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Dependent clauses with the conjunction $k\dot{\mu}$ 'and' in Dinka: Clause chaining in a non-SOV language

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Abstract:

Dinka, a Western Nilotic language, has a construction in which a clause with dependent syntactic status is combined with a preceding clause of any type by means of the conjunction $k\dot{u}$ 'and', which is also used for coordinating both noun phrases and independent clauses. Dependent $k\dot{u}$ -clauses, which all have the same syntactic structure, do not express any particular semantic function and normally have fewer markers of tense, aspect and mood than the clause with which they are combined. But they are interpreted as having the same semantic function and generally also the same tense, aspect and mood as that clause.

Keywords: Dinka, Western Nilotic, conjunction, clause chaining, cosubordination

1 Introduction

This article explores an aspect of the syntax of Dinka, a Western Nilotic language spoken in South Sudan.¹ The purpose is to demonstrate that Dinka has a construction in which a clause with dependent syntactic status is combined with a preceding clause of any type by means of the conjunction $k\dot{u}$ 'and', which is also used for coordinating both noun phrases and independent clauses. Dependent $k\dot{u}$ -clauses, which all have the same syntactic structure, do not express any particular illocutionary force and inter-propositional semantic function (cf. Mann & Thompson 1987) and normally have fewer markers of tense, aspect and mood than the clause with which they are combined. But they are interpreted as having the same illocutionary force

¹ I wish to thank my principal Dinka informants Isaac Maker, Kuyok Abol Kuyok, David Daniel Marial and Peter Gum Panther for their assistance. In addition, I wish to thank an anonymous reviewer for helpful comments on an earlier version of this article.

or semantic function and generally also the same tense, aspect and mood as that clause. Depending on the preceding clause, a dependent $k\dot{\mu}$ -clause like (1) could be interpreted as, for instance, 'and she cooked meat', 'and she used to cook meat', 'and is she cooking meat?', 'and if she cooks meat', 'and because she cooks meat', 'and so that she cooks meat', or 'and who is cooking meat'.

(1) kù trêcel ríiŋ and cook.3SG meat.SG

Thus, a sentence that includes a dependent $k\dot{\mu}$ -clause may be said to be an instance of clause chaining of the initial-consecutive type (Longacre 1990, Longacre 2007, Dooley 2010), and the dependent $k\dot{\mu}$ -clause itself may be said to be an instance of cosubordination (Olson 1981, Foley & Van Valin 1984, Van Valin & Lapolla 1997, Van Valin 2021), which contrasts with both coordination and subordination. However, a discussion of these notions is beyond the scope of the present article.

The article is organized as follows. Section 2 is a brief presentation of clause structure in Dinka, with a major distinction between NP-initial (and verb-second) clauses, verb-initial clauses, and particle-initial clauses. Section 3 is an introduction to tense, aspect and mood (TAM) in this language. Section 4 is a brief overview of the ways in which the conjunction $k\dot{\mu}$ 'and' is used. Section 5 briefly describes the structure of dependent kù-clauses, which are verbinitial, with respect to the form of the finite verb and the ways subjects are expressed. Section 6 shows (i) that the clause on which a dependent $k\hat{u}$ -clause is dependent, i.e., the preceding clause, can be of any type, (ii) that the $k\dot{u}$ -clause gets its illocutionary force and/or its semantic function from that clause, and (iii) that kù-clauses are not necessarily semantically consecutive, that is, that they do not necessarily indicate the chronological order of events, but may also describe a simultaneous event or state. Section 7 illustrates that a dependent $k\hat{u}$ -clause typically has fewer markers of tense, aspect and mood than the preceding clause on which it is dependent, but that it is to be interpreted as having the same tense, aspect and mood as that clause. Section 8 concludes the article.

The variety of Dinka dealt with here is the Agar dialect. The transcription uses IPA symbols. The Agar dialect has a ternary vowel length contrast between short (V), long (VV) and overlong (VVV), a binary phonation contrast in the vowel between modal voice quality (V) and breathy voice quality (\dot{V}), and a ternary tonal contrast in the vowels between low (\dot{V}), high (\dot{V}) and falling (\hat{V}) (Andersen 1987). The phonation and tone diacritics are placed on the first of a sequence of vowel symbols.

The data on which this article is based were collected in South Sudan and Sudan during several periods between 1981 and 2009. Most of my text corpus was collected in Khartoum between 1988 and 1995. All of it is oral material, which contains the following genres: narrative, oral history, interview, personal history, song, and marriage negotiation.

Examples from my text corpus are marked by "(t.)" after the English translation. Other examples come from elicitation. When an example is a complex sentence, it is divided into clauses, which are ordered with numbers rather than letters. Some constituents consisting of more than one word are enclosed in brackets in the interlinear translation.

2 Clausal constituent structure

In terms of their initial constituent, apart from an initial conjunction, clauses are either NP-initial (and verb-second), verb-initial, or particle-initial (Andersen 2019). With few exceptions, the order of clausal constituents after the finite verb is strictly fixed (Andersen 2007, 2019). Syntactically, a verb stem is either intransitive, transitive, ditransitive or copulative. The morphology of verbs consists of a derivational stratum and an inflectional stratum. In the derivational stratum, derived verb stems such as antipassive, applicative, causative and centrifugal are formed from verbal roots. In the inflectional stratum, verb stems (whether underived or derived) may be inflected for e.g. subject.

2.1 NP-initial clauses

NP-initial clauses are declarative and begin with an NP in the nominative case, which is the citation form and which is morphologically unmarked. This NP is a clause-internal topic, as illustrated by the three propositionally synonymous clauses in (2). This topic NP may be, among others, a subject (2a), an object (2b) or an adjunct (2c).

- (2) a. màrjàal à = tàt màbàor è léc.
 Marial.SG D.SG = beat Mabor.SG [PREP stick.SG]
 'Marial is beating Mabor with the stick.'
 - b. mabaa constant c

stick.SG D.SG = beat.NST Marial.SG.GEN Mabor.SG

NP-initial clauses conform to the clause schema in (3) with ten slots in which the constituents occur if they are present (Andersen 2019).

- (3) 1. Topic, expressed as a noun phrase in the morphologically unmarked nominative case. This noun phrase may be zero if third person.
 - 2. Proclitic declarative marker, sg. a =, pl. aa = or aa =. As indicated in (5) below, other minor constituents may also occur between the topic and the finite verb.
 - 3. Finite verb.
 - 4. Subject, expressed as a noun phrase in the genitive case; this is glossed as genitive (GEN) only if the genitive case does not syncretize with the nominative case for the relevant noun phrase.
 - 5. Plural marker $k\hat{e} \sim k\hat{e}$ of a plural non-subject topic.
 - 6. Expressed as a noun phrase in the nominative case: (i) the object of a transitive verb, or (ii) the first object of a ditransitive verb (either a patient or a beneficiary), or (iii) a body-part noun externally possessed by an intransitive or copulative subject.
 - 7. One or more non-finite verbs.
 - 8. A body-part noun externally possessed by the first or only object, in the nominative case.
 - 9. Expressed as a noun phrase in the nominative case: either (i) the second object of a ditransitive verb (either a patient or a beneficiary) or (ii) a copula complement.
 - 10. One or more adjuncts.

The topic slot (3.1) may be empty, but in that case a third person pronominal element is implied as a covert topic, i.e. a topic expressed by zero. It is followed in position (3.2) by a declarative marker, which agrees with the topic for number, even when the topic is covert. Position (3.3) always contains a finite verb, which may be inflected for subject if the topic is object. If the subject, the object of a transitive verb, or an adjunct are not selected for the topic position, they occur in positions (3.4), (3.6) and (3.10), respectively. The finite verb may be an auxiliary, and in that case the main verb occurs in position (3.7) in non-finite form, optionally together with one or more additional auxiliary verbs in non-finite form preceding the semantically main verb. The second object of a ditransitive verb or the complement of a copulative verb occurs in position (3.9), and cannot be topicalized. A body-part noun externally possessed by an intransitive or copulative subject occurs in position (3.6), and a body-part noun externally possessed by a first or only object occurs in position (3.8). A plural non-subject topic is optionally cross-referenced by the plural marker $k\hat{e} \sim k\hat{e}$ in position (3.5).

The finite verb has an inflectionally unmarked form if the topic is subject, as in (4a). The declarative marker is a proclitic and therefore not part of the inflection of the verb, and it may be separated from the verb, cf. (5) and (12.2) below. By contrast, the finite verb has an inflectionally marked form if the topic is not subject. Before a nominal subject the finite verb has a form glossed as NST (for "having a non-subject topic"), as in (4c). Here the topic makeer 'Maker' is an adjunct, since in postverbal position this participant would be expressed as the prepositional phrase (n) *è* màk*êer*. A pronominal subject is expressed in the finite verb if the topic is object, as in (4b), where the topic *tim* 'tree' is object. But a pronominal subject is expressed by a free pronoun if the topic is an adjunct (unless the subject is unspecified), and in that case the finite verb has the NST form. An unspecified subject, which is glossed as UNSP and translated as passive, is expressed in the finite verb whether the topic is an object or an adjunct.

(4) a. djaar $\acute{a}a = cen$ pliw.woman.PL D.PL = not_have water.PL 'The women have no water.' (t.)

- b. $tim \quad \hat{a} = j \epsilon p k \hat{\mu}.$ tree.SG D.SG = cut-1PL 'We are cutting the tree.'
- c. $m \partial k \hat{e} er$ $\partial = b \hat{e} \epsilon r$ $m \Delta r i \partial a l$. Maker.SG D.SG = be_tall.NST Marial.SG.GEN 'Marial is taller than Maker.'

In addition to the declarative marker, other minor constituents may occur in preverbal position, where they may co-occur with each other and with the declarative particle (Andersen 2016). In this way there are six slots before the finite verb, as shown in (5).

- (5) 1. Topic.
 - 2. Assertive particle k =.
 - 3. Declarative marker, sg. $\dot{a} =$, pl. $\dot{a}a =$ or $\dot{a}a =$.
 - 4. Past tense particle *è*.
 - 5. Pronominal cross-reference of the topic.
 - 6. Negation $c_{\vec{k}}$ or irrealis marker $d(j)_{\vec{k}}$.

The assertive proclitic k =, which weakly emphasizes the truth value of a clause with the declarative marker, occurs in position (5.2) between the topic and the declarative marker. The past tense particle k occurs in position (5.4), but fuses with a preceding declarative marker. In the presence of the past tense particle, the topic is cross-referenced pronominally in position (5.5), but with 3sG being zero. The negation ck or the irrealis marker d(j)k occurs in position (5.6) immediately before the finite verb.

2.2 Verb-initial clauses

Verb-initial clauses conform to clause schema (3), except that they lack the first two slots. Examples of such clauses are questions (6a), orders (6b), sequential clauses beginning with the sequential auxiliary verb góo, which have a declarative function $(6c)^2$, relative clauses (6d), and temporal or conditional clauses with the conjunction naa 'when, if' (6e) or tg 'when, if' (6f). The relative clause in (6d) is verb-initial since it begins with the auxiliary verb cg. That this is a

² That the sequential auxiliary verb is indeed a verb is shown by the fact that it is inflected like a verb, cf. Andersen (2007: 93).

verb is evidenced by the facts that it takes the position of a finite verb and that it is inflected like a verb, as shown in Andersen (2007: 93).

- (6) a. nֲἐɛk t̪ɔ̯̀ək? kill.3sG goat.sG 'Is he killing a goat?'
 - b. mwóoc à tòk è màcér!
 give.2SG [1SG mouth.SG] PREP tobacco.SG
 'Give my mouth tobacco!' (t.)
 - c. *góo márjàal mèț țâat.* SEQ Marial.SG.GEN child.SG beat.NF 'Then Marial beat the child.'
 - d. <u>jóŋ</u> c<u>é</u> mè<u>t</u> câam
 dog.SG.CS1 [PF child.SG eat.NF]
 'the dog which has bitten the child'
 - e. *nàa b*^(f) àj(t) [...]. if come chicken.SG.GEN 'If a chicken comes, [...].' (t.)
 - f. t<u>è</u> tựuyn kéek r<u>ò</u>ot, [...]. if eliminate.NST 3PL.GEN hippopotamus.PL

'If they eliminate the hippopotami, [...].' (t.)

In a verb-initial clause the subject is always overtly expressed, but a third person object or adjunct may be covert. If there is no covert constituent, a pronominal subject is expressed in the verb, as in (6a– b). A nominal subject, on the other hand, is preceded by the inflectionally unmarked form of the verb, as in (6c–e). If there is a covert object or a covert adjunct, the finite verb (whether a lexical verb or an auxiliary) has the NST form before a subject NP. This is seen in the question (7a) and in the relative clause in (7b), where the object is covert. It is also seen in the question (8) and in the purposive clause (9.2), where there is a covert adjunct with instrumental meaning. Inside the relative clause in (7b) the object, which is coreferential with the head k_{e}^{i} (thing', is covert in the sense of being zero.

- (7) a. méɛɛn tìik?
 hate.NST woman.SG
 'Does the woman hate him?'
 - b. ké céem mìit thing.SG.CS1 [eat.NST child.PL] 'what children eat'
- (8) c<u>í</u>i ŋá t<u>ò</u>on kwêem?
 PF.NST who.GEN pot.SG break.NF
 'Who has broken the pot with it?'
- (9) 1. àn à = góoor è páal
 1SG D.SG = search.AP [PREP knife.SG]
 'I want a knife'
 2. báan àit téeem ról.
 - báan à<u>jù</u> téeem ról.
 FUT.NST.1SG.GEN chicken.SG cut.NF throat.SG
 'in order to slaughter a chicken with it.'

In clauses with a covert adjunct a pronominal subject is not expressed in the verb (unless it is an unspecified subject), but is expressed by a free pronoun after the NST form of the verb, as in (9.2), where the phonological word *báan* is a contraction of the future auxiliary verb *bíi* (FUT.NST) and the subject *µéɛn* (1SG.GEN). Some types of adverbial clauses always require the NST form of the verb (except when the subject is unspecified), for instance clauses beginning with the conjunction *tµei* (when, if as in (6f); so such clauses behave like clauses in which there is a covert adjunct.

2.3 Particle-initial clauses

Particle-initial clauses also conform to clause schema (3), except that instead of the first two slots they begin with a particle which is followed by an NP before the finite verb. This NP may have the same grammatical relations to the verb as the preverbal NP of a NP-initial clause, being either a subject, an object, or an adjunct. Examples of particle-initial clauses are main clauses beginning with the particle k_{e}^{i} (then', which are declarative but have no declarative marker (10.2); adverbial clauses beginning with the conjunctive particle $(k)_{e}^{i}$ (while' (11.2); and adverbial clauses in which the particle c_{e}^{i}

'not' occurs after the conjunction $n\acute{a} \sim n\grave{a}a$ 'when, if' (12.1). The negation $c\grave{e}$ is not an auxiliary verb since it cannot be inflected. As seen in (10.2), a 3SG pronominal preverbal NP is zero, while other pronominal preverbal NPs have the short shape CV, like $u\grave{o}$ 'we' in (12.1). In NP-initial clauses, by contrast, pronominal preverbal NPs have a longer form ending in a consonant (except that third person pronouns normally are zero in that position). The auxiliary verb $c\underline{\hat{i}i}$ in (11.1) expresses an unspecified subject (translated as passive), and therefore it does not have the NST form.

(10)	1.	wán j <i>óo</i> k	jéen	tìik	bàaaj
		when find.NST	3sg.gen	woman.SG	home.LOC
		é t <u>à</u> k,			
		[3sg one]			
		'When he found	the woman	alone in the l	nouse,' ³
	2.	k <u>è</u> <u>tj</u> éec	è	p <u>ậ</u> iw.	
		then ask.AP	[PREP	water.PL]	
		'then he asked fo	or water.' (t.)	
(11)	1.	rów	$\dot{a} = c_{i}\hat{i}$	nậci	k
		hippopotamus.s	G D.SG = P	F.UNSP kill.	NF
		tôooc			
		swamp.LOC			
		'A hippopotamus	s has been k	illed in the sv	vamp'
	2.	k <u>é</u> kòc	máj.		
		while person	.PL fish.	AP.H	
		'while people we	ere fishing.'	(t.)	
(12)	1.	náa c <u>ề</u> щò	ţjáj		
		if NEG 1PL	separate.	н	
		'If we don't separ	rate,'		
	2.	k <u>è</u> ràaan	t	àk à=c≧	
		then [person	.sg.cs2 c	one] D.SG=1	NEG

³ The phrase \acute{e} t $\grave{o}k$ is what yields the meaning of 'alone'.

béɛr làj. take_along.NST animal.SG.GEN 'an animal cannot attack one person.'

If there is more than one preverbal particle, the preverbal NP occurs after the first of them, as in the question (13), where *tilk* 'woman' occurs between the past tense particle $\underline{\dot{e}}$ and the negation particle $c\underline{\dot{e}}$. The past tense marker $\underline{\dot{e}}$ is not an auxiliary verb since it cannot be inflected.

(13) <u>è</u> t*ìik* c<u>è</u> <u>t</u>*àal mj<u>è</u>e<u>t</u>? PST woman.SG NEG cook food.SG 'Was the woman not cooking food?'*

3 Tense, aspect and mood (TAM)

As will be illustrated in section 7, a dependent $k\underline{n}$ -clause normally has fewer markers of tense, aspect and mood than the clause on which it is dependent. The purpose of the present section, therefore, is to overview the structural elements of the tense-aspect-mood (TAM) system of the Agar dialect of Dinka. This overview is not intended as an exhaustive description of the semantics of the TAM markers.

3.1 Introduction to TAM

In Dinka, verbs are not inflected for tense, aspect or mood (TAM). But all of these semantic categories are to some extent expressed by means of auxiliary verbs or particles, so they have to be recognized as belonging to the grammar of Dinka. The inventory of such words with a tense, aspect or mood function in the Agar dialect of Dinka is shown in Table 1. It consists of four primary auxiliary verbs (Andersen 2007), shown in their inflectionally unmarked form, and three particles (Andersen 2016). These TAM words are discussed in the following subsections, with underlining in the interlinear translation.

Table 1. Words with tense, aspect or mood function in the A	agar dialect of
Dinka	

Word class	Form	Label
Auxiliary verbs	$c \acute{e} \sim c \acute{l}$	Perfect (PF)
	kệec \sim kậic	Negative perfect (NEG.PF)
	bệ	Future (FUT)
	èe or jèe	Habitual (HAB)
Particles	sg. à, pl. áa or àa	Declarative (D)
	è or é	Backgrounded past tense (PST)
	$dj \dot{e} \sim d \dot{e}$	Irrealis (IRR)

3.2 The perfect auxiliary verbs cé (PF) and keec (NEG.PF)

The perfect auxiliary verb $c \not{e} \sim c \not{i}$ (PF) and its negative counterpart $k \not{e} c \sim k \not{i} i c$ (NEG.PF) often or mostly have perfect meaning. In (14) $c \not{e}$ thus indicates that the (present or past) situation denoted by the proposition is the result of a prior event. This is perhaps most clearly seen in 'while'-clauses (14b) and relative clauses (14c). In (14b) $c \not{e}$ $\dot{t} \partial w$ means 'he has/had died', indicating a state which results from the event of dying.

(14) a.	щậak=k-	wà	áa=c <u>è</u>	<u></u> dwóo	k
	COW.PL.CS	cow.pl.cs2 = pl-1pl		<u>SG</u> retur	n.APPL.NF
	щò.4				
	1pl				
	'He has re	turned our o	(t.)		
b.	kù dậəŋ) àdwè	er k <u>é</u>	c <u>é</u>	ţòw.
	and rem	ain Adue	r.SG [whi	le <u>PF</u>	die.NF]

'and Aduer remained, while dead.' (t.)

c. *nòoon c*<u>î</u>i *nàaj* grass.SG.CS1 [<u>PF.UNSP</u> twist.NF] 'twisted grass' (Lit. 'grass which has been twisted') (t.)

⁴ The finite auxiliary verb $c\dot{e}$ expresses a third person singular subject, while the verb $dw\dot{g}ok$ 'return' is the main verb with non-finite form.

Some speakers also use $c \not\in$ as a perfective past tense marker, as in (15).

(15) kè ànèjòooŋ àa=cé bêɛn è wêɛɛj
then vulture.PL D.PL=PF come.NF [PREP [chyme.SG ic.
stomach.SG]]
'then the vultures came to a chyme.' (t.)

Other speakers only use $c\underline{e}$ as a perfective past tense marker in combination with another auxiliary verb, especially the non-finite form bàné, which literally means 'come and do', as in (16.2). The perfect auxiliary verb form $c\underline{\hat{i}}$ in (16.2) expresses an unspecified subject.

(16)	1.	wận c	zîi-n <u>è</u>	jè	gâam	è		
		when P	PF-UNSP.CT	3sg	agree.NF	[by		
		râaan	ébç	įn,				
		person.so	G.GEN all]				
		'When it was agreed upon by everybody,'						
	2.	kòc	àa=c <u>ậ</u> i		bàné		kwâan.	
		person.PI	L D.PL $=$ <u>PF</u> .	UNSP	come_and_	do.NF	pick.NF	

person.PL $D.PL = \underline{PF.UNSP}$ come_and_do.NF]
'people were nominated [].' (t.)	

The perfect auxiliary verb $c\underline{\acute{e}}$ does not combine with the negation $c\underline{\grave{e}}$. Instead, the negative perfect auxiliary verb $k\underline{\grave{e}}cc$ is used; that is, the negative counterpart of (17a) is (17b).

(17)	a.	tìik	$\dot{a} = c \dot{e}$	mj <u>è</u> eț	ţáaal.
		woman.SG	$D.SG = \underline{PF}$	food.sg	cook.nf
		'The woman h			

b.	tìik	à=kệec	mj <u>è</u> e <u>t</u>	ţáaal.		
	woman.SG	$D.SG = \underline{NEG.PF}$	food.sG	cook.nf		
'The woman has not cooked food.'						

In (18) the negative perfect auxiliary is used in a relative clause.

(18)	k <u>è</u>	jîin	$\dot{a} = c\dot{e}$	bêer- <u>è</u>	lâat
	then	2sg	D.SG = NEG	do_again-UNSP	insult.NF

èrànkêcc-ègóɔɔrnòm.[byperson.SG.CS1[NEG.PF-UNSPmark.NFhead.SG]]'then you are not insulted again by somebody whose headhas not been marked.' (t.)

3.3 The future auxiliary verb bé (FUT)

The future auxiliary verb $b \not e$ (FUT) is used for expressing future tense, as in (19) and (20.1). But it is also used for introducing a purposive (or resultative) clause, as in (20.2).⁵

- (19) $lw \dot{\varrho} ok \quad \dot{a} a = b \ddot{\mu} i$ <u>t</u> $\dot{a} a a p$ <u>nj</u> $\dot{a} a k$. case.PL D.PL = <u>FUT.UNSP</u> finish.NF tomorrow 'The cases will be finalized tomorrow.' (t.)
- (20) 1. bòolìiit áa = bà tóooc
 policeman.PL D.PL = <u>FUT.1SG</u> send.NF
 'I will send the police'
 - 2. bìik kóc lậck.
 <u>FUT.3PL</u> person.PL inform.AP.APPL.NF
 'to inform people.' (t.)

3.4 The habitual auxiliary verb èe (HAB)

The habitual auxiliary verb $\dot{e}e$ (HAB), which is homonymous with the copula verb 'be', expresses habitual meaning, as in (21). When the habitual auxiliary verb combines with the past tense particle, it expresses 'habitual in the past', as in (23) below. After a word ending in a vowel, the habitual auxiliary verb begins with the glide /j/, as in (23a) below.

(21) a. $\frac{\partial r j \hat{\rho} ooc}{\partial c}$ $\hat{e}e$ $m j \hat{e} e t = k - \hat{e}$ $m \hat{\mu} u k$. coward.SG D.SG.<u>HAB</u> child.PL.CS2 = PL-3SG hold.NF 'A coward feeds his children.' (a proverb) (t.)

⁵ In (20.2) the purposive clause refers to the future, but such a clause may also refer to the past.

b. ée màaț è bâaŋgè?
 <u>HAB.2SG</u> smoke.AP.NF [PREP opium.SG]
 Do you smoke opium?' (t.)

3.5 The past tense particle \dot{e} or \dot{e} (PST)

The past tense particle $\underline{\dot{e}}$ or $\underline{\acute{e}}$ (PST) is not used in event-line clauses in narratives, but it is used in clauses which provide background information in narratives, where it can be characterized as a marker of imperfective past tense. In (22) it occurs in clauses without any auxiliary verb, here fusing with the plural declarative marker into \dot{aa} .

- (22) a. $b \not\in ccj = k \note en$ $\dot{a}a$ $k \dot{e}$ $t \not= d a a k \dot{e}$ home.PL.CS2 = PL-3PL D.PL.<u>PST</u> 3PL be_near.REC 'Their homes were near each other.' (t.)
 - b. kôc àbéek áа kè mêec [person.PL.CS1 part.PL] D.PL.PST 3pl. tie.AP cóok. è шэ́к è lwák [PREP COW.PL] [PREP [shrine.SG foot.sG]] 'Some people were herding around the shrine.' (t.)

In (23) the past tense particle combines with the habitual auxiliary verb. In (23a), the past tense form $\underline{\dot{e}}/\underline{\dot{e}}$ fuses with the singular declarative marker \dot{a} into $\dot{e}e$.

- (23) a. tôoc ée jèe màaj
 swamp.SG D.SG.<u>PST HAB</u> spend_dry_season.NF
 ké pâiw.
 [COM water.PL]
 'The swamp used to remain with water during winter.' (t.)
 - b. *áa kêe cáaţ <u>è</u>páţ*. D.PL.<u>PST</u> 3PL.<u>HAB</u> walk.NF just 'They used to walk naked.' (t.)

In (24) the past tense particle combines with the perfect auxiliary verbs.

⁶ The morpheme -k in $b \notin \varepsilon \varepsilon j = k \cdot \acute{een}$ 'their homes' indicates plural possessum, not plural possessor.

(24) a. kù ròot áa kè djèt сé hippopotamus.PL bear.AP.NF and d.pl.pst 3pl PF àpêej. verv much 'And hippopotami had multiplied in great number.' (t.) b. jêen ée kîic dâac bêen 3SG D.SG.PST PF.NEG do soon.NF come.NF nè wéet è méec è of [word.SG.CS1 [of [be far.NMLZ.SG.CS1 PREP pín. land.SG.GEN]]]]

'He had not turned up early, due to the remoteness of his home.' (t.)

The past tense particle is also used in clauses where it is presupposed that the event described by the verb has taken place, as in (25).

(25)	a.	è	rów	nák				
		<u>PST</u>	hippopotamus.s	G kill.uns	SP			
		tjôow	?					
		place	place.SG.CS1.which.SG.ESS/ABL					
		'Whe	re was the hippop	otamus kil	led?' (t.)			
	ь.	mjàa	r=d-j <u>è</u>	ée	djéet	wÈE		
		bull.s	sG.cs2 = sG-1sG	D.SG. <u>PST</u>	give_birth.UNSP	[P3		
		rúut.						
		autumn.LOC]						
'My male calf was born last autumn.'								

The uses of the past tense particle as expressing (i) imperfective past tense and (ii) event presupposition seem to have in common that they mark (part of) the proposition as backgounded.

Event-line clauses in narratives typically begin with either the sequential auxiliary verb $g \acute{o} o$ (SEQ), as in (26), or with the word $k \grave{e}$ 'then', as in (27)–(28). A clause with $k \grave{e}$ 'then' is normally preceded by a temporal clause or some other time adjunct which establishes a point in time at which the event of the main clause took place, as in (27)–(28). A $k \grave{e}$ -clause without the declarative marker (with $k \grave{e}$)

counting as a particle) is a statement about a specific past event, as in (27.2). By contrast, a k_{e}^{2} -clause with the declarative marker (with k_{e}^{2} not counting as a particle) is a statement about a past or non-past habitual situation, as in (28.2) which describes a past habitual situation.

(26)	1.	gòo	kwáak	j <u>ì</u> iiț	pìn.	
		seq.3sg	catch.CF.NF	ear.PL	ground.ALL	
		'Then he se	eized its ears.'			
	2.	góo à j wờ	οοη ίς		ŋèɛɛr.	
		<u>SEQ</u> lion.	.SG stomacl	h.SG.EP	collapse.NF	
		'Then the la ach collaps	• •	ened.' (L	it. 'Then the lio	n's stom-
(27)	1.	nâa	uyòn njà	ak,		
			SG P4 ton			
		'The follow	ving morning,	,		
	2.	k <u>ề</u> bán	n rj <u>è</u> eel	te	2n	è
		then chi	ef.sG go_earl	y.cp [j	place.sg.cs1.AL	L of
		lwàok.				
		case.PL]				
		'the chief c	ame early to t	the cases	s.' (t.)	
(28)	1.	nàa má	ij kòc,	7		
		when fisl	h.AP.H pers	on.PL.GI	EN	
		'When people fished,'				
	2.	k <u>ề</u> r <u>à</u> c	DĽ	âa	kòc	
		<u>then</u> hip	popotamus.P	L D.PL.	HAB person.PI	
		côop.				
		chase.NF				
		'hippopota	mi used to cha	ase peop	le.' (t.)	

⁷ It seems that (28.1) is neutral with respect to the distinction between habitual and non-habitual meaning.

3.6 The irrealis particle $dj\underline{\dot{e}} \sim d\underline{\dot{e}}$ (IRR)

The irrealis particle $dj\dot{e}$ (IRR), with the shortened variant $d\dot{e}$, has counterfactual meaning, as illustrated in (29).

(29)ée сé a. dè tòw. die.NF D.SG.PST PF IRR 'He would have died.' [but he didn't] (t.) b. nàŋ é kêec là kôon, PST NEG.PF.1SG go and do.NF if help.NF 'If I had not helped him,' ée dè сé môow. D.SG.PST IRR PF drown.MID.NF 'he would have drowned.'

4 Coordination with kù 'and'

The conjunction $k\underline{\dot{u}}$ 'and' may conjoin both noun phrases and independent clauses. In addition, it conjoins a dependent clause with the clause on which that clause is syntactically dependent.

Two or more noun phrases may be conjoined by placing the coordinative conjunction $k\dot{\mu}$ 'and' between them. In (30) the simple NP $d\dot{\rho}ck$ 'boy' and the complex NP $n\dot{a}n \dot{e} m \dot{a}rj\dot{a}al$ 'Marial's daughter' are conjoined so that they constitute an NP. In (30), this conjoined NP occurs in the preverbal NP position in a clause with the declarative marker, and it is the subject of the verb $b\dot{\rho}$ 'come'.

(30)	djìok	kù	лàп	è	márjàal
	[boy.sG	and	[girl.SG.CS1	of	Marial.SG.GEN]]
	àa=b́2.				
	'A boy an	d Mari	al's daughter a	re con	ning.'

The same conjunction may also conjoin independent clauses. In (31)–(32), two declarative clauses with the declarative marker are conjoined in this way.

- (31)1. *pîiw* è pwòot kĵooc, âa of pool.PL] [water.PL.CS1 stand.NF D.PL.HAB 'Water in pools remains stagnant,' 2. kù níiin kák è âa [thing.PL.CS1 of tributary.PL] and D.PL.HAB ríin wíiir. run.NF river.LOC 'and tributaries run to the river.' (t.) (32) 1. tjôop $\dot{a}a = c\dot{e}$ pát, be good.H soil.pl D.PL = NEG'The soils are infertile,'
 - 2. kù áa=lèw bìik dâac and D.PL=be_able [FUT.3PL do_quickly.NF jìit. erode.NF]
 'and they are liable to erosion.' (t.)

The fact that the conjunction $k\underline{\dot{u}}$ used for conjoining NPs is also used for conjoining independent clauses seems to make Dinka rather exceptional among African languages. Thus, Welmers (1973: 305) mentions that "in any African language to which I have had sufficient exposure to find out", the word for 'and' used for conjoining NPs cannot be used for joining verbs or sentences. Creissels et al. (2008: 139) make the same generalization:

"[...] in most African languages, the morpheme used as the equivalent of English *and* in noun phrase coordination (which generally also serves as the comitative adposition 'with' [...]) cannot be used for clause coordination. Exceptions to this generalization are only sporadic, and never extend to entire families or areas."

Some other Western Nilotic languages are like Dinka in that a conjunction meaning 'and' can be used for coordination of both clauses and noun phrases. This is the case with Mabaan 25ce 'and', Jumjum 2an 'and', Kurmuk 2oo 'and', Surkum uu 'and', and Regariik wa 'and'. These five languages all belong to the Burun branch of the Western Nilotic family.

The third use of the conjunction $k\dot{\mu}$ 'and' is found in clauses which are dependent on a preceding clause, but which are not embedded in that clause. An example of this is seen in (33). Here $k\dot{\mu}$ contrasts with the conjunction $k\dot{a}$ 'or', which in the same way is dependent on the preceding clause, as in (34). The structure of dependent $k\dot{\mu}$ -clauses is illustrated in the next section, but dependent clauses with 'or' have the same structure as dependent $k\dot{\mu}$ -clauses.

- (33)tiów èе kàc pêen refuse.APPL.NF guinea worm.SG D.SG.HAB person.PL càat, kù nèek k*ì*k walk.NMLZ.SG and kill.3sG some.PL 'Guinea worm prevents people from walking and kills some' (t.)
- àwwòoc (34) tè cíin lôooj, mistake.sG if PF.NST.2SG.GEN do.NF 'If you have made a mistake,' kè jîin $\dot{a} = n \hat{o} o k$, ká mác iì [...]. then 2SG D.SG = hang.UNSP 2SG or tie.UNSP 'you are hung or imprisoned [...].' (t.)

5 Structure of dependent kù-clauses

This section describes the internal structure of dependent $k\underline{\dot{u}}$ -clauses. The relation of such clauses to the clauses on which they are dependent is discussed in sections 6 and 7.

Dependent $k\dot{u}$ -clauses are mostly verb-initial, but they can also be particle-initial since they may be negative, in which case the particle $c\dot{e}$ 'not' precedes the verb. As in other verb-initial clauses, the subject is always overtly expressed by either a noun phrase or by inflection of the finite verb. Further, as discussed in section 2, the form of the finite verb and the expression of the subject depend on whether or not there is a covert object or adjunct. This is illustrated with textual examples of $k\dot{u}$ -clauses in (35)–(41). They are translated in such a way that they fit the textual context from which they have been extracted. As discussed in section 2.2, in the absence of a covert participant, the finite verb has the inflectionally unmarked form before a nominal subject. This is illustrated in (35), where the finite verb is the main verb, and in (36), where the finite verb is an auxiliary. In the (a)-clauses the main verb is intransitive, in the (b)-clauses it is transitive.

(35)	a.	kụ dậɔŋ àwàn cệeen and remain fox.SG.GEN back.ALL 'and the fox remained behind' (t.)
	b.	kỳ tjèec méɛɛn cóol and ask Mayen.SG Col.SG 'and Mayen asked Col' (t.)
(36)	a.	kỳ cế tòoc pjàaț àrệet and PF swamp.SG.GEN be_good.NF very_much 'and the swamp had become very nice' (t.)
	b.	kùjślàmídòooróotanddo_then.Hgreedy_person.PLself.PLtźɔɔŋsay_goodbye_to.NF'and in the end the greedies said good-bye to one an-

When there is no covert participant, a pronominal subject is expressed in the finite verb, as illustrated in (37), where the finite verb is the only verb and therefore the main verb. The verb is intransitive in (37a), transitive in (37b), and ditransitive in (37c).

(37)	a.	kù	ţòow				
		and	die. <u>3sG</u>				
		'and :	it died' (t.)				
	b.	kù	j <u>à</u> ok	dít		róoor	
		and	find. <u>3sG</u>	bird.	SG	forest.LOC	
		'and I	he found th	he bir	d in t	the forest' (t.)	
	c.	kù	n <u>é</u> ek		kè	mwòɔr	è
		and	kill.APPL.	<u>3sg</u>	3pl	[bull.sG.cs1	of

other' (t.)

wòŋcow.SG.GEN]'and he slew a bull for them' (t.)

If there is a covert object, a nominal subject is preceded by the NST form of the verb (38), while a pronominal subject is expressed in the verb (39) in the same way as when there is no covert object. The clauses in (38)–(39) are analyzed as having an object-topic because the object is zero.

- (38) kù bw5oot ràn tìự and follow.NST [person.SG.CS1 be_brown] 'and an Egyptian followed him' (t.)
- (39) a. *k*¹/_µ *cóop-k*¹/_µ *wéj* and chase.CF-3PL away 'and they chased him away' (t.)
 - b. kù tják and bury.UNSP 'and he was buried' (t.)

If there is a covert adjunct, a nominal subject is preceded by the NST form of the verb (40a), in the same way as when there is a covert object. However, in contrast with a $k\dot{\mu}$ -clause with a covert object, in a $k\dot{\mu}$ -clause with a covert adjunct a pronominal subject is expressed by a pronoun (in the genitive case), which is also preceded by the NST form of the verb (40b). In (40a–b), the finite verb is the habitual auxiliary verb *jée*, and the main verb is intransitive. The phonological form *jiin* in (40b) is a contraction of *jée* and the 2SG subject *jin*. In (40a) the covert adjunct refers to a place, which is resumed by the proform *tin* 'in it' in the adjunct slot of the clause. In (40b) the covert adjunct seems to correspond to a prepositional phrase with the general purpose preposition $n\dot{e}$, and it refers to a language.

(40) a. kù jée dệeŋ twèɛŋ tín and HAB.NST rain.PL rain.NF PRO.ESS/ABL àpɛ̂ɛj very_much 'and rains rained heavily there' (t.) b. kù jíin Jàam and HAB.NST.2SG.GEN speak.NF 'and so that you speak it' (t.)

By using the NST form of the verb, a covert non-subject participant is treated like a topicalized non-subject participant in NP-initial clauses (with the declarative marker) and in particle-initial clauses.

The negation particle $c\underline{\dot{e}}$ 'not' may intervene between $k\underline{\dot{u}}$ and the finite verb, as in (41). As in other particle-initial clauses, the particle is followed by an NP slot, in which a 3SG pronoun is zero, as in (41b).

(41)	a.	kù	c <u>è</u>	kè	mîiț	tệɛn	t <i>ģ</i> k
		and	NEG	3pl	eat	[place.sG.Cs2	one.ESS/ABL]
'and they did not eat together' (t.)							

b.	kù	с <u>è</u>	gám	ӈје҈еј
	and	NEG	accept.н	order.NMLZ.SG
	'and I	he did	not accept	t advice' (t.)

After having accounted for the internal structure of dependent $k\dot{u}$ clauses in the present section, the next section will show the range of clause types on which $k\dot{u}$ -clauses can be dependent.

6 Dependence on various types of preceding clauses

The clause on which a $k\dot{u}$ -clause is dependent, which I call its controller, may be of any type. That is, it may be an independent clause, a subordinate clause, or another dependent $k\dot{u}$ -clause. This is shown in the following subsections, where the relevant instances of $k\dot{u}$ are underlined in the interlinear translation.

6.1 Dependence on an independent clause

This subsection shows that an independent clause on which a $k\dot{\mu}$ clause is dependent may have any illocutionary force. That is, the preceding clause may be a statement (declarative), a question (interrogative), or an order (imperative). The dependent $k\dot{\mu}$ -clause itself has no marker of illocutionary force, but in each case, it must be interpreted as having the same illocutionary force as the preceding clause, its controller.

6.1.1 Dependence on a declarative clause

As seen in section 2 above, declarative clauses are of three types in Dinka: (i) NP-initial clauses with the declarative marker, (ii) particleinitial clauses beginning with the particle k_{e}^{λ} 'then' and not including the declarative marker, and (iii) verb-initial clauses beginning with the sequential auxiliary verb, whose inflectionally unmarked form is góo, glossed as SEQ.

In (42) the controller is a declarative clause (42.1) with the plural declarative marker, which here fuses with the past tense particle \underline{e} into $\underline{a}a$. The dependent $k\underline{\dot{u}}$ -clause (42.2) has no declarative marker, but must nevertheless also be interpreted as a statement. So the declarative marker as an illocutionary force operator has scope over both its own clause and the following $k\underline{\dot{u}}$ -clause.

(42) 1. kù ròot áа kè сé and hippopotamus.PL D.PL.PST 3PL PF djèt àpêej, bear.AP.NF very much 'And hippopotami had multiplied in great number,' cé tòoc 2. kù pjàat àrêet. and PF swamp.SG.GEN be good.NF very much 'and the swamp had become very nice.' (t.)

In (43) the controlling declarative clause (43.2) also includes the declarative marker, here in its singular form \dot{a} =. It begins with the adverb $k\dot{e}$ 'then' and is preceded by a conditional clause (43.1). Again the dependent $k\dot{u}$ -clause (43.3) has no declarative marker, but must be interpreted as an additional statement consequent to (43.1).

(43) 1. náa ujóok,

if be_angry.2SG 'If you quarrelled,'

- 2. kġ jậin à=kậum,
 then 2SG D.SG=punish.UNSP
 'you were punished'
- 3. kù mác <u>ì</u>. <u>and</u> catch.UNSP 2SG 'and jailed.' (t.)

The same construction is seen in (44). The $k\dot{u}$ -clause (44.3) is dependent on a declarative clause (44.2) which begins with the adverb $k\dot{e}$ 'then'. This declarative clause is preceded by an adverbial subordinate clause (44.1) beginning with the conjunction *náa* 'if', which fuses with the following finite verb $\dot{e}e$ (be.3SG) into *nâa*. The main clause (44.2), the apodosis, expresses the consequence of (44.1), the protasis, and the $k\dot{u}$ -clause (44.3) must be interpreted as describing an additional consequence and thus as having the same illocutionary force as (44.2).

(44) 1. nâa ràn céem [eat.NST if.be.3sG [person.SG.CS1 ròw. hippopotamus.SG.GEN]] 'If somebody is eaten by a hippopotamus,' (Lit. 'If it is a person whom a hippopotamus eats') 2. *k*è ràn nìn ràaan then [person.SG.CS1 [have person.SG]] $\dot{a} = li \dot{e} p$ lúk, D.SG = opencase.SG

'his relative (Lit. 'the person who has the person) will open a case'

kù tjèeec àpúuk=d-è.
 and ask.3SG compensation.SG.CS2=SG-3SG
 'and ask for his compensation.' (t.)

As stated in section 3.5, $k\underline{k}$ -clauses with the declarative marker describe a situation which is habitual, as in (43.2) and (44.2). By contrast, as also mentioned in section 3.5, declarative $k\underline{k}$ -clauses without the declarative marker, are statements about specific past events, as in (45.2), and they are preceded by a time adjunct, as in (45.1). Again the $k\underline{k}$ -clause in (45.3), must be interpreted as having the same illocutionary force as the main clause (45.2).

(45) 1. wán wéet kéek từ [when arrive.NST 3PL.GEN place.SG.CS1

	mèc,			
	[be_fa	r.ALL]]		
	'When	they reached	l a remote j	place,'
2.	k <u>è</u>	láj	réeet	pwģow,
	then	animal.SG	get_torn	heart.SG
	'the a	nimal's heart	broke,'	
3.	kù	<u></u> tòow.		
	<u>and</u>	die.3sG		
	'and i	t died.' (t.)		

A $k\underline{\hat{u}}$ -clause with declarative interpretation may also be dependent on a sequential clause beginning with the sequential auxiliary verb $g\acute{oo}$, as in (46).

(46) 1. góo tùik nwôooc, SEQ.NST woman.SG sit.CAUS.NF
'Then the woman seated him'
2. kù mwòɔɔc tòk è pîiw. and give.3SG mouth.SG [PREP water.PL]

'and gave him (Lit. 'his mouth') water.' (t.)

In examples (43)–(46), the subject of the $k\dot{u}$ -clause is coreferential with the subject of its controller, and as an anaphor it is expressed in the verb. However, although this coreference relation is common in the text corpus used for this study, such coreference is by no means obligatory. Thus, in (42) the subject *tòoc* 'swamp' of the $k\dot{u}$ -clause is not coreferential with the subject *r\u00e0ot* the 'hippopotami' of the controlling clause.

6.1.2 Dependence on an interrogative or imperative clause

As mentioned in section 2.2 above, questions and orders are verbinitial; so they have the same structure as dependent $k\dot{\mu}$ -clauses (apart from the initial $k\dot{\mu}$). Therefore, if a $k\dot{\mu}$ -clause is preceded by an interrogative clause, as in (47)–(48), or an imperative clause, as in (49), then it is indeterminable whether the $k\dot{\mu}$ -clause is dependent or independent.⁸ In (47.1) the independent clause is a cleft polar question (a yes/no question), in (48.1) a constituent question.

 $^{{\}bf 8}~$ Polar questions differ into nationally from orders by having a rising pitch at the end.

(47)	1.	jèe	pànàaar	kèek	é	kè	nġ	ík
		be.3sG	Panyar.PL	3pl	PST	3pl	ki	ll.н
		rów,						
		hippop	otamus.SG					
		'Was it	the Panyar	who kill	led the	e hipp	opc	otamus'
	2.	kù lì	iw à	itwòɔj	tín?			
		<u>and</u> b	e_absent A	thoi.PL	PRO	.ESS/A	BL	
		'and we	re the Athu	oi not i	nvolve	ed?' (t.)	
(48)	1.	ŧál	ná.					
(10)			who.sg.c	EN				
			leaving,'					
	2.		çoŋ ηά?	,				
	2.		emain wh		N			
			o is staying		•			
(10)	1							
(49)	1.	pál-kà	-					
			pl 3pl					
		'Leave t	-					
	2.		ậak lv	•			••	njàlíc.
		<u>and</u> co	ome.2pl [s	shrine.so	G.CS1.	ALL	of	God.SG.GEN]

'and come to the Christian church!' (t.)

6.2 Dependence on an adverbial clause

The controller of a dependent $k\hat{u}$ -clause may also be an adverbial clause. This is exemplified with temporal/conditional clauses with the conjunction $n\hat{a}a$ 'when, if' and $t\hat{e}$ 'when, if' (section 6.2.1), causal clauses with the conjunction $n\hat{e}$ wéet 'because' and $r\hat{n}$ 'because' (section 6.2.2), temporal clauses with the conjunctional particle (k) \hat{e} 'while' and the conjunction \hat{a} 'until' (section 6.2.3), and purposive or resultative clauses beginning with the future auxiliary verb $b\hat{e}$ (section 6.2.4).

6.2.1 Dependence on an adverbial clause with the conjunction nàa or tệ 'when, if'

In (50) the controller is a conditional clause beginning with the conjunction naa 'when, if' (50.1), and the $k\underline{u}$ -clause (50.2) is interpreted

as having the same semantic function, namely that of a condition. The main clause occurs in (50.3) and is followed by another dependent $k\dot{u}$ -clause in (50.4).

(50)	1.	nàa	bʻʻ	à <u>jít</u> ,				
		if	come	chicken.SG	.GEN			
		'If a c	hicken o	comes'				
	2.	kù	gùut,					
		and	stab.3s	SG				
		'and	picks it, [*]	,				
	3.	$k = \dot{a}$	=róoot		àwàn	ņòm		
		then	= D.SG =	press.NST	fox.SG.GEN	head.SG		
		êe		ţàr,				
		[PRE	[PREP.3SG pair_of_buttocks.SG]					
		'then	'then the fox traps its head in its buttocks'					
	4.	kù	kèet	ké	jè.			
		and	flee.3s	G [COM	3sg]			
		'and	escapes	with it.' (t.)				

The $k\dot{u}$ -clause in (51.2) is dependent on another type of conditional clause, namely one that begins with the conjunction $t\dot{e}$ 'when, if' (51.1). Like (50.2), the $k\dot{u}$ -clause in (51.2) adds another condition. Unlike the conjunction $n\dot{a}a$, the conjunction $t\dot{e}$ requires its clause to be structured as having a covert adjunct, so its 2SG subject is expressed by the pronoun jiin (2SG.GEN), which fuses with the perfect auxiliary verb cii (PF.NST) into ciin. By contrast, the same subject is expressed by the inflection of the verb $n\dot{s}\eta$ (have.2SG) in the $k\dot{u}$ -clause.

- (51) 1. từ cấn tíŋ twèng
 if PF.NST.2SG.GEN [woman.SG.CS1 front.ESS/ABL]
 tjâaak,
 marry.NF
 'If you have married the first wife'
 - 2. kỳ nớŋ u/śk,
and have.2SG cow.PL
'and have cows,'

3. $k\underline{\dot{e}} = \underline{j}\underline{\dot{a}}ak$ $t\underline{j}\underline{\dot{e}}\underline{n}$ $\underline{\dot{t}}\dot{u}$. then 2SG D.SG = marry [woman.SG.CS2 DIM] 'you can marry a junior wife.' (t.)

In (50) and in several other examples, the $k\underline{\dot{u}}$ -clauses have consecutive meaning in the sense of referring to events that take place subsequent to those of their controllers. However, this is by no means always the case. In (51), for instance, what the $k\underline{\dot{u}}$ -clause denotes is not an event but a state, and this state is simultaneous with the state denoted by the controller.⁹

6.2.2 Dependence on an adverbial clause with the conjunction ng wgct or rin 'because'

The $k\dot{u}$ -clause in (52.4) is dependent on the adverbial clause in (52.3), which begins with the complex conjunction $n\dot{e}$ wéet 'because', and which itself follows the main clause (52.2). The last is a declarative clause which is preceded by a left-dislocated adverbial phrase after the adverb $k\dot{e}$ 'then'. The $k\dot{u}$ -clause adds another reason to the reason given in (52.3). A clause beginning with $n\dot{e}$ wéet 'because' requires the NST form of the finite verb, which is here the habitual auxiliary verb ée. It fuses with the genitive third person singular subject pronoun *jéen* into *éen*. By contrast, the finite verb *mòoc* 'shoot' of the $k\dot{u}$ -clause does not have the NST form, but a form which expresses a third person singular subject. The singular noun *máaw* 'tsetsefly' in (52.1) is here used with collective meaning and therefore translated as plural.

(52)	1.	k <u>è</u>	щáan	d <u>í</u> it		máa	N	ké
		then	[place.PL.CS1	[be_	big.NST	tsets	efly.sG	PL
		<u>t</u> ín,						
		PRO.ES	S/ABL]]					
		'Then in	n places where tse	etsef	lies are ab	unda	nt, '	
	2.	pwģor		è	dóm		èe	
		[cultiva	te.NMLZ.SG.CS1	of	field.sg.c	EN]	D.SG.HA	AB

⁹ The difference between simultaneous action and consecutive action is discussed in Stassen (1985: 66–70).

	kûur,				
	be_sr	nall.NF			
	'culti	vation becor	nes litt	le,'	
3.	nè	w <u>é</u> et		éen	kóc
	[PRE	P word.SG.	cs1	HAB.NST.3SG.GEN	person.PL
	câam	,			
	eat.N	F			
	'beca	use they bite	e peopl	e'	
4.	kù	тоос	là̯aj.		
	<u>and</u>	shoot.3SG	anima	l.pl]	
	'and s	sting animal	s.' (t.)		

The $k\dot{u}$ -clause in (53.3) is dependent on the reason clause in (53.2), which begins with the conjunction rin 'because'. Again the $k\dot{u}$ -clause adds another reason, as determined by the preceding reason clause. Like the reason clause in (52.3), the reason clause in (53.2) requires the NST form in the finite verb, which is here the perfect auxiliary verb $c\dot{n}$. And again, the finite verb of the $k\dot{u}$ -clause, $d\hat{g}om$ 'catch', does not have the NST form, but the inflectionally unmarked form before the subject kèeec \dot{e} w $\hat{u}un$ 'his father's spiritual strength'.

(53)	1.	à=c <u>è</u> n	ràn		dàl	
		$D.SG = not_h$	ave [pe	rson.SG.CS1	despise	
		lwáŋ	è	màkwèer		è
		[shrine.SG.C	s1 of	Makuer.SG.	CS1.GEN	of
		gòl				
		Gol.SG.GEN]]			
		'Nobody disb	oelieves tł	ne shrine of M	Makuer (s	on of) Gol'
	2.	rìn c <u>í</u> i	wį	<i>ĵun</i>	é	
		because PF	.NST fa	ther.sG.3sG	3sg	
		báar		è,		
		leave_as_inhe	eritance.A	APPL.NF 3S	G	
		'as his father	had left	him it as an i	nheritan	ce'
	3.	kù dộom	kèeed	ç	ė	
		and catch.	AP [be_l	oitter.NMLZ.S	G.CS1 d	of

wậunệjégwậop.father.SG.3SG][PREP3SGbody.SG]'and as his father's spiritual strength empowered him.' (t.)(Lit. 'and bitterness of his father catches on his body')

6.2.3 Dependence on an adverbial clause with the conjunctive particle $k \not\in \sim \not\in$ 'while' or the conjunction à 'until'

The $k\dot{u}$ -clause in (54.4) is dependent on the temporal clause in (54.3), which begins with the conjunctive particle \dot{e} ($\sim k\dot{e}$) 'while' expressing simultaneity. This adverbial clause follows the main clause in (54.2), which itself is preceded by the temporal clause in (54.1). Like its controller in (54.3), the $k\dot{u}$ -clause describes an activity which did not take place at the same time as the situation described by the main clause (54.2). The $k\dot{u}$ -clause is followed by a temporal clause in (54.5), which expresses the time period over which the state-of-affairs in the preceding three clauses took place. The $k\dot{u}$ -clause in (54.4) is an example of one which does not have consecutive meaning since the state-of-affairs which it expresses is simultaneous with that of its controller (54.3).

- (54) 1. *nàa cé kwèeeŋ tòok,* when PF swear.NMLZ.SG finish.NF 'When swearing had ended,'
 - 2. $k\dot{g}$ $k\dot{j}c$ $\dot{a}a = r\dot{g}ccr$ then person.PL D.PL = stay 'then people stayed separate'
 - 3. <u>é</u> kè c<u>è</u> d<u>ê</u>ek,
 [while 3PL NEG drink.AP
 'without drinking' (Lit. 'while they do not drink')
 - 4. kù cè kè mîit tèen tók, and NEG 3PL eat [place.SG.CS2 one.ESS/ABL]
 'and eating together' (Lit. 'and they do not eat in one place')
 - 5. àgút tệ táok pàj [until when end.NST [month.PL

kâa dètém. 3PL.QUANT six]]] 'until the end of six months.' (t.)

The word sequence $k\hat{e} c\hat{e}$ in (54.3) is reversed to $c\hat{e} k\hat{e}$ in (54.4). This is because the short pronoun $k\hat{e}$ 'they' has to occur after the first of one or more preverbal particles, and while the conjunction \hat{e} counts as a particle, the conjunction $k\hat{\mu}$ does not.

The $k\dot{u}$ -clause in (55.3) is controlled by the temporal clause in (55.2), which begins with the conjunction \dot{a} 'until'. This temporal clause is preceded by the main clause in (55.1). Like its controller, the $k\dot{u}$ -clause describes the time limit of the situation denoted by the main clause.

(55)	1.	t <u>è</u>		dậ	$k = \grave{e}e$	
		[place	e.sg.cs1	other.ESS/ABL]	then = D.SG.	be
		mwòɔı	r <u>è</u>	wòŋ	èn	
		[bull.s	sg.cs1 o	f cow.sg.gen]	3SG	
		à=lár	n			
		D.SG=	= curse.UN	SP		
		'Some	times it is	a bull which is	cursed'	
	2.	à	b <u>è</u>	wàr	cwáat	pìn
		until	fut.3sg	cowdung.PL	throw.CF.NF	down.ALL
		'until i	it throws	down dungs'		
	3.	kù	lèeec.			
		<u>and</u>	urinate.3	BSG		
		'and u	rinates.' (t.)		

6.2.4 Dependence on an adverbial clause with the future auxiliary verb bé (FUT)

The $k\dot{u}$ -clause in (56.3) is controlled by an adverbial clause in (56.2) beginning with the future auxiliary verb $b\dot{g}$, which is grammaticalized as an expression of purpose or result. Thus, like the $b\dot{g}$ -clause, the $k\dot{u}$ -clause expresses a result of the state expressed by the main clause (56.1). (56) 1. $kw = \dot{a}p\dot{a}ac$ ée сé and = floating swampgrass.SG D.SG.PST PF wèeet è bàaai kàw home.SG back.SG] arrive.CP.NF [PREP 'and floating swampgrass had come to inhabited area' 2. bé ш*э*k âa nwàt, FUT COW.PL.GEN graze.AP.NF HAB.NF

'so that cows pastured'

3. kù dệek-kỳ ỳ wút cóok.
<u>and</u> drink.AP-3PL [PREP cattle_camp.SG foot.SG]
'and drank water around the cattle camp.' (t.) (Lit. 'and they drink at the foot of the cattle camp')

6.3 Dependence on a relative clause

A $k\underline{\dot{u}}$ -clause may also be dependent on a relative clause, in which case it is interpreted as having the same function as the relative clause. This situation is exemplified in (57)–(59).

The kù-clause in (57.2), kù gòoon kóc, which literally means 'and she accommodates people', is dependent on the relative clause in (57.1), *è kòc lôoor è dôol* 'who receives people with laughter', which itself modifies *tin* 'woman'. What is relativized on in (57.1) is the subject, and a relativized subject is not represented in the relative clause. The $k\hat{y}$ -clause has a third person subject which is coreferential with the relativized subject in (57.1), and it is represented in the finite of a relative clause. However, using Comrie's (1981: 136) functional definition of the notion relative clause, the $k\hat{u}$ -clause (57.2) has the same function as the relative clause in (57.1) in that it restricts the potential range of referents of tiŋ 'woman', the head of the relative clause. Moreover, the noun phrase in (57.1) and the $k\hat{u}$ -clause in (57.2) form a constituent, in that they together constitute an objecttopic of the declarative main clause (57.3), here translated as passive. (57)

7)	1.	tíŋ	è	kòc	lôoor
		[woman.SG.CS1	[HAB	person.PL	receive.NF

	è	dîɔl						
	[PREP	laugh.NMLZ.SG]]]						
	'A wom	woman who receives people with laughter'						
2.	kù	gòɔɔŋ		kśc,	,			
	<u>and</u>	accomm	odate.3sG	per	son.PL			
	'and provides for people'							
3.	à=jée		bâaaj		ņjâaar	kù		
	D.SG =	HAB.NST	home.SG.GEN		love.nf	and		
	pàaan = d-è.							
	in_laws.sG.Cs2=sG-3sG 'is liked by people and her in-laws.' (t.)							

The relative clause tjáaak ké nin è wàar 'which is near the tributary' in (58.3) has a relativized subject and is headed by the noun tè 'place'. It is followed by the $k\hat{u}$ -clause in (58.4), which literally means 'and rains rain very much there'. This clause has a covert adjunct as shown by the fact that the finite habitual auxiliary verb has the NST form jée rather than the inflectionally unmarked form jèe before the subject deen 'rains' of the intransitive main verb tween 'rain'. The covert adjunct has a locative function as shown by the fact that it is resumed by the essive/ablative pro-adverb *tin* 'there' in the same way as a topicalized location adjunct is in an NP-initial clause (Andersen 1991: 282-283, 290). This covert location adjunct is coreferential with the head noun tè 'place' of the relative clause; so like the relative clause in (58.3), the $k\hat{u}$ -clause in (58.4) has the function of restricting the potential range of referents of this noun. Another $k\dot{u}$ clause follows in (58.5) with the same function, and the third person singular subject expressed in the verb $n \partial 2\eta$ 'have' also anaphorically refers to tè 'place'.

- (58) 1. *góo djàar gâam,* SEQ.NST woman.PL accept.NF 'Then the women accepted it'
 - 2. kù uloot-kỳ tỳ mèc and move.CF-3PL [place.SG.CS1 be_far.ALL] 'and they moved to a remote place,'

- 3. tjáaak ké tè nìn [be near.REC COM tributary.sg.cs1 place.sG.Cs1 è wàar, river.SG.GEN] of 'an area which was near the tributary' twÈEN 4. kù iée dêen tín and HAB.NST rain.PL rain.NF PRO.ESS/ABL àpêej, very much 'and in which there were heavy rains' (Lit. 'and rains rain very much there')
- 5. kù nòoŋ mîiit êe câam.
 <u>and</u> have.3SG food.PL.CS1 [HAB.UNSP eat.NF]
 'and which had enough food to eat.' (Lit. 'and it has foods which are eaten') (t.)

In (59.1), the noun $k\underline{k}$ 'thing' is modified by a relative clause. This noun semantically instantiates a reason (hence an adjunct) for the main verb $b\underline{\hat{k}}cn$ 'come'. The adjunct status of the constituent which is relativized on is shown by the facts that the finite habitual auxiliary verb has the NST form *ée* before the subject $k\underline{a}ac = c-\underline{j}\underline{k}$ 'my people' and that the non-finite main verb $b\underline{\hat{k}}cn$ 'come' is intransitive so that the constituent relativized on cannot be an object. The following $k\underline{\hat{u}}$ -clause in (59.2), which literally means 'and they die', has the same restrictive function as the preceding relative clause, an interpretation which is supported by the fact that the NP in (59.1) and the $k\underline{\hat{u}}$ -clause in (59.2) together constitute the topic of the declarative clause in (59.3). This topic is the object of the main verb $p\underline{\hat{n}}ic$ 'know' in the complement clause in (59.4), which itself is the object of the verb *wj\underline{\hat{e}}ec* 'I want' in the main clause in (59.3).

(59)	1.	k <u>é</u>	ée	káac = c-j <u>è</u>		
		thing.SG.CS1	[HAB.NST	person.PL.CS2.GEN = PL-1SG		
		lờ	bậɛn	róoor		
		go_and_do.NF	come.NF	bush.LOC]		
	'The reason why my people come from the bush					

- 2. kù tów-kì and die-3PL
 'and die' (Lit. 'and they die')
- 3. $k = \dot{a} = wj \dot{e}c$ AFF = D.SG = want.1SG 'I want'
- 4. bà nîic.
 [FUT.1SG know.NF]
 'to know.' (t.)
- 6.4 Dependence on a dependent kù-clause

As seen in (58) in section 6.3 above, a dependent $k\dot{\mu}$ -clause may be preceded by another dependent $k\dot{\mu}$ -clause whose function it shares. Other examples of a dependent $k\dot{\mu}$ -clause being controlled by a dependent $k\dot{\mu}$ -clause are seen in (60)–(63).

Sentence (60) consists of an independent clause in (60.1) and three following $k\dot{u}$ -clauses. The independent clause is declarative and starts with the sequential auxiliary verb in its third person singular subject form $g\dot{o}o$. Each of the following $k\dot{u}$ -clauses describes a new event in the event line of the narrative, and their verbs express a third person subject, which is coreferential with the subject expressed by the finite verb in (60.1).

- (60) 1. *gòo kwèec*, SEQ.3SG refuse.NF 'Then he refused,'
 - 2. kù lòom tòŋ kù páal, and take.3SG [spear.SG and knife.SG]
 'and took a spear and a sword,'
 - 3. kù jóɔɔt è màtjàaŋ kàw,
 <u>and</u> jump.CF.AP.3SG [PREP horse.SG back.SG]
 'mounted the horse'

4. kù ŋŷɔr twèeŋ.¹⁰
<u>and</u> lead.AP.3sg front.ESS/ABL
'and led.' (t.)

A similar example is seen in (61), but here the subject of the sequential auxiliary verb is expressed by the noun phrase $w \hat{u} un t \hat{z} \partial k$, which literally means 'father of the goat'.

- (61) 1. góo wùun từ ck bậcn, SEQ [father.SG.CS1 goat.SG] come.NF 'So the owner of the goat came'
 - 2. kù jó>t àwán êe jéţ,
 and raise.CF.3SG fox.SG [PREP.3SG neck.SG]
 'and put the fox on his shoulder'
 - 3. kù μệεţ bàaaj.
 <u>and</u> take.CF.3SG home.LOC
 'and took it home.' (t.)

Somewhat similar is also sentence (62). After the temporal clause in (62.1) comes the main clause in (62.2), which is a declarative clause beginning with the particle $k\underline{\hat{e}}$ 'then' and whose finite auxiliary verb $j\partial l$ 'do then' has no proclitic declarative marker and therefore describes a past event (cf. section 5.1.1). This clause is followed by six dependent $k\underline{\hat{u}}$ -clauses, which continue the event line. Three of these $k\underline{\hat{u}}$ -clauses, (62.3), (62.5) and (62.6), also use the auxiliary verb 'do then', but here with the third person singular form $j\partial 2l$. As seen in (62.4), a dependent $k\underline{\hat{u}}$ -clause may include a subordinate clause such as a temporal clause beginning with the conjunction a 'until'. However, the following $k\underline{\hat{u}}$ -clause in (62.5) is not dependent on that clause, but on the matrix part of the $k\underline{\hat{u}}$ -clause.

(62) 1. wán céen é téeem ról when PF.NST.3SG.GEN 3SG cut.NF throat.SG 'After he had slaughtered it,' (Lit. 'when he had cut its throat')

¹⁰ The verb $\eta \hat{j} \sigma r$ 'lead' in (60.4) seems to have an irregularly formed antipassive stem.

2.	k <u>è</u>	J <i>રો</i>	k <u>é</u> =	=d-è		jâ	aaŋ,				
	then	do_then	thiı	ng.SG.CS	2 = sG-3sG	G sk	in.NF				
	'then he skinned it (Lit. 'his thing')'										
3.	kù	JÌ		лòр,							
	<u>and</u>	do_then.3	BSG	roast.A	P.NF						
	'and t	hen he roa	sted'								
4.	kù	cwệet	(à	b <u>è</u>	kwèe	eţ,				
	<u>and</u>	eat.AP.3s	G	[until	fut.3sg	be_s	atiated.NF]				
	'and l	ne ate until	he b	became s	atiated'						
5.	kù	<i>з</i> эл		r <u>ì</u> iŋ		kàk					
	<u>and</u>	do_then.3	SG	[meat.I	PL.CS1	othe	er.PL]				
	tîir,										
	cut_i	nto_stripS.N	F								
	'and t	hen he cut	the	rest of tl	ne meat in	to str	rips'				
6.	kù	зэ̀эl		jòom	kàk		лôор,				
	<u>and</u>	do_then.3	SG	[bone.F	PL other	.PL]	roast.NF				
	'and t	hen roaste	d sor	ne bone	s'						
7.	kù	cwèet	kè,								
	<u>and</u>	eat.3sg	3pl								
	'and a	ate them'									
8.	kù	géem		k <u>à</u> k.							
	<u>and</u>	give.CF.38	SG	other.P	L						
	'and g	gave away s	some	e bones.'	(t.)						

The $k\dot{u}$ -clause in (63.2) is dependent on the preceding temporal clause (63.1) that begins with the conjunction $n\dot{a}a$ 'when, if'. This $k\dot{u}$ -clause is followed by another $k\dot{u}$ -clause in (63.3), which, like the first $k\dot{u}$ -clause, must be interpreted as having the same temporal or conditional function as the adverbial clause in (63.1). These three clauses are followed by the main clause in (63.4), whose covert plural topic is coreferential with *wéew reen cé doon* 'a little money left' in (63.3).

(63)	1.	nàa	сé́	ņòm	è	gìl
		[when	PF	[head.SG.CS1	of	clan.SG.GEN]

	mwòo	r щâaac,			
	bull.s	G buy.CF.	NF		
	'When	n the clan le	eader had sold	the bull,'	
2.	kù	càatáp	gậur,		
	<u>and</u>	PF.3SG.tax	.SG close.NF	7	
	'and h	nad paid the	e tax,'		
3.	kù	nòɔŋ	wéew	rèen	c <u>é</u>
	<u>and</u>	have.3sG	[money.PL.CS	s1 two.cs1	[PF
	dậoŋ,				
	rema	in.NF]]]			
		f there was ey which re	a little money mained')	left,' (Lit. 'an	d it has two
4.	k=á	a=dúuk		ràn	nờŋ
			urn.APPL.3SG	person.SG.C	s1 [have
	mwòo	or.			
	bull.s	G]			
	'he w	ould give it	back to the ov	wner of the bu	ll.' (t.)

7 Reduced TAM marking

As seen in section 6, a $k\dot{u}$ -clause does not by itself have any illocutionary force and does not by itself indicate its semantic function in the overall sentence. Rather, it must be interpreted as having the same illocutionary force or semantic function as the clause on which it is dependent. Very often, moreover, a $k\dot{u}$ -clause also has fewer markers of tense, aspect and mood (TAM) than its controller, but again is to be interpreted as having the same tense, aspect and mood as that clause. This fact is exemplified in the following subsections for the past tense particle (section 7.1), the irrealis particle (section 7.2), the habitual auxiliary verb (section 7.3), the future auxiliary verb (section 7.4), and the perfect auxiliary verb (section 7.5). That the declarative marker is not repeated in a dependent $k\dot{u}$ -clause was shown in section 6.1.1. In the following examples, the relevant instances of TAM markers and of $k\dot{u}$ are underlined in the interlinear translation.

7.1 Past tense particle (PST) not repeated

The past tense particle $\underline{\dot{e}}$ or $\underline{\acute{e}}$ in a controlling clause is not repeated in a dependent $k\underline{\dot{u}}$ -clause, as exemplified in (64). This particle occurs in the declarative main clause in (64.1), where it fuses with the plural declarative marker into da. Here the past tense particle makes its clause denote a past state as opposed to a present state. The dependent $k\underline{\dot{u}}$ -clauses in (64.2) and (64.3) must also be interpreted as describing past states, but the past tense particle is absent in them. So, the main clause not only determines the interpretation of the illocutionary force of the $k\underline{\dot{u}}$ -clauses, but also their temporal interpretation.

- (64) 1. $b \not{\epsilon} c j = k \dot{e} e n$ $\dot{a} k \dot{e} t j \not{a} a a k$ home.PL.CS2=PL-3PL D.PL.<u>PST</u> 3PL be_near.REC 'Their homes were near each other,'
 - 2. kù níc-kè cèn and do_properly-3PL inhabit.AP.NF káam=k-éen, gap.PL.CS2=PL-3PL 'and they lived in harmony,' (Lit. 'and they inhabited properly in their gaps')
 3. kù jée-kè kwáat tòk.
 - <u>and</u> be-3PL clan.SG.CS2 one 'and they were one clan.' (t.)

The same phenomenon is seen in (65). The declarative main clause in (65.1) has three TAM markers, namely the declarative proclitic (D.PL), the past tense particle (PST), and the perfect auxiliary verb (PF), and it describes a resultative past state. The $k\dot{\mu}$ -clause in (65.2) must also be interpreted as describing a resultative past state, but only the perfect auxiliary is repeated, while the past tense particle is not.

(65) 1. kù ròọt áa kè cé and hippopotamus.PL D.PL.<u>PST</u> 3PL PF djèt àpêcj, bear.AP.NF very_much 'And hippopotami had multiplied in great number,'

2. kù cé tòoc pjàat àrêet.
 <u>and</u> PF swamp.SG.GEN be_good.NF very_much 'and the swamp had become very nice.' (t.)

7.2 Irrealis particle (IRR) not repeated

The irrealis particle $d\underline{k}$ in a controller clause is also not repeated in a dependent $k\underline{n}$ -clause, as exemplified in (66). This particle occurs in the declarative main clause in (66.2) together with the past tense particle \underline{e} (here fusing with the plural declarative marker into da) and the perfect auxiliary verb $c\underline{e}$. The clause describes a counterfactual past event which would have taken place if the condition described by the adverbial clause in (66.1) had obtained. None of the three TAM markers in (66.2) are repeated in the dependent $k\underline{n}$ -clause in (66.3), which nevertheless must be interpreted as an additional counterfactual past event.

- (66) 1. *nàŋ é cé mwôol,* if PST PF stay.NF 'If he had stayed,'
 - ràp áa kè dè cé tòok, sorghum.PL D.PL.PST 3PL <u>IRR</u> PF finish.NF 'sorghum would have finished,'
 - 3. kù dộoŋ ké cók. and remain.3SG [COM hunger.SG]
 'and he would have remained hungry.' (Lit. 'and he remains with hunger')

The same pattern is found in (67). In (67.1), which is a declarative clause embedding a complement clause beginning with the complementizer *lán*, the irrealis particle $d\dot{e}$ occurs in combination with the preceding *ée*, which is a fusion of the singular declarative marker \dot{a} and the past tense particle \underline{e} . To the counterfactual past situation described by this clause is added another counterfactual past situation expressed by the dependent $k\dot{\mu}$ -clause in (67.2), although none of the TAM markers are repeated here.

(67)	1.	[]	ée	d <u>è</u>	njèec	lán
		[]	D.SG.PST	<u>IRR</u>	know.1sG	[COMPL

éen ké bź cíin not have.NST 3SG.GEN thing.SG.CS1 [come $\acute{e} = t\acute{\epsilon}\epsilon n$, DEM = place.SG.CS1.DEM1.SG]] [...] I would have known that there is nothing coming here.' 2. kù tàa è wé iìiic.

<u>and</u> be_present.1SG [PREP [2PL stomach.PL]] 'and I would have been among you.' (t.)

Example (67), together with (68) just below, are from a marriage negotiation party in which an interpreter (an agaamloon in Dinka) repeats more loudly, clause by clause, what the speakers say and at the same time often rewords the clauses according to his interpretation. Passage (67) is from the turn of one of the speakers, who utters both (67.1) and the dependent ku-clause in (67.2). Then (67.2) is rendered by the interpreter as the independent clause in (68). This independent clause includes both the declarative marker a and the past tense particle, fused into *ée*, and the irrealis particle dk, just as in (67.1), so it is clear that the agaamloon interprets (67.2) as having the same TAM as (67.1).

(68) ée μà dè cé pùc
D.SG.PST 1SG IRR PF sit.NF
lòŋ = tµ̂uuj.
side.SG.CS1 = DEM3.ESS/ABL
'I would have sat on the other side.' (t.)

7.3 Habitual auxiliary verb (HAB) not repeated

The habitual auxiliary verb $\dot{e}e$ in a controller clause is not repeated in a dependent $k\dot{\mu}$ -clause. This is the case whether the controller is, for instance, a declarative clause (69)–(70), a relative clause (71), or a purposive clause (72).

The habitual auxiliary verb occurs in the declarative clause in (69.1), where it fuses with the singular declarative marker as $\dot{e}e$ and describes a habitual action of the fox. The dependent $k\dot{\mu}$ -clause in (69.2) describes a subsequent habitual action, but the habitual auxiliary verb is not repeated.

- (69) 1. èe tàc,
 D.SG.<u>HAB</u> lie.NF
 'It lies down'
 2. kù dèɛŋ è tàr.
 - and project.3SG [3SG pair_of_buttocks.SG] 'and projects its anus.' (t.)

In (70.1), the habitual auxiliary verb also occurs in a declarative clause, where it fuses with the short third person plural pronoun $k\hat{e}$ into $k\hat{e}e$. Unlike in (69.1), it here occurs in combination with the past tense particle expressed together with the plural declarative marker in da. The following $k\hat{u}$ -clause in (70.2) contains neither of these TAM markers, but like (70.1) it refers to a past habitual situation.

(70) 1. r\u00e90t otimus.PL 0.PL.PST 3PL.HAB river_bed.PL w\u00e9ec, dig.NF
'Hippopotami used to dig river beds'
2. k\u00e9 d\u00e9oor-k\u00e9 p\u00e9\u00e9in n\u00e9in k\u00e9 p\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9 p\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9 p\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9 c\u00e9\u00e9\u00e9in k\u00e9\u00e9\u00e9\u00e9in k\u00e9\u00e9\u00e9\u00e9in k\u00e9\u00e

'and join tributaries with the river.' (t.)

The relative clause in (71.2) is headed by tin 'woman' in (71.1) and begins with the habitual auxiliary verb, which here has the lowtoned form k with breathy voice quality. The dependent kk-clause in (71.3) has the same function as (71.2), restricting the potential range of referents of tin 'woman' with a proposition referring to a habitual situation, but it does not repeat the auxiliary verb.

(71) 1. $kw \dot{a} a = n j \dot{a} a r$ $t \dot{n}$ clan.SG D.SG = love woman.SG.CS1 'The family loves a woman' 2. \dot{e} $m \dot{o} o o c$

[<u>HAB</u> give.AP.NF

'who receives them with hospitality' (Lit. 'who gives')

3. *k*^{*i*}_{*i*} *tèeek ké*. <u>and</u> respect.3SG 3PL] 'and respects them.' (t.)

The purposive clause in (72.3), which begins with the future auxiliary verb in its third person singular form $b\overset{2}{\varrho}$, includes the habitual auxiliary verb in its non-finite form $\hat{a}a$, but this verb is not repeated in the $k\overset{1}{\varrho}$ -clause in (72.4). Semantically, however, (72.4) is within the scope of $b\overset{2}{\varrho}$ of the preceding clause. The singular nouns $nw\overset{2}{\varrho}ccr$ 'Nuer' (72.1), $mw^{2}ond^{2}an$ 'Dinka' (72.3) and won 'cow' (72.4) are here used with collective meaning.

- (72) 1. nàa ló nwèser uègeet àgàaar, when go_and_do Nuer.SG arrive.CP.NF Agar.ALL
 'When the Nuer came to Agar land,'
 - 2. kġ mɛɛt tôɔɔŋ
 then mix.MID.CF war.LOC
 'they participated in the war'
 - 3. bè mwôɔŋɨàaŋ âa nônk
 FUT.3SG Dinka.SG <u>HAB.NF</u> kill.NF
 'in order to kill Dinka'
 - 4. kù pèeec wóŋ.
 <u>and</u> kidnap.3SG cow.SG
 'and raid cattle.' (t.)

In (73), the first clause (73.1) is an order in which the habitual auxiliary verb occurs in the second person plural form $j\dot{a}a$ - $k\dot{a}$. The following $k\dot{u}$ -clause in (73.2) has the same illocutionary force, but lacks the habitual auxiliary verb of the first clause, so it is presumably a dependent clause rather than an independent clause.

- (73) 1. jáa-kà lậɔŋ tế=d-wóon, <u>HAB-2PL</u> pray.AP.NF place.SG.CS2.ESS/ABL=SG-2PL 'You must pray in your place'
 2. kù lậɔŋ-kù tế=d-à.
 - and pray.AP-1PL place.SG.CS2.ESS/ABL=SG-1PL 'and we must pray in our place!' (t.)

Although the habitual auxiliary verb is not repeated in a dependent $k\dot{\mu}$ -clause, such a clause may itself introduce this auxiliary verb, as

seen in (74). The sequential declarative clause in (74.1) does not include the habitual auxiliary verb, but the following $k\underline{n}$ -clause in (74.2) does, here in the high-toned form \underline{e} with breathy voice quality. Another example is seen in (58.4) in section 6.3 above.

- (74) 1. góo tớŋ ŋwòɔt=ġ ló twêeŋ
 SEQ war.SG.GEN CONT.NF[=while go front.ALL]
 'So the war still continued,'
 - 2. kù cè kòc é róot táan.
 and NEG person.PL HAB self.PL hand_over.CF.NF
 'and people did not surrender.' (Lit. 'and people do not hand themselves over') (t.)

7.4 Future auxiliary verb (FUT) repeated or not repeated

Unlike the habitual auxiliary verb, which is not repeated in a dependent $k\dot{\mu}$ -clause, the future auxiliary verb $b\dot{g}$ (FUT) varies between being repeated and not being repeated. It is not clear what determines this variation, which is illustrated in (75)–(76). In both sentences, the first clause is declarative with the future auxiliary verb making reference to a future situation, but while the auxiliary is not repeated in the $k\dot{\mu}$ -clause in (75.2), it is repeated in the $k\dot{\mu}$ -clause in (76.2).

- (75) 1. $\eta \dot{\epsilon} k$ $\dot{a} = b \dot{\epsilon}$ $j \hat{a} a$ $b \dot{\epsilon} \epsilon n$, each.SG D.SG = <u>FUT</u> HAB.NF come.NF 'Each will come'
 - 2. $k\dot{\mu}$ tèeem $t\dot{e}=d-\dot{e}$. <u>and</u> cut.3SG place.SG.CS2=SG-3SG 'and book his place.' (Lit. 'and he cuts his place') (t.)
- (76) 1. $k = \dot{a} = b\hat{a}$ $n\hat{c}ok$, AFF = D.SG = <u>FUT.UNSP</u> kill.NF 'He will be killed,'
 - 2. kù bậi tòn àamàaal jâal and FUT.UNSP bull.SG.CS1 of.sheep.SG do_then.NF

pâaaj. remove.CF.NF 'and the ram will be taken away.' (t.)

Note also that the future auxiliary verb, like the habitual auxiliary verb, may be used in a dependent $k\underline{\hat{u}}$ -clause even if it is not used in the controller. This is seen in (77), where the controller of the $k\underline{\hat{u}}$ -clause in (77.3) is the temporal clause in (77.2).

- (77) 1. $\dot{a} = c \dot{e} n$ ràn dèk è D.SG = not haveperson.SG.CS1 [HAB drink.AP.NF ké parwaaj = d-ein laws.SG.CS2 = SG-3SG] COM 'Nobody drinks with his in-laws' 2. àqút tè 1éee rwàaaj tòok when go and do.NST until marriage.SG end.NF 'until marriage is over,'
 - 3. kù bé párwâaj = d-ù í
 and FUT in_laws.SG.CS2.GEN = SG-2SG 2SG
 jàal wêer pîiiw.
 do_then.NF sprinkle.APPL.NF water.PL
 'and your in-laws will sprinkle you with water (as an introduction to eating with in-laws).' (t.)

7.5 Perfect auxiliary verb (PF) repeated or not repeated

When the perfect auxiliary verb $c\underline{\acute{e}}$ (PF) is used as a perfective past tense marker together with the non-finite auxiliary verb $b\underline{\grave{a}}n\underline{\acute{e}}$ 'come and do' in the controller, neither of these auxiliary verbs are repeated in the $k\underline{\grave{u}}$ -clause. An example of this is seen in (78), where the declarative clause in (78.1) controls the $k\underline{\grave{u}}$ -clause in (78.2).

(78)	1.	kîɔc			wận	kέ	Èєр	kù		ràn	
		[[per	son.PL.C	s1	Р2	tr	avel]	[and	l	person.SG.CS1	L
		é	kwàaț	rjà	aj		àa=0	cé	bàn	é	
		PST	drive	pla	ane.SG]]	D.PL	= <u>PF</u>	<u>con</u>	ne and do.NF	

ţòw,

die.NF

'The passengers and the pilot died,' (Lit. 'The aforementioned people who travelled and the person who was driving the plane died')

2. kù pìir màdùl è kwêek.
 <u>and</u> live Madul.SG.CS1.GEN of Kuek.SG 'but MacDonald survived.'

Another example is (79), where the declarative clause in (79.2) controls the $k\dot{\mu}$ -clause in (79.3).

(79)	1.	wận	c <u>ậ</u> i-n <u>è</u>		jè	gâa	m	è		
		when	PF-UNS	SP.CT	3sg	agr	ee.NF	[by		
		râaan		ébán	1,					
		person	.SG.GEN	all]						
		'After i	t was ag	reed u	ybody	, ' ,				
	2.	kòc	àa	=c <u>î</u> i		bàn	é			kwâan.
		person	erson.PL D.PL = <u>PF</u> .			<u>con</u>	ne_and	IF	pick.NF	
		'people	were no	omina	ted'					
	3.	kù t	êek- <u>è</u>			kè	pìn		bìil	k
		and d	listribut	e.CF-U	NSP	3pl	down.	ALL	[FU	j t.3p l
		ţòk	ı	цậaţ		è	щác	an		
		messag	ge.SG 1	take.C	F.NF	[PREF	p [pla	ace.PI	L.CS	1
		mèc.								
		be_far]]]							

'and were delegated to convey the message to remote areas.' (t.) $% \left(t,t\right) =0$

But when the perfect auxiliary verb is used with perfect meaning in the controller, it is often repeated in the $k\underline{\hat{\nu}}$ -clause. Thus, $c\underline{\hat{e}}$ in the declarative clause in (80.1) is repeated with the second person singular form $c\underline{\hat{a}}$ in the $k\underline{\hat{\nu}}$ -clause in (80.2). And the NST form $c\underline{\hat{i}}$ in the temporal clause in (81.3) is repeated in the $k\underline{\hat{\nu}}$ -clause in (81.4). Other examples are seen above in (42.2), (63.2) and (65.2).

(80)	1	kè iîin	$\dot{a} = c \dot{e}$	làoon	dôon	kòɔɔṯ,			
(00)	1.	•••••••••••••••••••••••••••••••••••••••	$u = c_{L}$ D.SG = PF						
		ken the lav		ne laws ((Lit. Then	you have bro-			
	ŋ		-		à				
	۷.	kù cá	<i>н</i> ••		è e				
			SG [despise	e.NMLZ.S	G.CS1 of				
		ņjàlíc	bâaaj.						
		God.SG.GE	- 0						
		'and disrega	arded sacrile	ge of Goo	d.' (t.)				
(81)	1.	pwàor	à=	=kòŋ	ţ <u>à</u> ok				
		cultivate.N	MLZ.SG D.S	G = do_fi	rst finish	.NF			
		'Cultivation	should take	e place fir	st'				
	2.	bé lwòo	k	kźk	r	ģot			
		FUT [trial	.PL.CS1.GEN	other.	PL.GEN] S	elf.pl			
		bèer	Jîil						
		do_again.N	F begin.M	NF					
		'so that nev	v cases come	e up'					
	3.	tệ cíi	ká	_	dòm-ìc	lwòsk,			
		when PF.	NST [thing.	PL.CS1	field-ESS/A	BL] yield.NF			
			-		when things in the field have				
		yielded')	0		U				
	4.	kù c <u>í</u> i	tísypiii	ı k	:w=àgót				
		and PF.N	<u>st</u> ground	nut.PL a	nd = green	_bean.pl			
		and = bean	.PL [] C	ome.NF	out.CP.ALI	_			
		dòm-ìc.							
		field-ESS/A	BL						
				reen bear	ns, beans ſ.] have come			
		U	ne field.' (t.)		, E	-			

In some cases, however, the perfect auxiliary verb with perfect meaning is not repeated in a dependent $k\underline{\hat{u}}$ -clause; the reason seems to be semantic. An example is seen in (82). In the controlling temporal clause in (82.2), the perfect auxiliary verb $c\underline{\acute{e}}$ indicates a state that has resulted from the event denoted by the non-finite main verb

 $\eta \hat{\epsilon} \hat{\epsilon} \hat{\epsilon} r$ 'collapse'. The absence of the auxiliary verb in the $k\hat{\mu}$ -clause in (82.3) seems to be due to the absence of a resulting state here, as the impersonal transitive verb $l\hat{\epsilon} \hat{\epsilon} \hat{t}$ 'make shiver' denotes an iterative process.

- (82) 1. gòo jâal bậcn tớŋ bận
 SEQ.3SG do_then.NF come.NF [LOC chief.SG]
 'Then he came to the inspector,'
 - ké cé jíc ŋèεεr,
 while PF stomach.SG.EP collapse.NF
 'scared,' (Lit. 'while his stomach has collapsed')
 - 3. kù lêɛt.
 and shiver.3sG
 'and he trembled.' (Lit. 'and it makes him shiver') (t.)

As with the other auxiliary verbs, a dependent $k\dot{u}$ -clause may itself introduce the perfect auxiliary verb, as exemplified in (83.4). This $k\dot{u}$ -clause is dependent on the temporal clause in (83.3), which has no perfect auxiliary verb. The perfect auxiliary verb in (83.4) indicates a state resulting from the event of moving to a sitting position.

(83) 1. nàa wán à péeec, when when ? wake up.3sG 'When he woke up,' 2. kè tùrùmbíl è bàn tìŋ then [car.sg.cs1 of chief.SG.GEN] see 'then he saw the inspector's car' 3. ké kâaac while stand 'standing' 4. kù cé ké bàn nùc and PF chief.SG.GEN sit.NF ГСОМ kôc cáat ké iè. person.PL.CS1 [walk [COM 3sg]]] 'and the inspector himself sitting with those escorting him.' (t.)

8 Conclusion

As shown in this article, Dinka has a coordination construction in which a clause with dependent status is coordinated with a preceding clause by means of the conjunction $k\dot{\mu}$ 'and'; we have seen that $k\dot{\mu}$ is also used for coordinating both noun phrases and independent clauses. The dependent $k\dot{\mu}$ -clause is dependent in the sense that, in itself, it does not express any particular semantic function, but is interpreted as having the same semantic function as its preceding coordinand, which thus controls the interpretation of the $k\dot{\mu}$ -clause. To a large extent, a dependent $k\dot{\mu}$ -clause also has fewer markers of tense, aspect and mood (TAM) than its coordinand, but again it is interpreted as having the same TAM as that clause. Since a dependent $k\dot{\mu}$ -clause is not subordinate, it falls into the category that Foley and Van Valin (1984) call cosubordinate, and it belongs to what Longacre (2007) calls initial-consecutive (as opposed to medial-final) chaining structures.

The controlling clause may be of any type semantically and syntactically. Thus, the controlling clause in Dinka is not restricted to being an independent clause. The controlling clause may also be a dependent clause, whether an adverbial clause or a relative clause. By contrast, all dependent $k\dot{u}$ -clauses are structured alike syntactically.

As observed by Stassen (1985: 90) and Longacre (1990), among others, there is a strong tendency for languages with medial-final chaining to be SOV in clause structure and for languages with initial-consecutive chaining to be VSO or SVO in structure. The Dinka language conforms to this tendency since it has both SVO and VSO constructions (but not SOV).

It is generally taken for granted that in order for two (or more) units to be coordinated, they must be of the same type, cf. e.g. Haspelmath (2007: 1). While this condition is clearly fulfilled when $k\dot{\mu}$ coordinates noun phrases or independent clauses, a dependent $k\dot{\mu}$ -clause does not have the same syntactic status as the clause with which it is conjoined (unless the latter is also a dependent $k\dot{\mu}$ -clause). But the sameness condition may be said to be fulfilled semantically, in that the overall construction forces an interpretation of the dependent $k\dot{\mu}$ -clause as having the same semantic function and TAM as its coordinand.

Abbreviations

? morpheme with unidentified meaning, 1PL first person plural, 1SG first person singular, 2PL second person plural, 2SG second person singular, 3PL third person plural, 3SG third person singular, AFF affirmative, ALL allative, AP antipassive, APPL applicative, CAUS causative, CF centrifugal, COM comitative, COMPL complementizer, CONT continuous, CP centripetal, CS1 first construct state, CS2 second construct state, CT having a circumstantial topic, D declarative, DEM demonstrative, DEM1 first person demonstrative, DEM3 third person demonstrative, DIM diminutive, EP externally possessed, ESS/ABL essive/ablative, FUT future, GEN genitive, H shift to high tone, HAB habitual, IRR irrealis, LOC locative, MID middle, NEG negation, NF non-finite, NMLZ nominalized, NP noun phrase, NST having a non-subject topic, P2 time particle: in the distant past of today (as opposed to recent past of today), P3 time particle: earlier than last midnight (possibly hesternal), P4 time particle: long ago, PF perfect, PL plural, PREP multipurpose preposition, PRO proform, PST past, QUANT quantification marker, REC reciprocal, SEQ sequential, SG singular, UNSP unspecified subject.

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