

## When verbs ‘stay (and) go’ together: Pseudo-coordination in Jul’hoan and !Xun

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### Abstract

Multi-verb constructions are an areal feature of Kalahari Basin Area languages (“Khoisan”), a *Sprachbund* comprising the Kx’a, Tuu, and Khoe-Kwadi families. Presently, these languages are characterised by two distinct multi-verb constructions with specific distributions: strictly contiguous serial verb constructions in Kx’a and Tuu correspond to multi-verb constructions involving a morphophonological linker, or “juncture”, in Khoe-Kwadi. This paper describes an additional multi-verb construction, namely pseudo-coordination. Drawing on a corpus of spontaneous discourse data, this paper demonstrates the rise of pseudo-coordination from a biclausal construction in Jul’hoan and !Xun (Ju, Kx’a). The comparative analysis highlights the verbs that typically arise the context of pseudo-coordination and the resulting functions. This paper describes the polygrammaticalisation resulting from pseudo-coordination, including other multi-verb constructions.

**Keywords:** Jul’hoan; !Xun; Khoisan; multi-verb constructions; pseudo-coordination; serial verb construction; grammaticalization; posture verbs

## 1. Introduction

### 1.1 Background

Monoclausal, multi-verb constructions are an areal feature of Kalahari Basin Area languages (aka “Khoisan”), a *Sprachbund* comprising the Kx’a, Tuu, and Khoe-Kwadi language families (Güldemann 1998; Güldemann & Fehn 2017). Some of these constructions have been analysed by different researchers as serial verb constructions (henceforth SVCs). Aikhenvald’s (2006) prototype-approach defines an SVC as:

[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 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)

This paper focusses on distinguishing distinct multi-verb constructions (MVCs) across Ju languages. Verb serialisation in Ju is strictly contiguous, also known as nuclear-root serialisation (e.g., Foley & Van Valin 1984). As such, non-subject/agent participants never intervene between the participating verbs in SVCs in Ju. Tense-aspect is marked once per construction before the verbal complex. An example from Jul’hoan is provided in (1). Another SVC construction type is recognised by some authors. In this construction type, the tense-aspect markers are described as “post-posed”, appearing between the first and second verb (e.g., König 2010a; König & Heine 2015:103-104). An example from !Xun is given in (2). Here, the aspect marker appears to be an enclitic to V1.

- (1) Jul’hoan (Groot Laagte, Pratchett 2018:92)

*hà kǔ ǀðhm !hárá mí tzi*  
 PRO1 IPFV chop burst 1SG 4.mouth  
 “It is going to split my mouth open.”

- (2) !Xun (Ekoka, Heine & König 2015:55)

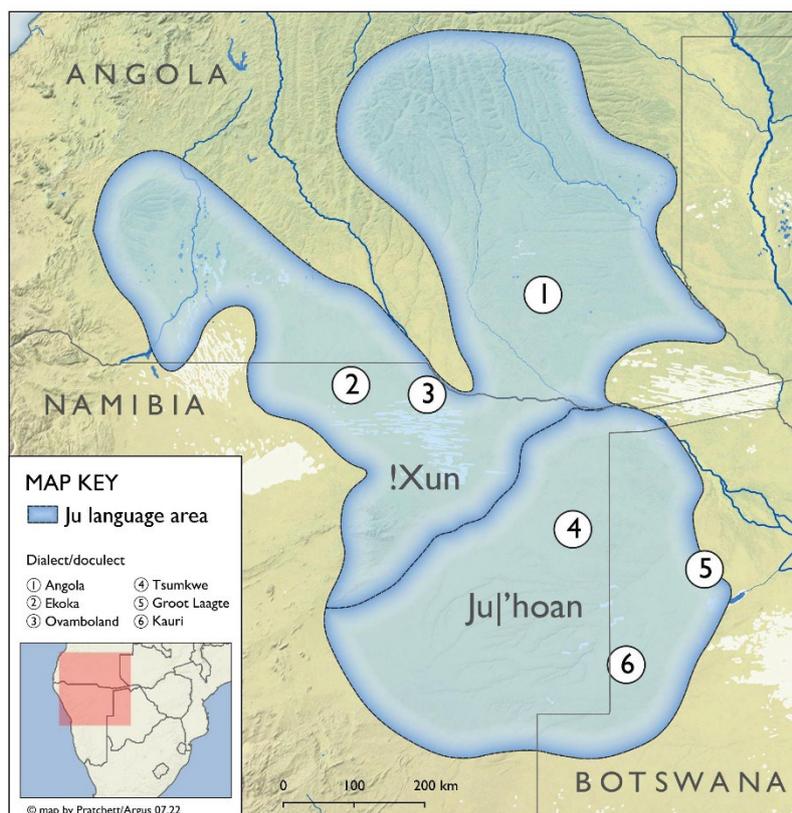
*hà má glè-ā nàmì tjù*  
 PRO1 TOP come-PROG circulate 4.home  
 “He comes around the homestead.”

The primary goal of this paper is to provide a thorough analysis of the MVC illustrated in (2), and to discern if and how it relates to SVCs. The paper is structured as follows. Section 1 continues with some relevant features of the Ju languages (§1.2), including remarks on syndetic and asyndetic clause linkage, followed by a brief overview of SVCs in Ju (§1.3). Section 2 presents a cross-dialectal analysis of the “irregular SVC” type, which, by way of a bottom-up, text-based approach, I shall demonstrate is derived from pseudo-coordination. The corpus includes sources transcribed by mother-tongue transcribers, which provide unique insights into wordhood judgements and distinct grammaticalisation pathways. Section 3 provides some suggestions for how the different constructions addressed in the paper potentially relate diachronically. Some conclusions and avenues for future research are summarised in section 4.

## 1.2 Ju languages: Jul’hoan and !Xun

Jul’hoan and !Xun are the principal languages (dialect clusters) of the Ju language complex, itself one of two branches of the Kx’a family (see also Heine & König 2015:22ff; see Sands 2010 for a phonologically motivated classification)<sup>1</sup>. Ju is spoken by hunter-gatherer communities across southern Angola, northern Namibia, and northwestern Botswana.

<sup>1</sup> In some sources the entire language complex is referred to as !Xun. Heine & König (2015:18) suggest that the term “Ju” is inappropriate as it appears only in a subset of varieties. On the contrary, *jù* ‘person’ [zuu~zuu-dzuu] is found across the language complex (for !Xun see e.g., Heikkinen 1987:19, 31, 35, 49; König & Heine 2001:41, 45, 53; Heine & König 2008:23; for Jul’hoan see e.g., Dickens 1994:221). This paper adopts Heine & König’s (2015) classification but applies the labels !Xun and Jul’hoan to the branches named “Northwestern” and “Southeastern”, respectively. Dialects of a particular language are referenced geographically. E.g., the Ju variety



**Map 1:** The Ju language area

Language	Dialect	Source	Notes
!Xun (aka Northwestern)	Angola	Heine & König (2015)	aka !'O-!Xun
	Ovamboland	Heikkinen (1987)	
	Ekoka	König & Heine (2001), Heine & König (2015)	
Jul'hoan (aka Southeastern)	Tsumkwe	Dickens (1992)	Texts transcribed by community transcribers (translation/gloss by present author)
	Kauri	Biesele (2009), Winberg (2010)	Texts transcribed and translated by community transcribers (gloss by present author)
	Groot Laagte	Pratchett (2018), fieldnotes	aka #Kx'aol'ae

**Table 1:** Classification of Ju dialects featured in the present study and the relevant sources

Ju is a highly isolating language with two main open word classes, namely nouns and verbs. An important property of Ju nouns is grammatical gender, which is conflated with number and is reflected through the agreement behaviour of noun forms with various pronouns. The pronominal gender system involves between four and five agreement classes and as many as seven genders (Pratchett 2021; also, Güldemann 2000). Except for a closed class of verbs with number-sensitive suppletive stems, Ju verbs do not inflect for person or number. Most property

spoken in Ekoka is a dialect of !Xun, hence Ekoka !Xun. This reference system largely overlaps with the autonyms used by speech communities, i.e., the Ekoka !Xun community identify as !Xun.

or descriptive words – adjectives in many other languages – are intransitive verbs in Ju. There are no ditransitive verbs (König 2010b). An elaborated clause structure is schematised in (3). The order of constituents is relatively fixed, although the only constituent necessary for a clause is the verb. Within canonical (pragmatically unmarked) clauses, the initial nominal position conflates the two roles of semantic subject/agent and pragmatic topic in a grammatical subject (= SBJ) relation. There is no case marking in Ju languages (*pace* König 2008a). Transitive verbs in Ju permit maximally one postverbal noun phrase (= ‘OBJect’) without any flagging or verbal inflection, as in (4a). A valency external postverbal participant triggers verbal inflection by means of the valency-external (= VE) suffix *-a*, as in (4b). As such, three-place predicates with transitive verbs trigger verbal inflection and the additional postverbal participant (= ‘OBLique’) is systematically encoded as valency-external by means of a multi-purpose oblique (= MPO) preposition, as in (4c). It is also possible to invert the order of postverbal participants with no obvious change in meaning (Dickens 2005:39).

(3) SBJ ADV PRED.OPERATOR VERB<sub>n</sub> OBJ [MPO OBL]

(4) Jul’hoan (Groot Laagte, Pratchett fn.)

- a. *hà kú ‘m ‘m-sì*  
 PRO1 IPFV eat 4.food-PL  
 ‘She/he/it is eating food.’<sup>2</sup>
- b. *hà kú ‘m-á tjà n!áng*  
 PRO1 IPFV eat-VE 4.house 4.inside  
 ‘She/he/it is eating inside the house.’
- c. *hà kú ‘m-á ‘m-sì kò tjà n!áng*  
 PRO1 IPFV eat-VE 4.food-PL MPO 4.house 4.inside  
 ‘She/he/it is eating food inside the house.’

The default verbal coordinators *tà* in !Xun or *tè* in Jul’hoan link clauses, as illustrated in (5). Clauses (or utterances) consisting of solely a verb are typically coordinated this way.

(5) Jul’hoan (Groot Laagte, Pratchett 2018:116)

- sá ǔ-ǎ Tjùm!kx’úi tè tzá tè n!ómà sá ǔ-ǎ skóré*  
 3DU go-VE PN and sleep and dawn 3DU go-VE 4.school  
 ‘They went to Tsumkwe and slept, and in the morning, they went to the school.’

Example (6) attests to the polyfunctionality of *tè* in Jul’hoan, with functions including conjunctive and adversative coordination, introducing purpose clauses, and marking indirect discourse. The second instance of *tè* in (6) appears between †’áng ‘think’ and the quotative verb *kò* ‘say’. Here, coordinator *tè* has become a semantically bleached linker morpheme (LNK) in a quotative construction (Güldemann 2008a:158, 560-561).

<sup>2</sup> Examples are transcribed using the Jul’hoan practical orthography (Dickens 1991), diverging only in the transcription of velar ejectives, which appear in the present paper as <kx’> in all contexts. For ease of reading, note that <q> represents pharyngealisation on the previous vowel, i.e., <aq> /aʔ/; <h> when following a vowel represents breathiness. Phonotactically, Ju languages behave like all “Khoisan” languages in permitting three root templates (cf. Beach 1938): CVCV, CVV, and CVN, where N stands for nasal phonemes, <nn> /n/, <ng> /ŋ/, or <m> /m/. An intervocalic <n> represents the nasal consonant, and a word-final <n> following a vowel represents nasalisation, i.e., <an> /ã/.

- (6) Jul'hoan (Tsumkwe, Dickens 1992:6)  
*mí †'áng tè kò mí !ú-n!à'àn tè ǔ tè n!hàì !hún*  
 1SG think LNK QV 1SG 1.grand.father IRD go and 1.lion kill.SG  
 “[I was sad as] I thought that my grandfather had left, and the lion had killed [him].”

The morpheme *ká* is described as a coordinator for clauses expressing simultaneous events, as illustrated in (7).<sup>3</sup> *Ká* also heads subordinate clauses. Within subordinate clauses, the verbal coordinators *hè~yè* are used, as shown in (8).

- (7) Jul'hoan (Tsumkwe, Dickens 2005:53)  
*n!hai lóá †'àè è tè sìn kǔ 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.”
- (8) Jul'hoan (Tsumkwe, Dickens 1992:2)  
*ká mí tsáú hè sè hè jù kòàrà mí tjin*  
 when 1SG get.up and see REL 1.person not.be.there 1SG cry  
 “When I got up and saw that there was no one there, I cried.”

Asyndetic clause linkage is also found in Ju, as illustrated by (9). In the absence of qualitative research, asyndetic coordination is likely a matter of speaker style (cf. “narrative SVCs” in Pawley 2008). Square brackets demarcate clause boundaries.

- (9) Jul'hoan (Kauri, Biesele 2009:84)  
 [*sì tsí tè kǔ tsí g!àè*] [*sín kǔ gù hà*]  
 PRO2 come and IPFV come arrive just IPFV take PRO1  
 “They came and arrived and [they] just took him.”

### 1.3 Serial verb constructions in Ju

Dickens (2005:81) defines an SVC in Jul'hoan simply as “two verbs in a sequence”. This is expanded upon by Heine & König (2015:91-92). The present definition retains some but not all of these properties, as it includes constructions that I do not analyse as SVCs (see §2).

- (a) A monoclausal, uninterrupted sequence of two or more verbs acting together as a single predicate, without a morphological expression of dependency;
- (b) The verbs synchronically can function independently as the predicate nucleus;
- (c) The word order is iconic and the verbs are strictly contiguous;
- (d) When present, polarity, tense, and aspect is marked once before the verbal complex and holds for the entire construction;
- (e) Adverbs of different kinds precede the verbal complex;
- (f) Argument sharing, albeit common, is not obligatory;
- (g) If present, derivational morphology is used once on the final verb.

SVCs are typically described as expressing a single, even if complex, event. However, as defining eventhood can be problematic, eventhood is not elaborated on here (see Bisang 2009;

<sup>3</sup> At least in Jul'hoan, there is considerable speaker variation and *tè* and *ká* appear interchangeable.

Haspelmath 2016). With respect to argument sharing, several different construction types are found (for more details see Heine & König 2015:97). In (10), the participating verbs share the subject/agent and the object. Note that in this particular case, the subject/agent referent is not overtly expressed as part of the SVC. Zero anaphor is common in Ju. In the following examples, verbs in the SVC are presented in bold.

- (10) Jul’hoan (Tsumkwe, Dickens 2005:81)  
*mí !òmà tè lóá sé ||’àbà !àìhn*  
 1SG be.short and NEG see go.over 4.tree  
 “I am short and/thus [I] cannot see over the tree.”

In (11) and (12) only the post-verbal argument is shared, serving as the object of V1 and the subject of V2. In typological literature, this construction is described as a “switch function” SVC (Aikhenvald 2006:14ff).

- (11) Jul’hoan (Groot Laagte, Pratchett 2018:92)  
*hà kú ||ðhm !hárá mí tzi*  
 PRO1 IPFV chop burst 1SG 4.mouth  
 “It is going to split my mouth open.”

- (12) !Xun (Ekoka, Heine & König 2015:98)  
*hà má ké ||’háí n!!hàð tàq*  
 PRO1 TOP PST pull.SG fall.SG 1.taq  
 “Jackal simply pulled the food out (i.e., pulled the food and it fell out).”

Some SVCs in Ju lack argument sharing completely, as illustrated by (13) which involves two intransitive verbs. This example could be described as an “event-argument” SVC, where an event is expressed by one part of the SVC and its temporal or locational specification is expressed by the other (Aikhenvald 2006:18-19; cf. “overlapping clause” in Ameka 2006).

- (13) !Xun (Ovamboland, Heikkinen 1987:44)  
*sàŋ n!úú á tsxáé n!àhò gà’ó*  
 PRO2 just IPFV dance set sun  
 “They just danced while the sun set.”

Aikhenvald (2006:1, 35) distinguishes between asymmetrical and symmetrical SVCs, i.e., whether all verbs are sourced from open semantic classes (=symmetrical), or from a mix of open and closed semantic classes (=asymmetrical). In symmetrical SVCs both verbs contribute their lexical semantics to the expression of the event; in an asymmetrical SVC one verb (the “light verb”) expresses distinctions with respect to aspect, direction, and modality, which hold for the event expressed by the other verb. This dichotomy has been attributed to Ju languages in previous studies (e.g., König 2010a; Heine & König 2015:99-103). In the present paper, however, I shall not uphold these categories in Ju, as I find no formal grounds for doing so. We return to this point briefly in section 3.

## 2. Verbs that 'stand (and) go' together: pseudo-coordination in Ju

We turn now to the formally divergent kind of "irregular SVC" highlighted in the introduction. This has been described as an SVC involving a closed class of verbs in V1 position which "have their tense aspect markers basically between the two verbs" (Heine & König 2015:103-104). An example is given below.

- (14) !Xun (Ekoka, Heine & König 2015:98)  
*n!òxò má glè kē gè'è*  
 PN TOP come PST sing  
 "N!oxo sang while moving."

According to current analyses, the "post-posed" tense-aspect markers are moved from the canonical preverbal position to the position between the two verbs. This behaviour is not explained or motivated in the analysis. The formal variation between this construction and a canonical SVC is especially pertinent because, as the authors note, it seemingly arises with a closed class of verbs that express "schematized (grammatical) meaning when used in an SVC" (Heine & König 2015:103). This would suggest morphological evidence for distinguishing two subtypes of SVCs in Ju, ostensibly providing a form-function correlation for the symmetrical-asymmetrical dichotomy. However, one must be mindful that the morphological expression of tense and aspect is not obligatory in Ju. Thus, the verbs occurring in a MVC with "post-posed" tense-aspect marking are also found in MVCs without tense-aspect marking. This effectively results in three construction types: zero tense-aspect marking, as in (15); default tense-aspect marking, as in (16); and non-canonical tense-aspect marking, as in (17) and (18). For the present purposes, all examples involve deictic motion verbs *tsí* 'come' or *glàè* 'arrive'.

- (15) Jul'hoan (Groot Laagte, Pratchett 2018:94)  
*à glàè llhái mànì mí n'áng mí tsí 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."
- (16) Jul'hoan (Kauri, Biesele 2009:90)  
*sì-!á kú tsí g!á*  
 PRO2-PL IPFV come arrive.home  
 "They were coming home."
- (17) Jul'hoan (Kauri, Winberg 2010:64)  
*glùih glàè kú !àh ũ tjin g!à'ámá glúi*  
 1.hyena arrive IPFV run go cry enter 4.bush  
 "Hyena then ran off crying into the bush"
- (18) Jul'hoan (Tsumkwe, Pratchett 2018:94)  
*tè sì-!á tsí kú g!à'ámá sá tzá-sí*  
 and PRO2-PL come IPFV enter 3DU 4.sleep-NMZ  
 "And they then entered their sleeping place."

How else might the divergent construction be explained? The aspect marker in Ju reliably demarcates the beginning of the predicate nucleus. Hence, the verbs that arise before the aspect

marker may alternatively be viewed as external to the predicate nucleus, possibly pushed out due to grammaticalisation in an erstwhile MVC (Güldemann 2013:411; Pratchett 2018:93). This idea is rendered more credible considering descriptions of *tsí* ‘come’ and *glàè* ‘arrive’ as markers of contrastive altrilocality (Pratchett 2018:93) and of “new events” (Heine & König 2015:105). Viewing the verbs as external to the predicate nucleus has an important implication: synchronically, the constructions themselves do not qualify as SVCs. Furthermore, whether the source construction is an SVC, however plausible, is not a foregone conclusion.

In the following, I demonstrate that the non-canonical placement of tense-aspect can help to identify a distinct, non-serialising construction. Spontaneous discourse texts representing various Ju varieties were scoured for instances of MVCs with non-canonical tense-aspect marking (see table 1). This was facilitated by previous studies of Ekoka !Xun and the verbal collocations identified therein (cf. Heine & König 2015:102-103). The comparative study unveiled a more complete picture of the construction profile, its variation, and the participating verbs. In its fullest and most complex version, the construction involves an initial verb (V1) that is separated from the main semantic verb (V2) by a morpheme that is identical in form to the clause coordinators, usually *tè* in Jul’hoan and *tà* in !Xun (see §1.2). When tense-aspect is morphologically expressed, it appears immediately before V2, as in (19).

- (19) Jul’hoan (Tsumkwe, Pratchett 2018:101)  
*sì hìn gè tè kú ǔ*  
 PRO2 EMPH stay LNK IPFV go  
 “They keep on going.” (Not: “They stay and are going.”)

The construction in (19) is formally indistinguishable from a string of coordinated clauses, but semantically such an interpretation is clearly awkward. Historically, verbal coordination is the plausible origin, with the clausal coordinator developing into a desemanticised linker (LNK) in a monoclausal multi-verb expression. This profile conforms well with cross-linguistic appraisals of pseudo-coordination (e.g., Ross 2021; Guisti, Di Caro & Ross 2022).<sup>4</sup> Grammaticalisation can result in the omission of the linker entirely, resulting in constructions plausibly analysed in some frameworks as SVCs. This would provide evidence for verb serialisation in Ju derived from clause fusion (see §3). However, pseudo-coordination also gives rise to structures that are segmentally indistinguishable from SVCs, but which do not meet all the criteria in subtle yet important ways. Such fuzzy boundaries seem cross-linguistically characteristic of these constructions, an important factor when distinguishing different MVCs (e.g., Ross 2022). The three attested structural variants subsumed here under pseudo-coordination are provided in figure 1. The properties of the pseudo-coordination are summarised in figure 2. The next subsections are organised according to the verbs regularly found in the context of pseudo-coordination. Instances of the constructions are underlined.

i.	S/A	V1 <sub>intr</sub>	CLCO	(ASPECT)	V2	principally in Jul’hoan
ii.	S/A	V1 <sub>intr</sub>	(CLCO)	ASPECT	V2	principally in !Xun
iii.	S/A	V1 <sub>intr</sub>	(CLCO)	TENSE	V2	only in !Xun

**Figure 1:** Constructions derived from pseudo-coordination across Ju languages

<sup>4</sup> In previous research (e.g., Pratchett 2022) I refer to the construction as pseudo-consecutive construction. My thanks to Daniel Ross for suggesting the term pseudo-coordination.

- a. an intransitive verb linked to another verb by a desemanticised clausal coordinator, or 'linker' (*tè, tà, ká, or hè~yè*). Grammaticalisation leads to the omission of the linker.
- b. the subject of V1 is obligatorily the subject/agent of V2. Overt expression of the subject is not required construction initially and is never expressed before V2.
- c. if present, tense and aspect markers appear once before the main semantic verb only (e.g., V2).
- d. negation is marked once and does not necessarily hold for both verbs

**Figure 2:** Formal properties of the pseudo-coordination construction in Ju

## 2.1 Existential verbs

The verb *gè* 'be there~stay~remain' was not previously identified as a potential verb of interest; however, it provides robust evidence for pseudo-coordination. Ruling out clause coordination is crucial. Thus, utterances which would yield antonymic readings as coordinated clauses are ideal, such as (20a) from Jul'hoan, which features the construction twice. The first instance includes *gè* 'be there~stay~remain' and the motion verb *ũ* 'go', which would yield an awkward interpretation if viewed as coordinated clauses. The second instance comprises *gè* and *nłuri* 'try~attempt'. This could be construed as two clauses: however, the utterance is better analysed as being composed of the repetition of a particular template, serving to contrast two (not three or four) events, namely "going" and "trying". The existential verb in pseudo-coordination typically results in a progressive reading (cf. Heine & Kuteva 2002:276). Example (21) shows the presence of the linker in the pseudo-coordination construction in !Xun, demonstrating the presence of the morphologically heavier construction in both branches of Ju.

- (20) Jul'hoan (Tsumkwe, Pratchett 2018:101)
- sì hìn gè tè kũ ũ*  
 PRO2 EMPH be.there LNK IPFV go  
*tè hà hìn gè tè kũ nłuri kòà ...*  
 and PRO1 EMPH be.there LNK IPFV try 4.place  
 "They keep on going and he keeps on trying [to find] a place [to escape]."

- (21) !Xun (Ovamboland, Heikkinen 1987:93)
- Hásà má kúndò'à ó gè ká llũ †'ǎng*  
 it.is.better 1SG then SBJV be.there LNK DUR think  
 "It is better that I still [i.e., continue to] think."

In subordinate clauses, the linker takes the form *hè~yè*, as in (22). This is the expected form of a coordinator in subordinate clauses in Ju (see §1.2). In (23), the linker is omitted, resulting in a segmentally more compact construction.

- (22) Jul'hoan (Tsumkwe, Dickens 1992:48)
- ká lári n!ómà hè gè yè kx'óá nłhòò*  
 when 1.jackal morning:REL 1.DEM be.there LNK search go.around  
*tci-s-à hà 'm*  
 4.thing-PL-REL PRO1 eat  
 "That morning, whilst jackal was still looking around for something to eat [...]."

- (23) Jul’hoan (Tsumkwe, Dickens 1992:14)  
*tè ká Uhu gè kú ‘m zám*  
 and when PN be.there IPFV eat 1.tortoise  
 “And whilst Uhu was still eating tortoise [meat], [...his mother left from that place].”

In addition to progressive aspect, the construction with *gè* also denotes current relevance for an event expressed in a following clause, as illustrated by (22) and (23) above. An inchoative reading is also possible, as shown in (24).

- (24) Jul’hoan (Kauri, Biesele 2009:22)  
*hà n!òqm gè tè kú d!xàní*  
 PRO1 1.springhare be.there LNK IPFV dance  
 “The springhare began to dance.”

In !Xun, the existential verb *gè* overlaps functionally with the equational copula *òh* (Heine & König 2015:81; Güldemann & Pratchett, forthcoming). It is therefore unsurprising that in !Xun the equational copula *òh* also appears in the pseudo-coordination, as shown in (25) without a linker. Further morphological reduction is also observed: the tense marker *ké* undergoes the loss of the initial consonant and seemingly behaves as an enclitic to V1 (Heikkinen 1987:91).

- (25) !Xun (Ovamboland, Heikkinen 1987:91)  
*kúndò’à zù n!úún òh=é gè-à*  
 then 1PL.EX just COP=PST be.there-VE  
 “Then we stayed still.” [literally: “then we just kept being there”]

## 2.2 Posture verbs

Pseudo-coordination is found with posture verbs ‘lay’, ‘sit’ and ‘stand’.<sup>5</sup> As aforementioned, optimal evidence comes from utterances which cannot be interpreted as coordinated clauses, or in terms of accompanied position (cf. Heine & König 2015:71-72). Such is the case for the next examples in which the posture verbs form progressive expressions. Such grammaticalisation is well described both areally (e.g., Kilian-Hatz 2002) and cross-linguistically (e.g., Bybee et al. 1994:127; Kuteva 1999; Newman 2002). It is particularly curious that different posture verbs form progressive expressions with dynamic verbs, with combinations such as ‘stand (and) run’ in (26), and ‘sit (and) move’ and ‘lay (and) herd’ in (27). We revisit this briefly at the end of the paper.

- (26) Jul’hoan (Tsumkwe, Dickens 1992:9)  
*tè hà sìn n!ún tè !ààh cècèàkhòè*  
 and PRO1 just stand LNK run go back and forth  
 “And he just kept running back and forth.”

<sup>5</sup> Heine & König (2015:72) remark that posture verbs “in conjunction with the progressive marker *ā* serve as grammaticalised progressive or continuous markers in a serial verb construction”. The authors argue that the aspect marker is in the scope of V1 (ibid.:104). This is a different analysis than the one proposed here.

- (27) Jul'hoan (Kauri, Biesele 2009:13)  
*hà glàè cú tè kú 'm ká !àih-sì*  
 PRO1 then lay LNK IPFV eat PRO4 4.tree-PL  
 "He spent a long time eating the trees."

The linker is typically preserved with posture verbs in Jul'hoan, a tendency that holds for Jul'hoan more generally (cf. figure 1). This suggests that grammaticalisation is more advanced in !Xun. This is further evidenced through the loss in !Xun of an important property of some posture verbs in Ju, namely stem suppletion that agrees with the number value of nominal arguments. In (28), the non-singular subject should trigger the number-marked verb form, *g!!à* 'lay (PL)'. The same applies to the second instance of pseudo-coordination in (29), where the plural subject *dèbé* (cf. *dàbá* [1] 'child') should also trigger the form *g!!à* 'lay (PL)'.

- (28) !Xun (Ekoka, Heine & König 2015:72)  
*cā ndò'à cú ā ú tà ndò'à cú ā ú*  
 3DU DIST lay.SG PROG go and DIST lay:SG PROG go  
 "They two were continuously going and going."

- (29) !Xun (Ovamboland, Heikkinen 1987:52)  
*ká'è hà 'nlǎŋ ké !áo hè débé sũ ké kòré gùmì*  
 when PRO1 sit:SG PST move and 2.children lay:SG PST herd 3.cattle  
 "When he was moving and the children were herding the cows [...]."

As the morphological expression of tense-aspect is not obligatory in Ju, the omission of the linker can result in structures that are segmentally indistinguishable from SVCs, as shown in (30). The translation offered by the authors does not suggest accompanied posture.

- (30) !Xun (Ekoka, adapted from König & Heine 2001:115)  
*mí má nàcì lhā kā-ndò'à má mí !'àn !óán !!'h*  
 1SG TOP need 4.meat PRO4-DIST ID 1SG also stand:SG think  
 "I need meat. That is what I think." (Original: "I need that meat, I think so, too.")

There are cases which permit a reading in terms of accompanied posture. However, accompanied posture is seemingly rendered explicit by using the posture verb in an additional independent clause. Compare the difference in the original translations in (31a) and (31b) from !Xun, as well as (32) from Jul'hoan.

- (31) !Xun (Ekoka, Heine & König 2015:72, 100)  
 a. *cŋ gèhí má xāh g!hō tà g!hō ā !'hàn g!kx'ā*  
 PRO2 other TOP then sit.PL and sit:PL PROG crack 1.manketti  
 "[As they said this to their friends,] they were sitting and cracking manketti nuts."  
 b. *hī ndò'à g!hō-ē !'hàn g!kx'ā*  
 PRO3 DIST sit:PL-PST crack 1.manketti  
 "Those who were cracking manketti nuts."

- (32) Jul’hoan (Kauri, Biesele 2009:4)  
*hà<sub>x</sub> tsí glàè n!áng tè n!áng tè kú g!ára hà<sub>y</sub> kò hì*  
 PRO1 come arrive sit:SG and sit:SG LNK IPFV ask:VE PRO1 MPO PRO3  
 “He<sub>x</sub> [G!ara] came and sat down and was asking him<sub>y</sub> for it [i.e., honey].”

It is in relation to posture verbs that the corpus revealed constructions with other kinds of formal variation and morphological reduction. In Jul’hoan, the aspect marker *kú* is sometimes omitted segmentally, resulting in a floating high tone that is hosted by the morpheme immediately to the left (Pratchett 2018:89, 116). In (33), the floating tone is hosted by the linker changing its underlying tone from low to high.

- (33) Jul’hoan (Groot Laagte, Pratchett 2018:89)  
*g!òá-khà ò hà kà lòrò. llú tè cú té n!à'm*  
 evening TOP PRO1 then lie.on.back and lay.SG LNK:IPFV beat  
 “In the evening, he lay down on his back and was beating [an instrument] a while.”

Example (34) provides another case of reduction to tense-aspect markers. Here, the past marker *kē* is reduced to an enclitic, and both the nasality and the tone of the final vowel of the verb lexeme spreads onto the enclitic (cf. [25]).

- (34) !Xun (Ekoka, König & Heine 2008:54)  
*dàbà kùndò'à n!hú=én n!ùm*  
 1.child then stand.SG=PST crawl  
 “The child then crawled.” [alternatively: “and then the child was crawling.”]

### 2.3 *cè* ‘do again’

Pseudo-coordination featuring *cè* ‘to return’ as V1 yield additive and excessive expressions, as in (35), (36), and (37), respectively.

- (35) Jul’hoan (Tsumkwe, Dickens 1992:6)  
*tè cè tè n!óá l'àn mí !ú-n!à'àn kò kocè kòtá xái*  
 and return LNK cook give 1SG 1.grandfather MPO 4.coffee and 4.bread  
 “[We make porridge,] and also cook coffee and break for my grandfather.”

- (36) Jul’hoan (Tsumkwe, Dickens 1992:9)  
*tè cè tè !óá llàhlläh n!ähm-si*  
 and return LNK NEG cover 4.blanket-PL  
 “[...] Neither did [we] cover up with blankets [and the cold really froze us].”

- (37) Jul’hoan (Tsumkwe, Dickens 1992:16)  
*tè cè tè !ómà tè !àihn.n!àq-sì cè tè g!à'áín*  
 but return LNK be.small and 4.branch-PL return LNK be.long  
 “But [I] am too small and the branches are too long [...so do not see very well].”

The examples above suggest the retention of the linker with the verb *cè* in Jul’hoan. However, texts transcribed by mother tongue transcribers provide some unique and important insights into

speakers' expert wordhood judgements.<sup>6</sup> In (38), *cè tè* is codified conjunctively as *cètè* and translated as 'again'.

- (38) Jul'hoan (Kauri, Bieseles 2009:22)  
*tè n!ò'ò tè cè tsí glàè tè hà **cètè** dǰxàní*  
 and be.quick LNK return come arrive and PRO1 again dance  
 "And [he] hurried back and he danced again."

The wordform *cètè* conforms to the relatively strict phonotactic rules in Ju, which permit only CVV, CVCV, and CVN lexical wordforms. Most grammatical words are CV in shape. Thus, underlyingly, *cè* is phonologically /fèè/. However, a sequence of two identical vowels is likely to be realised short phonetically. Thus, the grammaticalised verb form and the desemanticised coordinator can combine into a new CVCV word. This is not possible with CVCV roots or CVV roots with contrastive vowels because the resulting CVCVCV and CVVCV wordforms violate the language specific phonotactics. As such, the case of *cè* demonstrates the precise and varied ways a single MVC can develop, depending on the properties of the verbs. In (39), *cètè* appears clause finally and it is clearly independent of the pseudo-coordination construction.

- (39) Jul'hoan (Kauri, Bieseles 2009:4)  
*jù-à hè tsí gòàq !áí hè òò !áú hàjòè xáé **cètè***  
 person.1-REL DEM1 DEM long.ago die and do move who Q again  
 "That person who long ago died and went away, who was that again?"

Given this speaker-centric evidence for word formation, transcribing *cètè* disjunctively should probably be avoided. In addition to avoiding prescriptivism by outsider linguists, there are issues that are more pertinent to the present study. In its original transcription, (40a) could be analysed as a multi-word MVC entailing two linkers and three verb forms: *cè* 'return', *tchòàtchòà* 'start' (cf. §2.5), and the main semantic verb *n!àbà* 'follow' (cf. Pratchett 2018:101). It is noteworthy that such complex cases of pseudo-coordination seemingly always involve the form *cè*. As such, and in keeping with community expertise, these cases are more suitably analysed as entailing the adverb *cètè* 'again', as in (40b).

- (40) Jul'hoan (Tsumkwe dialect, Pratchett 2018:101, after Dickens 1992:40)  
 a. *sì-!á cè tè tchòàtchòà tè n!àbà sá*  
 PRO2-PL return LNK start LNK follow 3DU  
 b. *sì-!á **cètè** tchòàtchòà tè n!àbà sá*  
 PRO2-PL again start LNK follow 3DU  
 "And they started following them again."

In !Xun, the adverbial expression 'again' is expressed by *lxà~xa* (Heikkinen 1987:26). There is no evidence of *lxà* functioning as a predicate, hence it does not form MVCs.

- (41) !Xun (Ekoka, König & Heine 2001:174)  
*lae llxà é glè càng*  
 1.monkey again PST come drink  
 "The monkeys came to drink again."

<sup>6</sup> Examples taken from the edited volume of Jul'hoan folktales (i.e., Bieseles 2009) are transcribed and translated by the Jul'hoan Transcription Group. For a brief overview, see Bieseles, Pratchett, & Moon (2012).

Fehn (pers. comm.) suggests that *lxà* may in fact be a borrowing from Khoe languages. This would be one of several adverbs borrowed into Ju from Khoekhoe (e.g., *káísé* ‘very’ < *káǀsè* ‘very’, *káǀ* ‘big’ in Standard Namibian Khoekhoe. Cf. Haacke & Eiseb 2002:725). Such borrowings offer a morphologically lighter expression. One might hypothesise that, particularly in the case of bilingual speakers or where contact with Khoekhoe languages is more pronounced, as is the case with !Xun communities, derived adverbs adversely influence the use of pseudo-coordination (see also section 2.4).

## 2.4 Manner verbs

Pseudo-coordination is a prime context for certain manner verbs, in which they adverbially modify the main semantic verb (cf. Heine & König 2015:274). This is illustrated with *dùsá* ‘be slow’ in (42), *gǀòm* ‘be silent’ in (43), and *!háé* ‘be quick’ in (44).

- (42) !Xun (Angola, Heine & König 2015:274)  
*yà ndū’à kē !xòlù dǀngí tǀā dùsá tǀā ú*  
 PRO1 DIST PST mount 1.donkey and be.slow LNK go  
 “He rode the donkey slowly.”
- (43) Jul’hoan (Kauri, Winberg 2010:63)  
*tè sǀn gǀòm tǀē gǀàè gǀá’ámá ú-á gǀúí !kx’á*  
 and just be.silent LNK arrive enter go-VE 4.bush 4.heart  
 “[Hare did not respond to them], [he] just silently went into the bush.”
- (44) Jul’hoan (Tsumkwe, Dickens 1994)  
*mǀí !háé tǀē ú-á tǀjùlhó kǀá gǀá lóá lǀòm mǀí*  
 1SG be.quick LNK go-VE 4.village PURP 4.rain NEG wet 1SG  
 “I hurry home so that the rain won’t wet me.”

Derivational morphology is found with some manner, such as the adverbialiser suffix *-sǀ/-cí* (cf. Heine & König 2015:186). Compare *nǀò’ò* ‘be quick’ in the pseudo-coordination construction in (45) and *nǀò’òcí* ‘quickly’ as a deverbal adverb in (46).

- (45) Jul’hoan (Tsumkwe, Dickens 1992:32)  
*hǀǎ nǀò’ò tǀē gǀàè !óá hǀǎ dshǀú*  
 PRO1 be.quick LNK arrive tell PRO1 1.wife  
 “He quicky told his wife.”
- (46) !Xun (Ekoka, Heine & König 2015:186)  
*nǀò’ò-cǀí gǀǎè*  
 be.quick-ADVZ come  
 “Come quickly.”

In the corpus, the linker is always retained with manner verbs in affirmative contexts. However, under negation, it is always dropped. Consider (47) in which the negation marker is followed by an uninterrupted chain of verb forms: *nǀò’ò* ‘be quick’ and *tsǀí* ‘come’. The expression is formally indistinguishable from an SVC. However, the SVC analysis is incompatible as the

verbs do not have the same polarity value: in the example, the subject referent is not quick, but *come* it does, nevertheless.

- (47) Jul'hoan (Tsumkwe, Dickens 1992:17)  
*tè |óá n!ò'ò tsí tè jú n!á'ngákhòè 'm zó*  
 and NEG be.quick come and 2.people alone eat 3.honey  
 “[He walked to the village] but didn’t come quickly and the people ate the honey alone.”

A similar pattern is attested with *láú* ‘do well’, as shown (48) and (49). Conceivably, negation offers a source of construction-specific variation. This hypothesis would benefit from further research, such as targeted elicitation with the other verb groups discussed in this paper.

- (48) Jul'hoan (Tsumkwe, Dickens 1992:17)  
*è-!á sìn ||áú tè g!àán tè g!òá tci n!úi n!án*  
 1EX-PL just well LNK spend.day and evening 4.thing certain happen  
 “We just spent the day well and in the evening something happened.”

- (49) Jul'hoan (Groot Laagte, Winberg 2010:63)  
*Gluih yè kò kx'àè dsháú n!ání kò |óá ||áú ||àè !'háí*  
 1.hyena REL PST have 2.woman three PST NEG well hold 1.hare  
 “Hyena, who has three wives, did not treat hare well.”

Pseudo-coordination also arises with other kinds of manner expressions, such as adverbial expressions ‘alone’ and ‘both’. These are rendered by a non-verbal predicate involving the equational copula *ó* and a numeral in V1 position followed by the main semantic verb, as in (50) and (51). The linker is always present.

- (50) Jul'hoan (Kauri, Winberg 2010:55)  
*hàtcékhòè ré hà ó n!è'é tè gè*  
 why Q PRO1 COP one LNK be.there  
 “Why are you staying alone?”
- (51) Jul'hoan (Tsumkwe, Dickens 1992:6)  
*è-tsá mí txún sìn ó tsàqn tè tzá*  
 1EX-DU 1SG grandmother.1 just COP two LNK sleep  
 “My grandmother and I just both slept.”

## 2.5 Auxiliary verbs

Another group of verbs frequently observed in the pseudo-coordination are subsumed here as auxiliary verbs. This includes *g!àán* ‘to spend the day’. In (52) *g!àán* is the predicate nucleus in one of a string of coordinated clauses composed solely of verbs, as is typical in Ju. Comparison with (53) and (54) shows that, segmentally, coordination is indistinguishable from pseudo-coordination. Semantically, however, the constructions are quite distinct. In (52) *g!àán* is a distinct event, whilst in (53) and (54) *g!àán* provides temporal specification for the event expressed by the main verb.

- (52) Jul'hoan (Kauri, Biesele 2009:74)  
*hà tzá tè tsáú tè g!àán tè tzá*  
 PRO1 sleep and get.up and spend.day and sleep  
 “He slept and got up and spent the day (idly) and slept.” (Not: “spent the day sleeping.”)
- (53) Jul'hoan (Kauri, Biesele 2009:22)  
*hà<sub>x</sub> g!àán tè g!ù'ún hà<sub>y</sub>*  
 PRO1 spend.day LNK stare PRO1  
 “He<sub>x</sub> spent the day staring at him<sub>y</sub>.”
- (54) Jul'hoan (Kauri, Biesele 2009:13)  
*tè g!àán tè kú kù'ú-á !ú!ú-sì*  
 and spend.day LNK IPFV burn-VE 4.spear-PL  
 “And [they] spent the day firing spearpoints.”

Other auxiliary verbs include *tchòàtchòà* ‘start,’ *n!ùrì* ‘try’ and *bò* ‘be able’, illustrated in the following examples, respectively.<sup>7</sup> There is a clear tendency for auxiliary verbs to retain the linker, which may be indicative of an earlier stage of grammaticalisation. This is also reflected in the occurrence of tense-aspect markers with the auxiliary verb, as in (56) and (58).

- (55) Jul'hoan (Tsumkwe, Dickens 1992:8)  
*ká !há tòàn !'àkàà Kx'oara tchòàtchòà tè |kx'àè*  
 when 4.meat finish then PN start LNK be.sick  
 “[And one day long ago], when the meat was all gone, Kx'oara started being sick.”
- (56) !Xun (Ekoka, König & Heine 2001:110)  
*cā hñ kē ||hà-g!àì tè-ē (< tà kē) ú*  
 3DU EMPH PST start LNK-PST go  
 “They started to go.”
- (57) Jul'hoan (Tsumkwe, Dickens 1992:9)  
*jù †'áún ká jù n!ùrì hē |'àn jù dshàú kò !há*  
 1EX must COMP 1EX try LNK give:VE 1EX 1.woman MPO 4.meat  
 “One must try to give one’s wife meat.”
- (58) !Xun (Ekoka, König & Heine 2001:172)  
*hà |xōē hà |ō-ē bō kā ||háí !xà*  
 PRO1 4.tail PRO1 NEG-PST be.able LNK pull take.out  
 “His tail, he [the hyena] was not able to pull [it] out.”

Another reason why constructions with auxiliary verbs exhibit a lesser degree of grammaticalisation might be the stronger “predicative force” of these verbs. Context and common ground providing, the ellipsis of the main semantic verb still renders a well-formed utterance with comparable meaning. This is not the case for pseudo-coordination with posture verbs, where ellipsis of the main semantic verb would result in a posture predication.

<sup>7</sup> König & Heine (2001:110) state that in Ekoka !Xun the conjunction *tà* “may also be used to connect a verb having an auxiliary function with the main verb”, exemplified by the verb *||hà-g!àì* ‘start’. Dickens (2005:54-55) treats these verbs as complement taking verbs, with *tè* functioning as a complementiser.

It is noteworthy that Dixon (1991:88) groups the auxiliary verbs discussed here (e.g., ‘start’, ‘be able’, ‘try’, and ‘to hurry’) under the label “secondary verbs”, verbs which “provide semantic modification of some other verb”. Aikhenvald (2018:60-62) observes that these verbs typically form a subtype of asymmetrical SVC called the “secondary concept” type. In Ju, we see that these verbs form a multi-word MVC that is quite distinct from an SVC, although pseudo-coordination may develop into structures that resemble contiguous SVCs in Ju. This is discussed in section 3.

## 2.6 Summary

The verbs commonly found in the context of pseudo-coordination and the resulting functions are summarised in table 2. The presumed grammaticalisation of the erstwhile biclausal structure is more advanced with certain verbs, such as posture verbs expressing progressive aspect (see §2.2). This is reflected in the gradual morphological reduction, such as the omission of the linker morpheme or the enclitic-like behaviour of the tense markers. Both processes result in an increasingly morphologically lighter, monoclausal construction.

Verb form	Meaning	Function in PCC
<i>gè</i>	‘be there’	continuative, inchoative
<i>òhà</i>	‘be there’, copula	continuative
<i>cè</i>	‘return’	adverbial ‘again’, ‘also’; excessive
<i>n!áng</i>	‘to sit’	progressive, (do sitting)
<i>cú ~ sú</i>	‘to lay’	progressive, (do laying)
<i>n!ún</i>	‘to stand’	progressive, (do standing)
<i>n!ò’ò</i>	‘be quick’	do quickly
<i>!’háé</i>	‘be quick’	do quickly
<i>dìisá</i>	‘be slow’	do slowly
<i>g!òm</i>	‘be quiet’	do quietly
<i>g!àán</i>	‘to rest’	spend the day VERBing
<i>n!úrí</i>	‘to try’	try
<i>tchòàtchòà</i>	‘to start’	inchoative
<i>!hà-g!ái</i>	‘to start’	inchoative
<i>bò</i>	‘be able’	modality/ability
<i>ó n!è’é</i>	‘be one’	quantification, ‘alone’
<i>ó tsàqn</i>	‘be two’	quantification, ‘both’
<i>hò PRO  ’ae</i>	‘to see/find oneself’	intensification, ‘very’

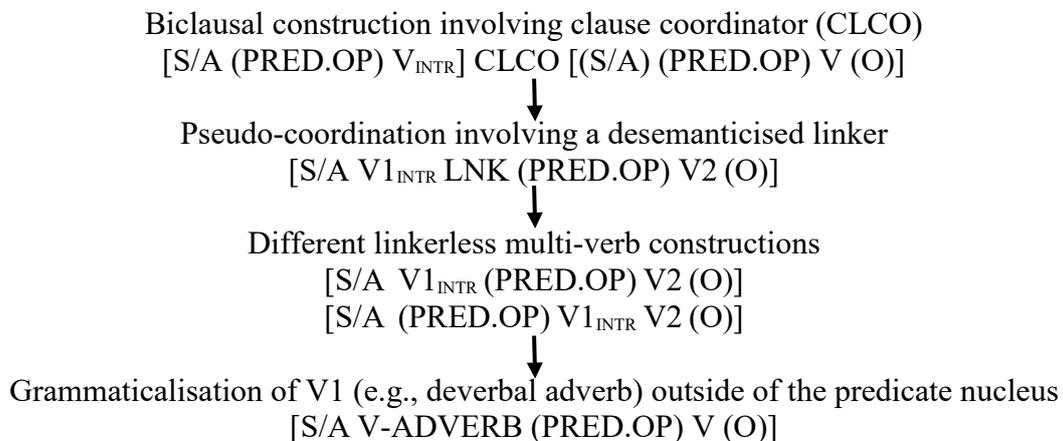
**Table 2:** Verbs partaking in pseudo-coordination and their functions

Finally, there is another kind of manner expressions that requires a construction identical to pseudo-coordination but slightly different from the templates proposed earlier in figure 1 and for this reason is discussed separately. This concerns the somewhat idiosyncratic intensifier expression found in Jul’hoan (cf. Dickens 2005:90). In (59) and (60) ‘very~really’ is rendered by the transitive verb *hò* ‘find~see’ and a noun phrase comprised of a pronoun that agrees with the subject/agent, and the reflexive marker *!’àè* ‘self’. This effectively serves as a valency-reducing operation, thus bringing the construction in line with the other verbs in the V1 position.

- (59) Jul’hoan (Tsumkwe, Dickens 1992:12)  
*ha hò hà l’àè tè ó jù jàn*  
 PRO1 find PRO1 self LNK COP 1.person good  
 “S/he is a really good person.”
- (60) Jul’hoan (Groot Laagte, Pratchett, fn.)  
*ká hò ká l’àè tè tìh*  
 PRO4 find PRO4 self LNK be.heavy  
 “It [i.e., the load] is very heavy.”

### 3. On the rise and fall of the different multi-verb constructions

This paper describes the rise of MVCs from biclausal structures, a process also known as “clause fusion” (Aikhenvald 2018:196-201). In Ju, clause fusion results in a monoclausal MVC, with a surface structure that remains identical to coordinated clauses, thus referred to as pseudo-coordination. With certain verbs, the desemanticised coordinator is dropped. The basic evolution of these constructions is schematised in figure 3. There is an important caveat, namely that it should not at this stage be ruled out that several distinct biclausal constructions develop into the constructions summarised presently as pseudo-coordination (Güldemann, pers. comm.). This merits further research. If this does turn out to be the case, it would further underline one of the important takeaways from the current paper, namely how surface structures are sourced from multiple constructions.



**Figure 3:** Development of pseudo-coordination in Ju languages

Even after the omission of the linker, the construction retains an important clue as to its biclausal origins, namely in the position of tense and aspect markers between the participating verbs. In !Xun, these tense-aspect markers can even behave as enclitics on the initial verb. This is strikingly distinct from the profile of SVCs in both !Xun and Jul’hoan in which tense-aspect precedes the verbal complex (see §1.3). As such, the present analysis highlights the risk of a prototypical approach to characterising construction types. However, in the absence of the linker and tense-aspect markers, the two construction types become indistinguishable, as illustrated in (61a) and (61b).

(61) !Xun (Ekoka, König & Heine 2015:104, 105)

- a. *hà má b̂ò kí gè'è*  
 PRO1 TOP be.able HAB sing  
 “He is always able to sing.”
- b. *mí má b̂ò ĉj gllú*  
 1SG TOP be.able drink 4.water  
 “I am able to drink water.”

Pseudo-coordination may, however, only superficially resemble an SVC. Such is the case under negation, where the coordinator is seemingly dropped resulting in a verb-verb structure but where the verbs do not share the same polarity value, as seen previously (cf. [45] and [47]), repeated as (62a) and (62b) for convenience.

(62) Jul'hoan (Tsumkwe, Dickens 1992:32, 17)

- a. *hà n!ò'ò tè glàè lóá hà dshàú*  
 PRO1 be.quick LNK arrive tell PRO1 1.wife  
 “He quickly told his wife.”
- b. *tè lóá n!ò'ò tsí tè jú n!á'ngákhòè 'm zó*  
 and NEG be.quick come and 2.people alone eat 3.honey  
 ‘[...] but didn’t come quickly and the people ate the honey alone.’

Aikhenvald (2018:202), in summarising research by Creissels et al. (2008), states:

In a fundamental study of morphosyntactic features shared by African languages, Creissels et al. (2018:113) explicitly state that there is no evidence that serial verb constructions in Chadic and other African languages ‘arose from the combination of clauses.’

(Aikhenvald 2018:202, my emphasis)

On reflection, I interpret the statement by Creissels et al. (2008:113) as being restricted only to Chadic languages. In any case, the present study provides proof of clause fusion resulting in SVCs in an African language via the intermediary step of verbal pseudo-coordination. However, clause fusion as outlined in the present study only results in a certain kind of SVC. For example, the initial verb is always intransitive and in the resulting SVC it specifies manner, modality, or aspectual distinctions. In typological literature, such SVCs are frequently referred to as “asymmetrical” SVCs, in contrast to “symmetrical” SVCs in which all verbs contribute lexically to the expression of the event (e.g., Aikhenvald 2006). There is no evidence that the kind of clause fusion described here derives multi-verb structures in which each verb contributes lexically (i.e., “symmetrical” SVCs). If so, one would expect to see variation with respect to the position of tense-aspect markers in such contexts, which is seemingly never the case.

Similarly, the present paper does not suggest that clause fusion is a potential source of SVCs in which the initial verb is the main semantic verb, and the final verb takes on a more functional role. Consider the cases below showing the different functions of *l'àn* ‘give’ and *!hún* ‘kill’ as V2 in SVCs. Examples (63) and (64) show the benefactive and dative interpretations of *l'àn* ‘give’. The cross-linguistic tendency for ‘give’ to develop such functions is well attested (e.g., Newman 1996:211-223). The reading of *l'àn* ‘give’ in (63) is ambiguous, and both transfer of

possession and benefactive interpretations are possible. Only discourse context provides clues as to the intended reading: in this narrative, the would-be recipient is asleep at the time of the utterance and a transaction does not take place. Such contexts provide the ambiguity that drives language change (e.g., Traugott & König 1991). Examples (65) and (66) illustrate the reanalysis of SVCs with *!hún* ‘kill’ as V2 towards an intensifier expression comparable with degree resultatives in English, e.g., ‘to laugh to death’ (cf. Hoeksema & Napoli 2019).

- (63) Jul’hoan (Tsumkwe, Pratchett 2018:109)  
*tè cètè n!óá l’àn mí !ú-n!à’àn kò kocè kòtá xáí*  
 and also cook give 1SG 1.grandfather MPO 4.coffee and 4.bread  
 “[We make porridge] and also cook coffee and break for my grandfather.”
- (64) Jul’hoan (Groot Laagte, Pratchett 2018:97)  
*n!hàì kǔ n!hǎðh l’àn à*  
 lion.1 IPFV walk give 2SG  
 “The lion walked towards her.”
- (65) Jul’hoan (Groot Laagte, Pratchett 2018:105)  
*hǎ kù’ú !hún hǎ*  
 PRO1 burn kill PRO1  
 “She/he/it burnt him/her/it to death.”
- (66) Jul’hoan (Groot Laagte, Biesele 2009:23)  
*g!á n!à’m !hún hǎ*  
 1.rain beat kill.SG PRO  
 “The rain beat him hard.”

These few examples support the hypothesis that in Ju languages the grammaticalisation of V2 verbs is the result of regular occurrence in SVCs (see also Bisang 2009:808-810). Occasionally, discourse context is the only means of identifying the semantics of a construction. This makes it difficult from a language-specific perspective to draw a distinction in formal terms between two SVC subtypes, such as symmetrical and asymmetrical SVCs. Similarly, it does not make sense from a Ju perspective to homogeneously categorise SVCs in which only one verb expresses the event, and another verb contributes functionally (i.e., asymmetrical SVCs): in Ju, these SVCs are sourced from a pool of syntactically strikingly heterogenous constructions.

#### 4. Conclusions and future research

The present analysis of pseudo-coordination contributes to a more exhaustive description of MVCs in Ju. The study simultaneously makes an important contribution from the study of African languages to typological studies on pseudo-coordination, which has been dominated by European languages (Guisti et al. 2022:6). The paper has stressed the polygrammaticalisation of verbal pseudo-coordination, which gives rise to adverbs, SVCs, and other non-serialising MVCs. Simultaneously, the results of the study also underline the many-to-one pattern in Ju with respect to the development of what is synchronically a single construction type, such as SVCs. The present study would greatly benefit from further investigation, such as exploring the exact conditions under which the interverbal segments can be dropped, and phenomena like the suprasegmental realisation of aspect.

In closing, I wish to highlight two ways in which the present study is of interest to the ongoing description of Kalahari Basin Area languages in particular. Section 2.2 highlighted the quirky progressive expressions composed of different posture verbs and dynamic motion verbs, such as ‘sit (and) run’ and ‘lay (and) go’. Nakagawa (2016) describes a similar phenomenon in Glui, an unrelated Kalahari-Khoe language (Khoe-Kwadi) spoken in the central Kalahari. Based on experimental fieldwork, Nakagawa proposes that in addition to generic progressive expressions, Glui distinguishes posture-specific progressive expressions that, with dynamic verbs, “consider the movement of the object within the field of view of the speaker” (Nakagawa 2016:113). Thus, LIE-progressives “indicates the object’s horizontal movement”, i.e., movement that crosses the speaker’s line of vision; by contrast, SIT-progressives “indicates the object’s static position, lacking horizontal and vertical movement” (Nakagawa 2016:113). Future research should consider the areality of such posture-specific progressives and investigate the functional load of posture-specific progressives in Ju languages (and beyond).

Finally, as aforementioned in the introduction, a heterogenous group of constructions across Kalahari Basin Area languages have been labelled as SVCs. Whilst SVCs in Kx’a and Tuu are strictly contiguous (cf. Kießling 2013 for Tuu), the equivalent constructions in the Khoe family feature a morphophonological linker, also referred to as a “juncture” (e.g., Köhler 1981; Rapold 2014; Vossen 2010). An example is given in (66). Due to the juncture (JCT), there is no consensus amongst specialists on whether the construction satisfactorily meets the definition of an SVC (e.g., Kilian-Hatz 2006) or represents a different type of MVC (e.g., Güldemann & Fehn 2017).

- (66) Khwe (Kalahari Khoe, Khoe-Kwadi; Kilian-Hatz 2006:113)  
*tí l’ám-á |qx’úú-á-tè córò-hè è*  
 1SG beat-JCT kill-JCT-PRES rock.monitor-F.SG ACC  
 “I beat the rock monitor to death.”

Various analyses of the juncture morpheme have been offered, including suggestions of a grammaticalised copula (Heine 1986), a desemanticised clause coordinator (Elderkin 1986), and an inherited suffix from a periphrastic MVC in an ancestral Khoe-Kwadi language (Güldemann & Fehn 2014). Given the robust evidence for a MVC involving a linker morpheme in Ju languages provided by the present study, the distinction between Kx’a and Tuu languages, on the one hand, and Khoe-Kwadi languages, on the one hand, is narrowed. This is significant because many Khoe languages, particularly Kalahari Khoe languages, are spoken by hunter-gatherer populations who have likely undergone historical language shift – presumably from a language with a profile like Kx’a or Tuu – to the languages spoken by early Khoe pastoralists when encroaching into the eastern Kalahari (e.g., Güldemann 2008b; cf. Pickrell et al. 2012 for a study on genetic admixture across the Kalahari Basin). In earlier research, I identified some formal and functional similarities between the “verb-juncture” construction in Khoe and the then still preliminary description of pseudo-coordination in Ju (cf. “bisected periphrastic construction”, Pratchett 2018:232-243), and made the novel claim that “a multi-verb predicate involving a linker morpheme [forming] part of a Ju substrate in Kalahari Khoe languages, whilst still rather radical, is not beyond the realm of possibility” (Pratchett 2018:243). The present analysis of pseudo-coordination across Ju, including insights into the complex underlying nature of the elements at the “verbal juncture”, certainly does not detract from original idea. On the contrary, it renders it significantly less radical.

## Abbreviations

Arabic numerals when not followed by SG or PL indicate agreement classes.

A – agent, ACC – accusative, ADV – adverb, ADVZ – adverbialiser, C – consonant, CLCO – clause coordinator, COP – copula, DEM – demonstrative, DIST – distal demonstrative, DU – dual, DUR – durative, EMPH – emphatic, EVID – evidential, EX – exclusive, F – feminine, HAB – habitual, ID – identificational, INTR – intransitive, IPFV – imperfective, IRD – indirect discourse, JCT – juncture, LNK – linker, MPO – multipurpose oblique, MVC – multi-verb construction, N – nasal consonant, NEG – negation, NMZ – nominaliser, O – object, PL – plural, PN – proper name, PRED.OP – predicate operator, PRES – present, PRO – pronoun, PROG – progressive, PST – past, PURP – purpose, Q – question marker, QV – quotative verb, REL – relative marker, S or SBJ – subject, SBJV – subjunctive, SG – singular, SVC – serial verb construction, TOP – topic, V – verb or vowel, VE – valency external suffix.

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