Nominal marking in Northern Tshwa (Kalahari Khoe)¹

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Abstract

Languages of the Khoe family have a complex pronominal system that distinguishes three categories each for person, gender, and number. However, while languages of the Khoekhoe branch and the western subgroup of Kalahari Khoe obligatorily or optionally mark nouns and nominal classifiers for gender and number, the nominal marking system in eastern Kalahari Khoe appears to be undergoing serious reduction. This article discusses data on personal pronouns and nominal gender-number marking in four little-known Northern Tshwa varieties, including data from Tjwao, a severely endangered language spoken by fewer than ten individuals in western Zimbabwe. We analyse personal pronoun use, case distinctions and nominal marking, focussing on characterising features and commonalities shared across the cluster. Our findings show a high degree of uniformity within Northern Tshwa, and at the same time suggest a more complex nominal marking system than was previously assumed for varieties of the Eastern Kalahari Khoe subgroup.

Keywords: Khoe-Kwadi, Eastern Kalahari Khoe, Tshwa, nominal marking, personal pronouns.

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1. Data and methods

The Tshwa dialect cluster forms part of the Khoe language family's Eastern Kalahari branch (Voßen 1997). To date, little data has become available on this highly endangered language, which is spoken on the Eastern Kalahari Basin fringe, along the Botswana-Zimbabwean border. The authors' ongoing research suggests that Tshwa may be divided into a northern and a southern branch, with Northern Tshwa varieties being spoken in northeastern Botswana and western Zimbabwe.

In this article, we focus on four distinct varieties, drawing on both published and unpublished sources, which include data newly collected in the field. An overview of the corpus used in all subsequent discussions is provided in Table 1 below.

Variety	Origin	# of informants	Source
Tjwao	Tsholotsho, Zimbabwe	9	field notes
Tcire-Tcire ²	Tsholotsho, Zimbabwe	1	field notes
Hiechware	Tati River, eastern Botswana	unknown	Dornan (1917)
Glabak'e	Mosetse, Botswana	3	Westphal (1961)

Table 1: Individual sources for Tshwa varieties discussed in this paper

While little is known about the present-day situation of the historical varieties Hiechware and Glabak'e which were described by Dornan (1917) and Westphal (1961), respectively, some background information on Tjwao and Tcire-Tcire may be provided. At present, Tjwao is highly endangered and spoken by no more than ten elderly native speakers in the Tsholotsho area of western Zimbabwe (Phiri 2015). The Tjwao community itself comprises approximately 2,500-3,000 members, most of whom speak the local Bantu languages Ndebele and Kalanga as their mother tongue (Phiri 2015). They live in small, but closely linked, settlements located in areas quite remote from local centres. While the Tjwao report a foraging past and in part preserve their identity as "San", neither hunting nor gathering is customarily practiced by the community members. Memories of a nomadic or semi-nomadic life are absent and it may be assumed that they adopted a settled lifestyle several generations back. Members of the Tcire-Tcire community mostly reside in the Nata area of northeastern Botswana, but regularly interact with the Tjwao in Zimbabwe. Not much is known about their sociolinguistic situation or degree of language endangerment within the community. Our data from Tcire-Tcire was recorded with a speaker from Nata who resided in Zimbabwe at the time of research.

The field study on Tjwao and Tcire-Tcire largely used the qualitative research approach (cf. Creswell 1994:1) characterized by the collection of primary linguistic data by means of elicitation, interviews, corpus study, and participant observation. The authors also drew on the small Tjwao corpus previously collected by the African Languages Research Institute (University of Zimbabwe) and Living Tongues Institute for Endangered Languages (USA). As Tjwao and Tcire-Tcire are no longer used in everyday conversation, the recording of naturally produced speech was not possible during our fieldwork. The data discussed in the following sections are therefore based on elicitation of both the pronoun system and a corpus of

 $^{^{2}}$ A pronominal paradigm and data on possessive constructions in "Cirecire" is available in Chebanne (2009). However, since his data differs in some respects from ours, we have decided not to include it in the present discussion.

grammatical phrases. All interviews were recorded on tape in order to provide a corpus of data that is as comprehensive as possible and that is linguistically accurate. While we acknowledge the preliminary nature of our results, including data gaps which might be filled in the course of future fieldwork, we trust that they do not substantially alter the more general observations on pronouns and nominal marking in Northern Tshwa discussed in the sections below. The data from Hiechware (Dornan 1917) and Glabak'e (Westphal 1961) have been re-transliterated to match the orthography used in this article (see appendix), while the original transcription provided in the respective sources has been retained in the first line. The data from Westphal's Glabak'e recordings was transcribed by the first author, based on the sound files available from the Archives of the University of Cape Town (http://www.digitalcollections.lib.uct.ac.za/ernstwestphal-san-languages). While we acknowledge that lexical tone is distinctive in all Northern Tshwa varieties discussed in this article, more research will be needed to determine the exact number of distinctive tone levels and tone melodies; we have therefore chosen not to mark tone on the examples cited.

This article is structured as follows: we first centre on the personal pronouns, which are characterized by inherent case distinctions (§2). We then provide examples for plural marking and the limited presence of article-like gender-number marking on nouns (§3), and eventually discuss a particular syntactic construction involving a noun followed by a co-referential pronoun (§4). Lastly, we offer a short conclusion and place our findings within the wider frame of the Khoe language family's Kalahari subgroup (§5).

2. Marking of Person, Gender and Number (PGN) in the Northern Tshwa

The Khoe languages are characterized by having three person (1st, 2nd, 3rd), three gender (common, feminine, masculine), and three number (singular, dual, plural) categories. These may be expressed through portmanteau morphemes often referred to as PGN (person-gender-number) markers and can be reconstructed for Proto-Khoe:

	Common	Feminine	Masculine	
1 st	*ti, *ta			
2 nd		*sa	*tsa	Singular
3 rd		*si	*bi	
1 st	*kho -m(u)	*sa -m(u)	*tsa -m(u)	
2 nd	*kho -da -o	*sa -da -o	*tsa -da -o	Dual
3 rd	*kho -da	*sa -da	*tsa -da	
1 st	*ta -e	*sa -e	*!а -е	
2 nd	*ta -o	*sa -o	*!a -o	Plural
3 rd	*nV	*di	*!a -u (> *!u)	

As shown by Güldemann (2014), the Proto-Khoe PGN paradigm can be traced back to a contact-induced restructuring of an older "minimal-augmented" system as found in the more distantly related Angolan language Kwadi. Within the Khoe family, PGNs of the third person also function as obligatory (e.g., Khoekhoe, Naro) or article-like (Khwe, Ts'ixa) noun markers. The nominal marking system is mostly absent in varieties of Shua and Tshwa, where only names and sometimes sex-distinctions appear to be encoded by PGN suffixes attaching to the

noun (see §3 below). However, they are still visible in the languages' pronominal paradigms, as pronouns of the 3rd person are universally formed by attaching the PGNs to a pronoun base (see ex. 1 below). Pronoun bases for the 1st and 2nd person are restricted to Khoekhoe (Hagman 1977), Naro (Visser 2013: 205), Glui-Glana (Collins and Chebanne 2016; Nakagawa 2013, 2017), and possibly some varieties of southern Tshwa (Tsua, Cua; cf. Chebanne and Mathes 2013). A distinction between inclusive and exclusive pronouns for the 1st person dual and plural exists in Khoekhoe (Hagman 1977), Glui-Glana (Nakagawa 2013, 2017), Tsua (Chebanne and Mathes 2013) and Cua (Chebanne 2015). Examples for PGNs as personal pronouns and nominal markers in Kalahari Khoe are provided in (1) below:

- (1) Ts'ixa (Kalahari Khoe; Fehn 2016)
 - a. Pronoun without pronoun base (1st+2nd person) tí kò sá/tsá yábà.
 1sg IPFV 2sg.F / M love "I love you (f/m)."
 - Pronoun with pronoun base (3rd person) b. 'é.m̀ kò **'é.sérà** 'à vábà. 3sg.M **IPFV** 3du.F ACC love "He loves them (two women)." [+specific] nouns c. tvxóā-dzì hóó**-mà** kò 'vนิ้นี้. 'n grass-3sg.M.ACC ACC elephant-3pl.F IPFV eat

"The elephants are eating the grass."

As none of the Northern Tshwa varieties under discussion obligatorily or optionally marks nouns for person or gender, the full paradigm of distinctions is only overt in the languages' pronouns. They display simplex forms in the first and second person, but are complex in the third person, i.e., they consist of a pronoun base 'e. and a suffix. Pronouns of the 1st person dual and plural do not display an inclusive/exclusive distinction. A subset of pronouns displays different forms, reflecting grammatical case: our data suggests the existence of subject (Nominative), object (Accusative) and dependent (Genitive³) forms. The pronominal paradigms of Tjwao, Tcire-Tcire and Glabak'e are provided in Tables 3-5 below; forms for which a case distinction is attested are highlighted. Data from Hiechware was not included, due to the high number of gaps in the data available from Dornan (1917).

³ We here use "genitive" to refer to dependent forms appearing with a nominal head; we thereby follow Nakagawa (1993, 2017) for Glui. Collins and Chebanne (2016: 21) call this series "bare/possessor pronouns".

	(Common		I	eminine		1	Masculine		
	Tjwao	Tjwao Tcire Glaba		Tjwao	Tcire	Glaba	Tjwao	Tcire	Glaba	
1 st	ti, tire	tcire	tcire							
2 nd				ca	ca	ca	tca	tca	tca	Singular
3 rd	'e	'e	'e	'e.ce	'e.ce	'e.ce	'e.be	'e.be	'e.be	_
1 st	khabe	kham	khabe	sabe	sam	sabe	tsabe	tsam	tsabe	
2 nd	kharo	kharo	khao	saro	saro	sao	tsaro	tsaro	tsao	Dual
3 rd	'e.khora/ 'e.khoara	'e.khara	'e.khoa	'e.sara	'e.sara	'e.sa	'e.tsara	'e.tsara	'e.tsa	Duai
1 st	tsi/ tcoa.n(a)	tsia	tsae (>tse)	?	?	se	ka	ka	ka	Diana
2 nd	to/ toa	toa	tao	dzao	?	dzao	kao	?	kao	Plural
3 rd	'e.na	'e.na	'e.nae	'e.dza	'e.dzi	'e.dzi	'e.kua	'e.ku	'e.ku	

Table 3: Subject pronouns (Nominative)

 Table 4: Object pronouns (Accusative)

	(Common		I	Feminine		Ι	Masculine		
	Tjwao Tcire Glaba			Tjwao	Tcire	Glaba	Tjwao	Tcire	Glaba	
1 st	tia	tia	tcira, tcia							Singular
2 nd				ca	ca	ca	tca	tca	tca	Singular
3 rd	'e	'e	'e	'e.ca	'e.ca	'e.ca	'e.ba	?'e.ba	'e.ba	
1 st	khaba	kham	khaba	saba	sam	saba	tsaba	tsam	tsaba	
2 nd	kharo	kharo	khao	saro	saro	sao	tsaro	tsaro	tsao	Dual
3 rd	'e.khora/ 'e.khoara	'e.khara	'e.khoa	'e.sara	'e.sara	'e.sa	'e.tsara	'e.tsara	'e.tsa	Dual
1 st	tsi/ tcoa.n(a)	?	tse.a	?	?	si.a	ka	ka	ka	Dianal
2 nd	?	?	tao	dzao	?	dzao	kao	?	kao	Plural
3 rd	'e.na	'e.ra	'e.nae	'e.dzia	'e.dzia	'e.dza	'e.kua	'e.kua	'e.kua	

Table 5: Dependent pronouns (Genitive)

	C	Common			eminine	e	N	Iasculin	e	
	Tjwao Tcire G∥aba		Tjwao	Tcire	Glaba	Tjwao	Tcire	Glaba		
1 st	ti	tci	tci							
2 nd				ca	ce	ca	tca	?	tca	Singular
3 rd	'e	'e	'e	'e.ci	'e.ci	'e.ci	'e.m	'e.m	'e.m	
1 st	kham	kham	kham	sam	sam	sam	tsam	tsam	tsam	
2 nd	kharo	?	khao	saro	?	sao	tsaro	?	tsao	Dual
3 rd	'e.khora/	?	'e.khoa	'e.sara	?	'e.sa	'e.tsara	?	'e.tsa	Duai
	'e.khoara									
1 st	tsi/	tse	tse	?	?	se	ka	?	ka	
	tcoa.n									Plural
2 nd	?	?	tao	dzao	?	dzao	kao	?	kao	riufal
3 rd	'e.n	'e.n	'e.n	'e.dzi	'e.dzi	'e.dzi	'e.ku	'e.ku	'e.ku	

The existence of two 1st person singular forms *ti* and *tire* in the Tjwao nominative case series cannot be fully explained at this point in time, but following our preliminary hypothesis, *ti* predominates before the imperfective marker *kua*, and *tire* in all other environments (cf. ex. 2a-c below). However, the data shows some exceptions to this rule (ex. 2d), and it is not entirely

clear whether they are due to idiolectal variation, language loss, or to an entirely different reason.

Tjwao

- J · · ·						
(2)	a.	1sg	kua ku IPFV sl	hiver		
		1 ar	n shive	ring.		
	b.	tire	mari	oa	na.	
		189	mone	v ha	ve	
		-	-			
		"I ha	ve mor	iey."		
	c.	tire	yi	•	'yũũ	loo-kaxu-na-ha.
		1sg	DF	ĽΜ	food	end-CAU-J-PRF
		0				
		"l f11	nished t	he too	od."	
	d.	tire	kua	tcii.		
		189	IPFV	be.s	ick	
		0				
		"l ar	n sick."			

In Tjwao, the forms for the first person plural involving tcoa.n(a) probably derive from the noun tcoa 'person' plus the suffix for the 3rd person plural -n(a). They appear frequently in the data, but may constitute a more recent innovation than the rare form tsi, which has cognates in other Khoe languages.

Contact with neighbouring Kalahari Khoe languages may account for two variety-specific deviations from patterns otherwise shared across northern Tshwa: In the 1st person dual, Tcire-Tcire has nominative and accusative forms ending on a bilabial nasal *.m*, while those found in Tjwao and Glabak'e end in *.be/ba*. This peculiarity might be due to close contact with Shua varieties in the Nata area, all of which have 1st person dual forms corresponding to the Tcire-Tcire paradigm given above. In the 2nd and 3rd person dual, the element *-r*- (< *da, cf. Table 2) is absent in Glabak'e. The forms given instead correspond to the 2nd person dual of the southern Tshwa varieties Cua (Chebanne 2014, 2015) and Tsua (Chebanne and Mathes 2013) and might therefore be the result of language contact.

The case distinctions discussed above (Nominative – Accusative – Genitive) are exemplified for the 1^{st} and 3^{rd} person singular for all varieties, including Hiechware, in examples 3-6 below:

Tjwao

(3)	a.	'e.be	kua	kũũ.		
		3sg.M.NOM	I IPFV	go		
		"He is going	.,,			
	b.	'e.m	dun	u tire		<i>∎am-a-ha</i> .
		3sg.M.GEN	voie	ce 1sg.NO	ЭM	hear-J-PRF
		"I have hear	d his vo	ice."		
	c.	ti	kua	'e.ba	тũ	ũ.
		1sg.NOM	IPFV	3sg.M.ACC	see	
		"I see him."				

d. *tshaa ti.a maa.* water **1sg.ACC** give "Give me water!"

Tcire-Tcire

- (4) 'e.ba a. tcire boori-na-hĩ ma 'e.m tcaa.xu 1sg.NOM 3sg.M.ACC tell-J-PST COMP 3sg.M.GEN brother ts'ãã. ke IPFV steal "I told him that his brother steals." lũã-ra ำงนินิ tcũũ-a-ma. b. tcire ke tci 1sg.NOM IPFV **1sg.GEN** child-PL food buy-J-BEN "I buy food for my children." c. k'ao.tco mari tcoa.re 'e.ba ts'ãã-ma-na-xa money 3pl.C.NOM 3sg.M.ACC steal-BEN-J-PRF man 'e.be Buluwayo хии. **3sg.M.NOM** Bulawayo come.from "The man they stole money from comes from Bulawayo." glae-tco tcire d. ke.hĩĩ.a 'e.sa 'e.ce see 1sg.NOM FUT woman **3sg.F.ACC** marry 3sg.F.NOM t'unye beautiful:COP. "The woman I am going to marry is beautiful." Hiechware (5) a. em choo e kwa thoo ebe kwa sha lgoo. 'e kua thũũ 'e.be (?e.)ca 'e.m tcoo kua 3sg.M.GEN heart 3sg.C IPFV hurt 3sg.M.NOM IPFV **3sg.F.ACC** k'ũũ. kill "His heart aches and he kills her" (Dornan 1917: 74) khao eba pha eba |goo b.
 - xao'e.bapaa'e.ba $|k'\tilde{u}\tilde{u}$.leopard**3sg.M.ACC**bite**3sg.ACC**kill"The leopard bites him and kills him"(Dornan 1917: 73)
 - c. nao e are heaha? 'e.are $h\tilde{i}a-ha?$ nao **3pl.NOM** do-J-PRF what "What have they done?" (Dornan 1917: 72) d. ka chi kwa thukaa era moehe. ka thuu.ka mũũ-a-hĩ. tci kua 'e.ra
 - ANT 1sg.NOM IPFV yesterday **3pl.ACC** see-J-PST. "I saw them yesterday." (Dornan 1917: 72)

Glabak'e		
(6) a.	Cçíré kwà ébà mậ	
	tcire kua 'e.ba mũũ.	
	1sg.NOM IPFV 3sg.M.ACC see	
	"I see him."	(Westphal 1961: 34)
b.	Ébé kwà cçĩrà mù	
	' e.be kua tcira mũũ.	
	3sg.M.NOM IPFV 1sg.M.ACC see	
	"He sees me."	(Westphal 1961: 34)
с.	tco-'oo tci.a thee.	
	grain 1sg.ACC give	
	'give me grain!'	(Westphal 1961: recording)
d.	ém hmmá	
	'e.m mhaa	
	3sg.M.GEN head	
	'his head'	(Westphal 1961: 55)
e.	ébé kwà t∫ííkà kwíj̀,	
	'e.be kua tci ka k'ui.	
	3sg.M.NOM IPFV 1sg.GEN OBL speak	
	'He is speaking about me.'	(Westphal 1961: 78)

Apart from the case-dependent forms, Northern Tshwa has yet another set of pronouns to be used in subordinate clauses. They appear to be mostly identical with the dependent genitive forms (ex. 7a), but may display some differences (compare 2sg.M.GEN *tca* and 2sg.M.SUB *tci*, cf. ex. 7b). Use of a different set of pronoun forms in subordinate clauses has also been attested in other Kalahari Khoe languages like Glui-Glana (Collins and Chebanne 2016: 27ff; Nakagawa 2017) and Shua (own data, cf. ex. 7e below), but for the time being, their distribution and function will have to remain a subject of future research.

(7)	a.	'e.m tcii ndzoro.'a 'e.m tcxai-re ka mũũ-ta.
		3sg.M.SUB be.sick after 3sg.M.GEN eye-pl OBL see-NEG.IPFV
		"After he was sick, (he) could not see with his eyes." (Tjwao)
	b.	'ui tci haa ti kua tca tsãã-xu-na-ma.
		evening 2sg.M.SUB come 1sg.NOM IPFV 2sg.M boil-CAU-J-BEN
		"When you come in the evening, I will cook for you." (Tjwao)
	c.	maare 'e.n ũã 'ui ka 'e.ca boori ma
		mother 3pl.C.GEN child evening OBL 3sg.F.ACC tell COMP
		'e.ci ndjuu tcxari.
		3sg.F.SUB house clean
		"The mother tells their daughter in the evening to clean the house" (Tcire-Tcire)
	d.	ebe kwa au em ke kwa khao ka tonaka
		'e.be kua 'au 'e.m ke kua xao ka
		3sg.M.NOM IPFV howl 3sg.M.SUB SUBJ IPFV leopard OBL
		tona ka.
		ask OBL
		"He howls while he begs the leopard" (Hiechware; Dornan 1917: 73)

e.	'e.ma	'aka	k'an.se	xunu	'e.m	loe.
	3sg.M	ANT	INTENS	snore	3sg.M.SUB	sleep
	"He snore	ed loudly w	hile sleeping.		(Nata-Shua, field notes)	

3. Nominal marking

Khoekhoe and western Kalahari Khoe languages are known to mark nouns for person, gender and number. This type of nominal marking is either obligatory, as in Nama (Hagman 1977) and Naro (Visser 2013), or functions as a specific article, as in Khwe (Kilian-Hatz 2008) and Ts'ixa (Fehn 2016). Northern Tshwa has no obligatory nominal marking. The only singular nouns that are occasionally marked for gender and number are personal names and titles, as is exemplified in ex. 8-10 below. More research will be needed to determine whether the masculine and feminine suffixes actually reflect case distinctions (as implied by our glossing) or information-structural properties of the nominal referents.

Tjwao

Tjwa0								
(8) a.	ti	k'un	'e	Msindo-	-be.			
	1sg.GEN	name	3sg.C	Msindo	-sg.M.NO	Μ		
	"My name	is Msind	o."		0			
b.	ti	k'un	'e	Maria -c	e.			
	1sg.GEN	name	3sg.C	Maria-s	g.F.NOM			
	"My name	is Maria.	"					
с.	ti	kua N	Vdlovu -m		'ae	oa kũũ.		
	1sg.NOM	IPFV N	Vdlovu-sg	.M.GE	N home	to go		
	"I go to No		-			•		
	C							
Tcire-Tc	ire							
(9) a.	foromani -l	ba	'e	mĩĩ	та	'ua	tco-are	ke
	headman-s	g.M.ACO	C 3sg	say	COMP	tomorro	w person-pl	IPFV
	phute.xo	'a	k'ae	-				
	court	OBL	meet					
	"Tell the h	eadman (it), that th	e people	e meet at t	he court to	morrow!"	
b.		-ra k		alisi -ba		n gai.		
	DEM chi					sing		
	"Those chi					U		
		· ·						
Glabak'e	•							
(10)	tci	k'on	Maso-	be.				
. ,	1sg.GEN	name	Maso	-sg.M.N	IOM			

Unlike singular nouns, plural nouns are regularly marked by a suffix in all varieties. However, gender is not considered in Northern Tshwa plural marking, and the plural suffixes do not necessarily correspond to the pronominal suffixes of the 3^{rd} person plural. The generic plural marker is a suffix *-r*V, where V may be /e, a, o/. The examples cited below suggest that the difference between *-re* and *-ra* corresponds to a case distinction nominative ~ accusative (ex. 11a-e). However, a clausal object marked by *-re* was found in one sentence from Hiechware (ex. 11f), and *-ra* is attested in an identificational clause from Tcire-Tcire (ex. 11c), so it seems

"My name is Maso"

(Westphal 1961: recording)

possible that information-structural or syntactic properties other than case may trigger the choice of the correct plural marker. For the time being, this has to be considered a topic of future research.

(11)	a.	l'ee kua yaa kika k'oo.xo -re luu-ta.
		fire IPFV burn when animal-pl get.near-NEG.IPFV
		"When the fire burns, the animals do not get near." (Tjwao)
	b.	ηuana glee.tco -re ηko-l'a -ra 'ai-a-ha.
		three woman-pl bucket-pl carry-J-PRF
		"Three women are carrying buckets." (Tjwao)
	c.	pudi -re pata k'are-na-hĩ tci tcaaxu pudi -ra 'e.
		goat-pl road cross-J-PST 1sg brother goat-pl COP
		"The goats that crossed the road are my brother's goats." (Tcire-Tcire)
	d.	isa e kwa tsao pudira goo
		isa e kua tsao pudi -ra k'ũũ
		hyena 3sg.C IPFV many goat- pl kill
		"The hyena catches many goats." (Hiechware; Dornan 1917: 72)
	e.	chi kwa jubera moo
		tci kua djube -ra mũũ.
		1sg.NOM IPFV cattle-pl see
		"I see the cattle." (Hiechware; Dornan 1917: 72)
	f.	ka chi kwa tsao abare maehe
		ka tci kua tsao 'aba -re mũũ -a-hĩ.
		ANT 1sg.NOM IPFV many dog -pl see-J-PST
		"I was seeing many dogs." (Hiechware; Dornan 1917: 63-64)
		(Incentwate, Domai 1917: 05-04)

A dedicated genitive plural suffix is only attested for Tcire-Tcire, although it seems likely it also exists in other varieties. Its absence in our corpus should therefore be considered a gap in the data to be filled by future research.

(12)	tuu	ke	tee	хии -п	'iye	ke	yi.xua	uu.
	rain	IPFV	stop	thing-pl.GEN	all	IPFV	here	come.near
	"When	n the rai	in stop	os, all the (living)	things	come r	near."	(Tcire-Tcire)

An additional suffix *-ro* appears with both subject (ex. 13a-b) and object (ex. 13c) nouns, and is also attested in an identificational clause (ex. 13d). According to Westphal's (1961) field notes on Glabak'e, a morpheme o is used in replies and may hence be related to focus marking. Based on this information, we tentatively suggest that *-ro* might go back to assimilation of a marker o with the plural suffixes *-re/-ra* and correspond to an information-structural property of the referent noun.

(13)	a.	k'ao.tco -ro	xoo-ha	tcxai	ru	kaa	
		man- pl	dry:J-PRI	F firew	vood	collect.firewood	
		"The men c		(Tjwao)			
	b.	ti	kare- ro	kwa	thũũ	-	
		1sg.GEN	foot -pl	IPFV	hurt		
		"My feet hu	ırt."				(Tjwao)

c.	gaiechwa	are chor	oro choah	a					
	glae.tco -c	are teo	oro -ro	tcũũ	-a-ha.				
	woman-p	l bla	anket -pl	buy-	J-PRF				
	"The wor	nen hav	e bought	blanke	ets."		(Hiechwa	re; Dornan	1917: 72)
d.	pudi-re	pata	k'are-n	a-hĩ	tci	tcaa.xu	pudi -ro	<i>`0</i> .	
	goat-pl	road	cross-J-	PST	1sg	brother	goat -pl	?FOC	
	"The goa	ts that c	rossed the	e road	are my	brother's	goats."	(Tc	rire-Tcire)

A gender distinction in plural forms was absent from our data, save for one example from Tcire-Tcire, which has a feminine plural suffix -*dzi* with [+human] referents. Whether gender-specific plural suffixes may also occur in the other varieties cannot be answered with the corpus at hand. However, as Shua displays gender-specific plural marking, it is also possible this feature entered Tcire-Tcire by means of contact.

(14)	maa -dzi	ke	kxan.	
	woman -pl.F.NOM	IPFV	chat	
	"The women are chatt	ing."		(Tcire-Tcire)

In addition to the -rV forms discussed above, all varieties display additional plural markers which appear to be reserved for [+human] or [+animate] referents (cf. also Westphal 1961 field notes on Glabak'e). A suffix *-are* is attested in Tcire-Tcire, Hiechware and Glabak'e, but is absent from our Tjwao corpus:

(15)	a.	k'ao.tco -are ke khai-tcu.	
		man-pl IPFV fight-RCPR	
		"The men are fighting with each other."	(Tcire-Tcire)
	b.	k'aro -are ke tcoba thelela.	
		boy-pl IPFV field water	
		"The boys are watering the field."	(Tcire-Tcire)
	c.	chware e kwa pii ‡khaa.	
		tco -are e kua pii k'aa.	
		person-pl ?3sg.C IPFV milk drink	
		"The people drink milk."	(Hiechware; Dornan 1917: 63)
	d.	g∥aę́t∫hòàrê kwaxóhĩĩ́	
		glae.tco -are kua xo hiĩ.	
		woman-pl IPFV thing do	
		"The women are working."	(Westphal 1961: 45)
	e.	Ébé kwà tſoárè mù	
		'e.be kua tco -are mũũ.	
		3sg.M.NOM IPFV person- pl see	
		"He sees people."	(Westphal 1961: 34)

Tjwao has a further suffix *-rera*, which is attested with the noun 'children' only, but may have a similar distribution as observed for *-are* in the other varieties

(16)	ndjuu	k'ai	oa	lũã -rera	tsũĩ.	
	house	front	LOC	child-pl	be.seated	
	"The c	childre	n are s	sitting in fi	ront of the house."	(Tjwao)

Data on nouns modified by numeral quantifiers is available from Tjwao, Hiechware and Glabak'e. In Tjwao, nouns modified by numeral quantifiers may appear with (ex. 17a) or without (ex. 17b) overt plural marking. If the numeral appears phrase-final, it receives the plural marker, as illustrated by example 17c below.

(17)	a.	<i>baare</i> my.fath	<i>yuna</i> er three		<i>uu-ra</i> se -pl	<i>oana</i> . have				
		"My fat	ther has t	hree hou	ises."					(Tjwao)
	b.	am m	ini	kua	dao	k'are	ti	tcaa.xu	de.	
		two g	oat 1	IPFV	road	cross	1sg.GEN	brother	POSS	
		"The tw	o goats c	crossing	the ro	ad are my	brother's."			(Tjwao)
	c.	yi	lũã ŋur	na -re k	cua	kwele 'o	kũũ.			
		DEM	child thre	ee -pl I	PFV	school LC	DC go			
		"These	three chi	ldren are	e going	g to school	.,,			(Tjwao)

In the corpus from Hiechware, plural marking and quantifiers always co-occur (ex.18a-b). Whether this is a rule or merely the result of a data bias cannot be answered satisfactorily with the data at hand.

(18)	a.	echowe cl	echowe chware chi ‡kama thukaa yaehe.									
		etcowe	tco -are	tci	k'ama	thuu.ka	yaa-hĩ.					
		five	person-pl	1sg.GEN	?to	yesterday	come:J-PST					
		"Five mer	"Five men came to me yesterday." (Hiechware; Dornan 1917: 64)									
	b.	tse na jubesani khoo kohare goaha !goa nyimwa.										
		tse na	djubesan	i gloo ko	(a)xa -re	k'ũũ-a-ha	gloa-'nyim oa.					
		1pl.C ?	four	big zel	ora -pl	kill-J-PRF	mountain-top on					
		"We kille	d four big zel	bras on the	mountair	n." (Hi	echware; Dornan 1917:	64)				
	b.	tse na jub <i>tse na</i> 1pl.C ?	esani ∥khoo k <i>djubesani</i> four	ohare goal <i>i g loo ko</i> (big zel	na !goa ny (<i>a)xa-re ora-pl</i>	yimwa. <i>k'ũũ-a-ha</i> kill-J-PRF	g∥ <i>oa-'nyim oa.</i> mountain-top on	,				

According to Westphal's (1961: 45) field notes, quantifiers and plural markers may not cooccur in Glabak'e:

(19)	t∫hirę ∣am o	tzubęę ó	náá.		
	tcire	am	djubee	onaa.	
	1sg.NOM	two	cattle	have	
	"I have two	o cattle"	1		(Westphal 1961: 45, NB: not dyubeere)

4. Use of co-referential pronouns

While Northern Tshwa varieties do not display optional or obligatory nominal gender marking, they all have a special nominal construction where a subject noun phrase is followed by a personal pronoun agreeing with its head, i.e.,

NP_{SBJ} - PRONOUN_{SBJ} - PREDICATE.

Consider the Tjwao example below:

(20)	[k'aro- ũã] _{NP-SBJ}	['e.be] _{PRO-SBJ}	kua	l'ee	раа-ра.
	boy-DIM	3sg.M	IPFV	fire	kindle
	"The young boy is	s lighting a fire."			

The pronominal co-reference is not obligatory, as there are plenty of sentences where it does not occur. This suggests that there might be an information-structural background to this type of construction: for now, we cautiously suggest a topic construction involving left dislocation of the topical NP and repetition within the clause by a co-referential pronoun.⁴ However, this can only be tested by a careful survey of spoken discourse data, which will hopefully become available in the future.

The 3^{rd} person common gender singular (*')e* appears with both animate and inanimate nouns, but never with [+human] NPs. While examples for (*')e* as a co-referential pronoun were only found in our corpus from Hiechware and Glabak'e, we assume that this is due to a gap in the data, which will be remedied once more data from Tcire-Tcire and Tjwao becomes available.

With animates:

(21) a	a.	jube e kwa tie							
		<i>djube e kua</i> ?/ <i>ii</i> ox 3sg.C IPFV ?be.white	e. ?COP						
		"The ox is white."	.001	(Hiechware; Dornan 1917: 64)					
ł	b.	t∫wíìnì'è kwé wáhà.		(
		tcuini 'e kue oa hãã.							
		crocodile 3sg.C river in EXIST							
		"There is a crocodile in the river."		(Glabak'e; Westphal 1961: 74)					
C	c.	'aba e kua k'εε							
		dog 3sg.C IPFV howl							
		"The dog is howling."	(Glaba	ık'e; Westphal 1961: recording)					
With in	With inanimates:								
(22) a	a.	tsaa e kwa bela							
()		tshaa e kua bela.							
		water 3sg.C IPFV boil							
		"The water is boiling."		(Hiechware; Dornan 1917: 72)					
ł	b.	ts''ấấ ự lkx''án n ỳ							
		ts' $\tilde{a}\tilde{a}$ e $ x'an $ e.							
		steal 3sg.C bad COP							
		"Stealing is bad."		(Glabak'e; Westphal 1961: 76)					
C	с.	yi ii e kari.se k $\tilde{a}\tilde{i}$	e.						
		DEM song 3sg.C INTENS be.nice "This song is very nice."	COP	(Tiwaa)					
		This song is very nice.		(Tjwao)					

⁴ We thank the participants of the African linguistics colloquium at the Humboldt University of Berlin for suggestions on this type of construction, in particular Viktoria Apel and Tom Güldemann whose interpretation is reproduced in this article.

Our corpus contains three instances of a 3^{rd} person common gender plural pronoun *'e.re* used in the co-referential slot. As all of them are from Hiechware, we cannot say with any degree of certainty whether the same pronoun (which deviates from independent 3^{rd} person common gender nominative plural forms attested in the data) also appears in the other varieties. Note that in examples 23b-c, *'e-re* appears with [+human] referents.

(23)	a.	jubera ere kwa Ikhoo						
		djube-ra	'e.re	kua	g∥00.			
		ox-pl	3sg.C	IPFV	be.big	,		
	"The oxen are big."						(Hiechware; Dornan 1917: 64)	
	b. hie chware ere kwa khun ka chaa koe							
		hii.tco-are	'e.re	kua	xun	ka	?tcãã	loe.
		San-pl	3pl.C	IPFV	?skin	OBL	?enter	sleep
	"The San sleep under skins."					(Hiechware; Dornan 1917: 72)		
	c.	chware kana Igaichware ere kona khoobe						
		tco-are	kana	glai.tco	-are	'e.re	kona	xuu-be
		person-pl	or	woman	-PL	3sg.C	NEG	go.away-NEG
		"Neither men nor women must go!"					(Hiechware; Dornan 1917: 66)	

The gender-specific 3rd person singular pronouns '*e.be* (masculine) and '*e.ce* (feminine) appear with [+human] referents only. In Hiechware, '*e.be* appears with both male and female referents (ex. 24a-b).

(24)	a.	hie cho ebe kwa hii owa							
		hii.tco 'e.be kua hii-o oa.							
		San 3sg.M IPFV bush LOC							
		"The San man is in the tree (sic)." (Hiechware; Dornan 1917: 73							
	b.	‡gaicho ebe kwa lkabaha							
		glae.tco 'e.be kua laba-ha.							
		woman 3sg.M IPFV be.hungry:J-PRF							
		"The woman is hungry." (Hiechware; Dornan 1917: 72)							
	c.	ti-baa Ndlovu 'e.be kua loe o kũũ-ka.							
		?father Ndlovu 3sg.M IPFV sleep PURP go-VOL							
		"The father of Ndlovu wants to go to sleep." (Tjwao)							
	d.	Balisi 'e.ce kua maa-tco-re tcaru kaa-ma.							
		Balisi 3sg.F IPFV female-person-pl firewood collect.firewood:J-BEN							
		"Balisi (f.) is fetching firewood for the women." (Tjwao)							
	e.	Davy 'e.be tshoa karee-ha xai ka.							
		Davy 3sg.M elephant shoot: J-PRF arrow OBL							
		"Davy shot the elephant with an arrow." (Tcire-Tcire)							
	f.	tci lũã 'e.ce pensele 'unaa.xa							
		1sg.GEN child 3sg.F pencil have							
		"My daughter has a pen." (Tcire-Tcire)							

There is one example for a sex-specific plural pronoun in the data: *'e.ku* (3pl.M) is used with [+human] referents in the plural (ex.25, Tcire-Tcire); it is not clear whether this is representative for the cluster as a whole, or a contact feature with Shua.

(25) *k'aro-'are 'e.ku ke tcoba oa thelela.* boy-PL 3pl.M IPFV field on water "The boys are watering the field."

(Tcire-Tcire)

5. Conclusion

In this article, we have shown that the four Tshwa varieties considered - Tjwao, Tcire-Tcire, Glabak'e and Hiechware - display considerable uniformity in their pronominal paradigms and nominal marking strategies. At the same time, they can be clearly distinguished from other documented Kalahari Khoe varieties, including Cua (Chebanne 2014, 2015) and Tsua (Chebanne and Mathes 2013) that are also thought to form part of the Tshwa dialect cluster. The varieties documented by Chebanne and Mathes display an inclusive/exclusive distinction in 1st person plural pronouns, as well as pronoun bases for the 1st and 2nd person; both typological features are absent in Northern Tshwa. They further differ in their forms for the 2nd person dual, in the presence of a morphological element, which might be interpreted as a nominative case marker *e*, and in the retention of a lateral click in the masculine plural forms. Whether this is due to contact of the Southern Tshwa varieties with the Glui-Glana cluster or in the end indicative of a typological or even genealogical divide within what has been termed "Tshwa" by Voßen (1997) can only be answered satisfactorily when more data from Eastern Kalahari Khoe becomes available. It is also interesting to note that formally the nominative and accusative forms for the 1st person dual and the 3rd person masculine appear to link Northern Tshwa more closely to the Kalahari Khoe languages of the Central Kalahari, i.e., Southern Tshwa and the Glui-Glana group, than to the Shua and Khwe clusters in the north.

While accusative alignment in pronouns has long been considered a typological feature of Khoe (e.g., Güldemann 2008), three distinct paradigms for nominative, accusative and genitive pronouns have so far only been attested in the more distantly related dialect cluster Glui-Glana (Nakagawa 1993, 2017), and possibly in Southern Tshwa (Chebanne and Mathes 2013). An overt accusative series also exists in Ts'ixa, but a single series is used to encode both nominative and genitive (Fehn 2016, 2017). Finally, the Shua and Khwe clusters have an overt distinction between dependent and independent pronouns, with accusative being marked by the particle 'a only (Kilian-Hatz 2008; own data). It therefore seems that a clear-cut case distinction in personal pronouns is again a feature of the Central Kalahari, with Northern Tshwa aligning typologically with languages to its south, rather than with Shua and Khwe.

The predominating absence of nominal gender marking on singular nouns as described for Tjwao is widespread in Eastern Kalahari Khoe (Voßen 1997; Chebanne 2014; own data). Whether nominal gender marking was actually lost in the common ancestor of Voßen's (1997) genealogical subgroup may only be answered satisfactorily when more data has been analysed, including from the under-documented Shua varieties of eastern Botswana.

Lastly, we have described what is most likely a topic construction featuring a co-referential pronoun following its nominal referent. To the best of our knowledge, no similar syntactic construction is found in any Kalahari Khoe language described so far, but again, this may be due to a distinct lack of data on languages from the eastern Kalahari Basin fringe. While a possible historical link between co-referential pronoun use and nominal gender marking in related languages seems intriguing (cf., e.g., Himmelmann 1997), the exact information-structural meaning of this construction can only be determined when more data becomes

available, either from naturally produced speech or obtained with carefully designed questionnaires from Tjwao and related varieties.

An overview of distinctive typological and formal characteristics of Northern Tshwa personal pronouns and nominal marking strategies in comparison with other Kalahari Khoe varieties is provided in Table 6 below:

	N-Tshwa	S-Tshwa	Glui- Glana	Naro	Shua	Ts'ixa	Khwe
clusivity	Х	\checkmark	\checkmark	Х	Х	Х	Х
complex pronoun in 1 st and 2 nd person	Х	\checkmark	\checkmark	\checkmark	Х	Х	Х
accusative/nominative	\checkmark	\checkmark	\checkmark	Х	Х	\checkmark	Х
optional/obligatory nominal gender marking	Х	?	\checkmark	\checkmark	X	\checkmark	\checkmark
co-referential pronoun use	\checkmark	?	?	?	Х	Х	Х
1sg.C *ti-rV	\checkmark	Х	\checkmark	\checkmark	Х	Х	Х
1du *tsa/sa/kha -be	\checkmark	\checkmark	\checkmark	Х	Х	Х	Х
1pl.C *tsi(-e)	\checkmark	Х	\checkmark	Х	\checkmark	\checkmark	Х
2du *tsa/sa/kha -ro	\checkmark	Х	Х	Х	\checkmark	\checkmark	Х
3sg.M *-bV	\checkmark	\checkmark	\checkmark	\checkmark	Х	Х	Х
pl.M with lateral click	Х	\checkmark	\checkmark	\checkmark	Х	\checkmark	\checkmark

Table 6: Personal	pronouns and	d nominal	marking	in Kalahari Khoe
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Orthography

The orthography used in this paper deviates in several instances from IPA standards. The deviations are as follows: $\langle c \rangle = [\int], \langle tc \rangle = [t\int], \langle tc \rangle = [tfx], \langle dj \rangle = [dz], \langle ' \rangle = [?], \langle y \rangle = [j], \langle mh \rangle = [m], \langle ndj \rangle = [ndz]$

Abbreviations

 $1 - 1^{st}$ person; $2 - 2^{nd}$ person; $3 - 3^{rd}$ person; ACC – accusative; ANT – anterior; BEN – benefactive; C – common gender; CAU – causative; COMP – complementizer; COP – copula; DEM – demonstrative; DIM – diminutive; du – dual; EXIST – existential; GEN – genitive; F – feminine; FOC – focus; INTENS – intensive; IPFV – imperfective; J – juncture; LOC – locative; M – masculine; NEG – negation; NOM – nominative; NP – noun phrase; OBL – oblique; pl – plural; POSS – possessive; PRF – perfect; PRO – pronoun; PST – past; PURP – purpose; RCPR – reciprocal; sg – singular; SBJ – subject; SUB – subordinate; SUBJ – subjunctive; V – vowel; VOL – volition.

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