

Adoption, Maintenance and Loss of Click Contrasts

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Sound Change in Interacting Human Systems, 3rd
Biennial Workshop on Sound Change, University of
California, Berkeley, May 28-31, 2014



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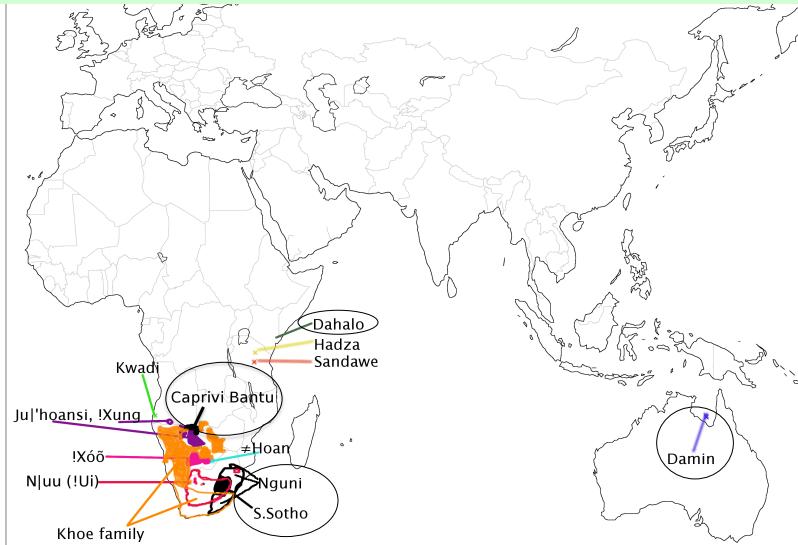
Adoption, Maintenance & Loss

- Do rare sounds behave differently than common sounds? (cf. Ladefoged & Everett 1996)
- Are they rare because their phonetic precursors (& conditioning environments) are rare? (Yu 2013)

Where must a rare sound be rare?

- Cross-linguistically
- Within a linguistic area?
- Within the lexicon?

Global distribution of clicks used as regular consonants



Clicks with irregular origins

Contact Situations (van Coetsem 2000)

- **Recipient language agentivity**
= Assimilation to the Recipient language
= Replacement or substitution pronunciation
- **Source language agentivity**
= Assimilation to the source language
= Phonological imposition on the target language

cf. Donohue (2013) “phonological aberrancies, in terms of the family to which a language belongs, in the core phonology are indicative of an older **substrate**”.

Source Language Agentivity (van Coetsem 2000)

- Is a motivated replication (p. 88)
- Takes place with increase in language consciousness

- cf. Bostoen & Sands (2012) on sound symbolism in the spread of Fwe clicks in the lexicon
- Herbert (1990) on hloniphia avoidance register in Nguni click spread

‡ and ⊖

More rare cross-linguistically than |, !, ||
 ⊖ is far less common in the lexicon than |, !, ||, ‡

	⊖		!		‡	other
TUU						
!Ui						
Nluu	4	19	18	21	12	26
Taa						
!Xoon	5	23	15	16	18	32
KX'A						
Ju'hoan	0	14	36	4	8	46
†Hoan	5	9	18	5	14	47
KHOE						
Khoekhoe	0	19	18	15	19	37
Sandawe	0	12	10	10	0	76
Hadza	0	9	1	9	0	86

Proportion of click types in words in 110-item Swadesh lists. compiled
 by Starostin (2011-2012)

Bilabial Clicks

‡Hoan (Kx'a)
 (Not found in Ju (Kx'a))

Inherited
 (Heine & Honken 2010)

!Xoon (Taa, TUU)

Inherited

Nluu (!Ui, TUU)

Inherited

& various extinct TUU languages

Inherited

Damin (Hale & Nash 1997)

Innovated

Bilabial clicks are not found in Ju, Khoekwadi,
 Hadza, Sandawe, Dahalo, Bantu

Why Bantu Languages Have no ⊙

Source

Ju (no ⊙)
Khoe (no ⊙)

Recipient

Caprivi Bantu (no ⊙)
Nguni Bantu (no ⊙)

Nguni language speakers were in contact with some !Ui language speakers but borrowing appears to be quite limited

Why no Khoisan-Khoisan ⊙ Loans?

- Relatively few lexical items with ⊙ in source languages
- Bilabials generally are marginal
- ⊙ Easily confused with | (Traill 1994)

ʘhán ‘duiker’ (!Xóõ) |^hanu- ‘duiker’ (obsolete) (Khoekhoe)

cf. Sands 2001 on contact patterns within Khoisan

Bilabial Clicks in Kx'a

#Hoan	SE-!Xun	NW-!Xun	Meaning
O'ũ	l'áú	l'āō	'duiker'
dzä-Oúí	níúí	níúí	'friend, other'
Óoa	g à'á	g à'ā	'eye'
nOóq'a	n à'än	n à'ā	'sky'

Heine & Honken (2010: 27)

#Hoan	SE-!Xun	NW-!Xun	Ju Proto Form
ɔχū 'tail'	!xúi 'tail'	lxóe 'tail'	*!!xoe
gOə ^f u 'heartburn'	g!ə ^f 'burp'	--	*g!!a ^f

Sources: (Sands †Hoan fieldnotes); (Snyman 1997), (Dickens 1994)

Athabascan Retroflex/Labial Correspondences

	Gwich'in	Ts'ets'aut
*tʃʷe:jə? 'heart'	-tʃ̪i:j?	-pfε·
*tʃʷ'ej 'blow'	-tʃ̪'ej	-pf̪ε
*ʒʷεŋjə 'pupil/black'	-z̪eŋj	-fʷa

(Howe & Fulop 2005)

†Hoan ⊖ may derive from labio-velarized clicks

cf. NW !Xun [g|ò'ñm̄], †Hoan [g|ò'ñm̄] “kneecap”
possibly: *g||ʷ > g⊖ > g|, *g||ʷ > g||

⌚ Recap

- All TUU (!Ui & Taa) languages maintain a contrastive ⊖
 - perhaps helped by presence in diminutives, ‘child’, etc.
- No evidence of ⊖ being borrowed
- Ju languages probably never developed ⊖
- ⊖ in †Hoan may have been influenced by Tuu despite presumed independent development

Palatal Clicks Across Families

Kx'a family (<†Hoan, Ju)	Inherited
Tuu family (!Ui & Taa)	Inherited
Khoe family	Inherited
some Caprivi Bantu	Borrowed

Contrastive palatal clicks are not found in: Hadza, Sandawe, Kwadi, Damin, Dahalo, Southern Sotho & Nguni

Explaining Patterns of † Click Adoption

isiXhosa, isiZulu: no palatal obstruents
(Khoekhoe ≠ >, // (Louw 1977))

no †

Caprivi Yeyi: no palatal obstruents
 (Seidel 2008, 2009; Donnelly 1990)

Ngamiland Yeyi palatal obstruents (Sommer 1995)

†

BUT, “Palatal” is often defined phonologically

Ngamiland Yeyi no palatal obstruents
 (ky, gy considered CV sequences)
 (Lukusa 2002)

Caprivi Yeyi palatal series: c, ch, c', j, sh, zh, ly, y, ny
 (Gowlett 1997: 260)

both accounts have †

NB: Lukusa (2002) does not state whether it describes Ngamiland (Botswana) Yeyi or is meant to be a composite description of both varieties.

Lukusa (2002: xix) uses [#] rather than † and calls it “apico-dental”

Fricated † in Yeyi (Fulop, et al. 2003)

	ú-n†gòàrà ú-g wàrá	 ‘chameleon’ (Ngamiland Yeyi) ‘chameleon’ (Caprivi Yeyi) (Sommer 2013: 446)
		
	ku.(ra)i k†hoa	‘to slap’ (Ngamiland Yeyi)
		

*recordings from UCLA Phonetics Lab Archive:
<http://archive.phonetics.ucla.edu/Language/YEY/vey.html> (.wav files
#40, #25)*
(L): Kgosibatho Mischief Dipuo, male, age 25
(R): Galesiwe Kebihilwe, male, age 51
recorded in 1998

***† Click Reflex in Ekoka !Xuun**

- † Fricated Post-Alveolar (Miller 2011)
- !! called retroflex (König & Heine 2008), but König (p.c.) agrees with this new description
- † is the regular reflex of Proto-Ju *‡

 	gf�� ‘be old’ Ekoka !Xuun <i>Rauxa Haixuxwa, Abraham Hamunyela</i>	†��m ‘wind around’, ‘yellow-billed hornbill’ Mangetti Dune !Xuun <i>Sabine Riem, Martin Aromo</i>
	 	

The !Xuun spoken in Ekoka, NW Namibia = NW !Xun = W2 lect

*‡ Clicks merge with *!

- **Korana** speaker Monica Kraalshoek (Engelbrecht 1936: 202) married to a Xhosa speaker
- **Korana** described by Wuras (Vedder 1927)
- **Griekwa** of Dibeng, RSA (Sands & Namaseb 2007)

	Griekwa	Khoekhoe
‘ear’	[!ae.s]	‡gàé.s
‘dance’	[ŋ!aa]	‡nàà.b
‘testicle(s)’	[!χara.p]	‡khàrà.s
‘buttocks’	[ŋ!are]	‡áré.s
‘ground, earth’	[ŋ!h <u>u</u> βa]	!hùú.b

Loss of *‡ Palatal Clicks (East Kalahari Khoe)

‡	>	c
g‡	>	ɟ
‡?	>	?
ŋ‡	>	ɲ
etc.		

cf. Traill & Vossen 1997, Traill 1986, Wilmsen & Vossen 1990, Vossen 1997

*‡ Click Reflexes in Kwadi

Moribund language, on outskirts of click area

Proto Khoe	Kwadi	
*‡ui	tcií	‘nose’
*‡ao	tso	‘heart’
*‡?ü	?nu	‘to eat’

(Fehn 2014)

Independent development of the same process seen as in East Kalahari Khoe

Patterns of ‡ Click Change in Tuu

||Xegwi (!Ui) (Sands 2007)

|Xam (!Ui)

Kakia (Taa)

||Xegwi *‡ reflexes

Xegwi	N uu
cheuŋ 'rain'	‡qau 'rain'
ſwee 'wind',	‡q ^h oe 'wind'
djwaa(ⁿ) 'pot'	‡qoa 'pot'
tſwinj 'short'	‡qoe 'short'
dlwiiⁿ 'ear'	⁹‡ui-si 'ear'
klw'iⁿ 'egg'	‡ui 'egg'
klolo 'moon'	‡oro 'moon'
kl'ini 'small'	‡ri 'be small, few'

- ||Xegwi (Lanham & Hallowes 1956a/b), N|uu: (Sands et al. draft dictionary)

|Xam *‡ reflexes, pt. 1

110 items	O		!		‡	other
N uu	4	19	18	21	12	26
Xam	4	18	32	17	4	26

-!khwaitəŋ 'to make a palatal click' (Bleek 1936: 198)

‡naiŋ	'to make a lateral click'
!kvara	'to make a cerebral click'
jiŋ	'to make a dental click'

|Xam data from Bleek 1929, 1956, Starostin 2011-2012.
Interpretation of transcription, cf. Traill 1995, Güldemann 2013

|Xam loss of *†

Gloss	Xam	N uu
'dog'	!wíŋ, ! ^h wíŋ	‡ ^h un (W), ‡ ^h uŋ (E)
'ear'	ĩ́-ntu, ‡nui	⁊‡ui-
'egg'	!áúi, !k'áú.wi	‡ui
'moon'	!au!árro	‡oro
'neck'	!au, !eau, ! ^h óu	‡quu
'near'	! ^h i:ŋ	⁊‡? ^h ee
'wind'	! ^h wé	‡q ^h oe

|Xam data from Bleek 1929, 1956, Starostin 2011-2012; N|uu (Sands et al. fieldwork)
Korana: Meinhof 1930, Lloyd 1932, Maingard 1964; Khoekhoe: Haacke & Eiseb 2002

|Xam /†/ reborrowed from Korana?

Gloss	Xam	N uu	Khoekhoe (orthogr.)	Korana
'know'	‡'eññ:		‡áñ	‡a'n
'say'	‡á-kkən			
'springhare'	‡go:		‡göö-b	‡gö:-p
'salt'	‡k'ò:	‡ ^x oo	‡òò-b	‡kχ'ò-b
'veins'	‡xuru	‡ ^x uru-	‡khürú-b	
'to push'	-‡kā	⁊‡ ^h a'q	‡hää	
'to be whole'	‡uru:, ‡urru	‡ ^h uu 'well, fine'	‡ürü 'healthy, whole'	
'bone needle, awl'	‡oro		‡òrò-s 'awl' (Damara)	‡oro-s 'needle', ‡o ⁺ ro ₁ -b 'awl'

!Ui > Khoë > |Xam?

Probable *V^C retained in |Xam

Gloss	Xam	N uu	Khoekhoe	Korana
'marrow'	#kai: ^f			#a, ē, -b
'egg of louse'	#k <a>n	# ^x an (W), # ^x aqn (E) 'nits'	#iññas 'nit'	

Pharyngeal vowel coloring (cf. Colarusso 2013)

Note: French loanwords into Moroccan Arabic "are often borrowed with pharyngeal secondary articulation" (Zellou 2011: 95)

d ~ d^f in pre-Arabic Domari lexical items (Matras 2012: 44)

Unpredictable ‡ in |Xam

Gloss	Xam	N uu	Khoekhoe	Korana
'gun'	#kabbu, !kabbu	ħ!əβu		
'three'	#no:ra	ŋ!ona	!nòná	!no, na,

linguistic 'syncretism' (Kidder 2013, Hill 1999) – use of pronunciation to claim membership in one community or other

|Xam-Korana bilingualism (Deacon 1986);
Korana: Meinhof 1930, Lloyd 1932, Maingard
1964; Khoekhoe: Haacke & Eiseb 2002

‡ in Taa languages

110 items	Ø		!		‡	other
!Xoon	5	23	15	16	18	32
Kakia	4	21	15	25	1	24

Gloss	Kakia	!Xoon	N u en
'short'	‡'aba	‡'aba	'aba ~ aba

Kakia & N|u||en data from Bleek 1929, 1956, Starostin 2011-2012, !Xoon from Traill (1994)

Kakia reflexes of Proto Taa *‡

Gloss	Kakia	!Xoon	N u en
'dog'	!xài ~ !ài ~ ‡xai	‡qhài	‡ ^h i~‡i~‡xi:
'ear'	ĩwà:	‡nùhã	ĩu-ša
'mouth'	!we:	‡ûe	‡ûẽ
'neck'	!kxüüm	‡kx'àõ	‡ũ

Gloss	Kakia	!Xoon	N u en
'ashes'	wa:	‡ða	
'bone'	a:	‡àã	‡ã
'egg'	wa:	‡gúã	
'foot'	ĩo~ĩõ~ĩo	‡nùõ	ĩu
'wind'	^h we: ~ kxwe:	‡qhùe	‡we: ~ ‡xe:

Phonetic variation due to language attrition? (cf. Maddieson et al. 2009: 98)

Has *‡ become a fricated ‡?

Gloss	Kakia	!Xoon	N u en
'sand'	xu:m	‡kx'ûm	‡um 'sand, ground'
'earth'	!um ~ um ~ k'om	(= 'earth')	!om-sa 'ground'
'two'	ĩum ~ ĩum	‡nûm	ĩum

Summary of ‡ Sound Changes

- *‡ merges with *! (some Griekwa, some Korana, |Xam)
- *‡ merges with non-clicks (Eastern Khoe, Kwadi, ||Xegwi)
- *‡ is fricated
 - post-alveolar (Ekoka !Xuun, Kakia (?))
 - denti-alveolar (some Yeyi)

Connection between loss of *c and *‡ in Tuu

	‘mouth’	‘ostrich’	‘lie down’
N uu	cu	cue	ca, cī
Xam	tu:	toi	ta:, te:n, tinj
Xegwi	tu	towe	--
Kakia	--	--	tu:, ta:, tʃu

Proto-Khoe *ts, *ts?, no palatal non-click series (Vossen 1997: 326)

Discussion: Rare Sounds

- normal processes: lenition, auditory substitution
- less likely to be borrowed (if in few languages)
- less likely to be traceable (if in few lexical items)
- less likely to be noticed in the first place, or accurately described
- connected to the phonology of more common sounds

importance of documentation of sociolinguistic and geographic variation

Acknowledgements



Isaak Gertze, Levi Namaseb, Jan Vries

This material is based in part upon work supported by the National Science Foundation under Grant NSF: BCS-0236795 'Collaborative Research: Descriptive and Theoretical Studies of N|uu' and BCS-0726200 "Collaborative Research: Phonetic and Phonological Structures of Post-velar Constrictions in Clicks and Laterals". Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.

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