ Kx’ao\|'ae dialect, Pratchett 2020: 109)
hä g/àè hò \|kx'òà kò \|'áíxà òsí
PRO1 arrive find 3.job MPO 1.leader LOC
'He went and found a job working with ('at') the king.'

### 1.1.2 Clausal coordination

Ju languages have distinct strategies for clausal coordination and noun phrase coordination

+ Syndetic coordination with *te (consecutive) and *ka (simultaneous/sequential)
$>$ tè tà (Proto Ju *te, Heine \& König 2015: 271ff) expresses conjunctive 'and' and adversative 'but'
$>$ (9) shows a chain of minimal clauses ('consecutive verb construction', Heine \& König 2015: 278)
(9) Ju|'hoan ( $\ddagger$ Kx'ao||'ae dialect, Pratchett 2020: 116)
sá ú-á Tjum!kx'ui tè tzá tè n!ómà sá ú-á skóré tè kx’óá skoolhoof DUgo-VE PN and sleep and dawn DUgo-VE 3.school and search 1.headmaster 'They went to Tsumkwe and slept and in the morning, they went to the school and looked for the headmaster.'
> Simultaneous or events immediately following one another can be introduced by ká
(10) Ju|'hoan (Tsumkwe dialect, Dickens 2005: 53)
n!hai lóá \|'àè è tè sìn kű tsí ká !'árú
1.lion NEG heed 1EX and just IPFV come and roar
'The lion did not heed us and was just coming and roaring.' (?'came roaring')


### 1.2.2 Asyndetic coordination/juxtaposition

+ Asyndetic coordination seems underrepresented in descriptions of Ju but can be found expressing various functions, potentially reinforcing the simultaneity (11\&12) or iterative (13) nature of events
(11) Ju|'hoan ( $\ddagger$ Kx'ao||'ae dialect, Biesele et al. 2009: 62)
mì!á kü ü \# lóá g!hòò !an hà kò kò-à
kè tè kü ű

1IN-PL IPFV go NEG sit.PL wait PRO1 MPO place.3-REL DEM. 3 but IPFV go 'We're going to go [we're] not going to sit and wait for him but [we] are going to go.'
(12) Ju|'hoan ( $\ddagger$ Kx'ao||'ae dialect, Biesele et al. 2009: 84)
tè kü tsí g/àè \# sín kür gú hä
and IPFV come arrive just IPFV take PRO1
'[..] and came and just took him.'
(13) !Xun (Angola dialect, adapted from Bleek 1925: 112)
!ku de ua ki \|kum !gaũ ta ki sn $\quad$ ki sn $\quad$ ta ki \|kum !khau !Xun woman TOP IPFV chop wood and IPFV look IPFV look and IPFV chop remove 'A !Xun woman cuts down wood and is looking and looking and cuts it off.'

## 2 Verb serialisation in Ju

+ SVCs can be distinguished on account of their composition:
Symmetrical SVCs: serial verb constructions consist of two or more verbs each chosen from a semantically and grammatically unrestricted class

Asymmetrical SVCs: Asymmetrical SVCs denote a single event described by the verb from a nonrestricted class. The verb from a closed class provides a modificational specification: it is often a motion or posture verb expressing direction, or imparting a tense-aspect meaning to the whole construction (Aikhenvald 2006: 21)
$>$ relevant for current discussions both due to formal variation remarked across these categories as well as language change processes/results attributed to both (i.e., lexicalisation of symmetrical SVCs and grammaticalisation of asymmetric SVCs, e.g., Aikhenvald 2018)

+ Following description is kept brief, fuller description can be found in Dickens (2005), König (2010), and Heine \& König (2015: 91ff)


### 2.1 Symmetrical serial verbs

+ Properties: strictly contiguous; tense-aspect (if present) is marked once before the complex predicate, as in (14) and (15), as is true for negation, as in (16), and adverbs.
$>$ So-called 'switch function' type where object of V1 is S/A of V2, as in (14) and (15)
$>$ Sequence is typically iconic of order of events
(14) Switch function/cause-effect (Ju|'hoan, Pratchett 2020: 92)
hä kü ||öhm !hárá mí tzí
PRO1 IPFV chop burst 1 SG mouth
'It is going to split my mouth open.'
(15) Switch function/cause-effect (!Xun, Heine \& König 2015: 98)
hä má ke 山’háí n!!häò täq
PRO1 TOP PST pull.SG fall.SG 1.taq
'Jackal simply pulled the food out (i.e., pulled the food and it fell out).'
(16) Cumulative subject/result (Ju|'hoan, Dickens 2005: 81)
mí !òmà tè Lóá sé |’àbà !äìhn
1sG be.short and NEG see go.over 3.tree
'I am short and/thus cannot see over the tree.'
$>$ (17) illustrates the internal complexity of a 'single event' in a serial verb involving three verbs and three participants/semantic roles. Chain remains iconic and strictly contiguous.
(17) Switch function/cause-effect (!Xun, Heikkinen 1987: 54)
$m$ tsaq \|áó tóán g\|ú ke dà’á
1IN pour die.pl finish water MPO flame. 4
'We shall pour water on the fires and extinguish them completely.'
(Alternative: $\mathrm{we}_{\mathrm{A}}$ pour and finish [i.e., use up all] the water ${ }_{\mathrm{T}}$ and extinguish the fire ${ }_{\mathrm{P}}$ )


### 2.2 Asymmetrical serial verbs

### 2.2.1 with V2 minor verbs

+ V2 comes from a closed semantic class of verbs otherwise (segmentally) indistinguishable from symmetrical serial verb - especially with respect to tense-aspect-negation markers
$>$ functions include path/direction (18), similative (19), aspect (20), or benefactive (21)
(18) Path/direction ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Biesele et al. 2009: 76)
tè mí kű tani tsí
ka ì
tsí sé hä
and 1SG IPFV fetch come and 2PL then see PRO1
'And I'm going to bring [her] so that you can see her.'
(19) Similative (T. Ju|'hoan, Dickens 1992: 68)
ari n/a ooa n!a’an $\ddagger o a \quad$ !xó
jackal. 1 EVID NEG be.big be.like 1.elephant
'Jackal is not as big as an elephant.'
(20) Terminative ( $\ddagger \mathrm{Kx}$. Ju|'hoan, Winberg et al. 2010)
tè $k a \quad g / u i h \quad k u$ !aah $\ddagger a u n$ toan $h a \quad$ dshau-si tju-si waqn-si
and when 1.hyena IPFV run surpass finish PRO1 2.woman-PL 3.house-PL all-PL
'And once hyena had [completely] run past all of his wives' houses...'
(21) Benefactive (T. Ju|'hoan, Pratchett 2020: 109)
tè cè
tè n/óá |'àn mí !ú-n!à’àn
kò kocè kòtá xáí
and do.also LNK cook give 1SG 1.grandfather MPO 3.coffee and bread
'[We make porridge] and also cook coffee and break for my grandfather.'
+ The grammaticalisation of 'give' *'an [|'ãã] in Proto Ju (Heine \& König 2015: 28) across Ju languages nicely illustrates different grammaticalisation pathways SVCs can take in a single language complex:
$>$ Ju|'hoan: |'àn 'give' > benefactive $>$ dative (22) $>$ allative (23)
(22) Jul'hoan ( $\ddagger$ Kx'ao\|'ae dialect)
ha sin \#'ang |'an ha l'ae
PRO1 just think give PRO1 self
'He just thinks to himself.'
(23) Ju|'hoan ( $\ddagger$ Kx'ao\|'ae dialect, Pratchett 2020: 97)
n!häì kü n\#häò |'àn hä
lion. 1 IPFV walk give PRO1
'The lion is walking towards her.'
> In !Xun the grammaticalised form /'àn is not used as a predicate verb (cf. /à'ā 'give', Heikkinen 1987: 30; Heine \& König 2015: 220). Thus, the following are technically not SVCs.
(24) Comitative preposition (E. !Xun, König 2001: 80, 175)
djù má |ú-ī n!!häö |'àn djù !x’a |'àn djù cń
1PL.EX TOP NEG-HAB walk COM 1PL.EX heart COM 1PL.EX lung
'We never walk together with our heart and our lungs.'
(25) Instrumental preposition (O. !Xun, Heikkinen 1987: 30)
hä !hún hä |'àn hä dsū
PRO1 kill.SG PRO1 INSTR PRO1 beak
'He kills him with his beak.'
(26) NP coordinator (E. !Xun, König 2001: 80, 167)
|àālè má xāp gù g/ùì \|xōē |'àn /öhè \|xōē
jackal TOP then take hyena tail and horse tail
'The jackal then took the hyena's tail and the horse's tail.'
(27) Additive (E. !Xun, König 2001: 1)
mí l'àn má khōmē |ōā !!’hàò cū
1 SG also TOP tomorrow NEG walk around
'I also will not walk around tomorrow.'


### 2.2.2 with V1 minor verb

+ Asymmetrical SVCs involving minor verbs show variation with respect to placement of tense aspect markers: illustrated firstly only using 'come' and 'arrive' which typically express deictic motion/direction
$>$ three variants: absence of tense-aspect marking (28); default tense-aspect marking (29); and intermedial tense-aspect marking (30-33). Note that only the aspect marker separates the verbs in Ju|'hoan whilst both tense and aspect markers are found in !Xun.
(28) Deictic motion ( $\ddagger$ Kx’ao||'ae dialect, Pratchett 2020: 94)
à g/àè \|háí mànì
mí n/áng mí tsi $\qquad$ g!à’ámá

2SG arrive pull turn.around 1SG PURP 1SG come enter
'[When I jump over the fence,] you then come pull me back so that I go inside.'
(29) Deictic motion ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Biesele et al. 2009: 90)
tè sì-!á
kü tsí g!á
and PRO2-PL IPFV come arrive.home
'And they all arrived (at home).
(30) ?Inchoative (O. !Xun, Heikkinen 1987: 88)
tà \|’è.ká ná sé g/è ké n\#à’m 'n/ọäă
and then 1 SG IRR arrive PST hit wild.cat
'And I almost began to hit the wild cat [but its arm was really very big].'
(31) Deictic motion ( $\ddagger \mathrm{Kx}$. Ju|'hoan, Winberg et al. 2010: 64)
te g/uih g/ae ku !aah u tiin g!a'ama g/ui
and 1.hyena then IPFV run go cry enter 3.bush
'And hyena then ran off crying (entering) into the bush.'
(32) Deictic motion (T. Ju|'hoan, Pratchett 2020: 94)
tè sì-!á tsí kü g!à’ámá sá tzá-sí
and PRO2-PL come IPFV enter DU 3.sleep-NMZ
'And they then enter their sleeping place.'
(33) Deictic motion ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Biesele et al. 2009: 76)
tè sì-!á tsí g/àè kú nキhao-a khòè n/úí
and PRO2-PL come arrive IPFV walk-VE 3.place certain 'And [then] they went walking to some place.'

## i) Grammaticalisation of $t s i ́$ 'come' and $g / a ̀ e ̀ ~ ' a r r i v e ' ~$

$>$ the position is indicative of grammaticalisation and are outside of the predicate nucleus
(Pratchett 2020: 94; see also Güldemann 2013: 411) - thus not an instance of verb serialisation $>$ additional evidence from (34) where tsí glàè appears before the negation marker, coinciding with a lack of shared polarity
$>$ could alternatively be analysed as asyndetic clause linkage (cf. §1.1.2)
(34) Ju|'hoan (Tsumkwe dialect, after Dickens 1992: 1)
ka sa u nfuuhn tsi, \|’akaa sa tsi g/ae lóá !'hàn kòà tju/ho gè-à when DU go go.by.night come then DU come arrive NEG know where 3.village exist-vE '[That evening,] when they were travelling, they arrived not knowing where the village was.'
$>$ Under this scenario the construction is indicative of the demise of multiverb constructions

## ii) "Post-posed" tense-aspect marking

> König (2010, see also Heine \& König 2015) suggest that certain V1 minor verbs in !Xun take "post-posed" tense-aspect marking (ibid.: 101-102)
$>$ All minor verbs are referred to as coverbs by the authors
What distinguishes coverbs from other verbs used in the SVC [...] is also a morphological property: while tense-aspect markers precede the verbs used in a SVC, coverbs serving as V1 have their tenseaspect markers basically between the two verbs; cf. the following example:
W2 n!òxò má g|è kē gè’̀̀
N!oxo TOP come PAST sing
'N!oxo sang while moving.' (Heine \& König 2015: 103-104)
> Suggests a greater level of 'structural asymmetry' in asymmetrical serial verbs in Ju languages although this is not motivated by the authors

## iii) Variation is diagnostic of distinct multi-verb constructions

$>$ Rather than fit different constructions into prefabricated categories - allow variation to speak for itself: even the grammaticalisation scenario in (i) seems to take for granted that grammaticalisation arose out of a 'regular' construction
$>$ A more fine-grained analysis, comparing more verbs and more varieties could shed light on the rise of the construction and thus the rise of serial verb constructions - particularly if asymmetrical and symmetrical constructions can be shown to have different origins

## 3 Data analysis: the pseudo-consecutive construction

### 3.1 Method

+ Cross-dialectal comparison of 'coverbs' [i.e., V1 minor verbs] in their grammatical context based on 'coverbs' attested for !Xun (Heine \& König 2015: 102-103) and others 'found along the way' (cf. §3.2.1, §3.2.4)
$>$ (mostly) bottom-up approach using natural language texts

| Language | Dialect | Source | Notes |
| :--- | :--- | :--- | :--- |
| !Xun | Ovamboland !Xun | Heikkinen 1987 | text-based examples |
| !Xun | Ekoka !Xun | König \& Heine 2001 | published folktales |
| Ju\|'hoan | Tsumkwe Ju\|'hoan | Dickens 1992 | untranslated texts in Ju\|'hoan |
| Ju\|'hoan | $\ddagger$ Kx'aol\|'ae | Biesele et al. 2009 <br> Winberg et al. 2010 <br> own texts | translated by mother tongue <br> speakers trained in ELAN |

Table 1 Sources

### 3.2 Analysis

+ Cross-dialectal comparative analysis reveals two principal constructions which can be reasonably considered to be variants induced by grammaticalisation/dialectal variation
$\begin{array}{lllllll}\text { i) } & \mathrm{S} / \mathrm{A} & \mathrm{V} 1 & \text { te } & \text { ASPECT } & \mathrm{V} 2 & \text { (principally in Ju|'hoan dialects) } \\ \text { ii) } & \mathrm{S} / \mathrm{A} & \mathrm{V} 1 & & \text { ASPECT } & \mathrm{V} 2 & \text { (principally in ! Xun dialects) }\end{array}$
ii) S/A V1 ASPECT V2 (principally in ! Xun dialects)
+ The first construction is superficially identical to a string of consecutive clauses (cf. §1.1.2)
$>$ Whilst this is the likely origin, synchronically there are formal and functional differences hence the chosen designation PSEUDO-CONSECUTIVE CONSTRUCTION
+ Properties of pseudo-consecutive construction (PCC) in Ju:
(i) an intransitive verb conjoined with another verb using the desemanticised clausal connective ( = linker/LNK) te/ta or ka. In subordinate clauses, the coordinator he $\sim y e$ is used;
(ii) $\mathrm{S} / \mathrm{A}$ sharing is obligatory whether over or not;
(iii) S/A is never overtly repeated with non-initial verbs (neither pronominally nor nominally);
(iv) tense-aspect markers appear before the main semantic verb;
(v) verbs can be independently negated;
(vi) grammaticalisation is scalar and varies with participating 'minor verb'. Desemanticised connective grammaticalises to a construction dependent linker or is dropped, resulting in verb-medial tense-aspect marking.


### 3.2.1 Existential verbs

+ Existential verbs are not listed as 'coverbs' by Heine \& König (2015: 101ff) but identifying them as existential verbs typically arise in MVC as aspect markers
$>$ (35) provides a strong argument against the consecutive chain of clauses and rather
$>$ variation with respect to maintenance of linker attested in both !Xun and Ju|'hoan, e.g. (38)
(35) Progressive (G. Ju|'hoan, Pratchett 2020: 101)
sì hìn gè tè kü û tè hä hìn gè tè kű n\|/òrì kò-à...
PRO2 EMPH stay LNK IPFV go and PRO1 EMPH stay LNK IPFV try place. 3
'They keep on going and he keeps on trying places [whence to escape from the kraal].'
(36) Progressive (O. !Xun, Heikkinen 1987: 93)

Hásà má kúndò'à ó gè ká \|ü \#’än
it-it-better 1 SG then SBJV stay LNK DUR think
'It is better that I still think.'
(37) Progressive (T. Ju|'hoan, after Dickens 1992: 48, 14)
ká |ari n!oma he gè yè kxoa n\|hoo tci-s-a ha 'm when 1.hyena morning 1.DEM stay LNK search go.around3.thing-PL-REL PRO1 eat 'And that morning, whilst hyena was still looking around for something to eat.'
(38) ká Uhu gè kű 'ḿ zam, \|’àkáà hä tàqè !ọ̆è g!xà \|’à kòà when PN stay IPFV eat 1.tortoise then PRO1 1.mother drag remove:VE ART 3.place 'And whilst Uhu was still eating tortoise [meat], then his mother left from that place.'

+ In some !Xun dialects, the copula verb ộh is used with existential function and is also found in the PCC expressing progressive aspect
(39) !Xun (Ovamboland dialect, adapted from Heikkinen 1987: 91)
zù n/úí ọ̀h á gè
1.person just COP IPFV stay
'The other person continues to stay.'


### 3.2.2 Verbal adverbs ('do again', ‘do also')

$+c e ̀$ 'do again, do also' in Ju|'hoan requires the PCC (cf. cè 'return' Dickens 1994: ??) and expresses additive, e.g. (40), and excessive (41)

+ Contrary to other minor verbs in PCC, grammaticalisation does not result in loss of linker; rather it is reanalysed together as $c \grave{e}+t e ̀ ~ c e ̀ t e ̀ ~ ' a g a i n ' ~$
$>$ woodhood judgements discernible in data transcribed by mother tongue speakers (44)
(40) Additive (T. Ju|'hoan, Pratchett 2020: 109)
te cè $\qquad$ tè nlóá |'àn mí !ú-n!à’àn
kò kocè kòtá xáí
and do.also LNK cook give 1SG 1.grandfather MPO3.coffee and bread
'[We make porridge,] and also cook coffee and break for my grandfather.'
(41) Excessive (T. Ju|'hoan, after Dickens 1992: 16, 9)
te ce te !oma te !aihnnfaq-si ce te gұa'ain
but do.alsolnk be.small and 3.branch-pl do.also LNK be.long
'[...] but I am too small and the branches are too long [...so do not see very well].'
(43) \{We stayed a week in the bush without eating anything. We only drank water.\}
te ce te loa \|ah/|ah nキahm-si te $\ddagger a$ 'u ho ka|'ae te sáu $e$
and also LNK NEG cover 3.blanket-PL and 3.cold see REFL. 3 LNK freeze 1EX
'[We] also didn't cover [ourselves] with blankets and the cold really froze us.'
(44) ( $\ddagger$ Kx. Ju|'hoan, Biesele et al. 2009: 4)
ju-a he tsi goaq !ai he oo !au hajoe xae cete
1.person-REL DEM. 1 DEM long.ago die and do movewho $Q$ again
'This person who long ago died left, who is this again?'


### 3.2.3 Posture verbs

+ Posture verbs 'sit', 'lay' and 'stand' can be found in PCC expressing progressive aspect strongest evidence for which is found in (45) and (47) and (48) which cannot be read as consecutive clauses or as accompanying position (see also Heine \& König 2015: 71-72)
$>$ in !Xun dialects the linker is likely to be dropped, as shown in (47) and (48)
(45) Progressive (T. Ju|'hoan, Dickens 1992: 9)


## tè hä sìn n!ún tè !ààh cècèàkhòè

and PRO1 just stand LNK run go.back-and-forth
'And he just kept running back and forth.'
(46) Progressive ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Biesele 2009: 13)
ha g/ae cu te $k u$ ' $m$ ka !aihn-si
PRO1 then lay.SG LNK IPFV eat PRO3 3.tree-PL
'He spent a long time eating the trees.'
(47) Progressive (O. !Xun, Heikkinen 1987: 52)
ká’è hä 'n/ấn ké !áó hè dèbé sű ké kọ̀ré gùmì when PRO1 sit.SG PST move CLCO 2.children go.walking PST herd 3.cattle 'When he was moving, and the children were herding the cows [...].'
(48) Progressive (E. !Xun, Heine \& König 2015: 72)
tà cā ndò'à cú $\bar{a} \quad$ ú tà ndò'à cú $\bar{a} \quad$ ú
and DUDIST lay.SG PROG go and DIST lay.SG PROG go
'And they two were continuously going and going.'

+ Certain contexts permit a reading in terms of accompany position
$>$ note, however, the repetition of posture verbs in (49) and (50a) that appears to be necessary in order to express the posture/position explicitly
(49) Progressive/Position ( $\ddagger \mathrm{Kx}$. Ju|'hoan, Biesele et al. 2009: 4)
tè hä tsí g/àè n/áng te n/áng tè kû głara-a hă kò hĭ
and PRO1 come arrive sit.SG and sit.SG LNK IPFV ask-VE PRO1 MPO PRO4
'Then he (Glara) came and sat down and was asking him [in a sitting position] for it.'
(50a) Progressive/Position (E. !Xun, Heine \& König 2015: 72)
$c \eta$ gëhń má xāŋ́ $g!h \bar{o}$ tà $g!h \bar{o} a \quad$ !'hàn $g \| x x^{\prime} a$
PRO2 other CTR then sit.PL and sit.PL PROG crack 1.manketti
'They were sitting and cracking mangetti nuts [in a sitting position].'
(50b) Progressive (E. !Xun, Heine \& König 2015: 100)
hiú ndò'à g!hō-ē !'hàn $g \| x$ 'a
PRO4 DIST sit.PL-PST crack 1.manketti
'Those who were cracking manketti nuts.'
+ Why use different posture verbs to express same function?
$>$ grammaticalisation of 'posture-specific' progressive expressions common in languages spoken
by hunter-gatherer communities in the Kalahari (Nakagawa 2016 for G|ui; also Kilian-Hatz 2002)
$>$ exact distinctions encoded by different progressives in Ju needs targeted research (our
'translations' remain poor until then) - a promising and quirky areal shared by unrelated
languages thousands of kilometres apart ;)


### 3.2.4 'Manner verbs'

+ A class of verbs expressing the manner in which a verb is carried out typically arise in the PCC
$>$ can be used as main verbs, as in (51), but the event being described is contextually given
(51) ( $\ddagger \mathrm{Kx} .\left.\mathrm{Ju}\right|^{\prime} h \mathrm{hoan}$, Biesele et al. 2009: 72)
\|’a !arikxaoma to'a ku n!o'o
DEM adolescent. 1 DIST IPFV hurry
'That adolescent was hurrying.' (= growing fast as a foetus getting ready to be born)
+ Full construction including linker well represented across Ju dialects
$>$ suggesting the construction is less grammaticalised? Linked to properties of the 'minor verb'?
(52) Manner (Angola !Xun, Heine \& König 2015: 274)
yà ndū’à kē !xòlù dóngí tā dùsá tā ú
PRO1 DIST PST mount donki and be.slow LNK go
'He rode the donkey slowly.'
(53) Manner (T. Ju|'hoan, Dickens 1992: 32)
hä n!ò’ò tè g/àè !óá hä dshàú [...] tè hä dshàú n!ò’ò tè g/àè sè
PRO1 be.fast LNK arrive tell PRO1 1.wife and PRO1 1.wife be.fast LNK arrive see [When |'Hun got to the village,] he quicky told his wife [...] and she quickly went to see.'
(54) Manner ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Winberg et al. 2010: 63)
!'hai lóá mani sì tè sin gұom tè g/àè g!a'ama ú-á g/ui-!kx'a
1.hare NEG answer PRO2 and just be.quiet LNK arrive enter go-ve 3.bush-heart 'Hare did not respond to them and just quietly went into the bush.'
+ Interestingly, the linker is dropped in the domain of negation resulting in a construction segmentally identical to a serial verb construction, shown in (55) and (57)
$>$ shared polarity is not achieved thus not an instance of verb serialisation?
(55) Manner (T. Ju|'hoan, Dickens 1992: 17)
tè loa n!o'o tsí
tè jú
n/a'ngakhoe
$m z o$
and NEG be.fast come and 2.people alone
eat honey. 4
'[he walked to the village] but didn't come quickly [enough] so the people ate the honey alone.'
(56) Manner (T. Ju|'hoan, Dickens 1992: 17)
è-!á sìn \|ááu tè g\|/àán tè g!òá tcí n/úí n!án
1EX-PL just well LNK spend.day and evening 3.thing certain happen
'We just spent the day well and in the evening something happened.'
(57) Manner ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Winberg et al. 2010: 63)

G/uih ye ko kxae dshau n!ani ko loa \|au \|ae !'hai
1.hyena REL PST have 2.woman three PST NEG well treat 1.hare '[My grandson, my eyes are bad and the sun is setting], thus I do not see well.'

### 3.2.5 'Auxiliary verbs'

+ Final group of verbs include 'start', 'try' and 'be able' ('secondary verbs'?) - referred to as 'auxiliaries' (Heine \& König 2015) or complement taking verbs where tè functions as a complementiser (Dickens 2005: 54-55. The same argument is applied to cè 'do again’ §3.2.2)
$>$ like manner verbs in §3.2.4 there is a near universal maintenance of the linker including with negation, as shown in (61) - albeit this is the sole example found
$>$ in !Xun, there is evidence of tense-aspect marking with the minor verb in (60) and (61)
$>$ the above seems to indicate a younger stage of grammaticalisation
(58) Auxiliary (T. Ju|'hoan, Dickens 2005: ??)

> |Ae/ani tchoatchoa te kxui |xoa jaqni
> PN start LNK play com 3.helicopter.toy
> '|Ae|ani began to play with the helicopter toy.'
(59) Auxiliary (T. Ju|'hoan, Dickens 1992: ??)
te jù f'aunká jù n/urihe l'an jù dshau ko !ha
and 1Ex must COMP 1EX try LNK give 1EX 1.woman MPO 3.meat
'And one must try to give one's spouse (F) meat.'
(60) Auxiliary (E. !Xun, König \& Heine 2001: 110, 172)
tà cāhń kē \|hà-g!àí tè-ē (< tà kē)ú
and DUEMPH PST start LNK-PST go
'And they started to go.'
(61) Auxiliary (E. !Xun, König \& Heine 2001: 172)
hä \|xōē hă $\qquad$ bö
kā |háí !xà
PRO1 3.tail PRO1 NEG-PST be.able LNK pull take.out
'His tail, he [the hyena] was not able to pull [it] out.'
(62) !Xun (Ekoka dialect, König \& Heine 2015: 104, 105)
hă má bồ kí gè̀è
PRO1 TOP be.able HAB sing
'He is always able to sing.'
(63) mí má bò $\qquad$ cì $\quad g / u ́$
1sG TOP be.able drink 3.water
'I am able to drink water.'

### 3.3 Summary

+ Formal variation observed position of tense-aspect marker in chain of asymmetric verbs derives from distinct multiverb constructions
> diachronically, evidence that the V1-tense/aspect-V2 construction derives from a nonserialising construction involving a linker (attested synchronically in some dialects)
> synchronically, even instances that are segmentally indistinguishable from a verb serialising construction superficially do not adhere to quintessential properties of a serial verb construction further evidence from phonological studies would likely strengthen this claim
$>$ grammaticalisation seems strongest in !Xun and with posture verbs more generally
$>$ functional profile of the construction largely overlaps with asymmetric SVCs (see Table 2)

| Verb form | Lexical semantics | Function in PCC |
| :--- | :--- | :--- |
| gè | 'to stay', 'to exit' | progressive, inchoative |
| òhà | 'to stay', 'to exit' | progressive |
| cè | to return | adverbial 'again', 'also'; excessive |
| n/ang | 'sit' | progressive, do sitting |
| cú , sú | 'lay' | progressive, do laying |
| n!ún | 'stand' | progressive, do standing |
| n!o'o | hurry | do quickly |
| dìsá | slow | do slowly |
| głom | quiet | do quietly |
| g/ààn | rest | spend the day VERB-ing |
| n/uri | try | try |
| tchoatchoa | start | inchoative |
| \\|hà-g!áí | start | inchoative |
| bò | be able | modal 'can' |
| Table $\mathbf{2}$ Verbs found in the pseudo-consecutive construction and resulting function |  |  |

+ In addition to verbs in Table 1, the muster is recognisable in a more idiomatic intensifier expression: hò $\mathrm{PRO}_{\text {AGR }}$ /'as tè VERB 'see/find onself', i.e., 'very' or 'clearly' (Dickens 2005: 90)
(64) Ju|'hoan ( $\ddagger \mathrm{Kx}$ 'ao||'ae dialect, Biesele et al. 2009: 64)
|Am n/á cà tè hô hà l'ae tè khúí
1.sun EVID do.also LNK find PRO3 self LNK hot
'The sun was really hot, too.'
(65) Ju|'hoan ( $\ddagger \mathrm{Kx} . \mathrm{Ju} \mid$ 'hoan, Winberg et al. 2010: 55)

Hatcekhoere ha o n/e'e te ge
why $\quad \mathrm{Q}$ PRo1 COP one LNK stay
'Why are you staying alone?'

Bipartite, biclausal construction involving clause coordinator
$\mathrm{S} / \mathrm{A}(\mathrm{TENSE-ASPECT}) \mathrm{v} 1_{\text {INTR }}$ te ( $\mathrm{S} / \mathrm{A}$ ) (TENSE/ASPECT) v2 (o)

## $\downarrow$

Bipartite (monoclausal) pseudo-consecutive construction involving an intransitive verb conjoined by a desemanticised linker to a main verb s/A v1 te (TENSE/ASPECT) v2 (o) $\downarrow$
Different linkerless multiverb constructions
s/A v1 (TENSE/ASPECT) v2 (o) $\downarrow$
Grammaticalisation of V1 to deverbal adverb outside of the predicate nucleus S/A (TENSE) V-ADVERB (ASPECT) V (o)

Figure 1 The diachrony of some asymmetric multiverb constructions in Ju languages

## 4 Final remarks and future research

+ This paper contributes to a more exhaustive description of multiverb constructions in their grammatical contexts/language use in Ju languages and thus the diversity of multiverb constructions in the Kalahari Basin Area
+ Previous analyses of serial verbs in Ju (e.g., König 2010, König \& Heine 2015) equate a group syntactically/semantically heterogenous constructions
$>$ present analysis restricted to asymmetric verbs with V1 minor verbs - further research could feasibly demonstrate diversity with respect to V2 minor verbs (and also symmetric serial verbs?) $>$ asymmetric vs. symmetric distinction in Ju is more of a smokescreen for unifying different under the banner 'serial verb construction' than a valid descriptive tool
+ Whilst targeted/controlled experiments may prove insightful to the present description certain constructions/functions are difficult to elicit and require a text-based, bottom-up approach
+ Future research: comparison with other non-serialising MVCs in Kalahari Basin Area languages $>$ Regionally, some Kalahari Khoe languages have developed distinct multiverb constructions with overlapping functional profiles: the 'verb-juncture' construction (treated as an SVC, e.g. Kilian-Hatz 2006) is found across Kalahari Khoe: yet the 'converb construction' in (66) is unique to Khwe and \|Ani (Kilian-Hatz 2010) - languages in contact with Ju
(66) Continuous (Khwe, Kilian-Hatz 2008: 312)
|Úū-m̀ à $\ddagger o ̀ o ̀-a ̀-h u ̂ ́ ~$
nò xà-tcá
||óé-é-kò
kû́ū-a-hũ
father-M.SG o follow-JCT-PST CONJ DEM-3DU.M lie-JCT-CONJ walk-JCT-PST
Wùúú-djì pò̀ò-é-djì
m̀ \|'áé-m
à té-́́-kò $\qquad$ łẵúuna-kó $\qquad$ $k u ̂ \bar{u}-a-h \tilde{\imath}$
hyena-F.SG jackal-3PL.F pOS camp-3PL.M o stand-JCT-CONV pass-JCT-CONV walk-JCT-PST
'The two followed their father and were always walking. [And] still walking, they pass the camps of the hyenas and jackals.'
$>$ functionally, the converb construction and the pseudo-consecutive construction exhibit numerous parallels and is used with very similar verbs - coincidence? Language contact?
+ Grammaticalisation of posture verbs for 'posture-specific' progressives with dynamic/motion verbs (Nakagawa 2016) appears to be feature of multiverb constructions of the Kalahari Basin Area - the exact progressive distinctions made in Ju languages should be explored systematically

| Abbreviations |  |  |  |
| :--- | :--- | :--- | :--- |
| ART | article | LNK | linker |
| COM | comitative | M | masculine |
| COMP | complementiser | MPO | multipurpose oblique |
| CONJ | conjunction | NEG | negation |
| CONV | converb | NMZ | nominaliser |
| CTR | contrast | PCC | pseudo-consecutive construction |
| DEM | demonstrative | PL | plural |
| DIST | distal demonstrative | PN | personal name |
| DU | dual | PRO | pronoun |
| DUR | durative | PROG | progressive |
| EMPH | emphatic | PST | past |
| EVID | evidential | PURP | purpose |
| EX | exclusive | Q | question marker |
| F | feminine | REFL | reflexive |
| HAB | habitual | REL | relative |
| IN | inclusive | SG | singular |
| INSTR | instrumental | SUBJ | subjunctive |
| IPFV | imperfective | SVC | serial verb (construction) |
| JCT | juncture | TOP | topic |
| KBA | Kalahari Basin Area | V | verb |
| LOC | locative | VE | valency external |

## Abbreviations

COM comitative
COMP complementiser
CONJ conjunction

ORV

DIST distal demonstrative
DU dual
R durative

EVID
EX
F feminine
HAB habitual
IN inclusive
NSTR instrumental

JCT juncture

VE valency external

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