

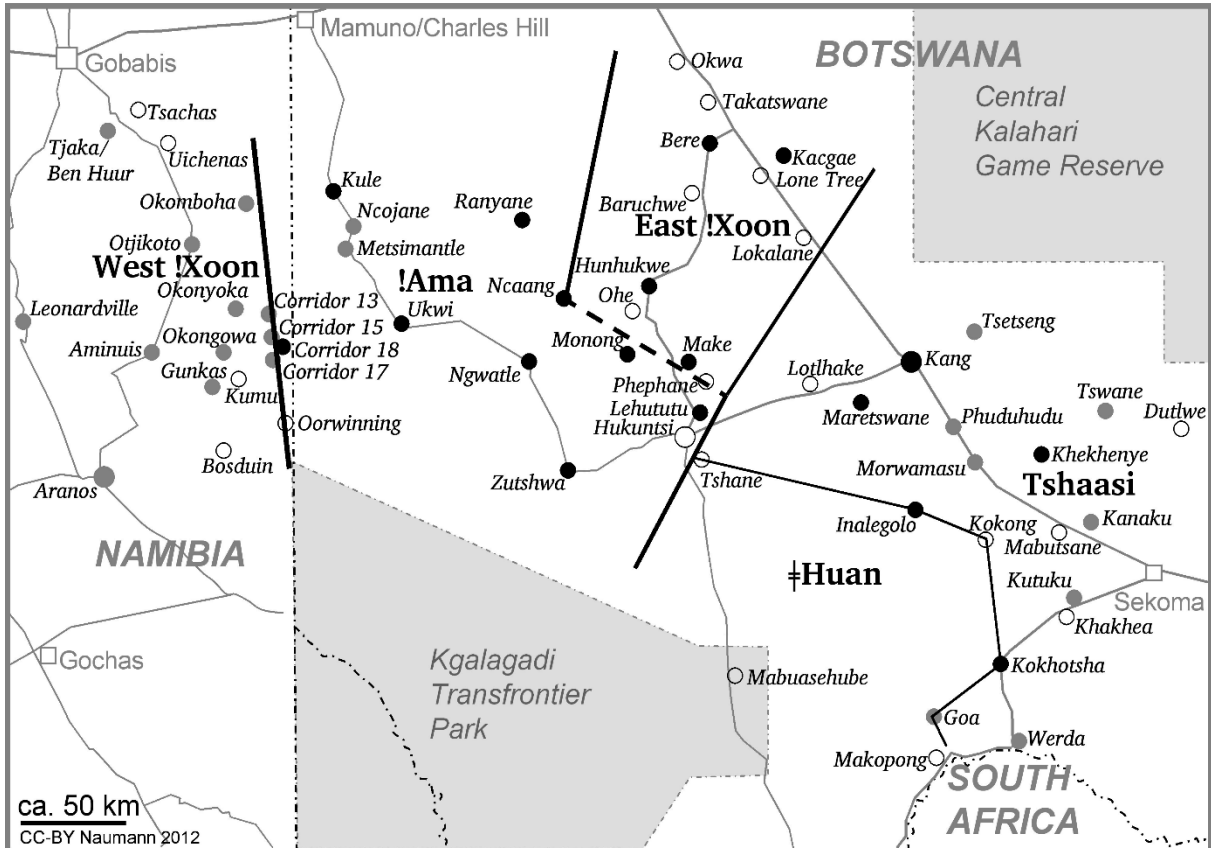
Towards reconstructing the nominal system of Taa

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1 Introduction

+ the Taa language complex as the last viable language of the Tuu family



Map 1: Taa localities and dialect groups (Naumann 2014: 289)

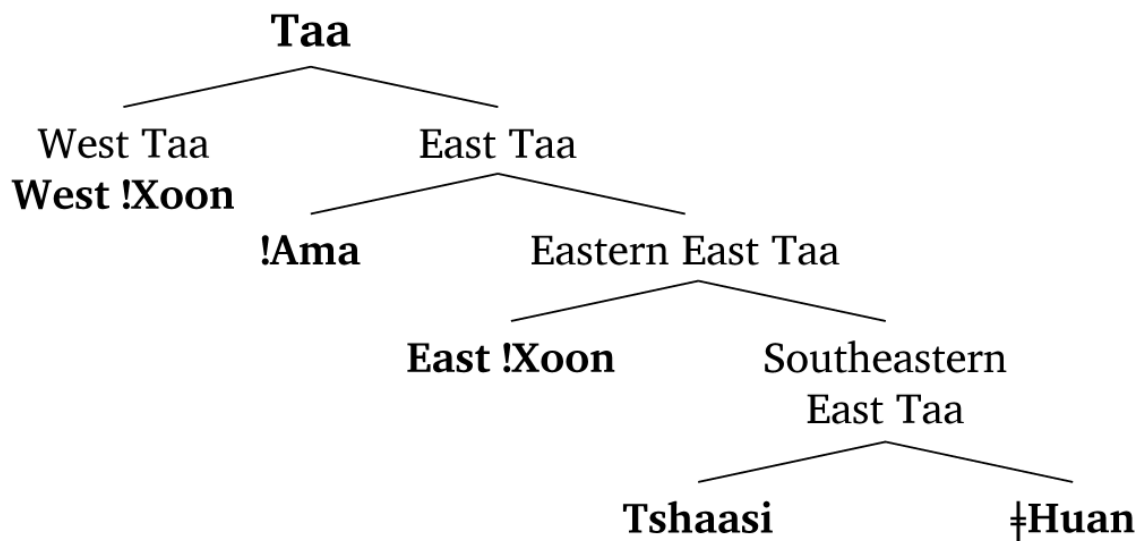


Figure 1: Genealogical classification of Taa dialects (Naumann 2014: 288)

Khakhea prod. ka-stem-ba
 eq (ka)-koloi-ba
 bu ruko-ba
 ma-ruko-le ʔani
 Gloss

!Xoo	Khakhea	Aminuis	Hukuntsi	Gloss
!ahi 1	OKhoa	!nye 3		aardwolf
!haba-te 4	!gahi	!nyum 2		
	!gahba-te			
!uh'u 3	(s)!ho'u 3	si- o(')u 3	!uh'u 3	bird
!uh'ã-te 2	ki-!hoã-ni 2	si- o-re 2	!uh'ã-te 2	
!gue	!gue	!gue 3		vulture
	!gum-sã	!gum 2		
	ka-!guu-ba			
	ka-!guũ-ni			
	<i>!guũ-ba</i> <i>!guũ-ni</i> <i>!guũ-ni</i>			
buru 2	li-khua 3	buru 2	bolu 2	Afrikaner
buru-te 2	ma-khua-le 2	buru-te 2	bolu-te 2	
	!huũ			
	ka-!hũ-ni			
!goa	ka !ohba	!ghoã	gohba	early p.m.
!naã 3		!lhaã 2	!naã 2	coeval
!naã- ba		!lhã-re	!naã-te	
koo ka'aã	koo ka'aa	guu ka	koo ka'aa	all
qhaũ ku	qhau ku		qhanu ku	nearly
2 ʔaje ʔaa	!oba 2	!lgoo ʔani	!uu ʔaa 2	animal
2 ʔ'aje ʔ'ani	!olo ʔ'oni 2	!lgoba	!uu-te ʔ'ani 2	
	!om-ka-le		ʔaje ʔ'ani (dim)	
	<i>dim</i> <i>pl</i> → !olo ʔ'oõ			
gulu 2	guru	!goru 2	gulu 2	ankle
gun-te 2	guru-te	!gun-te 2		
gulu-te				
dzohã 2	i-tshoã 2	si-dzu'ni 2	dzohã 2	ant sp.
dzohã-te 2	i-tshoã-ni 2	-	-te 2	
	i-dzoh'ã			

- + paper manuscript by Traill (n.d.) with an extensive list of Taa nouns as the starting point
- largely typed but also handwritten additions > **see sample page**
- no other information or (electronic) version of this research in his legacy data
- > list is the probable result of his early survey work in the 1970s (cf. Traill 1974a)
- ca. 270 comparative series of nominal lexemes and a number of additional doublets steered to the geographical and cultural KBA environment
- comparative series established according to meaning > can involve more than one etymon
- contains singular and, if relevant, plural forms as well as occasional diminutives, often (but not consistently) supplemented later by handwritten information on agreement classes (cf. Traill 1974b; see 2.2 below)
- represents data of four Taa varieties in the page order from left to right > **Table 1**

No.	Traill's label	Variety	Location
1	!Xoo	East !Xoon	Lone Tree (Botswana)
2	Khakhea~⊙Khoa	‡Huan	Khakhea (Botswana)
3	Aminuis	West !Xoon	Aminuis (Namibia)
4	Hukuntsi	!Ama	Hukuntsi (Botswana)

Table 1: Data origin in Traill's noun list

- + goal of a comprehensive corpus of Taa nouns from a representative array of dialects that allows the comparison and reconstruction of nominal morphology and the system of gender-number marking > necessary expansion of still limited cross-Taa research (Traill 1975, Naumann 2014)
- accomplished digitization and partial reordering of paper version of Traill list
- ongoing process of supplementing and data-checking by means of published and unpublished sources > **work-in-progress report!!!**
- > reveals occasional data inconsistencies between list and most recent available sources, most often regarding agreement information
- > list of varieties currently included in geographical order from west to east > **Table 2**

No.	Variety	Location	Sources used so far
1	West !Xoon	Aminuis (Namibia)	Traill list, DOBES project
2	!Ama ~ 'N oha	Corridor 18 (Namibia)	DOBES project - most restricted data!!!
3	!Ama	Hukuntsi (Botswana)	Traill list
4	East !Xoon	Lone Tree (Botswana)	Traill list; Traill (1994, 2018)
5	‡Huan	Inalegolo (Botswana)	DOBES project, Auer (2021)
6	‡Huan	Khakhea (Botswana)	Traill list

Table 2: Current data in comparative Taa noun list

2 Morphosyntactic aspects of nouns in Taa

2.1 Phonology, stem structure, and morphology

+ Taa exemplary for typical phonotactics in the KBA (cf. Traill 1985, Naumann 2017):

C	V	C	V
Unconstrained	Contrast reduction	Highly constrained	
	[± round]	[b, d, r, l,	[± high, ± low]
	[guttural]	m, n, ɲ]	[± back]
			[± nasal]
C	V	∅	V
C	V	∅	M

Figure 2: Skewed phonotactics in the Kalahari Basin (after Beach 1938, Traill 1985)

+ necessary analysis of segments and identification as part of the stem or as affixes

- rule of thumb: stem with two morae and one initial strong consonant

> (re)transcription of nouns according to a unitary convention:

[Prefix_n] — [1st stem mora] • [2nd stem mora] — [Suffix_n]

> considerable dialectal differences in segment alignment > cf. loan words > **Table 3**

Leseme	Number	Aminuis West !Xoon	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
bottle	SG	bùh kù.ñn	<i>buutule</i> bu.u-tu-le		bú-tú.lù	<i>butulu</i> bu-tu.lu
	PL	bùh kù.ñn-kê/te	<i>bootole-te</i> bo.o-to-le-te		bú-tú.lù-tè	<i>butulu-te</i> bu-tu.lu-te
paper	SG	pà.m pí.rí	<i>pam piri</i> pa.m pi.ri	<i>pam piri</i> pa.m pi.ri		<i>pam piri</i> pa.m pi.ri
	PL	pà.m pí.rí-tê	<i>pam piri-te</i> pa.m pi.ri-te		pà.m pí.rí-tè	<i>pam piri-te</i> pa.m pi.ri-te
chair	SG	s?-tú.ñn/ si-tu.n	<i>stytule</i> s?-ty-tu.le	<i>situlo</i> si-tu.lo		<i>sityilo</i> si-tyi.lo
	PL	s?-tú.ñn-kê/ si-tu.n-te	<i>stytule-te</i> s?-ty-tu.le-te	<i>situlo-te</i> si-tu.lo-te		<i>sityilo-te</i> si-tyi.lo-te
sugar	TN	sú-kú.rì	<i>suukuli</i> suu ku.li	<i>suukuli</i> suu ku.li		<i>suukuli</i> suu ku.li
sweets	SG	lé-k(é).r(ì)	<i>lee kere</i> lee kɛ.re	<i>nee kere</i> nee ke.re		<i>lekere</i> le-ke.re
	PL	lé-k?rì-kê/ lé-kèr?-kê	<i>lee kere-te</i> lee kɛ.re-te	<i>nee kere-te</i> nee ke.re-te		<i>lekere-te</i> le-ke.re-te
trousers	SG	<i>buruko</i> bú.rú khò.(è)	<i>burokho</i> bu.ro kho	<i>ruuko</i> ruu-ko	bòhù phè	<i>buruko</i> bu.ru-ko
	PL	<i>buruko-te</i> bú.rú khù.è-síkê	<i>burukhu-te</i> bu.ru khu-te	<i>ruuko-te</i> ruu-ko-te	bòhù phè-lè/tè	<i>maruko-le</i> ma.ru-ko-le

Note: italic = original Traill transcription

Table 3: Phonotactics and Afrikaans (via Tswana) loan words

2.2 The complex agreement system and gender across Taa

- + complex cross-reference system for person, gender, and number by means of a set of 11 thematic segments, which are vocalic and nasal
- 4 forms for speech-act participants ~ SAP (1SG, 2SG, 1PL, 2PL) vs. 7 forms for 3rd persons
- > 3rd-person forms establish so-called "agreement classes (= AGR)", which convey the gender and number of noun lexemes/referents > **Table 4**

Cross-reference class including person		Agreement suffix on adjective (‘Noun _x be ADJ-X’)	Anaphoric pronoun object suffix on verb (‘[Noun _x] VERB-IT _x ’)	Agreement object suffix on verb (‘VERB-X Noun _x ’)
Tone class i	AGR 2i	ˀàn [ˀã]	-án	-án
	AGR 3i	ˀè	-é	-è
	1PL	ˀì	-í	n/a
	2PL	ˀù	-ú	n/a
	1SG	ˀ̀ng [ˀ̀ŋ]	-ńg	n/a
	2SG	ˀ̀á	-á	n/a
Tone class ii	AGR 2ii	ˀ̀àn [ˀ̀ã]	-án	-án
	AGR 3ii	ˀ̀è	-è	-í
	AGR 1(ii)	ˀ̀ì	-ì	-í
	AGR 4(ii)	ˀ̀ù	-ù	-í
	AGR 5(ii)	ˀ̀̀ng [ˀ̀̀ŋ]	-ńg	n/a

Table 4: Cross-reference forms and tone classes in Taa exemplified for West !Xoon

- + 10 of 11 forms partake in a binary tonal distinction labelled by Traill i vs. ii:
- 3 segmental forms contrast between SAP (1PL/2PL/1SG) and 3rd-person AGR (1ii/4ii/5ii)
- 2 segmental forms contrast within 3rd-person AGR: 2i/3i vs. 2ii/3ii > **Table 5**

Segment	Tone class i	Tone class ii
<i>a</i>	2SG	-
<i>i</i>	1PL	3SG/TN ~AGR1ii
<i>u</i>	2PL	3PL ~AGR4ii
<i>n</i>	1SG	3SG/TN ~AGR5ii
<i>ã</i>	3SG/TN/PL ~AGR2i	3SG/TN/PL ~AGR2ii
<i>e</i>	3SG/TN ~AGR3i	3SG/TN ~AGR3ii

Table 5: Cross-reference forms across person and number in Taa

- + concrete word forms of a nominal lexeme are tied to a specific AGR, which encodes lexicalized gender and, if not transnumeral, two number values (SG, PL)

+ thematic AGR segments very often constitute the sonorlic part:

- a) of monomoraic grammatical elements > agreement~crossreference
 or of the second mora of:
 b) bimoraic transitive verb and adjective stems > agreement~crossreference
 c) bimoraic noun stems (not consistently) > AGR-alliteration
 > yields recurrently to Bantu-type alliterative concord - cf. (1)/(2) of West !Xoon

(1) *ú qá.rú k-ù !xa.b`ù*
 2PL parents.PL4 COP-<4 big.PL-<4
 Your parents are big/old. (TWb110927-0106.008)

(2) *ń sí n/à.-í #hà.ì #`ù.-ì*
 1SG IPFV see-1> dog.SG1 one-<1
 I see one dog. (TWb090405-0101.001)

+ the gender of a noun lexeme is instantiated by:

- a) a single AGR for transnumeral nouns, which are insensitive to number, or
 b) an AGR pair for number-sensitive count nouns
 > cf. (3) with the noun *má.rí* 'goat' of gender 2i/2i, which itself alternates for number

(3)a. *ń sí n/à.-àn má.rí #`ù.-ì*
 1SG IPFV see-2i> goat.2i one-<1
 I see one goat. (TWb090405-0101.005)

b. *ń sí n/à.-àn má.rí-kê n#úùm*
 1SG IPFV see-2i> goat.2i-PL two
 I see two goats.

+ cross-Taa gender comparison by means of the dialect-specific behavior of cognate nouns
 - Traill's noun list together with our more recent DOBES data attest for shared features as well as considerable changes in the gender system across dialects
 > findings further support Naumann's (2014) genealogical Taa classification
 - comparative series often have dialectal gaps or lack AGR-information, so that a good amount of data are compatible with but not conclusive evidence for any observed pattern

+ three genders shared across Taa:

- 2ii/(2ii) with 57 compatible series > **Table 6**
 - 3i/(2i) with 39 compatible series > **Table 7**
 - 2i/(2i) with 12 compatible series > **Table 8**

Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
4-42	bone				
‡á.àn	‡à.àn	‡a.ã	‡a.ã	‡à.àn	‡a.ã
sí-‡á.m-tê/ ‡á.àn-síkê		‡a.m-te	‡a.m-te	‡à.m-tè	‡a.m-te
10-115-2	gemsbok [suppletive plural]				
'n!ah.ã	'n!àqh.àn	'n!ah.ã	'n!ah.ã	'n!àqh.à	'n!ah.ã 4
11-131-1	hedgehog [star form]				
ō.řã			o.na		o ^a .na
ō.řã-ce			o.na-te		o.an-te
15-185	name [= tail]				
àh.̀ng-(sé)	à.̀n	a.o	a.ũ	à.̀ù(n)/ á.̀ù	a.ũ
àh.̀àn/ a.̀ŋ-te		a.ã	a.ã		a.ã
17-202	pot				
'n‡àq.nà	'n‡àq.nà	'n‡a.na	'n‡a.na	'n‡àq.nà	'n‡a.na
'n‡àqnà-síkê		'n‡a.na-te	'n‡a.na-te	'n‡àq.nà/là-tè/ 'n‡àq.̀n-n-tè	'n‡a.na-te
18-217	spoon				
(òh.̀àn)		g‡ah.m	g‡ah.m	tí-g‡àh.̀m	i-‡ah.m
(òh.̀àn-síkê)		g‡ah.ma-te	g‡ah.ma-te		i-‡ah.ma-ni
20-249	tooth				
hà.̀àn	hà.̀àn	qha.ã	qha.ã	hàà	qha.ã
hà.̀n-n-tê	hà.̀n-n-tê	qha.ã-te	qhaã-te	hàà-nì	qha.ã-ni

Table 6: Shared gender 2ii/(2ii) across Taa

Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
1-2a	bird [generic]				
si- o(ʻ).u		(g) uh'.u	(g) uh'.u	tí-g ùh.̀ù	(s)i- ho'.u
si- o.re		(g) uh'.ã-te	(g) uh'.ã-te	tí-g òh.̀à-lè/ tí-g òh.̀à-nì	ki- ho.ã-ni
6-64	camelthorn tree				
á.á	á.á 3i	a.a	á.a	á.á	a.a
á.m	á.m 2i	a.m	á.m	á.m	a.m
7-85	country				
n!ó.ré		n!u.le	n!u.le	n!ú.ú	n!u.u
n!u.n-sa.ri-te		n!u.m-sã	n!u.n-sa	n!ú.ú-lè	ka-n!u.u-ma
8-94	duiker				
⊙hhúún/ ⊙han		⊙han	⊙han	⊙hhú.ún	⊙hun/ ⊙han
⊙hhú.ní		⊙ha.na	⊙ha.na	⊙hhó.ná/ ⊙hhú.m	⊙ho.na/ ⊙ha.na
18-225	stone				
	n ú!è 3i	n u.le	n u.le	n ò.lè	n u.le
	n ú!n 2i	n u.n	n u.n	n ù.̀ng	n u.n
19-237	sun, day				
"á.̀ng		"a.n	"a.n	"àng/ "ànn	"a.n
"á.nà-kê		"a.na-te	"a.na-te		ka- "a.na-te
20-244	thorn				
qáq.bá		qa.ba	qa.ba	qàq.bá	qa.ba
qáq.má-kê		qa.m-ka-te	qa.m-ka-te	qàq.m-ká-lè	qa.m-ka-le

Table 7: Shared gender 3i/(2i) across Taa

Aminuis West !Xoon	Corridor 18 'Njoha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
1-4-1 Afrikaner					
bu.ru		bo.lu	bu.ru		li-khu.a 3
bu.ru-te		bo.lu-te	bu.ru-te		ma-khu.a-le 2
2-22 arrow					
‡qha.ã			‡qha.ã	‡hhà.àn	‡qha.ã
‡qhã-site			‡qha.m-te	(kà)-‡hhààn-(lè)	‡qha.m-te
8-97-1 egg					
g‡ó.án	g‡ó.án		g‡u.ã	g‡ó.á	g‡u.ũ
g‡ó.án-sítê	g‡ó.án-sítê				g‡u.ã-ni
10-122 grass					
g‡qx'á.àn	‡qx'á.àn	‡kx'a.ã	‡kx'a.ã	‡qx'á.à	‡kx'a.ã
12-148-1 knife					
n‡ò(h).rà 1	‡ò.ó	‡o.o	‡o.o	‡ò.ò	‡o.o
n‡ù(h).àn 2ii	‡ò.ó-tê	‡o.o-te	n‡u.n 2ii	kà-‡ò.ò-lè	‡o.o-le
21-263 wildcat					
⊙qú.ú	⊙qú.ú	⊙qo.u	⊙qo.u/ ⊙qu.u	⊙qú.ú	⊙qo.ũ
⊙qó.ré	⊙qú.ú-tê	⊙qo.u-te	⊙qo.u/ ⊙qu.u-te	⊙qú.ú-nì	⊙qo.ã-ni/ ⊙qo-le

Table 8: Shared gender 2i/(2i) across Taa

+ alternation between 1ii/(2ii) in West Taa (= West !Xoon) + !Ama and 3ii/(3ii) in Eastern East Taa: 24 compatible series > **Table 9**

West Taa	!Ama		Eastern East Taa		
Aminuis West !Xoon	Corridor 18 'Njoha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
14-171 meat					
⊙á.ì	⊙à.yè	⊙a.je	⊙a.je	⊙ú.è	⊙o.e
⊙á.ì-sítê					⊙o.e-le
16-191 orange < Afrikaans					
lámúún		namuni	namunu	nàmùní/ lùmùní	namuni
lèmùnn-kê				nàmùní-tè	namuni-te
16-195 paper < Afrikaans					
pà.m pí.rí	pà.m pí.rí	pa.m pi.ri	pa.m pi.ri		pa.m pi.ri
pà.m pí.rí-tê	pà.m pí.rí-tê	pa.m pi.ri-te	-	pà.m pí.rí-tè	pa.m pi.ri-te
20-253 tree~wood					
'nÓá.ì		'nÓa.je	'nÓa.je	'nÓù.è	'nÓo.e
'nÓá.àn		'nÓa.ã	'nÓa.ã 2ii	'nÓò.à 2ii	'nÓo.ã 2ii
21-258 water					
lqhà.à	lqhà.à	lqha.a	lqha.a	lqhà.à	lqha.a

Table 9: Gender shift of Eastern East Taa 3ii/(3ii) vs. West Taa + !Ama 1ii/(2ii)

+ alternation between 3i/4ii in West Taa (= West !Xoon) + 'N|oha and 3ii/4ii in Eastern East Taa: 11 compatible series > **Table 10**

- no information yet on Hukuntsi !Ama > could replicate above split or be a separate one

Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoá
5-61	person				
tá.à	tá.à	ta.a	ta.a 3i	tà.à	ta.a
tú.ù	tù.ù	tu.u	tu.u	tú.ù	tu.u
9-105	father				
àq.à	àq.à	ki-nq.a-ki	<i>q.a</i>	àq.à	<i>q.a</i>
áq.rù		ki-nq.a-tu	<i>q.a-tu</i>	àq.à-lù	<i>q.a-lu</i>
10-114	kin term				
‡hà.in	‡hà.in	‡qhe.ẽ	‡qhe.ẽ	‡hè.è	‡qhe.ẽ
‡hà.nù		‡qhe.ẽ-tu	‡qhe.ẽ-tu		‡qhe.ẽ-nu
12-140a	spouse				
'n á.̀ng	'n à.̀nn	'n a.n	'n a.n	'n á.̀ng	'n a.n
'n á.nú		'n a.n-tu	'n a.n-tu		(si)-'n a.n-tu
15-179	mother				
qá.é	qá.é	qa.e	qa.e	qá.é	qa.e
qá.rú		qa.e-tu	qa.e-tu	qá.é-lù	qa.e-lu

Table 10: Gender shift between West !Xoon aka West Taa 3i/4ii and East Taa 3ii/4ii

+ alternation between 1ii/2ii in West Taa (= West !Xoon) and 1ii/4ii in East Taa (= rest of the language complex): 62 compatible series > **Table 11**

West Taa	East Taa				
Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoá
2-15	woman's fr. apron				
g'ú.ú		g'u.u	g'u.u	g'ú.ú	g'u.u
g'ó.ré		g'u.u-te	g'u.u-te	kà-g'ú.ú-tè	ka-g'u.u-le
5-62	butterfly				
dhà.bì-dhà.bì		dtha.bi	dtha.bi	tí-/kí-dhá.bí	si-ka-dtha.bi
dhà.bì-dhà.bì-kê		dtha.bi-te	dtha.bu-te	tí-/kí-dhá.bú-lè	
7-78	clothing				
lxá.í	lxá.í	!xa.i	!xa.i	(tí)-cá'.á-(là)-cà 2ii	i-sa'.ã-na-sa 2
lxá.ré		!xa.ba-te	!xa.ba-te	cá'.á-cà-lè 2ii	i-sa'.ã-na-ja 2
8-93	dog				
‡hà.ì	‡hà.ì	‡qhə.i	‡qhi.i	‡hà.ì	‡qha.i
‡hà.rè	‡hàbà-tê	‡qha.ba-te	‡qha.ba-te	‡hà.bà-lè	‡qha.ba-le
12-142-1	brown hyena				
'n ú(h).ùn	'n úùn	'n u.ũ	'n u.ũ		
'n ú.nì	'n úni	'n u.ã-te	'n u.ã-te		
19-231	rope [bowstring hemp]				
xà.ì	xà.í		xa.i	xà.ì	xa.i
xà.rè	xàbà-te		xa.ba-te	xà.bà-lè	xa.ba-te

Table 11: Gender shift between East Taa 1ii/4ii and West !Xoon aka West Taa 1ii/2ii

+ gender shifts result in considerably different overall systems between dialects
 > detailed data on West !Xoon of West Taa and East !Xoon of East Taa as an exemplification
 (cf. already Kießling 2008) > **Figure 3 vs. 4**

- agreement forms are possessor pronouns
- lines represent genders of count nouns changing agreement class across number
- circles represent genders of count nouns with a single agreement class across number or of transnumeral nouns

> gender complexification from west to east: 3+4 in West !Xoon vs. 5/6+5 in East !Xoon
 (cf. Pratchett (2017, 2021) on a similar finding in the Ju language complex of Kx'a)

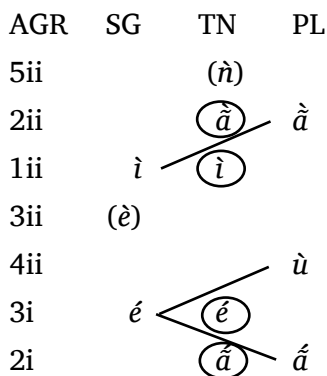


Figure 3: Agreement classes and genders in West !Xoon

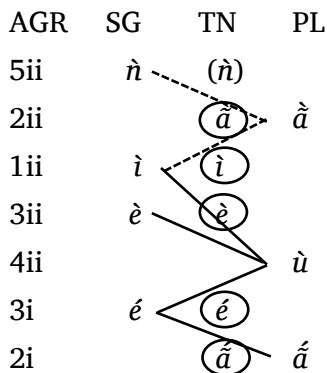


Figure 4: Agreement classes and genders in East !Xoon

2.3 Complex noun morphology - the example of suffixes in *sV*

+ complex nominal morphology in Taa, which is unprecedented for a Kalahari Basin Area language > cf. **Tables 6-11** above

- encodes derivation (notably diminutive), gender, and number

- involves affixation and stem change with historical cline from former to latter > **Table 12**

- | | | | |
|----|--|--------------------------|------------------|
| a) | CV-prefix | > voiced stem onset | cf. 'bird' |
| b) | plural suffix <i>-te</i> | > 2nd mora <i>.re</i> | cf. 'lower arm' |
| c) | <i>tuu</i> 'people' > associative plural (suffix) <i>-tu</i> | > 2nd mora <i>.ru/nu</i> | cf. 'child' |
| d) | <i>ᵒa.a</i> 'child' > diminutive suffix <i>-ba</i> | > 2nd mora <i>.ba/ma</i> | cf. 'wildebeest' |

Aminuis West !Xoon	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
1-2a bird (generic)				
si- o(ʔ).u	(g) uh'.u	(g) uh'.u	tí-g ùh.ù	(s)i- ho'.u
si- o.re	(g) uh'.ã-te	(g) uh'.ã-te	tí-g òh.à-lè/ tí-g òh.à-nì	ki- ho.ã-ni
2-19 lower arm				
n a.o	n ah.o	n ah.o	n àh.ù	n ah.o
n a.re	n ah.o-te	n ah.o-te	n àh.ù-lè	n ah.o-le
7-75 child				
⊙á.à	⊙a.a	⊙a.a	⊙ò.à	⊙o.a
⊙ú.rù	⊙a.a-tu	⊙a.a-tu		⊙a.a-lu
21-265 blue wildebeest DIM				
	ǰ.ri ⊙a.a	ka- a.li-ba		ka- ǰ.lu-be
		ka- ǰ.lu-te ⊙'a.ni		ka- ǰ.lu-te ⊙'u.ni

Table 12: Patterns of morphology turning into stem segments in Taa

- + noun suffixes with a voiceless alveolar fricative recur but are overall rare and erratic
- > goal to analyze the different *s*-suffixes more comprehensively in terms of form, function, distribution across the lexicon, and, if possible, origin
- Common Taa [s] changes regularly to Inalegolo ‡Huan [ʃ] (represented here as *c*)

2.3.1 Singular suffix *-si*

- occurs in 8 (of 270+) series (cf. *-sí* "noun suffix" in Traill 1994: 185) > **Table 13**

Corpus-No.	Lexeme	SG	PL	A	C	H	L	I	K
21-257	truck	-si (< KK -s)	-si-te			1			
3-29	honey badger	-si	-sa-ma-ka-te	1					
12-144	black-backed jackal	-si	.ma-te			1			
17-200-1	polecat	-si	-sam-te/-si-te	1		1			
20-250	serrated tortoise	-si/ci	.m-sa-re/?/.m-san	1	1	1	1	3i	3
8-95	ear	-si	-te/.nya-te		2ii	1			
13-156	leaf	-si	-ku-te/-si-te/-si-le	2ii		?			2
20-242	bag tassle	-si	-si-te/-si-te			1	2ii		

Table 13: Exhaustive list of attestations of the plural suffix *-si* with AGR information

- + bias to AGR1 > correlates with thematic vowel *i* > see 2.3.3 below on *-se*
- + both areal and genealogical parallel nominal suffixes beyond Taa
- partial similarity to Khoekhoe feminine singular suffix *-s* > indeed one case of loan interference: Hukuntsi !Ama *kuni-si* 'truck' from Khoekhoe *kuni-s* > see **Table 15** below
- *-si* also attested in languages of the !Ui branch of Tuu, with a bias toward loans but not restricted to them
- + all but the series for 'black-backed jackal' involve another *s*-suffix somewhere in the comparative series (mostly in the plural) > see 2.3.2-4 below

2.3.2 Plural suffix *-si-te/ke*

+ recurrent in West !Xoon (34) but rare elsewhere (5 of 270+ series) > **Table 14**

Corpus-No.	Lexeme	A	C	H	L	I	K
21-257	truck			X			
17-200-1	polecat			X			
13-156	leaf			X			X
20-242	bag tassle			X	X		
8-97-1	egg	X	X				
4-43-1	book	X -(si)te					
14-164a	truck, car	X -(si)te					
15-188	needle	X -(si)te					
16-197-1	path	X -(si)te					
20-246	year	X -(si)te					
13-161	liver	X -(site)					
2-22	arrow	X					
3-32	bag	X					
3-33	hook(thorn)	X					
3-36	bead	X					
4-37	bed	X					
4-42	bone	X					
4-45	plant	X					
5-57	bubble	X					
6-66	canvas sail	X					
7-84	copper	X					
9-103	fat	X					
9-104	field, garden	X					
9-108	flint lighter	X					
11-136	hole	X					
14-171	meat	X					
15-176	morama	X					
16-191	orange	X					
17-202	pot	X					
17-209	shade	X					
18-217	spoon	X					
18-220	ground squirrel	X					
19-231	rope	X					
19-232	quill	X					
19-233	quiver + Acacia sp.	X					
19-239-2	tatoo	X					
20-252	helicopter toy	X					
20-254	trousers	X					

Table 14: Exhaustive list of attestations of the plural suffix *-si-te/ke*

+ no AGR-bias > e.g. **Table 15** - related to following gender-neutral plural suffix

+ occurs overproportionally in loan words: 9 of 38 tokens (bolded in Table 14)

- source languages: Khoekhoe, Afrikaans

- loan words aside, recurrent with concepts that are not typically countable

- + presumably productive pluralization in West !Xoon (?and 'N|oha) > **Table 15**
- optional on certain nouns (also including *-te/ke*) - all tokens in Table 15 (in frame)
- > distributional profile makes *-si* in *-site/ke* look like a singulative allowing the pluralization

Corpus- No.	Gloss		Aminuis West !Xoon	A	Corridor 18 'N oha	C	Hukuntsi !Ama	H
8-97-1	egg	SG	gǀó.án	2i	gǀó.án	2i		
		PL	gǀó.án-sítê	2i	gǀó.án-sítê	2i		
4-43-1	book	SG	ǀxán(y)á	2i	ǀxá.nyá	2	ǀxa.na	2
	< Khoekhoe	PL	ǀxán(y)á-(si)kê	2i			ǀxa.na-te	2
14-164a	truck	SG	àútò	2ii			au too	2
20-164b	< Afrikaans	PL	àútò-(sí)kê/te	2ii			au tuu-te	2
15-188	needle	SG	ná.ñn	2ii			na.n	2
	? < Afrikaans	PL	ná.ñn-(sí)kê	2ii			na.n-te	2
16-197-1	path	SG	ǀá.ró	2i			ǀo.lo	1
		PL	ǀá.ró-(si)kê	2i				
20-246	year	SG	kú.rí	1			ku.li	1
	< Khoekhoe	PL	kú.rí-(sí)kê	2ii			ku.lu-te	4
13-161	liver	SG	nǀá.m̩	2ii			nǀa.m	2
		PL	nǀá.àn-(sítê)/ nǀá.ní	2ii			nǀa.a	2
3-33	hook(thorn)	SG	gǀxa.ŋ	2			gǀxa.ũ	1
		PL	gǀxa.na-site					
9-103	fat	TN	sàq.àn	2ii			sq.ã	2
		PL	sàq.àn-sítê	2ii				
9-104	field, garden	SG	tú.ín	1			(ǀha.la)	1
	< Khoekhoe	PL	tú.ín-síkê	2ii			(ǀha.la-te)	
16-191	orange	TN	lámúñn/ namune	1			namuni	
	< Afrikaans	PL	lèmúñn-kê/ namune-site	2ii				
17-209	shade	SG	só.m̩	2ii			su.m tsho.e	
		PL	só.m̩-síkê	2ii			su.ma-te	4

Table 15: Sample of the plural suffix *-si-te/ke* in West !Xoon and 'N|oha

- + *-site* elsewhere in Taa arises from default plural *-te* on singular *-si* > **Table 16**
- attestations do not have parallel occurrence in West !Xoon - cf. West !Xoon plurals for polecat /*ha.ru-sa.m-te* and leaf *gǀqà.bú-kú-kê/te*
- > apparently historically separate from *-site/ke* in West !Xoon (? + 'N|oha)

Corpus- No.	Gloss		Aminuis West !Xoon	A	Hukuntsi !Ama	H	Lone Tree East !Xoon	L	Khakhea ǀKhoa	K
21-257	truck	SG			ku.ni-si	1	ku.ni	2	(koloi)	3
	< Khoekhoe	PL			ku.ni-si-te	1	ku.ni-te		(koloi-te)	3
17-200-1	polecat	SG	ha.ri-si	1	ah.li-si	1				
		PL	ha.ru-sa.m-te	2	 ah.li-si-te	4				
13-156	leaf	SG	gǀqà.bí-si	2ii	ǀga.bi-si				ka-ǀga.bi-si	2
		PL	<i>gǀqà.bú-kú-kê/te</i>	2ii	ǀga.bi-si-te				ka-ǀga.bi-si-le	2
20-242	bag tassle	SG			gũ.a-si	1	gũh.bi-si	2ii	gũh.ã	2
		PL			 gũ.u-si-te	2	 gũh.bi-si-te	2ii	gũh.m-sa	

Table 16: Exhaustive list of attestations of the plural suffix *-si-te* outside West !Xoon

2.3.3 Singular suffix *-se*

- occurs in 7 (of 270+) series (cf. *-sè* "noun suffix" in Traill 1994: 185) > **Table 17**

Corpus-No.	Lexeme	SG	PL	A	C	H	L	I	K
3-29	honey badger	-se	.n-ka-te				3ii		
12-144	black-backed jackal	-se/cè	.m-ka-te				3ii	3ii	
12-142-2	brown hyena	-se/cè	-cè-tè					3ii	3
6-65-2	camelthorn seed pod	-cè	-cè-lè					3ii	
10-124	habit	-se	?			3			
15-185	name	-sé	-te	(2ii)					
15-181	mouth	-se/cè	-sa/ca	(2ii)		2		2ii	

Table 17: Exhaustive list of attestations of the singular suffix *-se*

+ bias to AGR3 presumably motivated by thematic vowel *e*, AGR2ii probably related to semantics of gender 2ii/2ii, which is biased to inalienable nouns relevant for 'name'/'mouth'
 - one case of shift to *-si* and AGR1 with 'black-backed jackal' > **Table 18**

Hukuntsi !Ama	AGR	Lone Tree East !Xoon	AGR	Inalegolo ‡Huan	AGR
!a.o-si	1	!a.o-se	3ii	!à.ò-cè	3ii
!a.ma-te	2	!a.m-ka-te	2ii	!à.m-kà-lè	2ii

Table 18: Alternation of *-se* with AGR3ii vs. *-si* with AGR1 with 'black-backed jackal'

+ *-se* on 'mouth' related to nominal compounds with *tshóè/tshóà 'hole, inside' > **Table 19**

Corpus-No.	Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
15-181	mouth					
SG	‡ó.è-(sè)		‡u.e-se	‡u.e	‡ó.è/‡ó.ò-cè	‡u.e
PL	‡ó.mà-sā		‡u.m-sā	‡u.m-sa	‡ò.m-cà	‡u.m-sā
12-143	hole, inside					
	só.è	tshó.è			tsho.e	tchú.è
	só.àn-(kè)	tshó.àn-tê			tsho.ā-te	tchú.à
2-21	armpit					
	n y.mi tsho.ā		'n y.bi tsho.e	'n y.bi tsho.e	'n úq.bí tchù-è	ka-'n y.bi tsho.e
	'n y.ma-te tsho.ā			'n y.bi tsho.ā-te	'n úq.bí tchù.nì	ka-'n y.bi tshu.nì

Table 19: Complete series with interrelation between *-sa/sā* and previous *s*-suffixes

- plausible semantic relation and likely formal grammaticalization cline: tshóè > sóè > *-sè*
 - possible explanation for plural suffix alternation towards *-sa/sā*: tshóà > sóà > *-sà* > *-sà*
 - relevant for other nouns?!, but not in general - cf. semantically different animal terms
 > similar to Khoekhoe and ?Naro derivational suffix *-se-* > question of some borrowings?!

2.3.4 Suffix complex *-sa/sã* with variable number value

+ occurs in 42 + 4 (of 270 +) comparative series > **Table 20**

- restricted to AGR2ii and AGR2i both correlating with the thematic vowel *a*

- diverse in form (tone, nasal gesture on and before suffix) and function (cf., e.g., number)

Corpus-No.	Lexeme	SG/TN	PL	A	C	H	L	I	K
8-95	ear	N-sa	-ke	2ii					
16-190	nose	N-sa	N-nya-te	2ii	2ii	2			
15-181	mouth	-se/cè	.m-sa/cà	2ii		2	2ii	2ii	2
20-242	bag tassle		.m-sa						?
17-200-1	polecat	-sí	-sa.m-te	2					
20-250	serrated tortoise	-sí/ci	.m-sá(N)-(ré)	2ii		1	2ii	2i	2
1-3	vulture		.m-ca/saN					2i	?
2-17a	place		.n-sa			1	2ii		2
3-29	honey badger		.m-sa			2			
3-30	bag		-m.sa				2i		
4-40	body		.n-sa			?			
4-47	bow		.m-sa-(re)	(2ii)					2
4-49	tin trunk		.m-sa			2			
5-52-2/53	breast/udder		.n-sa/-sa			2	2ii	2ii	2
6-67	caterpillar		.m-sa-re	2					
6-69	chameleon		.m-sa						2
6-72-1	cheetah		.m-sa-(re)	2i		2			
7-79	cloud (house-COMP)		.n-sa			2	3		
7-85	country		.m/n-sa-(re)/(ri-te)	2i		2	2i		
9-100	elephant		.m-sa-re	2i					
10-116	plant sp.		.m-sa			?			
10-118-2	genet		.n-sa/cá				2i	2i	2
10-123	guinea fowl		.n-sa/cá			2	2i	2i	2
10-124	habit		.n-sa				2ii		
11-133	hill		.m-sá-ré	2ii					
11-137	horn		.n/m-sá/cá			2	2ii/3	2i/3i	2
12-139-1	horse		.m-sa-re	2i					
12-149a	Kgalagadi person		.m-sá-ré	2i					
13-150	knobkerrie		.m-sa(N)			2	2i		2
13-153	kori bustard		.m-cá					2i	
13-155-1	language		.n-sa(N)				2ii		2
14-170	sleeping mat		.m-sa/.m-sa-te	2		?	2ii		2
16-189	night		.m-sa			2			
16-192	ostrich		.m-cá					2i	
16-194	pangolin		.m-sa-na-te/.m-saN	2i			2i		
18-214	soap		.m-(sá-ré)	(2i)					
18-224	springhare hunting stick		.m-sa-(re)	2		2			
18-226	stone		.m-sa						2
19-230	root		.m-sa-re/-cá-lè	2				2i	
19-232	quill		.n-sa(N)			2	3		
19-235	reed [grass sp.]		.n-saN			2			
21-266	winter		.m-sa						2

Table 20: Exhaustive list of attestations of the suffix *-sa/sã*

- + suffix *-sà/cà separate from other *sa/sã*-suffixes
- on singular, transnumeral, and plural nouns as opposed to other exclusively plural *-sa/sã*
- consistently non-nasal and no necessary preceding 2nd mora of noun with nasal gesture
- consistently AGR2ii rather than also 2i
- mostly lexical counterpart as verb!!!
- > *-sà/cà as nominalization suffix (cf. Traill 1994: 184) > **Table 21**
- unclear why lexically so specific
- Kießling (2008: 234, 235, 239) proposes as etymological source *sà'è 'face'

Corpus- No.	Aminuis West !Xoon	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
4-37	bed	< to lie			
SG				túù-cà	
PL				túù-cà-tè	
7-78	clothing	< to dress?			
SG				cá'.á-cà/ tí-cá'.á-là-cà	i-sa'.ã-na-sa
PL				cá'.á-cà-lè	i-sa'.ã-na-ja
9-111	food	< to eat			
SG	á.àn-sà	a.ã-sa	á.ã-sà	á.à-cà	a.ã-sa
PL		a.ã-ja			a.ã-ja
11-128-2	hat	< ?			
SG				áh.à-cà	
PL				áh.à-cà-lè	

Table 21: List of attestations of the nominalization suffix *-sà

- + plural *sa*-suffix with 'mouth' related to 'hole'-semantics, interesting to observe the presence of *-sa/sã* with two other nouns for facial body parts involving holes > **Table 22**

Corpus- No.	Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
15-181	mouth					
SG	‡ó.è-(sê)		‡u.e-se	‡u.e	‡ó.è/‡ó.ò-cè	‡u.e
PL	‡ó.mà-sâ		‡u.m-sâ	‡u.m-sa	‡ò.m-cà	‡u.m-sâ
16-190	nose					
SG	n ùh.ùn-sâ	n ùh.ùn-sâ	n uh-sâ	n uh.ja	n ùh.nn tchú.à	n uh.ja
PL	n ùh.ní-sâ	n òh.nyà-tê	n uh.ja-te	n uh.ja-te		n uh.ã-ni
8-95	ear					
SG	n‡ùh.ùn-sâ	n‡ùh.ì-sí	n‡uh.i-si	n‡uh.a	n‡òh.à	n‡uh.a
PL	n‡ùh.ín-kê	n‡ùh.ì-tê	n‡uh.ja-te	n‡uh.ã-te	n‡òh.à-nì	n‡uh.ã-le

Table 22: Series with *-sa/sã* involving semantics of 'hole, inside'

+ various remarkable observations in Table 22

a) *-sa/sã* with 'nose' not in plural but singular form, but semantically compatible with involving two rather than one nostril > confirmed by:

- renewed single compound form *n/ùh.̀̀n tchú.̀̀à* ['nose' 'hole'] in Inalegolo
- cognate 'nose'-forms in !Ui regularly expanded by *-tu (cf. Taa tshóM 'hole')

b) suffix *-sa/sã* on **n|ùh.̀̀* 'nose' with nasalization alternates with *.̀̀nà* as second mora of the stem across different Taa dialects

> hypothesis: **n|ùh.̀̀.̀̀* tshóà > **n|ùh.̀̀.̀̀* sóà > *n|ùh.̀̀.̀̀-sã* > *n|ùh.̀̀.̀̀nà*

!!! possible origin of *.̀̀nà* in *N/Ñ-sa/sã* provides new perspective on historical Taa morphology and noun forms, as *.̀̀nà* is a frequent second mora in nouns

c) base form *n|ùh.̀̀.̀̀-sã/sà* recurrently pluralized secondarily by default suffix *-te*

> non-final position of *-sã/sà* possibly enhances its change to *.̀̀nà*

d) comparative series for **n|ùh.V* 'ear' has affinities with **n|ùh.̀̀* 'nose' on various planes

> 'hole'-compounds and likely historical interaction between 'nose' and 'ears' goes back to Proto-Tuu (cf. Güldemann 2008: 18, 24-5)

+ further instances of *-sa/sã* universally plural (cf. "plural suffix" in Traill 1994: 184)

- recurs with animal terms: 14 of 42 comparative series

- additional pluralization in West !Xoon by means of *-te/ke* yielding *-sa-re* (13 of 42 series), not in other dialects: 'serrated tortoise', 'bow', cheetah', 'country', 'springhare hunting stick'

- in some cases interaction with other *s*-suffixes (cf. frame in Table 20), but specific for both lexemes and varieties rather than according to any regular patterns > **Table 23**

Corpus- No.	Aminuis West !Xoon	Corridor 18 'N oha	Hukuntsi !Ama	Lone Tree East !Xoon	Inalegolo ‡Huan	Khakhea ⊙Khoa
20-242	bag tassle					
SG			gũ.a-si	gũh.bi-si		gũh.ã
PL			gũ.u-si-te	gũh.bi-si-te		gũh.m-sa
17-200-1	polecat					
SG	ha.ri-si		ah.li-si			
PL	ha.ru-sa.m-te		ah.li-si-te			
20-250	serrated tortoise					
SG	sí-n àh.̀̀.̀̀-sí	n àh.̀̀.̀̀-sí	n ah.i-si	n ah.i-si	tí-n àh.̀̀.̀̀-n-cí	n ah.n-si
PL	sí-n àh.̀̀.̀̀.m-sá-ré		n ah.m-sã	n ah.m-sã	tí/kí-n àh.̀̀.̀̀.m-cá	n ah.m-sã
SG DIM				n ah.i-si 0aa		ka-n ah.n-si-ba
PL DIM						ka-n ah.n-sa ⊙'u.ni

Table 23: Remaining series with interrelation between *-sa/sã* and previous *s*-suffixes

+ *sa/sã*-suffix complex comprises at least three different elements:

a) lexicalized nominalization (?as grammaticalization of **sà'ã* 'face')

b) lexicalized grammaticalization of **tshóà* 'holes'

c) "plural" > requires further research in particular!!

3 Conclusions

Taa morphology is not only complex but also historically layered and idiosyncratic across different dialects and lexical items.

Grammaticalization and phonetic incorporation of elements disguise a considerable amount of shared patterns.

Investigation of dialectal diversity is imperative for a proper understanding of Taa.

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